The Science of Teamwork: Implications for Cancer Care Teams

NIH/NCI Cyber Discussion
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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**
Can prep together and cheer, but perform solo; add individual scores = team score

**Medium**
Some members must coordinate, some of the time

**High**
Most or all members must coordinate consistently
## Challenges to Effective Teamwork

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