Care Coordination Clinical Reasoning Model for Advanced Practice Nurses

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Objectives

- Identify the essential care coordination competencies in the *Care Coordination Clinical Reasoning Systems Model*.

- Describe the flow of thinking between
  1. *patient centered-systems thinking*
  2. *team centered-systems thinking*
  3. *organizational centered-systems thinking*

- Describe the incorporation of the *Competing Values Framework* for team-centered thinking in the context of care coordination clinical reasoning.
Background

- The **Professional Nurse** has been the health professional who historically coordinated patient and family care. Advanced practice nurses in particular are highly qualified to provide care coordination and case management in the context of health care reform and the key focus for Accountable Care Organizations (ACO’s) (*Patient Protection and Affordable Care Act, 2010; Stanley, Werner, & Apple, 2009*).

- The American Nurses Association *(ANA, 2015)* supports and advances the core elements of care coordination *(AHRQ, 2014; NQF, 2010)* and espouses that **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.

- In addition, such care coordination is enhanced if advanced practice nurses are able to practice to the full extent of their education and license *(IOM, 2003)*.

- To date many of the advance practice nurse led models of care have demonstrated better coordinated care at lower costs for patients with multiple social and health care needs *(Craig, Eby, & Whittington, 2011)*.
Purpose for the Frameworks

- The **Outcome-Present-State-Test (OPT) Clinical Reasoning model** and the **Care Coordination Clinical Reasoning (CCCR) systems model** provides structures and strategies to support the critical, creative, systems and complexity reflective thinking needed to define and juxtapose present patient and family health care concerns with desired health outcomes in the context of interprofessional care and health care delivery systems.
Care Coordination Essential Needs

- A survey of various care coordination models and programs reveals care coordination essential needs to include in each case management situation to guide the plans of care toward successful outcomes (Haas, Swan, & Haynes, 2014).

- Conducting a needs assessment
- Initiating medical care services
- Testing, evaluation of capacity, resources and skills
- Developing an individualized plan of care
- Engaging, coaching, and educating the patient and family
- Monitoring and safety
- Promoting self-management
- Team collaboration
Thinking Skills that Support Care Coordination Clinical Reasoning

- **Critical Thinking** – *cognitive* activities the advanced practice nurse uses for clinical reasoning in the context of care coordination are driven by the values inherent each situation (questioning, analysis, synthesis, interpretation, inference induction, deduction, intuition, application, creativity (AACN, 1998).

- **Creative Thinking** – *metacognitive* processes that support clinical reasoning by generating associations, attributes, elements, images and operations to solve problems (Pesut, 2008; Schunk, 2012; Treffinger & Isaksen, 2005).

- **Systems Thinking** – *metacognitive* thinking about, and a language for describing and understanding, the forces and interrelationships that shape the behavior of systems including interactive feedback loops (Richmond, 1993; Senge, 1990).

- **Complexity Thinking** – *metacognitive* thinking regarding relationships and recursive non-linear pattern recognition associated with the identification and creation of clinical reasoning webs, patient care needs and nursing care responses (Capra, 1996; Gleick, 1987; Pesut, 2008; Wheatley, 1999).

- **Self-regulation perspectives** – *metacognitive* patient centered, team centered, and organizational centered-systems reflective thinking.
Flow of Thinking

- Critical Thinking
- Creative Thinking
- Self-regulation
- Systems Thinking

Patient-Centered Systems Thinking

Team-Centered Systems Thinking
- Creative Thinking
- Complexity Thinking
- Systems Thinking

Organizational-Centered Systems Thinking
- Complexity Thinking
- Systems Thinking
CCCR Systems Model Web

- The **CCCR systems model web** worksheet builds on the foundation of the OPT model.

- Helps to visually represent and determine relationships between and among essential patient care problems, needs, and issues through concurrent consideration of all the needs and issues to appreciate complexity of challenges.

- Interaction of system dynamics and manages the cross-setting communication and care transitions for team interaction and systems thinking.
OPT Clinical Reasoning Web Worksheet

Health Promotion
- Hypertension I10
- GERD K21.9
- Physical Abuse T76.11
- Cellulitis L03.115

Safety Protection
- Obesity E66.91
- Hyperlipidemia E78.5
- Vitamin D Deficiency E55.9

ICD 10 Codes
- Life Principles
- Growth Development
- Nicotine dependence F17.203
- Depression F33.0

Nutrition
- Depression F33.0
- Coping Stress Tolerance
- ICD 10 Codes

Elimination & Exchange
- ICD 10 Codes

60 Year Old African American female Patient
- History of cerebrovascular accident co-morbidities
- Risk for Injury, falls, other-directed violence

Sexuality
- ICD 10 Codes

Activity Rest
- Hemiplegia I69.35

Perception Cognition
- Growth Development
- Self-Perception

Comfort
- Role Relationships
- ICD 10 Codes
# Nursing Domain Priority Table

<table>
<thead>
<tr>
<th>Nursing Domain</th>
<th>Medical Diagnoses* (Example)</th>
<th>Web Connections (Example)</th>
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</thead>
<tbody>
<tr>
<td>Safety / Protection</td>
<td>Physical abuse T76.11</td>
<td>13</td>
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<tr>
<td></td>
<td>Cellulitis L03.115</td>
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<tr>
<td>Nutrition</td>
<td>Morbid Obesity E66.9</td>
<td>10</td>
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<td></td>
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<td></td>
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<td>Coping / Stress Tolerance</td>
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<tr>
<td>Activity / Rest</td>
<td>Hemiplegia I69.35</td>
<td>7</td>
</tr>
<tr>
<td>Perception / Cognition</td>
<td>Mild cognitive impairment G31.84</td>
<td>7</td>
</tr>
</tbody>
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*http://www.icd10data.com/ICD10CM/Codes*
OPT Clinical Reasoning Model

Reflection on Clinical Reasoning

Judgments
- Plan of care
- Safety
- Needs
- Capacity
- Skills
- Resources
- Self-management

Framing:
- Outcome State
  Answer here
- Present State
  Answer here

Testing
Answer here

Diagnostic Cue/Web Logic:
- Keystone Issue:
  Answer here

Patient-in-Context Story
Answer here

Decision Making (interventions)
Care Coordination Clinical Reasoning Systems Model

©Pesut & Herman, 1999
The **CCCR systems model worksheet** provides a visual representation or map of the structure of the model to serve as a guide to help make explicit the value exchanges in team work and the perspectives that emerge when thinking at the level of the team.

