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Leadership in Medicine

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INTRODUCTION

The medical curriculum comprises mostly clinical knowledge and skill sets needed for advancement in the profession. In practice, however clinicians must take on leadership responsibility on a daily basis, but there seems to be a paucity of leadership training in medical syllabi. (1)

Several studies suggest that newly qualified specialists lack generic non-technical skills, like management and leadership, compared with their technical skills. This manifests as doctors feeling unprepared in their roles as trainees and specialists and results in a greater degree of anxiety, stress and burnout compared to their older or more experienced colleagues. (1,2)

Kalafatis et al applied the concept of fitness for purpose and the CanMEDS framework (fig 1) to determine whether training of anaesthesiologists in South Africa is adequate for independent practice. Leadership is one of the competencies described as essential for an anaesthesiologist to possess.(2)

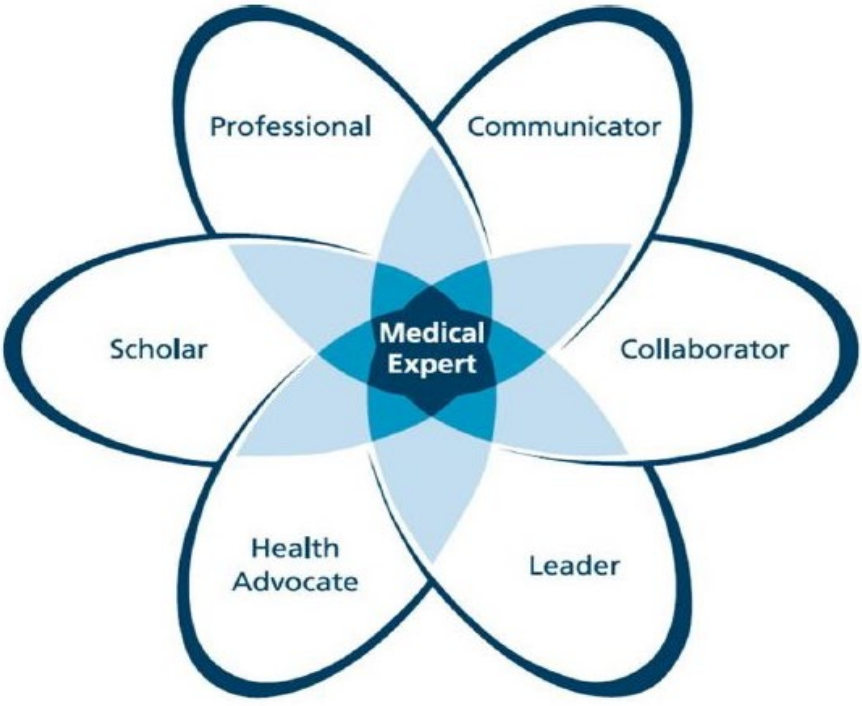

Figure 1 : The CanMEDS (Canadian Medical Education Directives for Specialists) Roles. Copyright © 2015, Royal College of Physicians and Surgeons of Canada. http://rcpsc.medical.org/canmeds

WHAT IS MEDICAL LEADERSHIP?

The concept of leadership has been very difficult to define. Many have tried to define it over the last century, but most agree that leaders tend to motivate, inspire, and align strategy to create direction for individuals, and the institutions in which they work. This directed to attain a group achievement or goal.

While leadership has also been defined as a "process of motivating people to work together collaboratively to accomplish great things", leadership is more of a process, instead of a property of a person. There are many examples of inadequate leadership by people who possess authority, just as many as there are examples of leadership in people without formal authority.(3)(4)

Hartley and Benington described three aspects of leadership, placing emphasis on a different leadership variable:

(i) "The personal qualities of the leader",

(ii) "The leadership position in an organisation",

(iii)"The social processes of leadership"

The personal qualities of the leader

The Great Man theory described by Carlyle and based upon military men, assumed that great leaders are born, not created. Over the following twenty years, the theory has expanded to describe attributes and behaviours associated with successful leadership, like self-awareness, resilience, and self-confidence. Despite many attempts over the years, a fixed defined list of traits of great leaders never came about. A fixed list of traits could never be applicable in all situations and there was the further implication that leadership training would not make a difference.

