

Coordinating Care and Managing Transitions for Individuals with Complex Care Needs Using the CCTM RN Model

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OBJECTIVES

- Discuss demand for care transition management for individuals with complex care needs across the care continuum
- Describe development of the Care Coordination and Transition Management (CCTM) dimensions and competencies
- Discuss challenges, future directions, and outcomes of the CCTM RN Model in managing care transitions for individuals with complex care needs

BACKGROUND

- Chronic diseases responsible for 7 of 10 deaths each year; and treating people with chronic diseases accounts for 86% of nation's health care costs <https://www.cdc.gov/nccdphp/dch/pdfs/oo-making-life-easier-nidcdp.pdf>
- 88% of U.S. healthcare dollars are spent on medical care that only accounts for approximately 10% of a person's health
 - Other determinants of health are: lifestyle and behavior choices, genetics, human biology, social determinants, and environmental determinants accounting for approximately 90% of their health outcomes (Trotter et al., 2016) [http://www.exerciseismedicine.org/assets/page_documents/Whitepaper%20Final%20for%20Publishing%20\(02%20\)2020Chronic%20diseases.pdf](http://www.exerciseismedicine.org/assets/page_documents/Whitepaper%20Final%20for%20Publishing%20(02%20)2020Chronic%20diseases.pdf)
 - Many struggle with multiple illnesses combined with social complexities such as, mental health and substance abuse, extreme medical frailty, and a host of social needs such as social isolation and homelessness (Berwick, Nolan & Whittington, 2008)
- Escalating problem of multiple chronic conditions (MCC) among Americans is a major challenge, associated with suboptimal health outcomes and rising healthcare expenses (Parekh et al., 2011)
- Delivery of health services continues to employ outmoded "silo" approaches that focus on individual chronic diseases (Parekh et al., 2011)
- Average Medicare patient has seven providers across four care settings involved in their care, five specialty providers and two primary care providers (IOM, 2013)

SIGNIFICANCE

- The Joint Commission identified miscommunication as the main cause of serious, unexpected patient injuries and was the second common cause of sentinel events reported during the first six months of 2013 (Ellison, 2015)
- Potential for medical errors increases when more than one health care provider or site of care is involved in providing services to an individual (Clancy, 2008)
- Four out of five patients are discharged from hospitals without direct communication with primary care provider (PCP) (RWFJ, 2013a, 2013b)

Definitions of Care Coordination and Transition Management

- Effective **care coordination and transition communication** is an expectation of quality care
- **Care coordination** "is the deliberate organization of patient care activities between two or more participants (including the patient) involved in a patient's care to facilitate the appropriate delivery of health care services. Organizing care involves the marshaling of personnel and other resources needed to carry out all required patient care activities and is often managed by the exchange of information among participants responsible for different aspects of care." (McDonald et al., 2007 in AHRQ Care Coordination Measures Atlas, 2010, p. 4)
- **Care coordination** is: "...the deliberate synchronization of activities and information to improve health outcomes by ensuring that care recipients' and families' needs and preferences for healthcare and community services are met over time" (NQF, 2016, p. 13)
- **Transitional Care** "comprises a range of time-limited services that complement primary care and are designed to ensure health care continuity and avoid preventable poor outcomes among at-risk populations as they move from one level of care to another, among multiple providers and across settings." (Naylor, 2000)
- **Transition Management** is "the ongoing support of individuals and their families over time as they navigate care and relationships among more than one provider and/or more than one health care setting and/or more than one health care service. The need for transition management is not determined by age, time, place, or health care condition, but rather by individuals' and/or families' need for support for ongoing, longitudinal individualized plans of care and follow-up plans of care within the context of health care delivery." (Haas, Swan, & Haynes, 2014, p. 3)

Need for Care Coordination and Transition Management (CCTM) Competencies

- Nurses in ambulatory care were performing care coordination, until Haas et al. (1995) national study, there was no evidence of their work or contribution
- Nurses typically did not chart in ambulatory care on paper or EHR
- With advent of EHR, there are few documentation screens for nurse documentation
- There were no indicators to track the impact that care coordination and transition management by RNs had on processes or outcomes of care
- Nurses in acute care may have been doing a form of case management/utilization review but not care coordination as delineated in CCTM focused on population health management
- Did not often use best evidence-based practice or evidence-based guidelines for specific populations, rather concern was with individuals
- **Nurses and the work of nursing was invisible**

