

Longitudinal Coordination of Care Overview to HL7 Patient Care WG

Wednesday, March 27th, 2013



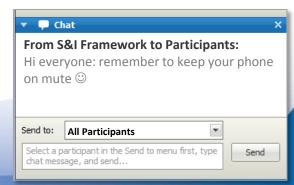
Meeting Etiquette

- Remember: If you are not speaking, please keep your phone on mute
- Do not put your phone on hold. If you need to take a call, hang up and dial in again when finished with your other call
 - Hold = Elevator Music = frustrated speakers and participants
- This meeting is being recorded
 - Another reason to keep your phone on mute when not speaking
- Use the "Chat" feature for questions, comments and items you would like the moderator or other participants to know.
 - Send comments to All Participants so they can be addressed publically in the chat, or discussed in the meeting (as appropriate).











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

This is Part 1 of a two-part slide deck



S&I Longitudinal Coordination of Care (LCC) Workgroup

- Initiated in October 2011 as a community-led initiative with multiple public and private sector partners, each committed to overcoming interoperability challenges in long-term, post-acute care (LTPAC) transitions
- Supports and advances interoperable health information exchange (HIE) on behalf of LTPAC stakeholders and promotes LCC on behalf of medically-complex and/or functionally impaired persons
- Goal is to identify standards that support LCC of medically-complex and/or functionally impaired persons that are aligned with and could be included in the EHR Meaningful Use Programs
- Seeks to influence Meaningful Use Stage 3
- Consists of three sub-workgroups (SWGs):
 - Longitudinal Care Plan (LCP)
 - LTPAC Care Transition
 - Patient Assessment Summary (PAS)*



LCC Sub Workgroups (SWG)

COMMUNITY-LED INITIATIVE

Longitudinal
Coordination of Care
Workgroup

- Providing subject matter expertise and coordination of SWGs
- Developing systems view to identify interoperability gaps and prioritize activities, and align identified standards with the EHR MU Program

Longitudinal Care Plan SWG

 Identify standards for an interoperable, longitudinal care plan* which aligns, supports and informs person-centric care delivery regardless of setting or service provider

LTPAC Care Transition SWG

- Identify the key business and technical challenges that inhibit LTC data exchanges
- Define data elements for long-term and post-acute care (LTPAC) information exchange using a single standard for LTPAC transfer summaries

Patient Assessment Summary (PAS SWG)

- Established the standards for the exchange of Patient Assessment Summary (PAS) documents
- Provided consultation to the transformation tool being developed by Geisinger to transform the noninteroperable MDSv3 and OASIS-C into an interoperable clinical HL7 CDA document

*Care Plan standards will enable providers to create, transmit and incorporate care plans and needed content for the benefit of medically complex and/or functionally impaired individuals, their families and caregivers.



LCC Initiative: Resources & Questions

LCC Leads

- Dr. Larry Garber (<u>Lawrence.Garber@reliantmedicalgroup.org</u>)
- Dr. Terry O'Malley (<u>tomalley@partners.org</u>)
- Dr. Bill Russell (<u>drbruss@gmail.com</u>)
- Sue Mitchell (<u>suemitchell@hotmail.com</u>)

LCC/HL7 Coordination Lead

Dr. Russ Leftwich (<u>Russell.Leftwich@tn.gov</u>)

Federal Partner Lead

Jennie Harvell (<u>jennie.harvell@hhs.gov</u>)

Initiative Coordinator

Evelyn Gallego (<u>evelyn.gallego@siframework.org</u>)

Project Management

- Becky Angeles (<u>becky.angeles@esacinc.com</u>)
- Sweta Ladwa (<u>sweta.ladwa@esacinc.com</u>)

