Enhancing the Inpatient Ward Learning Environment: A Practical Guide

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Inpatient ward placements are rich with practical learning opportunities for medical students, however, many such opportunities go overlooked and underused. Newly qualified doctors often feel underprepared for work on wards; improving student experience on ward placements can address this. While this requires an active effort from both students and clinical educators, it is not arduous and has mutual benefit: improving medical education whilst simultaneously reducing staff workload. Here, we present a guide for both teachers and students highlighting three key areas of ward learning that may be improved: strategies to drive active learning, integration of students into the ward team, and underutilised resources to develop a patient centered approach.

Introduction

Medical students spend a significant portion of their training on ward-based placements. It is important that students take full advantage of the wide-ranging learning opportunities on offer. Students learn best when learning actively (1). This is most likely to occur when they are involved by and included in the medical team, but this involvement is not always the case (2). More widespread integration of medical students into the team would improve the learning opportunities of students during their ward placements.

Incorporation of students into the medical team benefits patients. A controlled trial found that when students were involved in patient care, there was increased patient satisfaction and patient-perceived quality of healthcare (3). Further, the Francis report (4) described medical trainees as “invaluable eyes and ears”, highlighting the importance of students in protecting the welfare and interests of patients.

The NHS Long Term Plan (5) highlights the need for the training of more generalist doctors. Medical students should feel comfortable working on general medical wards by the time they finish medical school. However, there are a variety of areas in which junior doctors feel they are unprepared when making the transition from medical student to doctor (6). These included aspects such as handovers, working in a multidisciplinary team and even "ward environment familiarity", all of which could likely be improved by active learning and involvement in ward activities during medical student placements.

Lave and Wenger describe "legitimate peripheral participation", in which, as people gain knowledge and skills, "newcomers" become "old timers"(7) . O'Brien and Teherani use this model in a medical teaching context to discuss two methods of change in workplace learning: learner-driven change, and mandate-driven change (8). They emphasise the close link between learning environment and learning outcomes in a clinical setting (9).

We present a practical guide for educators and students to maximise the learning opportunities for medical students on ward placements. These are centred around three main pillars: participation, inclusion, and patient-centred teaching and learning. Implementation of these would support medical students to achieve more from their placements and feel better prepared for life as a doctor.

Setting the Stage for Learning

Allow medical students to actively participate in ward rounds

Facilitate active participation by medical students in daily ward rounds. To enable this, give handover sheets to medical students at the start of the ward round and include medical students when introducing a patient to the medical team. Where possible, allow students to participate in discussions relating to the patient and their management plan. Such involvement is important for medical students' learning and professional development (2). Due to the busy nature of some clinical environments, it is not always possible to offer direct teaching to medical students, but allowing them to be active participants rather than passive bystanders during ward rounds is a simple way to facilitate learning. As always, students should work within the limits of their competence and be appropriately supervised to ensure patient safety.

Encouraging attendance and verbalising learning outcomes

Medical students will make the most of time on the wards if they maintain good attendance and discuss their learning aims with the team (10). Students should be encouraged to attend regularly and informed of times during which it is particularly important to be present. Continuity with the medical team builds rapport and is likely to encourage the team to involve the student more. Medical students should have clear learning outcomes for each placement and should communicate their goals to the doctor leading the ward round. This will allow the team to offer teaching and tasks which are appropriate for the student. These learning outcomes could come from university faculty

or be the student's personal intended outcomes for the placement. As students gain confidence in the clinical environment, they should learn to develop their voice and responsibility in driving their own learning outcomes.

Case Study 1:

In our experience, starting the day with a particular learning outcome in mind helps to focus the clinical encounter. This could be something practical like offering to scribe for a ward round, or something broader like paying particular attention to a member of staff to see how their role fits into the multidisciplinary team. We find that by deciding our own learning outcomes for the day is very effective and stops students becoming passive observers. We would recommend this approach to other healthcare students.

Offer to share the task burden with medical students

Give medical students the opportunity to carry out tasks on the ward if they feel comfortable doing so. There are a variety of tasks each day that are the responsibility of the foundation doctors which, if completed by medical students, could represent a significant time saving and a useful learning opportunity. Examples include phlebotomy, catheters, routine cognitive screening in older patients admitted to hospital, venous thromboembolism (VTE) risk assessments and writing discharge summaries. Newly qualified doctors often lack skill in completing discharge summaries (11), so encouraging medical students to practice these routine tasks will likely lead to increased competency in future foundation doctors. Sharing the burden of tasks with medical students will also reduce doctors' workloads, which is beneficial to their performance (12). Medical

students should be encouraged to carry out tasks under necessary supervision, provided they are comfortable with the level of responsibility given to them and working within the limits of their competence.