Developing CCTM Dimensions and Competencies

- Developed evidence-based competencies for Care Coordination and Transition Management performed by registered nurses in all settings
- Leveraged expertise of ambulatory and acute care nurse leaders
- Used focus group methods online as a cost effective, expeditious approach to bring nurse leaders from all settings together
- Provided opportunities to dialogue and build on each panel expert's knowledge, skills, attitudes, and experiences
- Used data summary techniques to capture and share data and outcomes achieved by each panel

METHODS

Translational Research Design

- Searched and appraised interprofessional evidence for best evidence-based practices on care coordination and transition management in all settings
- Used theory (Wagner's Chronic Care Model, 1998) to guide development of dimensions, implementation, adoption, sustainability, and dissemination of Care Coordination and Transition Management (CCTM)
- Used Quality and Safety in Education in Nursing (QSEN) format to specify competencies
- Used Logic Modeling to clarify assumptions and relationships between major constructs
- Used project management techniques to keep project on target and on time
- Communicated with major stakeholders at frequent intervals

Expert Panel 1

- Provided with results of a search in MEDLINE, CINAHL Plus, and PsycINFO that yielded 82 journal articles plus white papers available on line from major organizations
- 26-member panel worked in dyads and abstracted data to a table of evidence (TOE)
- Each dyad reviewed four to five articles and needed to reach consensus on items for TOE
- Abstracted the information onto the template table of evidence

Expert Panel 2

- 16-member panel was charged with:
 - Defining the dimensions, identifying core competencies
 - Describing the activities linked with each competency for care coordination and transition management in all settings
 - Using focus group methods online, the expert panel identified nine person-centered care dimensions and associated activities of care coordination and transition management
- The *Quality and Safety in Education in Nursing (QSEN)* format was used for each care coordination and transition management dimension (Cronenwett et al., 2007)
- Panelists were asked to identify the knowledge, skills, and attitudes identified in the literature, and if absent to use expert opinion to specify each, illustrated in **Table 1**

Table 1. Example of Dimension with Knowledge, Skills, and Attitudes

DIMENSION	ACTIVITY(IES)	COMPETENCY (IES); KNOWLEDGE (K); SKILLS (S); ATTITUDE (A)	EVIDENCE (LIST CITATION/ REFERENCE)
Education and Engagement of Individuals and Families	Assessment of readiness to learn Development and use of content that is age, education level and culturally appropriate Evaluation of learner understanding of content taught Performance of eight clinical processes: "assessing the patient and primary caregiver at home, creating an evidence-based care plan, promoting patient self- management, monitoring the patient's conditions monthly, coaching the patient to practice healthy behaviors, coordinating the patient's transitions between sites and providers of care, educating and supporting the caregiver, and facilitating access to community resources." P. 321-322.	Knowledge: knows questions to ask and cues to look for regarding physical, psychological and social readiness to learn Skills: Uses techniques that invite/engage patient and significant others in learning Uses techniques to assess learning such as "teach back" Attitudes: Demonstrates creativity in planning appropriate learning experiences for patients and significant others Knowledge: identifies questions to ask to holistically design an integrated care plan that encompasses a variety of care methods to provide patients with complex care needs with the resources needed to maintain the highest level of function. Has awareness of known risk factors that place a patient at risk for re-hospitalization or exacerbation and utilizes knowledge and critical thinking to identify actions to mitigate risk. Skills: Identifies full range of medical, functional, social, and emotional problems that increase patient's risk of adverse health events. Addresses identified needs through education, self – care, optimization of medical treatment and integration of care fragmented by care setting and provider. Monitors patients for progress and early signs of problems. Utilizes data collection and analysis to design interventions to improve patient outcomes. Attitudes: Values the services available to patients by delivering services that facilitate beneficial, efficient, safe, and high quality patient experiences and improve patient healthcare outcomes.	Boutl et al. (2008). Early Effects of "Guided Care" on the Quality of Health Care for Multimorbid Older Person: A Cluster-Randomized Controlled Trial. Coleman et al. (2007). Effectiveness of team managed home-based primary care.

