Using team mental models and transactive memory to deliver coordinated cancer care

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Learning Objectives

After reading and reviewing this material, the participant should be able to:

• Describe the principle of Transactive Memory Systems
• Identify the components of Transactive Memory Systems
• Apply the principle of Transactive Memory to a multi-team system in oncology care
• Determine strategies for developing team mental models and evaluate clinical implications
Care Path: Mr. Mason

A 67 y/o Veteran with prostate cancer who obtains primary care from the VA, and private urology care closer to his home since his initial cancer diagnosis in 2005. In early 2015 found to have progression to metastatic, castrate-resistant prostate cancer.
Teamwork Principle: Team Mental Models

- Cancer care typically reliant on multiple care teams
- Multiteam Systems
  - Essentially a team of teams
  - Functions best when a point team coordinates
  - Transactive Memory applied to Multiteam System

Fig. 1 A Multiteam System demonstrating interplay between multiple healthcare teams in the delivery of cancer care
Teamwork Principle: Team Mental Models

• Transactive Memory Systems
  – Team members do not individually have all information
  – Each team member specializes in areas of knowledge and expertise
  – The key is for team members to know who has what specialized knowledge

• Focus is not on the information team members share but on combining divergent expertise and knowledge
  – Teams are more effective when they understand the collective knowledge held by the overarching team system
Practical Implications

• Case exemplifies challenges of a Multiteam System

• Two major themes emphasized
  – Cross-system use
    • Requires increased effort to align cognitive framework of the team
    • Shared cognition in teams that are both in direct and indirect contact
  – Oral anticancer therapy
    • Patient plays a much more active role in medication administration

• Teams must be adept at recognizing and leveraging the unique cognitive expertise of component teams
Implications for Clinical Care

• “Boundary Spanning” Team
  - Designated centralized team
  - Informed about expertise of component teams
  - Orients team to shared goals and collective knowledge
  - Limits informal knowledge exchange

• Patient may be only unifying member of MTS

Fig. 2 A Multiteam System with Medical Oncology as boundary-spanning point team
Implications for Clinical Care

• Training interventions
• Point-of-care aids to assist in knowledge sharing
  – For providers
  – For patients
• Build on design of Patient-Centered care models
  – PCMH, VA PACT
  – Incorporate a specialty liaison
    • Responsible for bi-directional communication and education
    • Assist with coordination
Implications for Research

• Further explore application of Transactive Memory Systems in a Multiteam System
  – What are the characteristics of a high-functioning MTS in oncology?
  – How can an oncology MTS effectively identify and achieve system-level goals?
  – What are the specific activities that a boundary-spanning team must perform to ensure coordination?
• How should technology be integrated to optimize results?
• Does a focus on team cognition directly influence patient care or outcomes?
Discussion Question

How can we successfully integrate our patients into the cognitive framework of an Oncology Multiteam System?