

(Setting up, Perception, Invitation, Knowledge, Emotions, Strategy and Summary) approach.<sup>1</sup> One participant described the workshop as ‘beautifully radical’. We hope it was.

Peer-to-peer role-playing could be utilised in the curriculum to enable a safe space for students to try out different ways of holding challenging conversations before they have them in clinical practice.

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## REFERENCES

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## Applying adaptive expertise for students’ clinical decision making

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**What problems were addressed?** The aim of our activity was to address the often-unvoiced concerns medical students have about difficult judgements that they will be called on to make when they transition to residency. Through interactive role-play and group discussion, students were invited to share their individual concerns in a safe, collaborative learning environment and to identify potentially helpful approaches to handling challenging clinical situations.

**What was tried?** Approximately 180 final-year students from our undergraduate medical programme, who had completed clerkship, participated in the activity, which took place in a large hall on campus. We first tapped students’ concerns about difficult clinical judgements by asking them to write down a potential scenario that they feared facing in residency and sharing it with one or two of their peers. We then offered a brief presentation on clinical judgement as adaptive expertise<sup>1</sup> that stressed the balance between efficiency and innovation, the importance of situational awareness, and the role of openness

to risk and failure as an important ingredient in learning. In groups of 10, students were then tasked with selecting and developing a single scenario from their cohort to enact for the members of a partner group. In each pairing, the role of the resident was played by a member of the partner group who was not familiar with the scenario and was therefore required to step in and make rapid decisions under conditions of uncertainty. After a short debriefing session, individual groups summarised what they had learned in three points and posted them on the wall. After all participants had circulated and reviewed the posts, the day concluded with a panel discussion during which four physicians from different backgrounds recounted their own experiences of making difficult decisions in the clinical setting. The resources required were nine faculty facilitators and a room large enough to accommodate 18 groups of students.

### What lessons were learned?

- 1 Students are concerned about difficult judgements they will have to make during residency and had no difficulty creating scenarios that simulated their concerns, which they later enacted with considerable energy and enthusiasm.
- 2 The idea of clinical judgement as adaptive expertise allowed us to frame the day for students as an opportunity to risk making mistakes in order to learn how to make better judgements.
- 3 The themes that emerged in students’ reflections on what they had learned, as evidenced by the points they posted on the wall, were: realise you are not alone and ask for help (17\*); clarify roles and delegate (8); stay calm (6); know yourself (6); focus on safety (5); prioritise (5); establish a suitable environment (5); create a therapeutic alliance (4); have self-compassion (3); communicate clearly (2); trust your gut (2); and document (2).
- 4 We believe that the main benefit of the activity may have been the opportunity the day provided for students to share their concerns with each other and with faculty members in a way that decreased their primary concern: feeling isolated and unsupported when making clinical judgements.

### Note

- \* The number in brackets refers to the number of times this learning point was listed.

## REFERENCE

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### Multi-level quality improvement education for fellowship trainees

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**What problems were addressed?** There has been a growing emphasis on integrating quality improvement (QI) initiatives into postgraduate medical education. In the USA, the Accreditation Council for Graduate Medical Education (ACGME) designates systems-based practice as one of six ‘core competencies’ by which trainees are evaluated.<sup>1</sup> To align trainee experiences with this educational priority, many residency and fellowship programmes encourage or require QI projects during training. However, the educational experience from such projects may vary considerably in structure, oversight and perceived utility.

**What was tried?** We developed an innovative, multi-level approach to team-based QI training. A multidisciplinary QI team, which included five paediatric endocrinology fellows, was created to engage in an improvement initiative on a clinically relevant topic. The project aim was to improve glycaemic control without compromising quality of life in children with type 1 diabetes aged 1–7 years. Based upon their level of interest and previous experience, different roles were offered to the trainees. One first-year fellow was designated team leader and three other fellows accepted roles as team members. A third-year fellow, who previously completed a formal curriculum and had other QI work experience, participated in a mentorship role as a coach. A faculty mentor with significant QI training and experience provided guidance for both the coach and leader.

Planning sessions between the mentor, coach and leader took place prior to the start of the project, to

set realistic goals within a predetermined time frame (6 months). The leader set up weekly team meetings to develop and advance the project. The coach attended team meetings and provided guidance. Concurrently, the group participated in a formal QI curriculum at the institution based on the Institute for Healthcare Improvement Model for Improvement framework. Team members took ownership of individual roles within the larger project. For example, some members were responsible for tracking measures and some tested specific interventions. The leader oversaw the progress made by the group, with the guidance of the coach and mentor. All trainees were offered an authorship opportunity to report on the outcomes, with the leader as lead author.

**What lessons were learned?** Although every trainee participated in the same group project and learned essential QI methods, the multi-level approach to team learning allowed the fellows to benefit from individualised skill development, and promoted QI proficiency in accordance with prior experience and interest. The team members received a comprehensive, hands-on and structured experience and had the opportunity to work synergistically with other team members (both other trainees and members in other disciplines). The leader, most motivated to develop QI expertise and devote more time to the project, gained experience in QI team leadership and management. The coach, who had prior QI training, learned about mentorship and teaching QI concepts. Furthermore, this approach also developed skills in other ACGME core competencies for all learners, including interpersonal and communication skills, and professionalism. In summary, a multi-level team project, supported by a QI curriculum, provides a consistent structure for applied learning that remains flexible to individualised educational needs of trainees.

## REFERENCE

- 1 Accreditation Council for Graduate Medical Education. *ACGME Common Program Requirements (Fellowship)*. Section IV.B. Chicago, IL: ACGME 2018. <https://acgme.org/Portals/0/PFAssets/ProgramRequirements/CPRFellowship2019.pdf>. [Accessed 30 April 2019.]

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