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Key Elements of Highly Effective Teams

The Council on Medical Student Education in Pediatrics (COMSEP) is an organization that values — and appreciates the benefits of — teams. COMSEP's best work comes as a result of highly effective teamwork.

A team is more than 1 person working together toward a common goal. Therefore, every physician is on multiple teams, ranging from a small team of himself or herself and a patient and family, to primary care medical home teams, to inpatient care teams with various levels of trainees and different professionals, to clinical and basic science research teams, to hospital boards, university committees, and organized community initiatives. Knowing the key elements of highly effective teams is relevant to every clinician, no matter where he or she practices.

In health care, team communication failures contribute to health care errors.¹ Effective teams decrease length of stay, result in fewer unanticipated admissions, improve coordination of care, decrease wait times, increase patient satisfaction, and improve health outcomes.²

The literature on teams is complex. A wide variety of conceptual frameworks³ have been developed independently, and as a result, they are not aligned with each other.⁴ In the health care

literature specifically, a large number of team models have been proposed.^{5–7} In this article, we present a novel way to think about team effectiveness that is easy to remember and can be used to set your team up for success and resolve common barriers. Drawing on the business, sports, and interprofessional health care literature, we have identified 3 key elements: purpose, openness, and roles and skills (Table 1 summarizes the features of each of these elements). This framework can be applied in physicians' clinical, educational, and administrative roles to assist with team effectiveness.

KEY ELEMENTS OF HIGHLY EFFECTIVE TEAMS

Purpose

Having a common purpose that all team members can articulate is fundamental.⁸ It could be “diagnosing what's go-

ing on with Emily,” “caring for our team of inpatients while completing the objectives of the rotation,” or “efficiently managing resources in an outpatient clinic.” Teams need to involve all members in purpose development; everyone should be able to articulate the team's purpose and be committed to it.⁹ If team members have different understandings of what their common purpose is, friction, confusion, and a waste of resources and effort are inevitable, and it will be harder to get the team back on track. An important challenge teams face occurs when the original purpose is superseded by a new, different purpose. Effective teams know shifts in purpose can occur. As a result, they check in regularly with both their members and external stakeholders to ensure that the purpose is still right. By checking in, teams determine whether they need to change their purpose or direction. For instance, in a clinical setting, the goal of

TABLE 1 Summary of Key Elements of Highly Effective Teams

Purpose	Openness	Roles and Skills
Clear	Excellent communication	Right people
Shared	Mutual respect	Right skills
Regular checking in	Safe environment	Awareness of each other's roles
Focus on “what's important now”	Leaderful	Necessary tools and resources
Celebrate successes	Engaged	are provided

a specific patient's care may change from diagnosis to cure, and later to optimizing the patient's quality of life; on a committee, a new external mandate may require the team to change its focus.

Deciding whether to change purpose can be challenging. According to former Notre Dame football coach Lou Holtz, a team has to concentrate on W.I.N.: "what's important now."¹⁰ In this approach, a team openly discusses events, new information, and changing circumstances and asks, "What's important now?" This approach helps the team distinguish between things that should trigger a change in strategy and things that should be ignored or coped with. Effective teams ask themselves, "Does this need to be dealt with now?" (If yes, deal with it.) "Does this issue have the power to impede the team's progress?" (If yes, deal with it now.)⁸ As progress toward a goal is made, it is important to celebrate achievements, even small ones; it helps keep the focus on the main purpose and builds team identity and momentum.^{8,11}

Openness

We think of openness as encompassing excellent communication (including the ability to say "I don't know"), mutual respect and promoting a "leaderful team."^{7,9,12}

Poor team communication can result in incomplete or inaccurate information being exchanged, important issues not being resolved, and key members being excluded.¹³ Closed-loop communication is 1 way to address these issues.¹⁴ Originally used in the military and most frequently used in health care in code situations, it requires team members to confirm they have heard instructions correctly and enables all members to be aware of what is happening.¹⁴

An important predictor of a team's success is the team's pattern of communication

and the energy and engagement of the group outside team meetings.¹⁵ Successful teams ensure that all members speak, and listen, and connect to one another. Pentland¹⁵ emphasizes the importance of face-to-face communication, stating that 35% of the variation in a team's performance is related to the number of face-to-face exchanges between team members.

