Leveraging a Team Mental Model to Develop a Cancer Anorexia Cachexia Syndrome Team

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Learning Objectives

- Identify the care challenges of current-state Cancer Anorexia Cachexia Syndrome (CACS)
- Define the team principle of Team Mental Model (TMM) & the types of knowledge involved
- Describe the application of TMM to new CACS team formation and function
- Specify possible research directions for the study of TMMs in healthcare teams

Outline

- Background
- CACS case and challenges
- Review of the principle of TMM
- TMM and CACS case deficits
- Leveraging the TMM for CACS care solutions
- Research opportunities
- Taking it Home

Background

- Cancer Centers are implementing integrated care delivery strategies including multidisciplinary teams

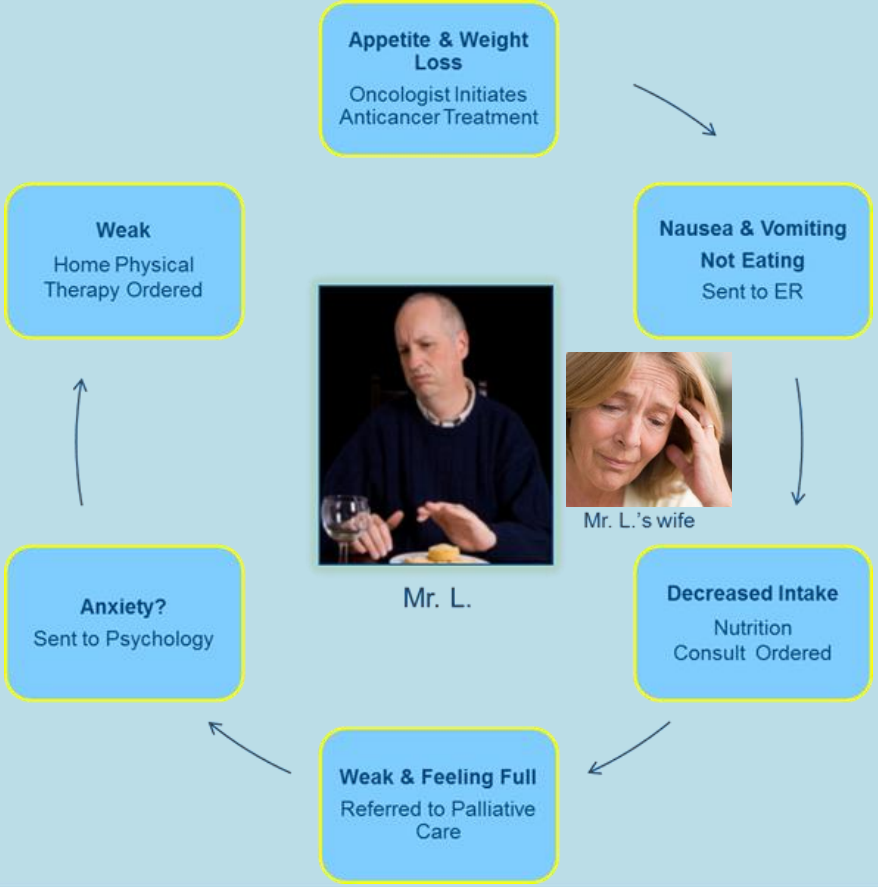
- Existing body of knowledge on barriers and promoters of care integration
  - Highlights problems in fostering collaboration and cooperation across professional boundaries

- Team Science suggests a *shared mental models* framework may enable more coordinated and effective action towards integrated care

Jenna M. Evans, G. Ross Baker, (2012),"Shared mental models of integrated care: aligning multiple stakeholder perspectives", Journal of Health Organization and Management, Vol. 26 Iss: 6 pp. 713 - 736

The Case: 62-year-old Man with NSCLC & CACS

- Fragmented approach of various disciplines to Mr. L.'s CACS care
- Absence of shared mental model among the providers, patient, caregiver for CACS care
    - Limited shared knowledge among providers about tasks to be performed, other clinicians' functions, optimal processes for CACS care
    - Each provider responsive to individual symptoms
    - Patient & the family caregiver at odds with providers



The CACS Challenge

- Loss of skeletal muscle mass; reduced food intake
  - Progressive functional impairment
  - Interferes with anti-cancer treatments
  - ***Major cause of patient and caregiver distress***

- Progress made in understanding stages and mechanisms
  - Promising pharmacologic & supportive-care interventions

- Coordinated care lacking
  - Few specialized clinics devoted to the management of CACS
  - Time and resource requirements are challenges in busy clinical oncology practice
  - Inconsistent screening, assessment, staging and management
  - Impetus to refer out to various specialists or engage in crisis management

Coordinating Mechanisms
Team Mental Model (TMM)

Definition:

- Team members' shared, organized understanding and mental representation of knowledge about key elements of the team's environment