Pairs for peer feedback

"You often pick things up from other students. I was clerking with another student, and they asked the patient "what can I do to help you today?". I thought it was a lovely phrase and now I use it in all my consultations." – Joseph, Medical Student

Placing medical students in pairs encourages peer feedback. The busy and unreliable nature of hospitals often makes it challenging to organise observed history taking and examinations. By placing students in pairs, it would allow for structured learning, for example by having one student undertake a history and one student provide feedback. This would also develop reflective practice skills which is an essential component to personal development and improving the quality of patient care (13). There is a growing body of evidence to support the use of peer learning in medical education (14). In our experience, it can also be reassuring to be paired with a fellow medical student, especially on placements early on in medical school.

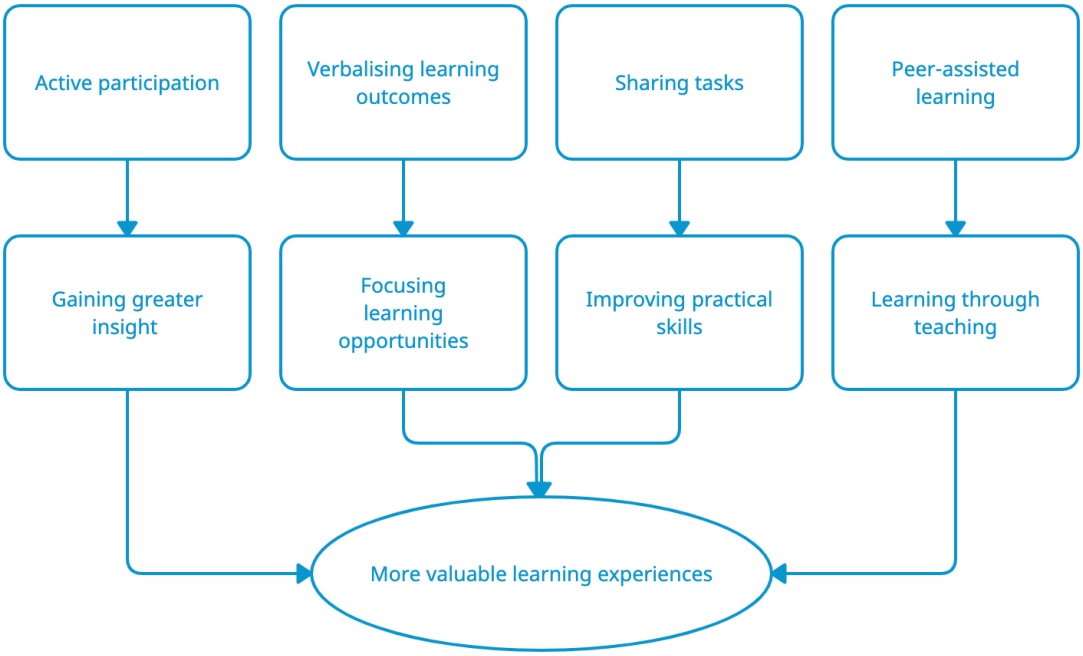

Figure 1: Setting the Stage for Learning - enabling a more valuable learning experience through active participation, verbalising learning outcomes, sharing tasks, and peer-assisted learning.

Facilitating Student Inclusion

Integration into team communication

Add medical students to team instant messaging channels and provide a list of appropriate contact numbers. Adding medical students to pre-existing instant messaging groups would enable them to introduce themselves to clinicians in advance, allowing them to adequately prepare for clinical opportunities, and ensuring that clinicians are expecting students. Assigning medical students a designated point of contact on the ward from the start of the rotation could also aid medical student integration into the team and allow them to raise any issues or questions without feeling like a burden. This is especially important in unfamiliar settings, such as placements outside of their main teaching hospital.

Introduction at the first board round

It is vital that members of the team are able to identify each other. New medical students should be introduced at the board round on their first day. This would help to both integrate the students and make them feel welcome, and to ensure that the team know who they are. In a rapidly changing team, this could reduce instances of medical students being confused with doctors or other staff. This could also allow the nursing team to delegate tasks to medical students where appropriate.