Research has found that up to six distinct leadership styles could be exhibited by leaders. Goleman describes that each leader will have their innate style, but to be effective, one needed to be flexible in using less dominant styles.(3)

The leadership position in an organisation

Leadership can be described as occupying a position that commands authority. For example, a clinical consultant or a CEO has formal authority and therefore legitimacy to lead others. Exerting authority, however, is not the same as leadership.
Authors have described the difference between those with authority and those without. Mountford and Webb argue that although the most obvious leaders within an organisation may have had formal positions of authority, those without formal authority are just as able to take ownership of a problem and drive through change.(3)

The social processes of leadership

A popular view of health care leadership is as a dynamic relationship between people in a group, where leadership is not permanently possessed by one person and hence leadership can be shifted to others in the group. This view considers the leader and follower relationship and shows how "followers" may influence the type of approaches that leaders adopt.

Seeing leadership as a "social process" highlights the importance of democracy and distribution of leadership in healthcare. Distributed leadership is described by Grant, as the collective responsibility of the group, each member with his/her own unique skillset. For distributed leadership to work, "collective flexibility" is needed where individuals take up leadership, only when necessary, and knowing when to lead and when to follow. This is a familiar concept to all working in trauma, theatre or amongst resuscitation teams, where leadership of the group shifts depending on the skills available and the changing scenario.

Organisations that develop collective leadership and capability tend to be more successful than those who develop individual capability. This includes better financial outcomes in commercial organisations and clinical and financial outcomes in healthcare organisations. Leadership should be spread to wherever capability, motivation and expertise are within an organisation and all staff must strive for excellence in patient care.(3)

DIFFERENCE BETWEEN MEDICAL LEADERSHIP AND MANAGEMENT

Managers are process driven individuals who use problem solving to direct employees to attain objectives already established by leadership.

The main aim of management is to achieve consistency and order. It is concerned with administration and maintenance, planning and budgeting, organising and staffing, controlling, and solving daily problems.

In the majority of cases, highly qualified managers do not lead development and improvement in an organisation. Thus, leadership is needed in any organisation because management produces acceptable results within a known condition and is not concerned about producing remarkable management.

It is important to realise that leadership, however, needs management to work. Management does provide an optimal, organised environment and platform for leaders to innovate and guide change.(3,5,6)

Summary of differences between management and leadership

Management

- Managing processes or stable tasks, like writing the rota
- Short-term focus
- Setting targets
- "Tame" problems (problems with simple solutions)
- "Doing things right"

Leadership

- Managing people through changes, e.g., providing a safe service with reduced resources and increased demand
- Long-term focus
- Vision setting
- "Wicked" problems (problems that have complex solutions or sometimes no solution at all)
- "Doing the right thing"(3)

WHAT MOTIVATES CLINICAL LEADERS?

So why take up a leadership position? What does one get out of it?

The four main "motivations" that drive social change is a concept described by Max Weber. It has been adapted to explain the motivation behind clinical leaders:

(i) "Shared purpose" – this is an extrinsic motivator, which inspires clinicians to assume leadership roles to help further the goal, they believe in

(ii) "Self Interest" - career progression and job security may act as both intrinsic and extrinsic motivation for leadership roles

(iii) "Respect" – Professional credibility or personal approval is a strong intrinsic motivator

(iv) "Tradition"- The pressure to uphold professional practice and standards may serve as a powerful intrinsic and extrinsic motivator(3)

EVIDENCE FOR MEDICAL LEADERSHIP

According to a 2011 Mckinsey consulting survey of 1200 hospitals, those with more clinically trained managers, had better management practices which correlated with improved clinical outcomes in terms of mortality, re-admission, and infection rates.