LCC Wiki Site: http://wiki.siframework.org/Longitudinal+Coordination+of+Care

LCC WG Key Successes to meet Health Information Technology MU3 needs

- (JUNE 12) <u>LCC Use Case 1.0</u>: Expanded from S&I ToC Use Case; identified 360+ additional data elements
- (AUG 12) <u>Care Plan Whitepaper</u> "Meaningful Use Requirements For: Transitions of Care & Care Plans"
- (OCT 12) <u>IMPACT Dataset</u>: Consensus built Transitions of Care and Care Plan/HHPoC dataset (483 data elements). Deep dive of LCC Use Case 1.0
- (MAY- SEPT 12) Balloted 3 standards through HL7: C-CDA
 Refinements interoperable exchange of Functional Status, Cognitive
 Status, & Pressure Ulcer; and LTPAC Summary IG. Also balloted
 through HL7 standards for Questionnaire Assessment. Stage 2 MU
 incorporated requirements for functional and cognitive status.
- (OCT 12) Stage 3 MU Care Plan Questions for HITPC MU WG
 (DEC 12) Care Plan Glossary
- (Jan 13) Community Led submission to HITPC RFC Stage 3 MU
- (MAR 18) IMPACT ToC High-level IG

Lantana has been contracted to work with LCC to make and ballot HL7 CDA IGS



Shared Care Encounter Summary:

- Office Visit to PHR
- Consultant to PCP
- ED to PCP, SNF, etc.

Home Health Plan of Care

Care Plan

A. Consultation Request Clinical Summary

Consultation Request:

- PCP to Consultant
- PCP, SNF, etc... to ED

-Transfer of Care Summary **Transfer of Care:**

- Hospital to SNF, PCP, HHA, etc...
- SNF, PCP, etc... to HHA
- PCP to new PCP



LCC WG Care Plan Artifacts: Glossary and Use Case

Term/ Component	LCC Proposed Definition
Care Plan	The term "care plan" considers the whole person and focuses on a number of health concerns to achieve high level goals related to healthy living. Care Plan and Plan of Care share the SIX components: health concern, goals, instructions, interventions, outcomes, and team member
Health Concern	Reflect the issues, current status and 'likely course' identified by the patient or team members that require intervention(s) to achieve the patient's goals of care, any issue of concern to the individual or team member
Goals	A defined outcome or condition to be achieved in the process of patient care. Includes patient defined goals (e.g., prioritization of health concerns, interventions, longevity, function, comfort) and clinician specific goals to achieve desired and agreed upon outcomes.
Instructions	Information or directions to the patient and other providers including how to care for the individual's condition, what to do at home, when to call for help, any additional appointments, testing, and changes to the medication list or medication instructions, clinical guidelines and a summary of best practice. Detailed list of actions required to achieve the patient's goals of care.
Interventions	Actions taken to maximize the prospects of achieving the patient's or providers' goals of care, including the removal of barriers to success. Instructions are a subset of interventions.
Outcomes	Status, at one or more points in time in the future, related to established care plan goals.
Team Member	Parties who manage and/or provide care or service as specified and agreed to in the care plan, including: clinicians, other paid and informal caregivers, and the patient.

LCC Interoperable Care Plan Exchange

Use Case v2.0

Summary of User Scenarios

- Scenario 1: Exchanging a care plan during a complete handoff of care from the sending care team to a receiving care team
- 2. Scenario 2: Exchanging a care plan between care team members during shared care $\ 10$
- 3. Scenario 3: Exchanging a care plan between care team members and a patient



Care Plan & Care Planning



Key Discussion Points

- The HL7 Care Model is great! Let's work together to ensure our "clinical" speak aligns with your "modeling" speak
- Barriers and Risks
- Goals (patient and provider / computable vs. behavior vs. patientspecified)
- Team Members (include patient and family)