Expert Panel 3

- Reviewed, confirmed, and created a table of dimensions, activities, and competencies (including knowledge, skills, attitudes) for RN care coordination and transition management across all settings
- After much discussion, they determined the original 8th dimension of decision support and information systems, as well as, telehealth practice were technologies that support all dimensions
- Population Health Management became the new 8th dimension given the prominence it is assuming in healthcare even though there was little discussion of it in the literature reviewed, final nine dimensions listed in **Table 2**
- Cross walk with nationally recognized competencies depicted in **Table 3**

Table 2. Nine Dimensions of Care Coordination and Transition Management

Support for Self-Management
Education and Engagement of Individuals and Families
Cross Setting Communication and Transition
Coaching and Counseling of Individuals and Families
Nursing Process
Teamwork and Collaboration
Person-Centered Care Planning
Population Health Management
Advocacy

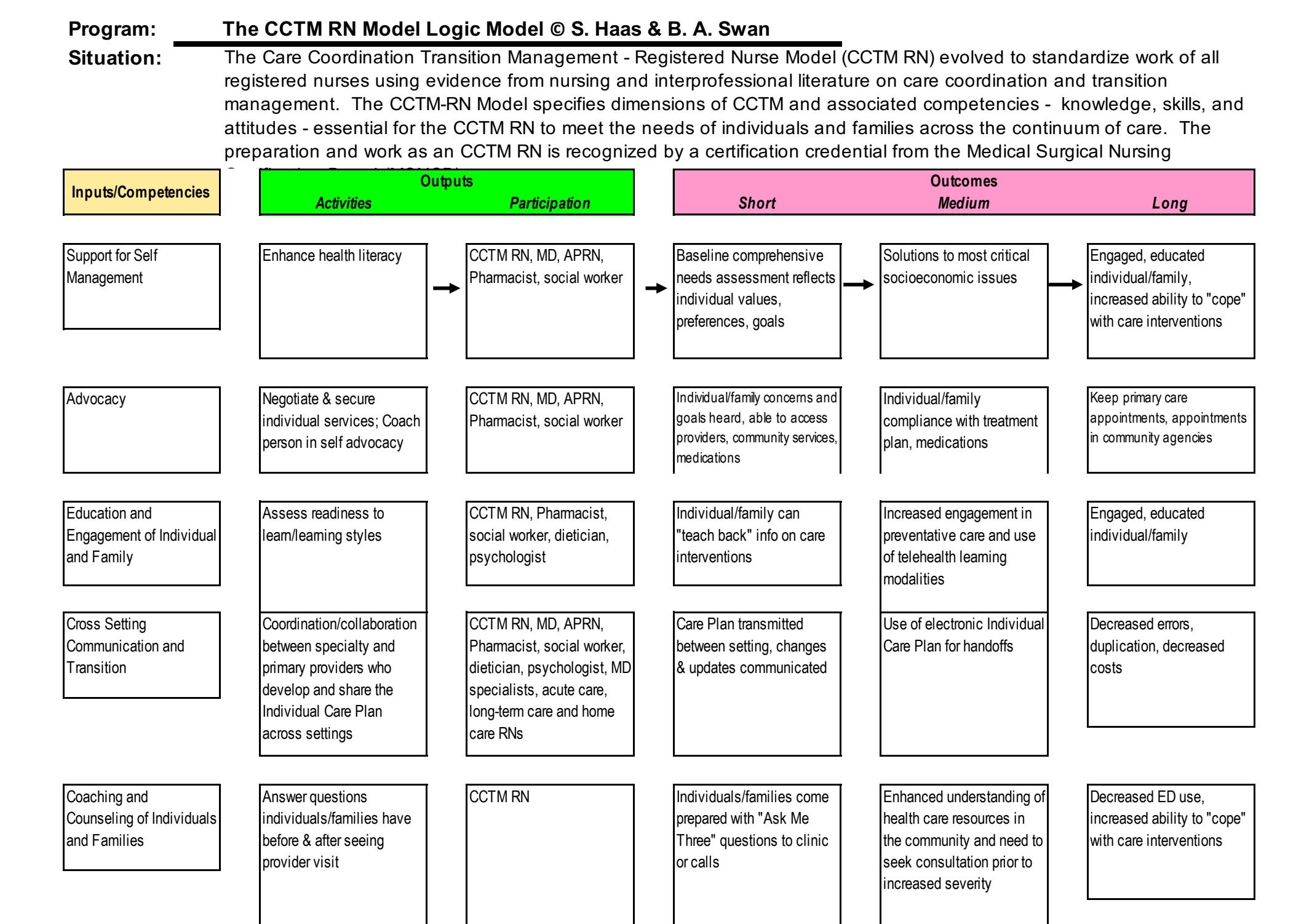
Table 3. Cross Walk of Dimensions for CCTM with National Competencies

