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## Twelve tips for the introduction of emotional intelligence in medical education

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### ABSTRACT

Emotional intelligence (EI) is the ability to recognize, understand, and manage emotions in yourself and in others. EI has long been recognized as a critical component for individual and organizational success within the business realm, and there is emerging evidence that enhancing EI is equally important in the medical setting. EI can improve interpersonal communications, enable constructive conflict resolution, and promote a culture of professionalism. As healthcare becomes increasingly team-based, proficiency in EI will be required to build consensus among multidisciplinary stakeholders, and effect change in attitudes and behaviors that result in improved patient safety and clinical outcomes. Based on the existing literature and the authors' experiences, these 12 tips provide practical suggestions on how to introduce EI into a medical curriculum. These tips have broad applicability, and can be implemented in courses on topics such as professionalism, leadership development, empathy, patient safety, or wellness.

### Introduction

Emotional intelligence (EI), defined as one's ability to recognize, understand, and manage one's own and other's emotions, and to use this information to guide one's thinking and actions, has long been recognized as critical to individual and organizational success (Arora et al. 2010). In realms outside of medicine, EI has been reported to be twice as important as IQ and technical skills in driving outstanding performance, and has been linked to increased productivity and job satisfaction (Goleman 1998; Van Rooy and Viswesvaran 2004). Similarly, there is emerging evidence to suggest that EI is equally important in the medical environment. Enhancing one's EI skills leads to more productive interpersonal interactions, improves communication, and enables constructive conflict resolution, and therefore it should be no surprise that clinical performance levels have been shown to positively correlate with higher EI (Codier and Codier 2017). In contrast, deficiencies in the EI-related categories of communication, leadership, and human factors were the top root causes of sentinel events reported to the Joint Commission in 2014 (Joint Commission Online 2015).

The "adaptive" challenges inherent in modern medicine, such as the ability to forge consensus and effect change with diverse stakeholders, cannot be solved with a purely technical approach (Heifetz et al. 2009). As noted by Dr. Emanuel, "vitally important to the success of 21st-century clinicians are 3 capabilities: to (1) effectively lead teams, (2) coordinate care, and (3) engender behavior changes in patients and colleagues.... Thus effective physicians need both an adequate IQ and a high EQ" (Emanuel and Gudbranson 2018). Curricular redesign efforts for medical learners at all levels, from medical students to senior faculty, will benefit by incorporating strategies useful to

overcome adaptive challenges, many of which require high EI for success. In general, EI has been recognized as a multidimensional construct that includes cognitive and affective components, with elements that can be enhanced and improved through training and practice (Cherry et al. 2014).

EI principles have been incorporated into the Center for Professionalism's presentations at grand rounds, departmental retreats, residency training programs, communication workshops, and within a graduate medical education (GME) curriculum, specifically to build a Quality Improvement/Patient Safety course. These 12 tips summarize the lessons learned from these experiences, which can be applied to the introduction of EI to a medical curriculum in a variety of settings.

### Tip 1

#### Start with the WHY

The benefits of becoming EI-proficient may or may not be clear to the course participants, especially those in the early stages of their career. It is important for learners to understand that EI is not an innate skill set, but rather, an ability that can be developed and enhanced, to the benefit of the individual physician, healthcare team, and overall organization.

The medical educator needs to describe in specific terms how enhancing EI will help learners become better physicians by laying the foundation of mutual respect and professionalism, enabling diverse teams to work productively, and fostering positive behavioral changes in their patients which will impact clinical outcomes. EI-proficient physicians will also be able to break through the organizational silos and mobilize the collective strengths of the healthcare

team members. This is important to highlight when teaching quality improvement or patient safety. One should also outline the benefits to the individual, such as the protection from burnout (Lindeman et al. 2017), and perhaps even expanded career options, since professionalism, emotional stability, team attitude, and communication skills were rated as “critically important” traits in the hiring of new physicians (Post et al. 2017). An early appeal to the “why” can be a useful “hook” to the presentation, sparking interest and leading to increased learner engagement.

## Tip 2

### ***Use a conceptual framework to organize the material***

Using a framework based on specific topics for teaching EI will facilitate developing what some have called “soft skills.” An in-depth discussion regarding the various conceptual models of EI models (trait versus ability) is beyond the scope of this article, and the reader is referred to several excellent reviews in the literature (Lewis et al. 2005; Arora et al. 2010; Cherry et al. 2014). We used the Goleman model adapted by the Cleveland Clinic which breaks EI into two major components: personal competence and social competence. Personal competence is then subdivided into self-awareness and self-management, and social competence is subdivided into social awareness and relationship management (Taylor et al. 2011; Stoller et al. 2013; Farver et al. 2016). Other leadership development courses have also used a similar framework to organize their teaching of EI (Johnson and Stern 2014). Once the conceptual scaffolding is in place, large- or small-group discussions, role-playing exercises, or other interactive activities can facilitate synthesis and application of teaching EI.