Also in 2011, an American cross-sectional study showed an association between having a medically trained CEO and increased quality scores amongst several specialities. These findings were replicated in the United Kingdom in 2012, where higher clinical representation on the hospital board related to improved mortality rates and patient satisfaction.(3)

MEDICAL LEADERSHIP MODELS AND THEORIES

There are three major leadership theories: transformational, situational and servant leadership.

Transformational leadership

According to this theory, leaders inspire others to transcend their self–interest to attain higher- order goals or visions. This emphasizes the ability to motivate others by raising awareness of idealized goals and through role modelling. With the transformational model, through empowerment and the development of followers, leaders realise human potential.

Situational leadership

In the situational leadership theory, choosing the appropriate leadership style specifically for the followers or group lead is a necessity for success in leadership. Situational leaders shift between four behaviours: supporting, delegating, directing, and coaching, in response to the needs of the followers.

Servant leadership

The theory of servant leadership states that the leader's influence arises from his/her need to serve others. Behaviours of servant leaders are empathizing, listening, accepting stewardship and actively developing others' potential.(3)

Importance of skill diversity in leadership roles depending on position. Adapted from Mumford (2000).

Figure 2

TYPES OF LEADERSHIP STYLES

Leadership styles can be viewed as behaviours or traits available for the pursual of the leader. Different situations ideally require different leadership styles. The mark of a great leader is one who can appropriately switch for one style to another.

Directive

This style is used when the leader wants immediate compliance. These leaders have a "Do as I say because I'm the boss" attitude. They command and expect immediate compliance. It is the style seen in the movies and read about in books. This commanding style is most effective during crises when fast decisions need to be made, like in a resus situation.

Continued use of this approach can leave group members feeling as if they have very little say in the group's direction or goals. It will eventually undercut morale and job satisfaction.

Pacesetting

The ambition here is to accomplish tasks with high standards. This style has the leader setting the example by showing the employees how it is done. These leaders are known for taking action. This is a great option for motivated, high performing people who are dedicated to improvement, which is why it is a common military leadership style.

This leadership style relies the most on autonomy, which can be challenging for those who need lots of guidance. Pacesetting leaders must ensure that their expectations are reasonable and that the team has the capacity to follow through. Pacesetters can also make people might feel as though they're being pushed too hard by a leader whose standards are unattainable.

Visionary

With this approach, the leader shares his direction and vision, for example "This is where we are going and why". Visionary leaders are great at finding potential solutions to a given problem. There is a reliance on abstract thinking and these leaders can visualize possibilities that others aren't yet able to see. They're "big picture" thinkers who can see future potential.

These leaders conceptualize new goals and ideas but tend to require others to create a working plan. They work well with a multitalented team, where one person can formulate big ideas, while others execute them.

Coaching

This style focuses on the professional development of employees, whereby opportunities are sought to practice. It encompasses cultivating deep connections with the individuals within the group to understand what drives them and motivates them. It creates a positive environment where open communication as well as encouragement can flow freely.

Coaching is a very effective style in the right circumstance but can risk making people feel micromanaged. A lot of time and energy is spent on individuals within a given group.

Participative

This is a democratic and inclusive style whereby commitment is built through shared ideas and leadership. "What do you think" approach. A high value is placed upon the team's skillset, knowledge, and qualities. A consensus is cultivated within the group by consistently asking for opinions and listening to the answers. Participative leaders use the collective wisdom within the group to find the best option, this also allows the group to develop confidence in him or her.

This style is not the best in crises, because it takes time. It is important to understand where the rest of the group stands on a given issue, but in an emergency it's better to make a quick decision alone.

Affiliative

The aim of this style is to ensure harmony amongst employees, to "all get along". For affiliative leaders, "the team always comes first". This style focusses on building trust within the group and creating bonds. Affiliative leaders are extremely effective where there is stress or low group morale. It is the best style for repairing broken trust in the workplace, improving communication, and creating harmony at work.