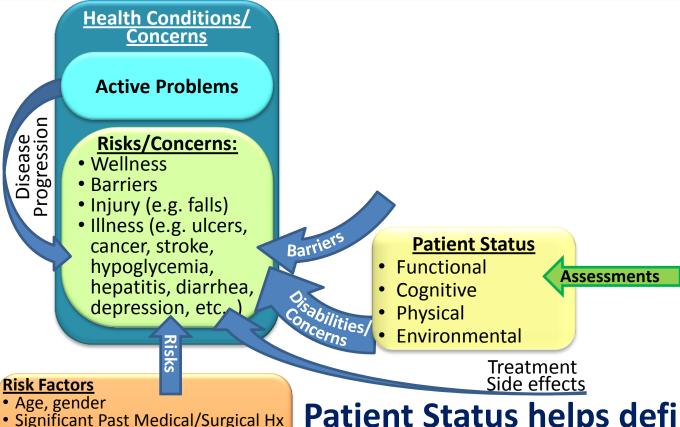


Patient Status

- Functional
- Cognitive
- Physical
- Environmental

Patients are evaluated with <u>assessments</u> (history, symptoms, physical exam, testing, etc...) to determine their <u>status</u>

Assessments



• Family Hx, Race/Ethnicity, Genetics

 Historical exposures/lifestyle (e.g. alcohol, smoke, radiation, diet,

exercise, workplace, sexual...)

Patient Status helps define the patient's current conditions, concerns, and risks for conditions

Risks/concerns come from many sources

- Patient/family preferences (values, priorities, wishes, adv directives, expectations, etc...)
- Patient situation (access to care, support, resources, setting, transportation, etc...)

Health Conditions/ Concerns

Active Problems

Risks/Concerns:

- Wellness
- Barriers
- Injury (e.g. falls)
- Illness (e.g. ulcers, cancer, stroke, hypoglycemia, hepatitis, diarrhea, depression, etc.

Goals

- Desired outcomes
- Readiness

Prioritize

Barriers

- Related Conditions
- Interventions
- Progress

Patient Status

- **Functional**
- Cognitive Ojsabilities/ Concerns
 - **Physical**
 - Environmental

Risk Factors

Disease Progression

- · Age, gender
- Significant Past Medical/Surgical Hx
- Family Hx, Race/Ethnicity, Genetics
- Historical exposures/lifestyle (e.g. alcohol, smoke, radiation, diet, exercise, workplace, sexual...)

Treatment Side effects

Goals for treatment of health conditions and prevention of concerns are created collaboratively with patient taking into account their statuses and Care Plan **Decision Modifiers** 15

Assessments

Prognosis

Related

- Patient/family preferences (values, priorities, wishes, adv directives, expectations, etc...)
- Patient situation (access to care, support, resources, setting, transportation, etc...)

Health Conditions/ Concerns

Active Problems

Risks/Concerns:

- Wellness
- Barriers
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Goals

- Desired outcomes
- Readiness
- Prognosis
- Related Conditions
- Related Interventions
- Progress

Patient Status

- Functional
- Cognitive
- **Physical**
- Environmental

Risk Factors

Disease Progression

- Age, gender
- Significant Past Medical/Surgical Hx
- Family Hx, Race/Ethnicity, Genetics
- Historical exposures/lifestyle (e.g. alcohol, smoke, radiation, diet, exercise, workplace, sexual...)

Treatment Side effects

Decision making is enhanced with evidence based medicine, clinical practice guidelines, and other medical knowledge

Assessments

Prioritize

Decision Support_

Barriers

Ojsabilities/ Concerns

- Patient/family preferences (values, priorities, wishes, adv directives, expectations, etc...)
- Patient situation (access to care, support, resources, setting, transportation, etc...)
- Patient allergies/intolerances

Prioritize

Decision

Support_

Barriers

Health Conditions/ Concerns

Active Problems

Risks/Concerns:

- Wellness
- Barriers
- Injury (e.g. falls)
- Illness (e.g. ulcers, cancer, stroke, hypoglycemia, hepatitis, diarrhea, depression, etc.

Goals

- Desired outcomes
- Readiness
- Prognosis
- Related Conditions
- Related Interventions
- Progress

Orders, etc.. Decision

Support

Assessments

Interventions/Actions

behavior changes, exercise, consults, rehab, calling MD for symptoms, education, anticipatory guidance, services, support, etc...)