## Tip 3

### ***Break up the didactic session into 10–15-minute blocks***

Facilitate the acquisition of knowledge within the learners’ working memory (“essential cognitive processing”) by using segmentation (Mayer 2010). Breaking up the session into smaller blocks was appreciated by our millennial learners. We alternated 10–15-minute didactic blocks with an interactive activity or small-group discussion which was received well by the learners and was effective to deliver the key principles. This segmentation enabled the learners to evaluate and synthesize the conceptual information, facilitating active learning and enhancing knowledge retention. Feedback indicated a preference of this technique over delivering an extended, continuous lesson (“sage on the stage”).

## Tip 4

### ***Create an atmosphere of psychological safety***

In order for the discussions of EI to be productive, it is imperative that participants feel comfortable. It is important for the facilitators to create a safe environment in order to have an open appraisal and exchange points of view. All participants must treat each other with mutual respect,

allowing all to feel free to share their honest perspectives. The facilitator should clearly establish these ground rules up front and set the tone for the group by modeling this behavior. They can sustain this environment by engaging all learners, encouraging feedback, and responding to suggestions, demonstrating that they respect and value every participant and his or her input. The clinical vignettes used to illustrate various concepts may be disturbing or emotionally charged. It may be helpful for group participants to agree that all course discussions should be kept strictly confidential (Blumenthal et al. 2012).

## Tip 5

### ***Incorporate a self-awareness exercise***

A cornerstone of EI is self-awareness. The use of a self-awareness exercise enables an exploration of the self, and is the first step in EI and leadership development (Goleman 1998; Farver et al. 2016; Till et al. 2017). Although tools such as the Meyers–Briggs type inventory, Mayer–Solovey–Caruso Emotional Intelligence Test, Bar-On Emotional Quotient Inventory, or multisource 360° feedback assessments can be used, these exams may be time-consuming, expensive and not viable options for the introduction of the topic (Cherry et al. 2014). There are a variety of inexpensive online tests that can be employed as a starting point for participants to better understand themselves, their working styles, and the different ways in which others may perceive themselves and the world (see “[Further resources](#)”). We decided to use a free psychogeometric test as an introduction to the self-awareness concept based on ease of administration and previous positive experience with its use (Dellinger 1996).

## Tip 6

### ***Employ multiple teaching methods***

“Generative processing,” or learning by integrating and organizing the key concepts, can be enhanced by the use of multiple teaching techniques (Mayer 2010). Reinforcing the message in a variety of formats makes it more likely your concepts will be understood, learners will learn, behavior will change, and better outcomes will be observed. Repetition is helpful; however, excessive redundancy should be avoided in order to keep the learner’s interest.

## Tip 7

### ***Make sessions as interactive as possible***

Interactive sessions are particularly well received. Interactive components can be incorporated into teaching all four EI components. For example, in order to teach the EI component of self-awareness, a values alignment exercise, in which the participants reflect on the alignment between their values and how they spend their most precious resources (such as their time) may be helpful. For the EI concept of self-regulation, reflection and debriefing sessions may be beneficial, with discussions drawn from the participants’ experiences, or from fictional clinical vignettes

(see also [Tip 8](#)), in order for the participants to better recognize, understand, and regulate emotional responses to difficult situations. Mindfulness sessions may also be useful, especially if incorporated into general self-care, as part of an effort to build emotional capacity and resilience. For social awareness, sessions on empathy development can help learners understand the emotional makeup of other people and promote compassionate responses even in challenging situations (Ekman and Krasner 2017). Finally, discussing specific effective communication techniques and conflict resolution strategies can aid in learner's comprehension of the EI component of relationship management (Taylor et al. 2011). Many of these discussions are best held in small groups; we would recommend circulating faculty to keep conversations from straying off topic, and allowing adequate time to bring the small groups back to a large-group format for a debriefing and to share lessons learned.