Shifts with Other Health Professionals

Medicine is a multi-disciplinary profession. As such, students should be encouraged to learn from other health professionals (15). Students may not have a complete understanding of the roles of nurses and other health professionals. We suggest that students spend time directly shadowing professionals in these roles in order to give students a greater understanding of a patient's journey. It would also help medical students learn about the ongoing needs of patients once they are deemed medically fit for discharge.

Case Study 2:

At Oxford Medical School, students have several opportunities to shadow a range of health professionals, including a 12-hour nursing shift as part of the acute general medicine placements, and physiotherapists and occupational therapists as part of the neurology placement. After these experiences, we are required to reflect through a SWOT analysis, which considers strengths, weaknesses, opportunities and threats. In our view, clinical shadowing followed by a focused reflection is highly effective. We feel that direct shadowing is the only way of gaining a proper understanding of the varied and essential roles of other health professionals, and how they work alongside doctors. For instance, we were unaware of the significant impact that early physiotherapist and occupational therapist involvement can have on recovery post-stroke, and their essential role in maximising patients' independence.

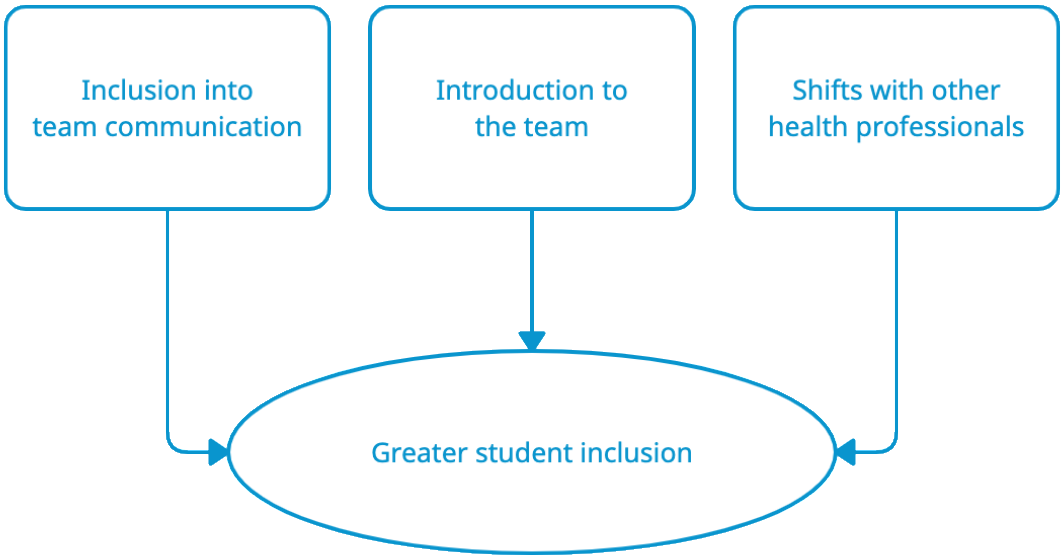

Figure 2: Facilitating student inclusion through team communication, introductions and shifts with other health professionals.

Patient-centred Teaching and Learning

Facilitate patient feedback to medical students

Feedback from patients has been shown to be an effective tool for the development and maintenance of interpersonal skills (16), however, medical students rarely seek direct feedback from patients. Valuable critique can be achieved if doctors or other ward staff were to facilitate patient feedback; patients will feel comfortable being honest and critical in a more formal teaching environment. We therefore propose that, where feasible, supervising medical professionals encourage patients to provide comment on the student's communication skills and bedside manner. Oxford Medical School has found success in the implementation of expert patient tutors, who are trained to provide feedback to medical students on their ability to communicate effectively and conscientiously (17).

Better feedback on consultation skills is given by patients when facilitated by a doctor in a teaching role. After bedside teaching, our educational supervisor asked the patient what they thought of our manner and approach to which the patient replied with detailed and constructive feedback. When asking for feedback as medical students, patients' usual response is "it was fine". Patients have a unique perspective in the patient-doctor interaction and their insight can greatly enhance one's consultation skills. We recommend that students are proactive in asking doctors to both observe them clerking patients, and to prompt the patient for feedback at the end.

