Embracing Longitudinal Person-Centered Care Plans

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Conflict of Interest

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Have no real or apparent conflicts of interest to report.
Agenda

• Embracing Longitudinal Person-Centered Care Plans
• Policy Levers supporting Person-Centered Care and electronic Care Plan exchange
• Role of Health IT
• State of Interoperable Exchange: Applicable Standards and Exemplar Initiatives
• Opportunities for Broader Industry Engagement
Learning Objectives

• Describe concept of an electronic longitudinal person-centered care plan

• Explain federal and state policy levers available to support capture and sharing of electronic person-centered care plans

• Illustrate how organizations are using standards-based approaches to capture, share and exchange person-centered care plans across clinical and non-clinical settings
What’s to embrace?

- Care Plans can be maddeningly complex
- Difficult to manage
- Require new (and expensive) resources to create and maintain
- Some parts can leverage HIT: e.g. communicating to the team
- Some parts can’t: e.g. the process of modifying the plan based on changes in conditions or priorities
- Why do we embrace Longitudinal Person Centric Care Plans?
The World of a Geriatrician

• My patients have all accumulated a large team of service providers
• They have complex mixes of medical, social, behavioral and functional issues
• They have a large burden of chronic illness and functional impairment, complicated by changes in mood and cognition and exacerbated by issues of housing, supports, engagement and adverse social determinants
• They require a team effort to achieve goals they value
• A better than average example: Mrs. M
Meet Mrs. M

11 ISSUES

- Congestive Heart Failure
- Atrial Fibrillation
- Old stroke
- Unstable gait
- Occasional Fall
- Osteoarthritis
- Hypertension
- Depression
- 12 medications
- Fear of falling
- Isolated

8 TEAM MEMBERS

- Cardiologist
- Neurologist
- Orthopedist
- Primary Care Team
- Visiting Nurses
- Homemaker/Home Health Aide
- Meals on Wheels Provider
- Transportation Provider
So Mrs. M wants hip replacement surgery...

• The questions for her and her team:
  – Will surgery help achieve what matters most to her?
  – What has to be done to get her home after surgery?
  – What does she need to stay there?
  – What can be done to avoid the next cycle of acute on chronic illness?”

• She needs coordination of
  – Medical/Surgical management
  – Behavioral Health support
  – Functional assistance
  – Home supports and modifications

• She is not alone
Business Driver: Oldest Population Segments Growing Fastest

Chart of Population 65 and over by age: 1900 to 2050

This chart shows the large increases in the population 65 and older from 3.1 million people in 1900 to 35 million in 2000 and projected to 72 million in 2030.

Populations by Age:
- Age 65-74
- Age 75-84
- Age 85+

Sources:
- This table was compiled by the U.S. Administration on Aging using the Census data noted.
- Projections for 2010 through 2050 are from Table 12. Projections of the Population by Age and Sex for the United States: 2010 to 2050 (NP2008-T12), Population Division, U.S. Census Bureau; Release Date: August 14, 2008
- The source of the data for 1900 to 2000 is Table 5. Population by Age and Sex for the United States: 1900 to 2000, Part A Number, Hobbs, Frank and Nicole Stoops, U.S. Census Bureau, Census 2000 Special Reports, Series CENSR-4, Demographic Trends in the 20th Century. This table was compiled by the U.S. Administration on Aging using the Census data noted.
Business Driver: Rising Disability with Age

Disability Prevalence and the Need for Assistance by Age: 2010
(In percent)  [http://www.census.gov/prod/2012pubs/p70-131.pdf]

Note: The need for assistance with activities of daily living was not asked of children under 6 years.
What Does This Mean?

• Disability increases with age
• The oldest segments of the population are growing the fastest
• The “Medical Model” does not work well for reducing total costs of care for a population with an increasing burden of chronic illness and disability
Why Worry about Cost?

• VBP: Value Based Purchasing
• Shift from pay for units of service (FFS) to pay for outcomes (value)
• Convert FFS Medicare payments to alternate payment models:
  – Medicare Advantage, Bundles, ACOs
  – Initial goal: 30% by 2016, 50% by 2018. Already above 60%
• Link FFS Medicare payments to quality and value
  – Readmission reduction, QIP (Quality Improvement Program)
  – 85% by 2016, 90% by 2018
• Margins come from efficient care not more services
NIHCM Foundation analysis of data from the 2014 Medical Expenditure Panel Survey.
Who is in the 5%?