- Teams with a well-developed TMM have a similar view of what is happening, what is likely to happen next, why it is happening and what members may need

KEY TMM ELEMENTS	
Task-related knowledge: **The WHAT**	• Team members share a similar representation of the task work the team is performing. • This knowledge holds across a variety of tasks and allows team members to draw common interpretations. E.g., team members are familiar with how to stage CACS based on established international consensus criteria.
Team-related knowledge: The WHO	• Team members know characteristics and expertise of their teammates and of the team itself. • Understand how each member's specific knowledge and skills serve the goals of the team as a whole. • Specific expertise and skills are distributed among team members yet are complimentary. E.g., for anorexia: The palliative care clinician determines the appropriateness of appetite stimulants and the dietitian focuses on preferred foods that may increase intake.
Team process knowledge: The HOW	• Shared mental model of the interpersonal processes among team members; teamwork. • Understanding and expectations among team members related to communication, coordination, and leadership. E.g., each CACS team member is integral to the development of a single cohesive CACS care plan by communicating their assessment and recommendations to the other team members.

Key Elements of TMM	Key TMM-related Deficits in CACS Case
Task-related knowledge: The WHAT .	• **Lack of shared knowledge of the constellation of symptoms that characterize cancer anorexia-cachexia and its stages** • Absence of a shared perspective that this is a syndrome requiring multidisciplinary early recognition and intervention • Gap in shared understanding of CACS management strategies
Team-related knowledge: The WHO	• **Multiple sequential referrals to various disciplines with unclear responsibilities** • Crisis-oriented referrals • Little emphasis on patient and family member priorities and goals
Team process knowledge: The HOW	• **Absence of communication among multidisciplinary providers regarding patient assessments, findings and recommendations** • Failure to integrate the various evaluations and recommendations into a global care plan • Lack of a documented CACS patient care plan derived and vetted by all the CACS providers • Inadequate coordination of care resulting in exclusion of patient and family from care planning

Key Elements of TMM	TMM-leveraged CACS Care
Task-related knowledge: **The WHAT**	• Provision of inter-professional, patient, and family education regarding CACS presentation, staging and outcomes • Establish comprehensive CACS screening and early referral criteria • Develop a comprehensive, multidisciplinary CACS assessment • Establish discipline-specific CACS management guidelines
Team-related knowledge: **The WHO**	• **Representatives of disciplines join together to provide proactive, multimodal team-based clinic care** • Delineate CACS team member roles and accountabilities, including the patient and family • Elicit patient and family member priorities and goals
Team process knowledge: **The HOW**	• Consolidate the individual multidisciplinary visits as a CACS clinic team visit • Creation of an interdisciplinary CACS documentation template to standardize assessment and hand-offs • Interdisciplinary team meetings including the patient and family to create a consensus care plan

Areas for Research Attention in TMM
Structure, Process & Outcomes

- Assessing the role of patients and families in the CACS TMM
- Evaluation of the team members' satisfaction and engagement in the teamwork process
- Measure the concordance between the care provided and the expressed needs of the patient and family caregiver

The TMM Applied to a Multidisciplinary CACS Clinic Team

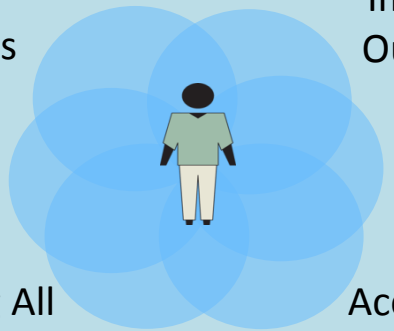
In partnership with our patients & caregivers, the team delivers timely, evidence-based, personalized & coordinated CACS care

For Our Patients

Rapid Access

Improved Outcomes

Coordinated Expertise



Better Experience

Knowing All Options/Education

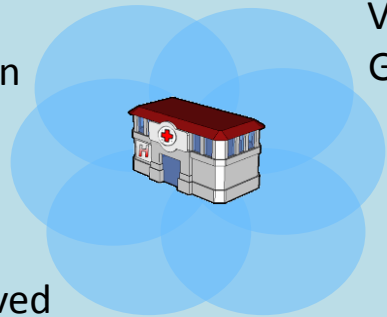
Accelerated Time to Treatment

For the Cancer Center

Patient Satisfaction

Volume Growth

Enhanced Research



Clinical Efficiency

Improved Integration of services

Better Care

Conclusions

- Evidence exists that early assessment and management of the constellation of symptoms that characterize CACS can improve patient quality of life and decrease disruption of cancer treatments.
- Multimodal evaluation and treatment is recognized as the optimal approach to CACS, but can lead to delayed and fragmented care that results in patient and caregiver burden and distress.
- Given what is known from the team science literature, CACS team formation and integration of care based on a Team Mental Model shows promise for improving care.