Encourage non-medical interactions between medical students and patients

"The most rewarding part of my week on the stroke unit was having a long conversation about baking with an elderly patient." – Hamish, Medical Student

Identify patients who may appreciate a short friendly conversation with a medical student, for example patients who have few visitors. Identification of such patients should come from the interactions between the patient and clinical staff. Staff should signpost these patients to medical students and encourage them to spend some time talking to the patient about non-medical topics, in addition to practicing history taking and examination. It is likely to be an even greater issue with reduced visiting hours during the COVID-19 pandemic. Facilitating non-medical, human interactions between patients and students may reduce patient loneliness and will be rewarding for medical students.

Freedom to speak up and incident reporting

"Getting clear guidance on incident reporting made me feel empowered to speak up when I witnessed an error." – Albert, Medical Student

The Francis Report (4) highlighted the duty of doctors in training to protect patients, stating that "trainees are invaluable eyes and ears in a hospital setting." A further report, *Freedom to Speak Up* (18) stated that all training for students should include training on raising and handling concerns. However, medical students may fear that raising concerns, whether formally or informally, could reflect poorly on them, and the process may be tricky to navigate. Students should be given clear guidance on the process

of raising concerns, both to maximise patient safety and to fully integrate them into clinical teams.

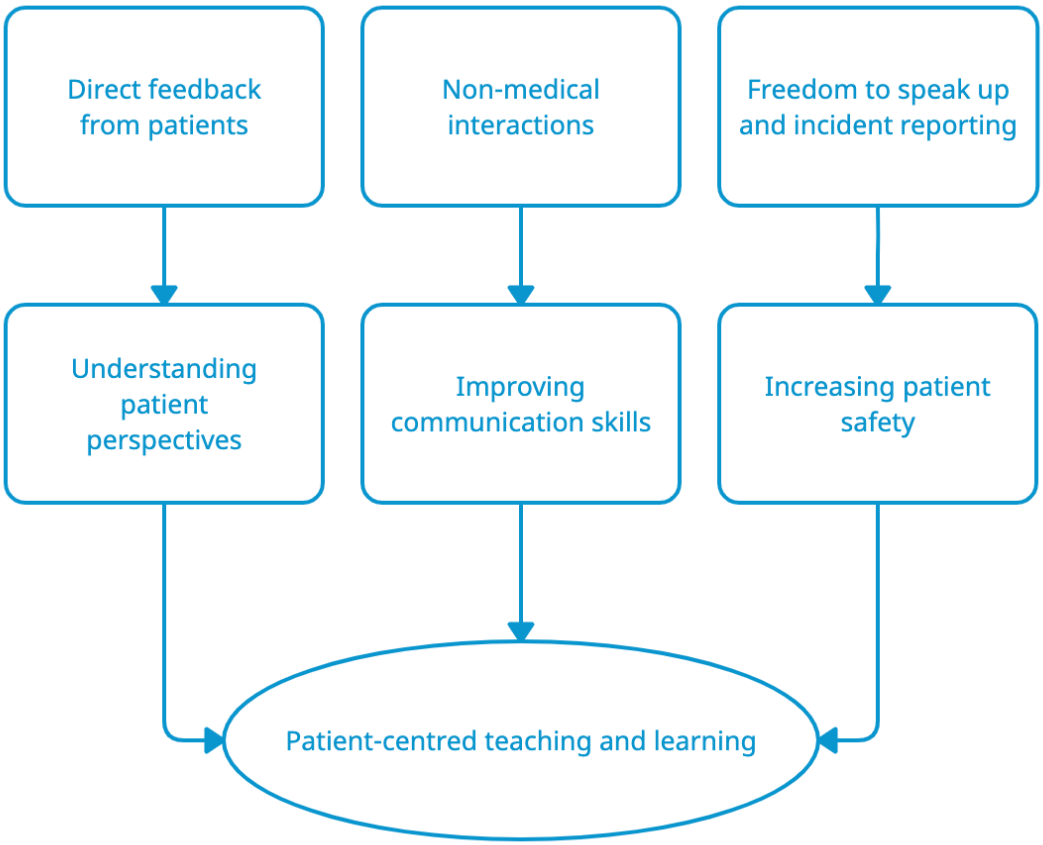

Figure 3: Patient-centred teaching and learning through direct feedback from patients, non-medical interactions, and freedom to speak up and incident reporting

Conclusion

Much can be gained from ward placements; more is gained when medical students feel involved and learn actively. Students should feel comfortable in ward settings and equipped for the transition to junior doctor by the time they graduate. We hope that this guide helps students and educators to make the most of ward-based learning opportunities.

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