- Start/stop date, interval
- Authorizing/responsible parties/roles/contact info
- Setting of care
- Instructions/parameters
- Supplies/Vendors
- Planned assessments
- Expected outcomes
- Related Conditions
- Status of intervention

Patient Status

- **Functional**
- Cognitive
- Concerns **Physical**
 - Environmental

Risk Factors

Age, gender

Disease Progression

- Significant Past Medical/Surgical Hx
- Family Hx, Race/Ethnicity, Genetics
- Historical exposures/lifestyle (e.g. alcohol, smoke, radiation, diet, exercise, workplace, sexual...)

Treatment Side effects

Interventions and actions to achieve goals are identified collaboratively with patient taking into account their values, situation, statuses, risks & benefits, etc...

- Patient/family preferences (values, priorities, wishes, adv directives, expectations, etc...)
- Patient situation (access to care, support, resources, setting, transportation, etc...)
- Patient allergies/intolerances

Care Plan

Health Conditions/ Concerns

Active Problems

Disease Progression

Risks/Concerns:

- Wellness
- Barriers
- Injury (e.g. falls)
- Illness (e.g. ulcers, cancer, stroke, hypoglycemia, hepatitis, diarrhea, depression, etc.





Decision Support

Barriers

Ojsabilities/ Concerns

Goals

- Desired outcomes
- Readiness
- Prognosis
- Related Conditions

Patient Status

 Related Interventions

Functional

Environmental

Cognitive

Physical

Progress



consults, rehab, calling MD for symptoms, education, anticipatory guidance, services, support, etc...)

Interventions/Actions

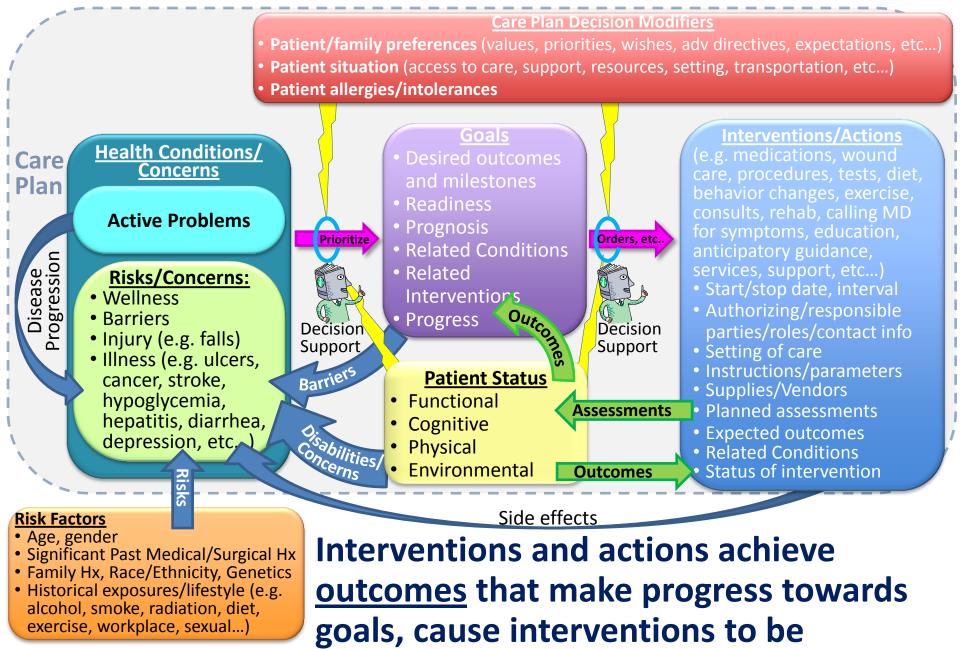
- Start/stop date, interval
- Authorizing/responsible parties/roles/contact info
- Setting of care
- Instructions/parameters
- Supplies/Vendors
- Planned assessments
- Expected outcomes
- Related Conditions Status of intervention
- Assessments

Risk Factors

- · Age, gender
- Significant Past Medical/Surgical Hx
- Family Hx, Race/Ethnicity, Genetics
- Historical exposures/lifestyle (e.g. alcohol, smoke, radiation, diet, exercise, workplace, sexual...)