- **50%**: Sudden catastrophic illness. Most costs from unavoidable hospitalizations. Difficult to reduce costs beyond what hospitals have done over past 30 years.

- **17%**: End of Life care. Significant avoidable costs with better informed choices by individuals.

- **33%**: Complex chronic illnesses. Significant opportunity to reduce costs (and improve care) through coordination of care, avoidance of high cost settings and reversing the “medicalization” of social and behavioral issues.
Embrace Care Plans

• These Plans enable efficiencies from an otherwise fragmented and inefficient federation of providers, AKA “The Health Care System”

• Without them:
  – Priorities and preferences of the individual are often lost or substituted by the priorities and preferences of the different care teams
  – Important issues and concerns can be lost in transition between sites and teams
  – Omissions in care
  – Duplications in testing
  – Repetition of failed interventions
  – Return to the acute care cycle with higher cost, increased risk of harm
But what is a Care Plan?

Long-Term Services & Supports Care Plan

Plan of Care

COMPREHENSIVE CARE PLAN

PERSON-CENTERED CARE PLAN

Many terms used to define output of care planning process
Yet all capture 5 basic components...

- Care Team Member Information
- Health Concerns / Needs
- Goals/ Objectives
- Interventions/ Activity
- Progress/ Outcomes
LONGITUDINAL PERSON-CENTERED CARE PLAN

- HOME & COMMUNITY BASED CARE
- POST-ACUTE CARE
- ACUTE CARE/EMERGENCY CARE

99% OF OUR LIFE TIME SPENT AS PERSON
1% OF OUR LIFE TIME SPENT AS PATIENT
“Person-centered care” means that individuals’ values and preferences are elicited and, once expressed, guide all aspects of their health care, supporting their realistic health and life goals. Person-centered care is achieved through a dynamic relationship among individuals, others who are important to them, and all relevant providers. This collaboration informs decision-making to the extent that the individual desires.

“Person-Centered Care: A Definition and Essential Elements” The American Geriatrics Society Expert Panel on Person-Centered Care, December 2015
Shift to Person-Centered Care Plan Models

Why are these types of plans important?

• Fully engage individuals, their caregivers (paid and non-paid), clinical and community-based provider teams
  – Evidence that person-centered care leads to better outcomes
• Encompass individual defined goals, preferences, strengths and weakness
• Address individual needs and the care and services required to meet their needs
• Integrate multiple interventions proposed by multiple providers and disciplines
Shift to Person-Centered Care Plan Models

*Why are these types of plans important?*

- Serve as blueprint for aligning interventions to improve quality and coordination of care received across settings of care
- Incorporate social determinants of health (SDOH) identified at assessment level
- Are managed, monitored and executed on by multidisciplinary team
- Are best supported by *technologies, policies* and *processes* that enable continual information sharing and integrated communication
POLICY LEVERS SUPPORTING PERSON-CENTERED CARE AND HEALTH IT ENABLED CARE PLAN EXCHANGE
State Survey Agency Director’s Letter S&C:13-35-NH: Dementia Care in Nursing Homes (NH)

• Outlines fundamental principles of care for a resident with dementia include an interdisciplinary approach that focuses on needs of resident as well as needs of other residents in NH

• Requires NH to implement ‘Person-Centered Care’—provides a supportive environment that promotes comfort and recognizes individual needs and preferences

Section 2402(a) of Affordable Care Act—Guidance on Implementing Standards for Person-Centered Planning and Self-Direction in Home and Community-Based Services Programs (HCBS)

- Requires HHS to ensure all states receiving federal funds develop service systems that are responsive to needs and choices of beneficiaries receiving HCBS.
- Presents ‘standards’ on person-centered planning and self-direction that should be embedded in all HHS funded HCBS programs as appropriate.
- Affected agencies include:
  - Administration of Community Living (ACL), CMS, Health Resources and Services Administration (HRSA), Indian Health Service (IHS), Substance Abuse and Mental Health Services Administration (HRSA), Administration of Children and Families (ACF).