Dimension RN Care Coordinator and Transition Manager (CCTM RN)	Quality and Safety Education for Nurses (QSEN) Core Competencies	Interprofessional Education Collaborative Core Competencies (2016)	Public Health Nursing Competencies (2018)
Support Self- Management	Person-centered Care		
Education and Engagement of Individuals and Families	Person-centered Care		
Cross Setting Communication and Transition	Person-centered Care	Interprofessional Communication	Domain #3: Communication Skills
Coaching and Counseling of Individuals and Families	Person-centered Care		Domain #4: Cultural Competency Skills
Nursing Process: Assessment, Plan, Intervention, Evaluation	Evidence-based Practice Quality Improvement	Roles and Responsibilities	Domain #1: Assessment and Analytic Skills
Team Work and Collaboration	Teamwork and Collaboration	Teams and Teamwork	Domain #8: Leadership and System Thinking Skills
Person-Centered Planning	Person-centered Care	Values/Ethics for Interprofessional Practice	Domain #1: Assessment and Analytic Skills
Population Health Management	Quality Improvement Informatics		Domain #5: Community Dimensions of Practice Skills Domain #6: Public Health Sciences Skills
Advocacy	Person-centered Care Safety		Domain #2: Policy Development/Program Planning Skills

Use of Logic Model

- Delineates vision/purpose for a project
- Surfaces assumptions, environmental issues and needed knowledge, skills, and attitudes
- Specifies relationships among program goals, objectives, activities, outputs, and outcomes.
- Clearly indicates the theoretical connections among program components; activities involved, who carries out the activities and specification of short, medium and long term outcomes.
- Sets up evaluation by assisting with development of the measures used to determine if activities were carried out (process and output measures) and if the program's objectives are met (outcome measures)
- Template illustrated in **Figure 1** <https://www.bja.gov/evaluation/guide/pe4.htm>

Figure 1. CCTM Logic Model



Challenges Using CCTM with Individuals with Complex Care Needs

- Developing and using position descriptions that incorporate CCTM competencies
- Developing education and evaluation methods that foster CCTM competencies involving QSEN KSAs within and across professions
- Developing staffing models to support/resource the interprofessional team
- Building human resources/team configuration to support CCTM
- Creating an environment (physical and cultural) to support CCTM
- **Choosing and using a tool to stratify individuals with complex care needs that incorporates social determinants**
- Developing/standardizing communication methods for communication across settings and between interprofessional team members
- Developing, testing and using process and outcome indicators to track the impact and value of CCTM RN

Advantages of Using CCTM With Individuals with Complex Care Needs

- Dimensions provide evidence-based assessments, interventions, and expected outcomes
- Population Health Management focuses attention on need to address best evidence-based practice for defined populations, prior to individualizing care
- Suggests use of standardized communication tools to enhance transition management between providers and settings
- Suggests use of extant evidence-based algorithm for assessment, planning, interventions for individuals with complex care needs
- Structures a layout for EHR documentation screens that provide data for:
 - Decision support tool development
 - Evidence of contribution to comes by distinct members of the interprofessional team
 - Data to assist with staffing models
 - Evidence of nurse contribution to outcomes of care

Example of Using Standardized Tool During Care Transitions

- BOOST[®] Better Outcomes by Optimizing Safe Transitions
- Developed by: Society of Hospital Medicine
- Assist in stratification of risk, as well as assessment of needs <http://www.hospitalmedicine.org>
- Advantages to BOOST[®]
 - Goes beyond individual's physical and psychological problems
 - Goes beyond history of readmission and ED use
 - Provides evidence-based predictors of risk that include social determinants
 - Can be used to stratify individuals
 - BOOST Tool with Universal Patient Discharge Checklist and General Assessment of Preparedness
 - BOOST Patient PASS Tool [Patient Preparation to Address Situations (after discharge) Successfully]
 - BOOST Tool For Addressing Risk: Geriatric Evaluation for Transitions, Risk Assessment 8P Screening Tool