Members of an open team feel safe enough to speak up and raise additional or contrary opinions, or declare their areas of uncertainty and ignorance, with the knowledge that their concerns will be listened to carefully.^{16,17} Leaders can promote an open team by posing thoughtful questions to the group and by declaring their own risk of making errors in judgment.¹⁶

To have a high degree of engagement, a team must function with mutual respect at all times. This can be difficult because of members' differing perspectives, arising from different backgrounds and group cultures.⁷ However, different perspectives also enable a team to spot previously unrecognized opportunities and challenges; as a result, they should be sought out, shared, and respected.¹⁶

The culture of an open team naturally enables it to be "leaderful"¹² in that all members feel empowered to jointly share in leadership tasks, such as ensuring that viewpoints have been explored and difficult issues raised. A leaderful team can have more than 1 leader operating at a time, and they do so in a collective manner, striving for the common purpose.¹² Leaderful practice is collaborative; members operate in good faith and seek to ensure that all members are engaged.¹²

Changing a traditional leadership culture to a leaderful one is challenging. It takes time, an open culture, a leader who is willing to allow others to lead,

and team members who are willing to lead even when they do not feel comfortable.¹²

Roles and Skills

Teams that are purpose oriented and open still need 1 more element to be successful: they need to have the right people with the right skills. Team members need to know who is on the team and what they each contribute in terms of skills and knowledge.¹⁸ Each team member must understand his or her role and those of others on the team.⁹ Any tools or resources needed to enable team members to fulfill their roles must be provided.^{18,19}

The team needs to be aware of any gaps between the skills present on the team and the skills needed to accomplish the purpose. This knowledge will directly drive additional training or the targeted recruitment of additional team members.

WHEN THINGS GO WRONG

Sometimes things do not work well. For instance, the team may not function well, the team may not have been set up for success, or external events may have derailed the team's progress. To find out what went wrong, a team should ask the following questions based on the 3 key elements described in this article:

- Do we have a clear purpose?
- Are we fostering an open environment?
- Do we have the necessary people with the necessary skills and resources on our team? Do they know their (and others') role?

There will always be challenges in a team environment; having a plan to respond to them is crucial.⁸ Effective teams get back on track by exploring what went wrong and looking for the opportunities that lie within setbacks.^{8,9}

CONCLUSIONS

All physicians are members of teams. The teams that have a clear, shared purpose, that are open and leaderful (including encouraging every member to contribute regardless of his or her status), and whose members have role awareness and the right skills are the ones that are set up for success.

REFERENCES

1. Sutcliffe KM, Lewton E, Rosenthal MM. Communication failures: an insidious contributor to medical mishaps. *Acad Med.* 2004;79(2):186–194
2. Mickan SM. Evaluating the effectiveness of health care teams. *Aust Health Rev.* 2005;29(2):211–217
3. Salas E, Stagl K, Burke CS. 25 years of team effectiveness in organizations: research themes and emerging needs. In: Cooper CL, Robertson IT, eds. *International Review of Industrial and Organizational Psychology.* New York, NY: Wiley; 2004:47–91
4. Rousseau V, Aubé C, Savoie A. Teamwork behaviors: a review and an integration of frameworks. *Small Group Res.* 2006;37(5):540–570
5. Lo L. *Teamwork and Communication in Healthcare: A Literature Review.* Edmonton, AB, Canada: Canadian Patient Safety Institute; 2001
6. Mickan S, Rodger S. Characteristics of effective teams: a literature review. *Aust Health Rev.* 2000;23(3):201–208
7. Mickan SM, Rodger SA. Effective health care teams: a model of six characteristics developed from shared perceptions. *J Interprof Care.* 2005;19(4):358–370
8. Wickenheiser H. *Gold Medal Diary: Inside the World's Greatest Sports Event.* Vancouver, BC, Canada: Greystone Books Ltd.; 2010
9. Benincasa R. *How Winning Works: 8 Essential Leadership Lessons From the Toughest Teams on Earth.* Don Mills, ON, Canada: Harlequin; 2012
10. Holtz L. *Winning Every Day.* New York, NY: Harper Business; 1998
11. Kouzes JM, Posner BZ. *The Leadership Challenge: How to Make Extraordinary Things Happen in Organizations.* 5th ed. San Francisco, CA: Jossey-Bass; 2012
12. Raelin JA. *The Leaderful Fieldbook: Strategies and Activities for Developing Leadership in Everyone.* Boston, MA: Davies-Black; 2010
13. Lingard L, Espin S, Whyte S, et al. Communication failures in the operating room: an observational classification of recurrent types and effects. *Qual Saf Health Care.* 2004;13(5):330–334
14. Burke CS, Salas E, Wilson-Donnelly K, Priest H. How to turn a team of experts into an expert medical team: guidance from the aviation and military communities. *Qual Saf Health Care.* 2004;13(1 suppl):i96–i104
15. Pentland A. The new science of building great teams: the chemistry of high-performing groups is no longer a mystery. *Harv Bus Rev.* 2012;3:61–70
16. Edmondson AC. Teamwork on the fly: how to master the new art of teaming. *Harv Bus Rev.* 2012;3:72–80
17. Gardner HK. Coming through when it matters most: how great teams do their best work under pressure. *Harv Bus Rev.* 2012;3:83–91
18. Bohlman LG, Deal TE. *Re-framing Organizations: Artistry, Choice and Leadership.* 5th ed. San Francisco, CA: Jossey-Bass; 2012
19. Hertzberg F, Mausner B, Snyderman B. *The Motivation to Win.* 2nd ed. New York, NY: John Wiley & Sons; 1959

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