CMS Medicaid 1915(c) Home and Community-Based Settings Final Rule

Specifies person-centered plans include:

- Individual’s strengths and preferences
- Clinical and support needs
- Individual’s identified goals and designated outcomes
- Services and supports that will assist the individual to achieve identified goals and providers that will perform those services
- Risk factors and measures
- Informed consent of the individual

Medicare Chronic Care Management (CCM) Codes

Included Services are:

• **Use of certified EHR (CEHRT)**
• Continuity of Care with Designated Care Team Member
• **Comprehensive Care Management and Care Planning**
• Transitional Care Management
• Coordination with HCBS Clinical Service Providers
• Advance Consent

Source: CMS Medicare Learning Network
CMS Reform of Requirements for Long-Term Care Facilities Final Rule

Includes requirements for Comprehensive Care Plan

• Nursing homes develop baseline care plan within first 48 hrs. of admission
• Care Plan must be person-centered—includes what is important to the resident and supports each resident in making his or her own choices
• Care Plan includes services that maintain the resident’s highest practicable physical, mental, and psychosocial well being
• Format and location of care plan are at facility discretion, but the clinical record must contain evidence that care planning process was conducted alongside the resident and include resident identified goals and outcomes of care

ONC 2015 Edition Care Plan Criterion

• Requires a Health IT Module to enable a user to record, change, access, create and receive care plan information in accordance with the HL7 Consolidated Clinical Document Architecture (C-CDA) Release 2.1 Implementation Guide, including the Health Status Evaluations and Outcomes Section

• Supports broader information about the patient, including education, physical therapy/range of motion, and social interventions

• Distinct from “Plan of Care Section” in previous C-CDA versions

• System must be able to receive care plan in accordance to standard but is NOT required to enable a user to reconcile care plan data

State Medicaid Director’s Letter 16-003

- Allows Medicaid HITECH funds to be used to support all Medicaid providers that Eligible Providers want to coordinate with
- Requires use of certified health information technology
- Supports HIE onboarding and systems for behavioral health providers, long-term care providers, home health providers, social workers and LTSS
- Supports unidirectional exchange of an electronic care plan during transition from hospital to ambulatory or LTC setting
- Supports exchange of care plan between care team members and a patient

CMS Quality Payment Program (QPP): MIPS

• MIPS Quality Measures: Measure #47 Care Plan
  – % of patients aged 65+ who have advance care plan documented in medical record

• MIPS Improvement Activities:
  – (IA_PM_13) Chronic care and preventative care management for empaneled patients
  – (IA_BMH_7) Implementation of integrated PCBH model
  – (IA_CC_9) Implementation of practices/processes to develop regularly updated individual care plans for at-risk patients that are shared with beneficiary or caregivers
  – (IA_BE_23) Provide coaching between visits with follow-up on care plan and goals

Source: https://qpp.cms.gov/
CMS QPP: Alternative Payment Models (APM)

• All 7 models require at least 50% of clinicians to use CEHRT

• Two models specifically require capture and exchange of care plans
  
  – Comprehensive Primary Care Plus (CPC+) Model (Track 2)
    • Practices must adopt certified health IT for two ONC 2015 Edition Criteria: Care Plan and Social, Behavioral and Psychological Data
  
  – Oncology Care Plan Model
    • Requires documentation of care plan using IOM guideline

Source: https://qpp.cms.gov/
ROLE OF HEALTH IT
Role of Health IT in Care Plan Exchange

**FOUNDATIONAL**
- Facilitates capture of data in one IT system and exchange of this data with another system without the receiving system having to interpret the data.

**STRUCTURAL**
- Defines *structure or format of data exchange* where there is uniform movement of health data. e.g. ADT message

**SEMANTIC**
- Provides *meaning* at data element level so that information is universally understood and can be used by the receiving information system. e.g. LOINC code for Goals
Role of Health IT Standards

• Standards provide the fundamental **definitions for** and **structures of**
  the data that can be communicated electronically across a wide variety
  of healthcare use cases

• Interoperable care planning involves standardization across three layers:
  – how care plan information is sent and received (transport)
  – the structure and format of the information (syntax)
  – the terms or meaning of the information within the care plan
    (semantics)

STANDARDS EXIST TO SUPPORT ALL THREE LAYERS
CURRENT STATE OF CARE PLAN
STANDARDIZATION
Universe of Care Plan Standards

Static Models

- HL7 C-CDA 2.1 Care Plan Document Template (constrained within C-CDA 2.1 Implementation Guide)
- HL7 Care Plan Domain Analysis Model
- HL7 FHIR Care Plan Resource (constrained by FHIR DSTU)
- HL7 C-CDA on FHIR Care Plan

Dynamic Models

- HL7/OMG Care Coordination Services (CCS) functional model
- IHE PCC Dynamic Care Planning Profile

All standards built upon CDA and FHIR
C-CDA Care Plan Components

Care Plan Serves as ‘container’ to capture key information components (structure & semantics)

- Health concern/problem (Needs/Issues)
- Health goal (Goal/Objective)
- Intervention/activity (Action)
- Progress/outcomes (Evaluation)
HL7 CarePlan FHIR Resource Components

Used to capture information for an activity that is desired to be done (future).