Side effects

The Care Plan is comprised of Modifiers, Conditions/Concerns, their Goals, Interventions/Actions/Instructions, **Assessments and the Care Team** members that actualize it 18



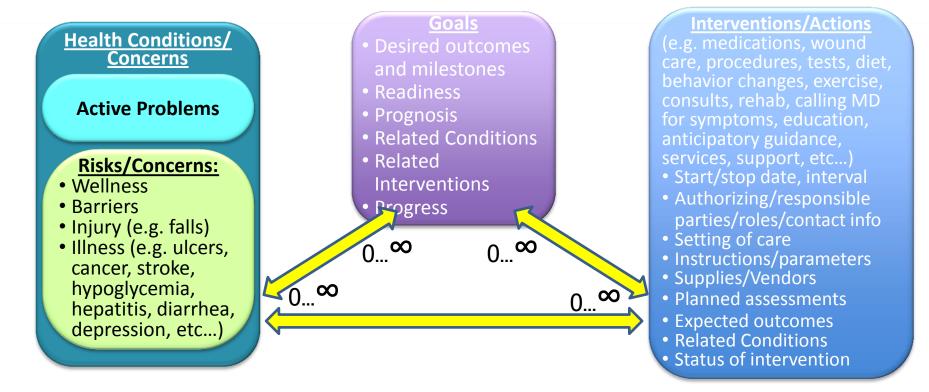
modified, and change health conditions

Care Plan Decision Modifiers Patient/family preferences (values, priorities, wishes, adv directives, expectations, etc...) • Patient situation (access to care, support, resources, setting, transportation, etc...) Patient allergies/intolerances Goals Interventions/Actions **Health Conditions/** Desired outcomes Care Concerns Plan behavior changes, exercise, Readiness consults, rehab, calling MD **Active Problems** Prognosis for symptoms, education, Prioritize Orders, etc.. Related Conditions anticipatory guidance, Disease Progression Related services, support, etc...) **Risks/Concerns:** Start/stop date, interval Wellness Interventions Authorizing/responsible Decision Barriers Progress Decision parties/roles/contact info • Injury (e.g. falls) Support_ Support Setting of care • Illness (e.g. ulcers, Instructions/parameters Barriers **Patient Status** cancer, stroke, Supplies/Vendors **Functional** hypoglycemia, Planned assessments **Assessments** hepatitis, diarrhea, Cognitive Concerns Expected outcomes depression, etc. Physical Related Conditions Environmental **Outcomes** Status of intervention Side effects **Risk Factors** Age, gender The Care Plan (Concerns, Goals, Significant Past Medical/Surgical Hx Family Hx, Race/Ethnicity, Genetics Interventions, and Care Team), along • Historical exposures/lifestyle (e.g. alcohol, smoke, radiation, diet, with Risk Factors and Decision Modifiers, exercise, workplace, sexual...)

iteratively evolve over time

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- Patient/family preferences (values, priorities, wishes, adv directives, expectations, etc...)
- Patient situation (access to care, support, resources, setting, transportation, etc...)
- Patient allergies/intolerances



A many-to-many <u>relationship</u> exists between Health Conditions/Concerns, Goals and Interventions/Actions

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Care Team Members

each have their own responsibilities

Care Plan Decision Modifiers

- Patient/family preferences (values, priorities, wishes, adv directives, expectations, etc...)
- Patient situation (access to care, support, resources, setting, transportation, etc...)
- Patient allergies/intolerances