When using this style, one must be careful not to let poor performances go unaddressed. Praise and encouragement are very important in the work setting, however affiliative leaders have a tendency to overlook issues in effort to build a strong, happy team.(3,7,12)

Laissez-Faire

Laissez-faire leadership, also known as delegative leadership, is a leadership style whereby leaders are "hands-off" and allow decision making among group members. It is seen as the leadership style of "no leadership" and is generally the leadership style associated with the lowest productivity.

This leadership style can have benefits and pitfalls. In certain settings and situations, laissez-faire leadership might be the most appropriate one, these include situations where the staff is highly skilled and experienced.

LEADERSHIP IN ANAESTHESIA

Our field has inherently high risks, with different professional groups working closely together, often with conflicting priorities and differing interpersonal relationships. Anaesthetists regularly experience routine changes, non-routine events, and occasionally severe events, some of which are unpredictable.

Decision making correlates with resulting actions due to rapid physiological changes in patients and unexpected surgical events. Other influences are constantly present, such as time pressure to use theatre efficiently and institutional norms. Additional responsibilities also interfere with the core tasks of anaesthetists like in-hospital emergencies, pain services or post-operative complications.

Workflow in anaesthesia is thus often fragmented with a changing team composition and leadership occurring in short lived or impromptu teams. Teamwork is anaesthesia usually occurs in a work setting which is intensely dynamic, time pressured and with great uncertainty about risk.

Because anaesthetists work in challenging environments, the changing nature of the work requires leadership that changes with it. Thus, an adaptive leadership practice has been shown to be better in the operating theatre. Anaesthetists also tend to favour non- hierarchical structures with shared responsibilities for leadership or team leadership.(8–10)

Refer to Appendix for specific examples of leadership in anaesthetic scenarios.

IMPORTANCE OF TEAMWORK

Leaders need a following to exist, and so it is important to outline some theories behind what constitutes a successful team. Effective teams are composed of individuals with differing skills who unite for a period of time to work towards a common agenda. Within the team, individuals will have their roles defined and accountability will be shared for the team's collective work and its outcomes.

This model is idealised and may not represent many of the teams in clinical practice. It is understood that most teams won't work well from the start and that they will need to learn, grow, and evolve together. The move from a working group to a real team occurs when decisions made purely by the team leader, evolves to a more democratic position, where the leader guides discussion and the team is empowered and able to accept accountability for outcomes.

Belbin describes nine roles that can be fulfilled by individuals within a team. These roles are suited to the individual's behavioural strengths and weaknesses in the workplace. Determining what role, one would tend towards provides valuable insight into how one may behave within a team. Belbin also mentions the importance of spread or balance within the team structure.(3,9)

Summary of Belbin team roles

1. Shaper – Pushes the team to focus and improve
2. Implementer – Plans practical, workable strategies to achieve goals
3. Completer finisher – Finishes, scrutinizes, and quality controls team's work
4. Co-ordinator – Focuses the team's work around their objectives
5. Team worker – Helps the team to get together
6. Resource investigator – Considers external application of the team's ideas and work
7. Plant – The creative problem solver in the team
8. Monitor-evaluator – Helps weigh up the team's options
9. Specialist – Team's specialized knowledge input

Lencioni identified ***five key dysfunctions of a team***, and how a leader can overcome each of them.

(i) Absence of trust
Build an environment that does not punish vulnerability while also demonstrating its own vulnerability to promote trust.

(ii) Fear of conflict
Recognise conflict which can be productive, but exercise restraint in monitoring conflict, thus allowing it to resolve naturally.

(iii) Lack of commitment
Push the team for closure and adherence to schedules but also display confidence in making decisions that may ultimately be wrong.

