



# The Science of Teamwork: Implications for Cancer Care Teams

NIH/NCI Cyber Discussion

Scott Tannenbaum, Ph.D.

The Group for Organizational Effectiveness

[scott.tannenbaum@groupoe.com](mailto:scott.tannenbaum@groupoe.com)



# Outline

1. A few “**knowns**” about team effectiveness
2. A way of thinking about **interdependence**
3. 8 common **challenges** to teamwork
4. A quick look **forward**

# Coordination Matters

- Meta-analysis of 130 studies -- better teamwork processes **20 to 25% more likely to succeed** (LePine et al., 2008)
  - A range of samples

# Communication Matters

- Meta analysis of 72 studies (Mesmer-Magnus & DeChurch, 2009)
  - Keys: Sharing of *unique* info (not just talking) and *closed loop* communications (to ensure understanding)
- Be aware
  - People often **assume** others “know” the same things they do – they don’t share unique info (Sasser et al., 2000)
    - Assigning responsibilities helps a little
  - Radiology, Primary Care, and Surgical Care may have unique information
  - In hierarchical teams, greater reluctance to speak up



# Cognitions Matter

- Teams that possess a **Shared Mental Model (SMM)** perform better, particularly when coordination is required
  - Meta-analysis - 23 studies (DeChurch & Mesmer-Magnus, 2010)
- SMM about: task, goals, roles, if-then, etc.
  - What is the ultimate goal?
  - Who is responsible for scheduling a follow-up? For updating the patient?
  - What should happen if a certain type of abnormality appears?

# Conditions Matter

- Teams don't operate in a vacuum
  - Same team, different environment = different results
- Resources, culture, rewards, technology all factors
  - Reward # of screenings vs rates of discussions?  
Reimbursement standards?
  - Is teamwork valued organizationally?



# All teams are not the same

- But often treated that way
- One key difference: Degree of interdependence
  - To what extent are team members reliant on one another and **need to work together?**



# How do team members view the team? How does that compare with what's required?



Low

Medium

High

Can prep together and cheer, but perform solo; add individual scores = team score

Some members must coordinate, some of the time

Most or all members must coordinate consistently

# Challenges to Effective Teamwork

Challenge	Observation	Research
<b>Individual mindset</b>	Not an expectation; wrestling team; Being team player less important	Collective orientation helps a team; you can be individually excellent and team player; Q: how to change expectations?
<b>Insufficient time</b>	Both real and perceived	Time spent debriefing boosts team performance Investment of time pays off – if interdependent
<b>Gap in teamwork competencies</b>	Don't know how; Not trained adequately	Team training works; Recent evidence from health care teams
<b>Misaligned rewards</b>	Unintended consequences	Lack of research in this area – <b>Research needed</b>
<b>Faultlines</b>	Subgroups can splinter – unique info	Faultlines surface under stress and hurt performance
<b>Distance</b>	Can jeopardize cohesion and cognitions	Some guidelines for virtual teams
<b>Dynamic composition</b>	Can contribute to lack of shared cognitions (e.g., roles)	Transportable skills; <b>Research needed</b>
<b>Unclear boundaries</b>	Challenge to shared cognitions and handoffs	Role clarity critical; Some preliminary research on “team of teams”; <b>Research needed</b>

# Cancer Care Team: What if they...?

- Established **general teamwork agreements**, guidelines, rules of engagement, charters
  - Typical roles/responsibilities, what-ifs in certain scenarios, role of the patient
- **Pre-briefed** when needed
  - If unique considerations or new players
- **De-briefed periodically** (not every case)
  - Followed simple structure, not just after problem



# Example debrief discussion questions (1)

- During this case, how effectively did we **update or consult with** other members of our team (e.g., from primary care, radiology, surgery, or the patient)?
  - Were there any points where we could have communicated a little sooner or more clearly? Might it have been better if you were told something or were consulted sooner?
  - If there were delays, what may have contributed to the delay?
  - In cases like this, when are we most likely to miss or be a little slow on providing an update, managing a handoff, or seeking input?
  - How do we want to handle these risk points in similar cases in the future?



# Example debrief discussion questions (2)

- How did we involve the **patient** in their care?
  - Were they part of the “team”? How can we tell? What did we do or not do that conveyed that message?
  - Should this patient have been viewed as part of the team? Why/why not?
  - At what point did we engage the patient (and/or their family) in discussions about their role and preferences?
  - How do we want to involve the patient in the future? Any general guidelines or agreements we can reach?



# Example debrief discussion questions (3)

- How did we **identify** that this patient needed a screening?
  - In hindsight, did we schedule it as quickly as we should have? Should we have scheduled it sooner? Why?
  - Who should be checking if it may be time for a screening or follow-up? Who can suggest it is time for a screening? Who can schedule it? What can prevent us from doing so in the most timely manner?
  - Going forward, what will we do to ensure that our patients receive timely screenings and follow up?



# Cancer Care Team: What if they...?

- Established **general teamwork agreements**, guidelines, rules of engagement, charters
  - Typical roles/responsibilities, what-ifs in certain scenarios, role of the patient
- **Pre-briefed** when needed
  - If unique considerations or new players
- **De-briefed periodically** (not every case)
  - Followed simple structure, not just after problem

- **Worth** doing this?
- What **prevents** us from doing this?
- Any of this **feasible**?
- What might **help**?