Goals Interventions/Actions **Health Conditions/** Desired outcomes Concerns Readiness consults, rehab, calling MD **Active Problems** Prognosis Related Conditions anticipatory guidance, services, support, etc...) Related **Risks/Concerns:** Start/stop date, interval Interventions Wellness Authorizing/responsible Barriers **Progress** parties/roles/contact info • Injury (e.g. falls) Setting of care • Illness (e.g. ulcers, Instructions/parameters Patient Status cancer, stroke, Supplies/Vendors Functional hypoglycemia, Planned assessments hepatitis, diarrhea, Cognitive Expected outcomes depression, etc...) Physical Related Conditions Environmental Status of intervention Family Non-physician Nursing Coordinators **Patient Physicians**

Providers

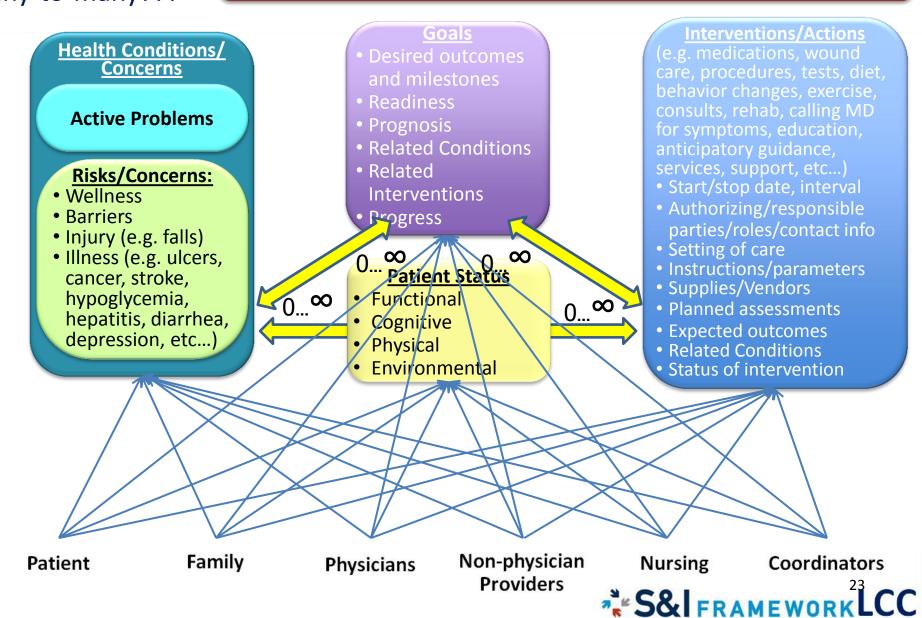
S&I FRAMEWORK LCC

How to represent

many-to-many-to-many-to-many-to-many-???

Care Plan Decision Modifiers

- Patient/family preferences (values, priorities, wishes, adv directives, expectations, etc...)
- Patient situation (access to care, support, resources, setting, transportation, etc...)
- Patient allergies/intolerances



The MAP Master All-care Plan

Care Plan Decision Modifiers

- Patient/family preferences (values, priorities, wishes, adv directives, expectations, etc...)
- Patient situation (access to care, support, resources, setting, transportation, etc...)
- Patient allergies/intolerances

Health Conditions/ Concerns

Active Problems

Risks/Concerns:

- Wellness
- Barriers
- Injury (e.g. falls)
- Illness (e.g. ulcers, cancer, stroke, hypoglycemia hepatitis, di depression,
 Item #1

Goals

- Desired outcomes and milestones
- Readiness
- Prognosis
- Related Conditions
- Related Interventions
- Progress

0...∞ Patient Status

Interventions/Actions

(e.g. medications, wound care, procedures, tests, diet, behavior changes, exercise, consults, rehab, calling MD for symptoms, education, anticipatory guidance, services, support, etc...)

- Start/stop date, interval
- Authorizing/responsible parties/roles/contact info
- Setting of care
- Instructions/parameters
- Supplies/Vendors

ad assessments ed outcomes d Conditions of intervention

Master All-care Plan

• Item #2

• Relationship (e.g. Goal-for-Problem, Intervention-for-Problem, Goal-for-Intervention, Performing Team Memberfor-Intervention, Performing Team Member-for-Assessment, Team Member Responsible-for-Problem, Team Member Following-Problem, Problem-Problem Causality, etc...)