(iv) Avoidance of accountability
Create a culture of accountability but be willing to enforce discipline if necessary

(v) Inattention to results

Demonstrate and maintain a commitment to results(3)

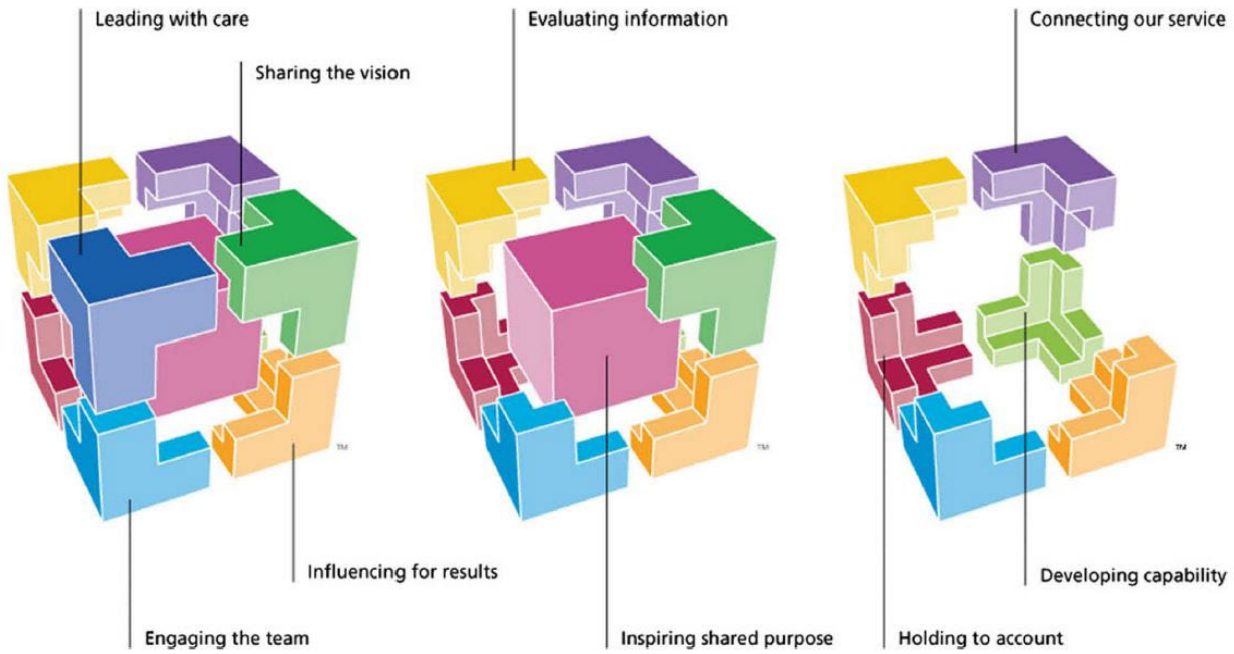

Fig 3(3)

BARRIERS TO EFFECTIVE LEADERSHIP

Even though there is much evidence suggesting that clinical leadership is important for the provision of safe, clinically effective care, many clinicians are uneasy about taking on formal leadership roles.

These barriers are particularly important when considering the failing or struggling organisation.

Professional Risk

Clinical leaders can feel more exposed as they hold clinical accountability, that is the feeling of responsibility for the actions of the entire clinical workforce. Clinical leaders risk losing their clinical registration if serious failings occur, because the job security of leadership roles is much less than clinical roles – the average CEO tenure is 700 days.

Lack of training

The lack of formal training in areas such as finance, lack of mentorship, and talent management stops strong leaders from applying for senior clinical positions.

Clinical conflict

Clinical leaders fear committing themselves to more non-clinical work, because of possible deskilling and causing them to “lose face” among clinical colleagues

Personal and financial disincentives

Clinical leaders can find themselves juggling both clinical and non-clinical duties with worsening work-life balance and less financial incentives compared with their clinical counterparts(3)

Fig 4 CTI Leadership Consultancy (www.ctileadership.com)

DEVELOPING LEADERSHIP

Whether leaders are born or whether they can be made is still debatable. While Kotter argues that leadership is made up of a series of definable skills that can be taught, others argue that there should be a prerequisite for natural leadership.

All professionals can develop an ability to lead others and can learn to improve that skillset at whatever level they work. The approach for leadership development is extensive, from one-on-one coaching, mentoring, action learning, and seminars to self–directed learning using books and audio recordings. Many doctors attend medical management and leadership courses at some point in their careers, but what should they learn?