Describes who is involved and what actions are intended without dealing in discrete data about dependencies and timing relationships.

Used to represent both proposed plans as well as active plans.

Source: https://www.hl7.org/fhir/careplan.html
<table>
<thead>
<tr>
<th>Name</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>HL7 CDA R2 Personal Advanced Care Plan Document R1</td>
<td>Specifies how to create a patient generated document with content that expresses an individual’s advanced care plan.</td>
</tr>
<tr>
<td>IHE QRPH EHDI Hearing Plan of Care Rev2.1</td>
<td>Describes the structure of hearing plan of care for a newborn to include closed loop referral.</td>
</tr>
<tr>
<td>HL7 Essential Information for Children with Special Health Care Needs</td>
<td>Presents CDA templates that include important information about patient and parental preferences and directives when seeking care from health care providers in a variety of settings including urgent and emergent care</td>
</tr>
<tr>
<td>HL7 Clinical Oncology Treatment Plan and Summary</td>
<td>Presents clinical oncology CDA templates (Treatment Plan and Summary Document) to augment coordination between providers treating patients for Breast Cancer and Colon Cancer.</td>
</tr>
</tbody>
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## Use Case/Domain Specific Care Plan Standards

<table>
<thead>
<tr>
<th>Name</th>
<th>Description</th>
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<tbody>
<tr>
<td>NCPDP/HL7 Pharmacist eCare Plan</td>
<td>Presents enhanced medication management content based on C-CDA 2.1 Care Plan Document template. Includes open source transforms (mappings) from C-CDA to FHIR.</td>
</tr>
<tr>
<td>HL7 US Core Care Plan</td>
<td>Sets minimum expectations for the HL7 CarePlan resource to record, search and fetch assessment and plan of treatment data associated with a patient (based on ONC 2015 Edition Common Clinical Care Requirements).</td>
</tr>
<tr>
<td>Argonaut Assessment and Plan of Treatment</td>
<td>Provides the API documentation for searching for and fetching patient assessment and plan of treatment data using the CarePlan resource.</td>
</tr>
<tr>
<td>ONC/CMS electronic Long-Term Services &amp; Supports (eLTSS) dataset</td>
<td>FULLY SUPPORTS CMS Person-Centered Planning Requirements. Identifies dataset to capture, share and exchange LTSS plans within home and community-based settings. Dataset can be incorporated into a CDA or FHIR based Care Plan.</td>
</tr>
</tbody>
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Standard Adoption Challenges

• Existing standards need additional testing, validation and real world implementation (too many to choose from!!)

• Content (semantic) standards gap remain for:
  – Social Determinants of Health (SDOH)
  – Behavioral Health nomenclature
  – LTSS vocabularies

• Existing transport standards need to account for all exchange methods from fax/email to HIE to FHIR API

• Healthcare organizations implementing robust care plan capabilities using non-certified and/or standards based technologies

• Go-to-market strategies for digital health cannot afford to ‘wait’ for the right standard to be published
Additional Challenges

• Policy barriers
  – electronic care planning across and between provider groups and individuals
  – Acceptance, incorporation of person-generated clinical and non-clinical information (e.g. LTSS) in Care Plan
  – Incorporation of Social Determinants of Health (SDOH) derived from assessments
• Governance barriers
  – Consensus on processes, procedures and workflow to support longitudinal care planning
  – Consolidation and reconciliation of multiple care plans
Standard Adoption Challenges

• Operational & Cultural Barriers:
  – Variability in vendor adoption and implementation of care planning capabilities
  – Lack of consensus on care plan component data sets
  – Limited awareness and consensus on value of longitudinal care plans
  – Lack of clarity on role of all care team members
  – Clinical sophistication of team members: RNs and MDs to Home Health Aides
  – Lack of clarity on outcomes and how they work within care planning process and modeling