- Writing each element on the worksheet shows how the parts of the model relate to each other.
Value Network Analysis

- When a group of people get together to make something happen; it does not evolve in a linear and/or hierarchical way.

- Value networks help make explicit the collaboration and values exchanged in human to human network interactions (Allee & Schwabe, 2015).

- **Value Network Analysis** is a method that comes from the business world to help explain the value added aspects of individual, group and team contributions to an enterprise.

- Discussions about value exchanges between and among patients and care givers and providers are likely to result in role clarity and contributions that support more high quality performance (Allee, 2003).
CCCR Systems Model

Patient Description

Basic Needs Assessment
*Practice Issues:
Interventions:
Outcomes:
Value: Explicit Knowledge

Medical Care Services and Testing
Practice Issues:
Interventions:
Outcomes:
Value: Deliverable in Value Network

Coaching and Educating
Practice Issues:
Interventions:
Outcomes:
Value: Exchange in Value Network

Organizational Centered-Systems Thinking

Patient Centered-Systems Thinking

Activity Plan from Interprofessional Team

Collaborate
Facilitator
Mentor

Create
Innovator
Broker

Control
Coordinator
Monitor

Compete
Producer
Director

Value Network
Managing knowledge
Impact Analysis

Team Centered-Systems Thinking

Individualized Plan of Care
Practice Issues:
Interventions:
Outcomes:
Value: Structural Capital

Monitoring Safety, Needs Assessment, and Plan of Care
Practice Issues:
Interventions:
Outcomes:
Value: Human Capital/Competence

Evaluation of Capacity, Resources, Skills
Practice Issues:
Interventions:
Outcomes:
Value: Perceived Value Analysis/Realization

Promoting Self-Management
Practice Issues:
Interventions:
Outcomes:
Value: Feedback/Resilience in a Network

*Practice Issues could be from any discipline; nursing, medicine, pharmacy, social work etc.
Competing Values Framework for Care Coordination Clinical Reasoning

Key questions to consider for the four dimensions of collaborating, creating, controlling, and competing in the CCCR systems model:

1. What are the desired outcomes in this case?
2. What are the values I expect of myself and others?
3. How are the feelings of the patient, family and team considered in this case?
4. What strategies could the team use to coordinate care?

(Kuiper, Pesut & Arms in press)
Team Value Network Exchange Reflection Questions

- **Deliverable** - What are the deliverables that you offer and expect of others?

- **Exchange** - What are the resource exchanges between roles or participants on your interprofessional health care team?

- **Explicit Knowledge** - What is the explicit knowledge shared among members of the team?

- **Feedback** - What feedback is returned about activities or outputs in your care coordination activities? How does feedback influence team dynamics and goal attainment?

- **Human Capital/Competence** - What human capital resources are needed in order for care coordination in your context to be successful?

- **Impact Analysis** - What are the tangible/intangible costs, gains or values from the input that generate a response or activity, or increases/decreases tangible assets?

Team Value Network Exchange

Reflection Questions

- **Knowledge Management** - Who is responsible and how is knowledge managed in the care coordination process?

- **Perceived Value** - What is the value added dimensions of individual, collective, team and organizational networks?

- **Resilience** - What is the resilience capacity of the team and organization in which you work?

- **Structural Capital** - To what degree does the structural capital and infrastructure support interprofessional team work and care coordination processes?

- **Systems Thinking** - To what degree do members of the team think about the system dynamics at the patient, group, team, or organizational levels?

- **Value Realization** - To what degree do members of the team intentionally negotiate and manage competing values related to collaborating, creating, competing, and or controlling?

Final Judgments

• The **OPT Clinical Reasoning model** is revisited again for the level of perspective in care coordination where judgments are made about achieving outcomes from the interprofessional team activity plan.

• The patient centered-systems thinking is used to make judgments about the care coordination essentials.
  - Individualized plan of care
  - Safety
  - Needs
  - Capacity
  - Skills
  - Resources
  - Self-management

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Evaluation of Care Coordination Outcomes

- Did the organization or services provide resources and achieve care coordination outcomes for the case?
- Did the organizational dynamics support behaviors for the purposes of fulfilling the needs for this case?
- Did the feedback loop promote communication among and between the health care providers, and patient/family?
- Did the complexity of the system hinder or enhance the achievement of outcomes?
Clinical reasoning for care coordination can be used as a teaching and learning strategy with a framework that includes structure, content and process.

This framework extends case management by using the OPT Clinical Reasoning model across levels of perspective to align care coordination activities.

The process of care coordination clinical reasoning involves critical reflection through the use of patient centered-systems thinking, team centered-systems thinking and organizational centered-systems thinking.

Attention to issues of competing values and value analysis helps to define and describe the unique contributions that individual providers make to care coordination clinical reasoning efforts.

Effective team dynamics include being purpose-centered, internally directed, other focused, and externally open.
References Available Upon Request

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