The most frequently used leadership-development methodologies within leadership programs are mentoring, coaching, action learning, networking, and experiential learning.

Mentoring

This is “off-line help by one person to another in making significant transitions in knowledge, work and thinking”. It is also seen as a form of human development where one person invests time, energy, and personal know-how in helping another person grow and improve to become the best he or she can become. Mentoring in healthcare is usually an informal process, however with the increase in clinical, research and administerial workload as well as the modernisation of medical career pathway, mentoring relationships have become rare.

As a leadership development tool, mentorships can be created at work, whereby the roles can be assigned formally with a structured agenda.

The agenda could include:
(1) career aspirations and career planning over the short, medium, and long-term.
(2) management of difficulties within professional and personal relationships.
(3) delivery of previously agreed goals.
(4) project management and leadership challenge currently facing the mentee.
(5) the impact and management of political factors in delivering healthcare.
(6) personal life issues and events.

Coaching

This methodology is aimed at enhancing performance in a specific area. It is goal-orientated and is usually relatively short-term process. Not much is known in terms of the effectiveness of this method in leadership development, why it is effective or what type of leaders benefit from coaching. Junior doctors have few opportunities to use this leadership development resource, although more institutions tend to provide coaching for more senior medical doctors when they are promoted to new leadership positions.

Action learning

This is based on the idea that leadership knowledge, skills and attitudes can be developed through joint solutions to problems in the workplace, during real-life projects, and by observation and cooperation with others. In practice, an action learning set consists of six to eight individuals with common goals or interests, accompanied by experienced counsellors.

Participants raise an issue they wish to solve, then look for a solution through role play, enquiry, and alternate perspectives. The goal is to empower the individuals to reach their own conclusions.

Networking

This forms a vital part in leadership development and may be sustained longer than the other methodologies. It involves creating interdependent and often mutually beneficial relationships. It can be formal, such as by participating in a national group or as an active member of a society, or informal, through getting to know, interacting with, and then working with others who share similar goals or interests.

There are two types of networking which can occur within leadership development, namely peer networking and networking with senior leaders. Peer networking is about creating a personal network of like-minded individuals who can support, encourage, and offer opportunities to learn and develop, and to take on new roles or leadership positions. This is important in reducing

isolation and making individuals feel like they are part of the team or movement. Networking with senior leaders provides opportunities to experience and witness interactions and events which individuals usually do not encounter. Senior leaders can provide extensive contacts which further the network's aims and offer a diverse range of perspectives, views, and information.

Experiential learning

Experiential learning takes multiple forms, which can include entirely new jobs, secondments to other organisations, or part time roles in ongoing clinical work. It encourages leadership development through experimentation and working outside one's comfort zone to acquire new skills. Lectures tend to only provide theoretical knowledge, and leadership like clinical medicine, is best learned through practical experience. It needs experimentation, application, and deliberate practice.

Recent surveys have suggested that there is a strong preference for experiential learning and mentoring by leaders as methods of leadership development. Curriculums should include role play, team training, community experiences, student leadership opportunities and participation in quality improvement projects.(3,4)

CONCLUSION

Healthcare is changing rapidly, and it is important for physicians to acquire leadership skills to guide this change. The transition from trainee to specialist comes with several other changes that clinicians are not prepared for. Immediately after passing exams, they become a teacher from being a student, they become a leader from a being follower and thus shoulder responsibility beyond what they've done before. In anaesthesiology, that added responsibility usually means responsibility for many patients at a time as well as other clinicians' actions in a clinical context. More broadly, there may be additional financial and staff management aspects that they may be unprepared for.

Leaders in anaesthesiology are commonly picked from those with exceptional clinical skills, with a research background or those who have occupied a clinical role for a long time. Rarely are our leaders judged by their qualities as a leader. Commonly, individuals are handed a position of leadership because of their availability or willingness to take it, rather than their skillset. Often this handover is done without training, a clear understanding, or a period of transition into the role.