• Financial Barriers
  – Significant resources (human and capital) needed to build, maintain and share care plans—CARE PLANS ARE DIFFICULT TO BUILD AND MAINTAIN
  – No compelling business case for value of care plans over cost
  – Misaligned incentives to incorporate SDOH within clinical workflow
EXEMPLAR CARE PLAN STANDARDS BASED INITIATIVES
<table>
<thead>
<tr>
<th>Initiative</th>
<th>Standard(s)</th>
</tr>
</thead>
</table>
| HL7/BCBSA: Care Plan Proof of Concept (2015)                              | • HL7 C-CDA 2.1 Care Plan  
• HL7 Care Plan DAM                                                                     |
| Greater New York Hospital Association and HealthIX Care Plan Implementation | • Builds off BCBSA Proof of Concept Project  
• HL7 C-CDA 2.1 Care Plan                                                                |
| VA Care Coordination for Improved Outcomes Challenge                       | • FHIR Care Plan Resource  
• Care Plan DAM                                                                               |
| NIH NIDDK Chronic Kidney Disease (CKD) Care Plan Project                    | • HL7 C-CDA 2.1 Care Plan                                                    |
| My Care Guide for Veterans                                                 | • FHIR Care Plan Resource  
• CDS Hooks API  
• Apple Carekit and Healthkit                                                              |
| Early Hearing Detection and Intervention (EHDI) Hearing Care Plan Pilot: Oregon Health Authority (June 2015) | • IHE QRPH EHDI Hearing Care Plan of Care  
• IHE PCD-01                                                                                  |
| Utah Health Department Newborn hearing screening care coordination (ONC HIE Grantee): Utah Department of Health, Utah Health Information Network (UHIN) and Intermountain Healthcare (Sept 2015 to Sept 2016) | • C-CDA 2.1 Progress Note  
• DIRECT                                                                                     |

Incorporate Person-Centered Planning Approaches
<table>
<thead>
<tr>
<th>Initiative</th>
<th>Standard(s)</th>
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</thead>
<tbody>
<tr>
<td>ONC/CMS eLTSS Initiative</td>
<td>• eLTSS Dataset (emerging)</td>
</tr>
<tr>
<td></td>
<td>• C-CDA 2.1 Care Plan Document Template</td>
</tr>
<tr>
<td></td>
<td>• FHIR Care Plan Resource(s)</td>
</tr>
<tr>
<td>NCPDP/HL7 Pharmacist eCare Plan Pilots</td>
<td>• HL7 ePharmacy eCare Plan IG (based on C-CDA 2.1 and FHIR Care Plan Resource)</td>
</tr>
<tr>
<td>• Community Care of NC (CMMI Grantee)</td>
<td></td>
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<tr>
<td>• Great Plains Area (ND, SD, IA, NE) of IHS</td>
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<tr>
<td>Comprehensive Primary Care Initiative (CPC+) Track 2</td>
<td>• C-CDA 2.1 Care Plan Document Template</td>
</tr>
<tr>
<td>CMMI Grantee (target Q12019)</td>
<td></td>
</tr>
<tr>
<td>Veterans Administration (VA) Salt Lake City Health Care System:</td>
<td>• FHIR Risk Assessment Resource, Patient Resource, Goal Resource, Clinical</td>
</tr>
<tr>
<td>Shared Care Planning</td>
<td>Resource, Workflow Resource</td>
</tr>
<tr>
<td>Argonaut Project</td>
<td>• Argonaut Implementation Guide</td>
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OPPORTUNITIES FOR BROADER INDUSTRY ENGAGEMENT
Calls to Action

- **Leverage existing policy levers** available that promote care plan capture and exchange and person-centeredness

- **Don’t reinvent the wheel**: review, test and provide input on available standards
  - Participate in national discussions and testing opportunities

- **Follow ‘Crawl, Walk, Run’ approach** for gradual electronic care plan implementation
  - Build incremental, standards based components

- **Promote your interoperability project** in [ONC Interoperability Proving Ground](https://www.healthit.gov/)
Participate, Test, Validate, Repeat…

**HL7 C-CDA Enhancing Implementations**
3 X per year

In-person vendor implementation-a-thons focused on the testing and rendering of C-CDA Document templates to include Care Plan. Scheduled week prior to quarterly HL7 Working Group Meetings.


**HL7 FHIR Connectathons**
3 X per year

Scheduled as part of quarterly HL7 Working Group Meetings. Register for Care Plan Track.


**IHE C-CDA Connectathons**
1 X per year

Annual 1 week testing events. Over past 4 years, have included testing of C-CDA Document Templates to include Care Plan:

[http://www.iheusa.org/what-is-ihe-connectathon]
Questions

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PLEASE REMEMBER TO FILL OUT EVALUATION FORMS