### Tip 8

#### ***Contextualize the lessons with clinical vignettes***

Relatable clinical vignettes bring the lessons to life. In fact, our feedback included the request for more specialty-specific examples. Content for the vignettes can come from a variety of sources, or you can construct them yourself or with a committee. For example, the Massachusetts General Hospital (MGH) leadership course EI session incorporated video clips from the television show "ER." This television medical drama incorporates an immersive filming style, which heightens the emotional impact of the depicted scenarios that take place within an urban teaching hospital. After viewing the video selections, the facilitators asked the learners to break into small groups and either: summarize the thoughts, feelings, and actions of the participants in the videos; discuss how one would feel in each of the roles; or how one might respond in each situation (Johnson and Stern 2014). These follow-up discussions regarding how to understand and analyze the thoughts and feelings underlying the behaviors depicted are an invaluable component to teach EI. In order for these discussions to be productive, it is imperative that participants feel comfortable discussing these topics in a safe environment (see [Tip 4](#)).

### Tip 9

#### ***Include visualization exercises in small-group discussions***

We included several visualization exercises in order to enable participants to reflect on various EI concepts. In small groups, we asked participants to describe how they would like colleagues to experience them as leaders, to think about the challenges they may encounter as leaders, and to describe how they could anticipate these challenges and apply various leadership styles. These questions were inspired by the MGH residency leadership development course (Blumenthal et al. 2012). The incorporation of the upper level trainees' perspectives and "near peer" teaching enriched the discussions, as it was sometimes difficult for the junior residents to envision barriers they may face as future leaders. Visualization exercises can be used for the learners to achieve the three essential components of

small-group learning: active participation, completion of a specific task, and reflection (Jones 2007).

### Tip 10

#### ***Integrate relevant material on leadership development***

Future leaders will be those who exhibit EI proficient attitudes, behaviors, and mindsets. One of the most effective methods to teach these attributes is for the faculty to demonstrate these behaviors themselves (Birden et al. 2013). EI has been largely incorporated within executive leadership programs, and medical education leadership programs are following this trend (Blumenthal et al. 2012; Farver et al. 2016). Given this close relationship, elaborating on specific concepts related to leadership development is highly relevant and synergistic to an EI overview. It is important that the learners view themselves as leaders and learn about their leadership style, strengths and weaknesses. After incorporating an overview of leadership styles (Goleman 2000), our participants noted that they had a better understanding of EI and leadership styles, and thought that that this would help them working with teammates.

### Tip 11

#### ***Tailor the presentation's approach for the appropriate audience***

We have designed our EI presentations for a number of groups, including a department-specific patient safety course. However, EI can be taught as part of general leadership development, empathy coaching, general self-care/wellness, burn-out prevention, or in other contexts. It is important that a clear goal be established that is relevant to your audience, and that the case studies you choose are relatable to the learner, and simulate real situations that they could encounter in practice (Blumenthal et al. 2012).

### Tip 12

#### ***Ask for feedback to improve the next iteration (continuous quality improvement)***

Continuous quality improvement (cQI) is an important feature of any sustainable curricular innovation. Incorporating participants' feedback also encourages learner ownership of course development for future cohorts. Both cQI and ownership of self-development represent best practices for leadership development programs (Blumenthal et al. 2012). Many of the tips we share here were collected from our participants' feedback.

## Conclusions

Delivery of healthcare in collaborative, coordinated teams is key to achieving safe and efficient care. Enhancing EI abilities, including understanding and regulating one's own emotions, and recognizing others' moods and diverse perspectives, enable future physicians to function effectively in multidisciplinary teams. For successful introduction of EI concepts into a medical curriculum, we emphasize the importance of interactive, contextualized, and relatable

lessons that adhere to a conceptual scaffolding. We also include several tips that sparked participant engagement, such as ensuring a climate of psychological safety, breaking up the didactic lectures into shorter segments, and incorporating exercises in visualization, self-awareness, reflection, and de-briefing. We are optimistic that increased awareness of the benefits of enhancing EI, and its incorporation into the medical education curriculum using the strategies outlined above, will pave the way to training future physicians equipped to successfully overcome the potential challenges of a team-based healthcare delivery system.

## Further resources

<http://www.psychogeometrics.com/onlinetest.php>  
[https://www.colorcode.com/choose\\_personality\\_test/](https://www.colorcode.com/choose_personality_test/)  
<https://www.businessballs.com/awareness-of-self/howard-gardners-multiple-intelligences-7>  
<https://www.psychologytoday.com/tests/personality/big-five-personality-test>

## Disclosure statement

The authors report no conflicts of interest. The authors alone are responsible for the content and writing of this article.

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