Medical educators have always had concerns about how effective training programs are at producing specialists with appropriate skills. These concerns, however, have centred around the ability to perform tasks, understand key concepts or having sufficient clinical exposure to produce expertise. Other competencies of specialists like leadership are poorly defined. How do we ensure that those who complete specialist training programmes are ready to support others, to communicate, advocate and lead the speciality?

Many agree that this is a skill that must be taught long before post-graduate level. (2–4,11)

Recommendations for team leadership practices in anesthesia according to clinical work phases and special situations.

Work phases and special situations	Recommended leadership practice	Description	Strengths (S) and weaknesses (W) of practice	Example
Routine - low task load[24]	"Low leadership",[24] monitoring, implicit coordination, individual work following standards.	Let professionals do their best according to their knowledge and to well-known standards.[3,46]	S: speed, no unnecessary time loss or delay, efficiency. W: Deviations may go unnoticed; potential of divergent mental models.	Routine anesthesia induction, no events
Routine - high task load[40]	Implicit coordination may be supplemented by explicit coordination and "heedful interrelating" in more complex high task load situations.[40]	Despite standardization of single tasks, complexity of high task load may require more explicit coordination.[40]	S: Maintenance of 1. safety and 2. work flow during high task load phases. W: Explicit coordination may slow down work flow.[24]	Standardized, but demanding patient positioning (e.g., prone position)
Unexpected events - minor events - low standardization	Explicit, interactive coordination: Re-adjust team mental models.	In ambiguous situations, re-adjust common understanding.	S: Adjusting team mental models, largely maintaining work flow. W: Potential of missing deterioration of minor to more serious events.	Minor hypotension; minor surgical bleeding
Unexpected events - serious events - initiation of response[49]	Explicit, directive leadership[24,46,49]: establish leadership structure; call for help; set medical priorities; "delegate and regulate"[67]; integrate new members, and pass leadership if needed; allow team to speak up.	Due to time pressure, directive leadership using clear commands focuses team on event. Call for help using cardiopulmonary resuscitation (CPR) alarm if needed.	S: Focus on initiation of specific event management. W: Due to time pressure, mental models may temporarily differ; work flow reduced or stopped in favor of event management.	Cannot ventilate; cardiac arrest; anaphylactic shock; massive hemorrhage
Unexpected events - serious events - maintenance of response[49]	Explicit leadership[49] and coordination: maintain medical priorities and global perspective; closed-loop communication; avoid undue focus on secondary tasks.	Directive leadership, explicit coordination; if needed, "stepping back" and directly advising team members: "delegate and regulate".[67]	S: Focus on maintenance of specific event management, re-establishing of team mental models. W: work flow reduced or stopped in favor of event management.	Cannot ventilate; cardiac arrest; anaphylactic shock; massive hemorrhage
Briefing, debriefing	Facilitating, re-establishing shared mental model,[46] allow for team learning.[68]	Establish or re-establish common "team mental models": Before routine[46] and non-routine tasks, after unexpected or adverse events.	S: Creating or readjusting shared mental models. W: In very busy operating room not always possible as needed.	Brief team update, discussion and task assignment before difficult intubation Debriefing after adverse event
Responding to violations of safety rules[64]	General rule: systematic observation of practice, continuous dialogue within team.[64,69]	Violations cannot be completely eliminated. Sometimes, disciplinary action may be needed[64]; exploring reasons will allow for team learning.[6]	S: Implementation of evidence-based safety rules where possible. W: Effect of different approaches (tolerant vs. punitive) not well understood.[64]	Disregard of hand hygiene, or checks, or other safety rules
Handover[8]	Using explicit leadership, support accomplishment of formalized handover.[60,70]	Handover including clear responsibility, checklists, defined sequence and contents, and allowing speak up.	S: Formalized handover may cause less information loss.[8,70] W: Implementation requires efforts to change previous routines.	Postoperative handover of surgical patients to ICU

Appendix 1

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