Abstract and Introduction

Abstract

Physicians are called upon to teach students, residents, patients and their families in the clinical environment every day as part of clinical care. A fast-paced emergency department offers a unique set of challenges that require the physician to be an effective communicator. We present a top 10 list of ideas selected from the literature for the busy clinician to use on that next shift to improve bedside teaching.

Introduction

All physicians are called upon to teach in the clinical environment. Bedside teaching refers to the instruction of learners (i.e., medical students and residents) and also to teaching other emergency department (ED) staff, patients and their families. Traditionally, bedside teaching has taken the form of ‘teaching rounds’ in which the ward team discusses the care of each patient on the service. This format does not adapt as well to the ED, where physician–patient interactions are brief, interruptions are frequent, overcrowding limits teaching time per patient and resuscitation of the acutely ill or injured patient is prioritised over all other tasks.\[1\] This setting demands an efficient, dynamic set of teaching methods. Regardless of the method, the instructor’s role remains the same: to provide excellent patient care, to teach the art and science of medicine and to evaluate the learner.\[2\] In this review, we present 10 frameworks for effective bedside teaching that any emergency physician can use to enhance his or her practice.

The Teachable Moment

Every patient interaction has many teachable moments. The teacher must be attentive to identify these moments and make them pertinent to a learner’s needs. The instructor makes a specific, pertinent point—a brief, targeted educational pearl.\[2\] For novices, pertinent areas to focus on are history-taking, physical exam findings and oral presentation skills, whereas for senior residents, medical decision making, communication of information to the patient and/or family and documentation might be more relevant. Direct observation of learners can inspire the teachable moment and result in feedback focused on a particular aspect of the patient interaction.\[3\]

1-Minute Preceptor

One of the most well-known frameworks for bedside teaching is the ‘1-Minute Preceptor’ or ‘Five Step ‘Microskills’ model of clinical teaching’, a focused, concise, teaching tool that is easy to implement in a busy environment.\[4\] Using this technique, a student first presents a case to the teacher. The student is asked to commit to a diagnosis or clinical position and is then probed by the teacher for evidence supporting his/her position. After exploring the student's thought process, the teacher tries to find a generalisable teaching point or clinical pearl, offers positive reinforcement and constructive criticism. In a mere 1 min, the instructor provides the educational pearl, a brief assessment of the student and immediate positive and negative feedback.

SNAPPS

Similar to the 1-Minute Preceptor is SNAPPS, a mnemonic for ‘Summarize,’ ‘Narrow,’ ‘Analyze,’ ‘Probe,’ ‘Plan’ and ‘Select’.\[5\] In this learner-centred and learner-initiated framework, the student first summarises the history and physical exam findings, narrows the differential diagnoses and weighs the various diagnoses. The student then probes the teacher to clarify any difficult or confusing issues and develops a management plan that integrates the teacher's approach. Finally, with the help of the teacher, the student selects areas for future research or learning and the steps to improve subsequent performance. This teaching technique may enhance learner independence in clinical reasoning and medical decision making.\[6\]

Aunt Minnie
The Aunt Minnie model of teaching focuses on developing rapid pattern recognition, i.e., if you see a person who looks exactly like your Aunt Minnie, she is probably your Aunt Minnie.\[7\] In this model, the student sees a patient, obtains a history, performs a physical exam and presents a short summary with a presumptive diagnosis. The teacher independently evaluates the patient, diagnoses the problem and creates a management plan. The teacher then discusses the case with the learner and provides teaching points on the patient and the condition. This efficient model is flexible to an ED workflow, because the teacher may see the patient prior to or after meeting with the student. Like the 1-Minute Preceptor, where the student is asked to commit to an assessment without instructor input, this educational tool may be more relevant for advanced learners.

Two-minute Observation

In this model, the instructor first prepares the student for a patient encounter and then watches the student interact with the patient.\[8\] Following the short observation, the instructor provides constructive feedback and specific teaching points about the encounter. This technique is particularly effective for teaching history and physical exam skills to medical students or interns as well as for teaching communication skills to all learners. Like other learner-centred models, the instructor sets clear expectations, directly observes the student and provides specific feedback and teaching.

Activated Demonstration

In this teaching model, the instructor must first understand the knowledge base and competence level of the student to select an appropriate clinical skill that will be demonstrated. After ‘activating’ the learner with a preview of the upcoming teaching points, the skill is then taught, followed by a discussion of any relevant learning points and areas for future study.\[9\] An instructor can use this technique to demonstrate and model any clinical skill (ultrasound, procedure, consultation, delivering news, etc) that is essential for patient care.

See One, Do One, Teach One

This well-known model for teaching procedural skills requires the instructor to demonstrate the procedure, observe the student perform the procedure and provide feedback on his/her performance.\[10\] To teach the procedure effectively, the instructor must break down the procedure into discrete steps and verbalise each step as he/she performs it. If the student is able to correctly articulate the process, he/she then demonstrates the successful performance of each step. True mastery of the procedure occurs once the student can effectively teach it to others.

Teaching Scripts

Teaching scripts are mini-lectures prepared beforehand by the instructor that target a specific concept or topic.\[11\] They are high-yield lessons that the instructor has memorised and can teach the student when the appropriate clinical setting arises. Examples of teaching scripts might include ‘Choosing Conscious Sedation Drugs’ for a patient with a dislocated hip or ‘Risk Stratification of Pulmonary Embolism’ for a patient presenting with acute shortness of breath. Over time, seasoned clinicians naturally create a portfolio of these for their students, but educators at all levels can proactively develop teaching scripts.

MiPLAN

This recently described model for bedside teaching is a three-part, learner-centred technique created for a busy inpatient setting.\[12\] Prior to the patient care encounter, the teacher has a ‘meeting’ with the student(s) to discuss specific goals and expectations. This verbal learning contract may yield more focused assessment and feedback at the end of the session. During the student’s bedside presentation, the instructor demonstrates the ‘I’ behaviours, which consist of an ‘introduction’ by the team to the patient, ‘in the moment’ focus on the student presenting the case, ‘inspection’ of the patient to confirm the presented information, ‘interruptions’ of the student, which should be minimised, and ‘independent thought’ or assessment by the student, which should be encouraged. Following the encounter, the instructor establishes the priorities for feedback and teaching using the ‘PLAN’ mnemonic. Teaching is targeted first to improve ‘patient care,’ then to address the ‘learner’s questions,’ the ‘attending’s agenda’ and finally, the ‘next steps’ for improvement. More studies are needed to determine whether this model is generalisable to other clinical settings.

Ask-tell-ask

The Ask-Tell-Ask model\[13\] has replaced the praise-criticism-praise model for giving feedback. In this revised ‘feedback
sandwich,' the teacher must first set the stage for providing feedback by telling the student, 'I would like to give you feedback.' Then, the instructor asks the learner to assess his/her own performance ('How do you think you did?'). Next, the teacher tells his/her own observations (both positive and corrective), addresses the learner's self-assessment and provides an action plan for improvement. Finally, the educator asks about the learner's understanding and strategies for improvement. This strategy incorporates the learner's perspective, avoids judgement and promotes the lifelong skill of reflection.

Conclusion

The ED is a challenging but rewarding setting to provide care while teaching aspiring physicians. This article provides 10 strategies for clinicians to use to improve their teaching skills in an active clinical environment.

References


Provenance and peer review
Commissioned; internally peer reviewed.