Virtual Teaming: Sense-Making to Transform the Team Mental Model and Care during Covid-19

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BACKGROUND

- Palliative Care team mental models (TMM) have the potential to enhance development and implementation of care plans and improve patient care by helping care teams establish team membership, identify roles and shared tasks, and facilitate interactions
- Following innovation implementation, teams may assume that their mental model will remain unchanged
- However, healthcare environments have been demonstrably dynamic
- Inability of teams to adjust to changing environments or apply insights from experience may imperil team viability and patient care
- In particular, the Covid-19 outbreak has required healthcare teams to rapidly adapt to sudden changes, demonstrating that TMMs must remain flexible and evolve to meet ongoing service challenges

CHALLENGES

- On-site assessments in our cancer anorexia-cachexia syndrome (CACS) supportive/palliative care clinic (Vitality Clinic) were deferred during the pandemic
- Our established model for in-person team-based CACS supportive care for patients with appetite and weight loss was no longer operational
- Patient and caregiver well-being, their experience of care and overall outcomes were jeopardized
- Previously established shared knowledge among providers regarding tasks, functions and optimal processes for team-based in-person CACS care were suddenly less relevant
- A new process to facilitate rapid modification of the entrenched CACS Vitality Clinic shared TMM and approach to care delivery was needed

APPROACH

- Use of Structured **sense-making**: A Team Science-based process that teams may employ to make sense of events and experiences
- In sense-making, teams observe aspects of their environment and make meaning of them as a basis for action
- Structured team sense-making enables teams to comprehend task, environmental and technology-related information within their own organizations
- Opportunities can be leveraged while navigating uncertainty, complexity, and rapid change during periods of turbulence
- To help inform ongoing clinical practice and research, we leveraged the team science principle and structured processes of sense-making to rapidly modify our TMM and create a virtual multidisciplinary CACS team (vCACSt) to provide coordinated patient-centered care remotely

Key Sense-making Steps	Sense-making for CACs Care	Sense-made CACS Care
Challenge New, unexpected, or ambiguous occurrence	-Covid-19 pandemic outbreak and containment guidelines preclude usual in-person multidisciplinary assessments and discussions for CACS patients and caregivers -Patients and caregivers unaccepting of deferral of CACS assessment and care -Several team members lack familiarity with remote care delivery options in healthcare and within their disciplines -Some care components may not have virtual care delivery options	-Patients and caregivers can receive and take part in comprehensive CACS virtual clinic visits for supportive care and nutrition optimization during the pandemic outbreak
Goal Reduce ambiguity and make sense of the issue and solution	-Adapt shared TMM to continue provision of usual multimodal team based CACS care as much as possible, including the patient and caregiver in a consensus-based approach	-A modified shared TMM is derived to reflect the team's new environment and commitment to establish the new what, who and how for CACS virtual and home care provision, including Supportive Care, Nutrition and Physical Rehabilitation evaluations and support -CACS screening and early referral criteria are reaffirmed
Sharing Unique Perspectives Each member draws from and shares their own knowledge and experience about the situation, resources and ways to address	-Team members share previous challenges with scheduling prolonged in person-visits for weakened CACS patients -Each team member describes their current role and tasks, their experiences with virtual platforms and the pros and cons of possible use of virtual assessments and care plan discussions in their discipline -Team members describe their knowledge of developing opportunities in the organization's use of virtual visits in other programs and applicability to CACS care -Team members describe understanding of home-service options for some CACS care components	-Sense is created regarding the team member roles that can be performed virtually and those that must have a home-delivered option
Discussion Team members converse to create shared understanding and representations	-Nutrition and Supportive Care team members discuss how they can use virtual platforms to deliver rapid multidisciplinary sequential care for CACS and coordinate care among the members -Physical therapy team members discuss obstacles and home-based alternatives to in-person care	-Collaborative conversation creates shared knowledge and a unified approach to virtual and home-based CACS care
Potential Action Shared representation allows development of potential action that can be implemented and understood by all participants	-Agree on virtual mechanisms to provide interprofessional patient and family education regarding CACS presentation, staging and outcomes; CACS comprehensive interdisciplinary assessments, including elicitation of the patient and caregiver priorities and goals -Agree on need to optimize patient convenience and coordinate care by continuing to provide new virtual assessments within a fixed time frame, while allowing for flexibility to optimize access to care	-Supportive Care and Nutrition providers are trained in use of virtual visit platforms -Virtual visit scheduling mechanisms are adopted and appointments by the various CACS clinic providers occur sequentially on the same day whenever possible -Home PT assessments are arranged as part of the CACS ordering protocol -Templates to document timely virtual visit notes and patient agreements are created and made available for rapid implementation in the EHR -CACS specialists communicate with each other via video conferencing platforms, chat functions and email -Education and discussion of care plans with patient/caregiver occur during each virtual visit and are immediately electronically documented for viewing by other team members -Group team members/patient/caregiver videoconferences are arranged as needed to discuss collaborative care plans

SENSE-MAKING STEPS

Sense-making represents steps toward consensual coordinated action

- Sense-making is a conversation among members of a team about specific challenges
- The subject of a sense-making conversation is the occurrence of an unanticipated, novel, or uncertain situation that affects the team
- The intent of a sense-making conversation is to increase clarity about the subject: to "make sense" out of it
- Sense-making is enabled when each member draws from their own experience to communicate unique knowledge and insights pertaining to the issue
- Discussion permits the translation of parsed knowledge into a new comprehensible form for the members
- Although sense-making is personal, team members are ultimately enabled to derive similar individual representations of the challenges, potential approaches and solutions
- This shared representation potentiates actions that are understood and implementable by participants

RESULTS

- The team clarified recent challenges, defined new goals, and shared individual understanding and expertise to derive a new shared TMM for a vCACSt to replace unworkable practices
- Teammates were motivated by perceived increase to their scope, removal of barriers to contribution, a sense of empowerment, improved trust and ownership and the possibilities for innovation with articulation of a new shared TMM for the vCACSt
- Team members agreed upon new process and outcome indicators to gauge future performance of the vCACSt
- The rapidly implemented virtual visits and care plans were well-received by patients

IMPLICATIONS

- The dynamic environment of healthcare provides fertile ground for ongoing team sense-making studies to gauge effects during periods of adjustment
- Research on how various health care teams are "making sense" and rapidly innovating to address patient needs may provide pragmatic strategies to optimize teams' care more broadly
- Studying team sense-making communications during a crisis, i.e., the processes to rapidly organize group consideration of problem(s), question prior assumptions, and together develop approaches to coordinate actions and apply innovative solutions, could also provide a roadmap to combat healthcare team inertia during non-crisis periods
- Collecting information on what is working and not working for patients, caregivers and team members during the pandemic and interpreting the data via continued team sense-making will be vital for effective post-pandemic team-based care