Patient

Family

Physicians

Non-physician Providers

Nursing

Coordinators

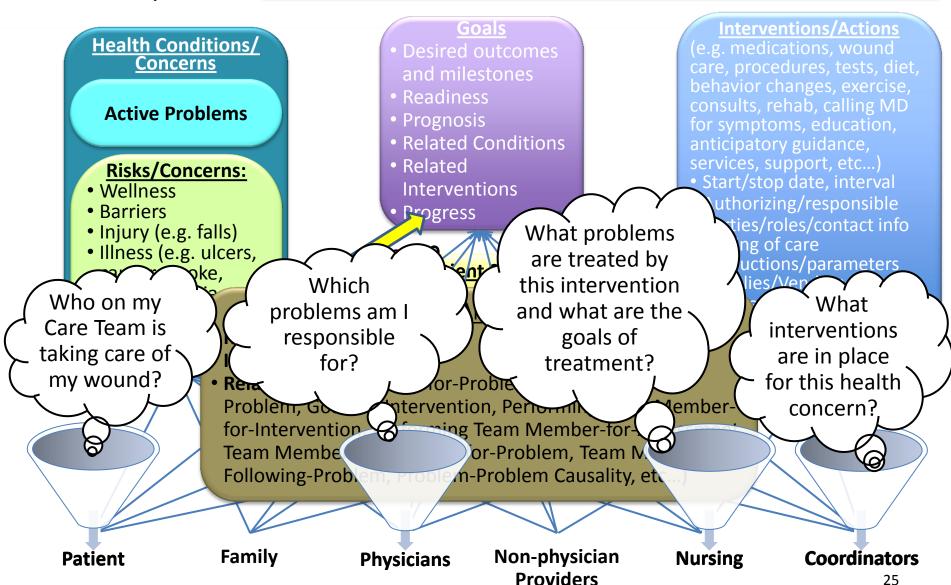


The MAP

Master All-care Plan enables many views

Care Plan Decision Modifiers

- Patient/family preferences (values, priorities, wishes, adv directives, expectations, etc...)
- Patient situation (access to care, support, resources, setting, transportation, etc...)
- Patient allergies/intolerances





- Patient/family preferences (values, priorities, wishes, adv directives, expectations, etc...)
- Patient situation (access to care, support, resources, setting, transportation, etc...)
- Patient allergies/intolerances

Care Plan

Health Conditions/ Concerns

Active Problems

Disease Progression

Risks/Concerns:

- Wellness
- Barriers
- Injury (e.g. falls)
- Illness (e.g. ulcers, cancer, stroke, hypoglycemia, hepatitis, diarrhea, depression, etc.)





Decision Support

Barriers

Ojsabilities/ Concerns

Goals

- Desired outcomes and milestones
- Readiness
- Prognosis
- Related Conditions
- Related Interventions
- Progress



Patient Status

- Functional
- Cognitive
- Physical
- Environmental

Assessments

Outcomes

Interventions/Actions

(e.g. medications, wound care, procedures, tests, diet, behavior changes, exercise, consults, rehab, calling MD for symptoms, education, anticipatory guidance, services, support, etc...)

- Start/stop date, interval
- Authorizing/responsible parties/roles/contact info
- Setting of care
- Instructions/parameters
- Supplies/Vendors
- Planned assessments
- Expected outcomes
- Related Conditions
- Status of intervention

Risk Factors

- Age, gender
- Significant Past Medical/Surgical Hx
- Family Hx, Race/Ethnicity, Genetics
- Historical exposures/lifestyle (e.g. alcohol, smoke, radiation, diet, exercise, workplace, sexual...)

Side effects

Questions?



Part 2:

Alignment to HL7 Domain Analysis Model (DAM)

To be continued ...