



Acute care toolkit 5

Teaching on the acute medical unit November 2012

Work-based learning and teaching are vital parts of medical education. Acute medical units (AMUs) are rich learning environments for a wide range of health professionals and students. High-quality teaching and learning have a direct impact on patient safety, quality of care, and the experiences of trainees. In a busy AMU, it is possible to define teaching and learning episodes more clearly, facilitate learning more effectively, and 'teach in chunks' when time is limited.

Background

Nearly all hospitals in the UK have an AMU. In 2007, the Acute Medicine Task Force made recommendations that encouraged the development of a supportive culture of education, training, self-improvement, excellence and teamwork, founded on the principles of patient safety and high-quality clinical care.¹ It recommended that exposure to the AMU should be a core part of the undergraduate medical curriculum, and that medical and nursing education leads should be identified to promote and coordinate education and training in this environment.

The Royal College of Physicians (RCP) recognises the importance of teaching on AMUs. **The RCP's Acute care toolkit 2: High-quality acute care** recommends:

*All consultants involved in acute medical care should recognise their educational responsibilities and ensure that teaching is prioritised. Consultants have a critical role in leading and motivating the team throughout the hospital and ensuring that the next generation of physicians is equipped to provide care of the highest quality.*²

The General Medical Council's 2011 *National training survey* of over 46,000 doctors found that, overall, trainees were satisfied with their training. It also found that trainees value high-quality supervision, including feedback and assessment of their performance, but that many receive no formal feedback and have concerns about the quality of assessment.³

The Federation of the Royal Colleges of Physicians' *Census of consultant physicians and medical registrars in the UK, 2010* found that 75% of consultants reported working under increased pressure compared with 2007, and 52% of consultants said the time they had available to spend with trainees had reduced during the past three years.⁴ A 2010 survey conducted by the Society for Acute Medicine in collaboration with the RCP, showed that in almost half of the hospitals surveyed, the on-call consultant still undertook other routine clinics or procedures while managing the acute take.⁵ This document provides practical guidance on how to facilitate learning on the AMU effectively when time is often limited.

Doctors learn mainly from practice in a clinical environment. Trainers need to outline opportunities for teaching and learning at the start of each AMU post.

Overcoming barriers to teaching on the AMU

Consultants, as expert clinicians, have a key role in facilitating learning, and in developing the experts of the future. However, the AMU consultant ward round or review can appear to have two conflicting priorities: one is patient care (including the organisational need for efficiency and keeping patients moving through the system); the other is the education of doctors in training. As a result, consultants can feel 'too busy to teach'. However, this apparent conflict can be overcome when units focus on:

- > defining teaching and learning episodes more clearly
- > creating a shared understanding with trainees, at the start of each AMU post, as to how teaching and learning will take place
- > creating a good learning environment
- > helping trainers to facilitate learning more effectively, eg 'teaching in chunks' when time is limited.

Teaching and learning in practice

Implementing high-quality teaching and learning on the AMU requires some practical measures:

1 Create a good learning environment

A good learning environment depends on education being held in high esteem and considered important. It is crucial to create a culture of learning where the relationships between teacher, learner and team are supportive and designed to allow the best opportunities for learning. This ethos should be supported by the following practical steps:

- 1 Appoint a lead to promote and coordinate education and training on the AMU.
- 2 Ensure trainees spend blocks of time on the AMU, not just when they are on call.
- 3 Make sure the basic needs of trainees/employees are met: send written information on AMU operational policy and rotas in advance, organise a locker room, ensure adequate work space eg a doctor's office.
- 4 Design rotas for all staff to manage peak admission times (early evening).
- 5 On the first day of each new rotation, include an education induction.
- 6 Organise shorter, but more frequent formal teaching sessions at times that fit in with the AMU workload, eg lunchtimes.

2 Explicitly facilitate work-based learning

The following are a selection of techniques that trainers could use to facilitate work-based learning:

- > thinking aloud (but out of earshot of the patient)
- > demonstrating
- > generating questions and getting some of the team to research the answer
- > swapping roles with the registrar for part of the ward round
- > getting trainees to review a patient first, think about the

- problem(s), then present their management plan to you
- > giving feedback
- > telling clinical stories to illustrate an evidence-based point
- > encouraging 'noticing' (eg of clinical signs or consultation skills)
- > having clinical conversations (eg explaining the rationale of a management plan when reviewing a case on paper or over the telephone)
- > at the end of a ward round, asking what three things people learned
- > encouraging trainees to write up interesting cases or present cases at meetings
- > recommending specific further reading (as one would in a tutorial).

When there are lots of trainees on a ward round, it is sometimes more 'interactive' to send some of them to research a clinical question (eg 'find out what the national guidelines are on this condition, then tell us what to do next'). Observing specialty trainees do part of the post-take ward round or review patients is a vital part of their training and need not take more time, however, feedback is important. Having 'homework' recommended (eg specific further reading) helps trainees to assimilate and digest new information linked to real cases. Finally, asking trainees what three things they learned at the end of a ward round reminds people that learning was taking place.

While facilitating learning using these techniques, it is important to be explicit about what is thinking aloud or discussion/teaching/research, and what is the actual management plan to be written in the notes. It is important to place the emphasis on learners taking responsibility for their own learning, rather than it being solely a top-down process.

3 Ensure frequent, effective feedback

Feedback has been extensively studied and can positively change clinical performance when it is systematically delivered from credible sources.^{6,7} For feedback to be effective, it should be clear, gathered soon after the event, interactive, face-to-face, non-judgemental and delivered in private if necessary. Effective feedback:

- > is interactive
- > encourages self-assessment,
- > involves an explicit action plan.⁸

After observing a trainee, there are good reasons for asking 'how do you think that went?'. Exploring a trainee's insight into a potential problem area is a vital aspect of giving 'constructive' feedback, as a small minority of trainees tend to overestimate their own performance.⁹ This should be followed with a discussion of what went well. Feedback should then focus on only one or two areas for improvement, with an achievable action plan, developed with the trainee.

It is important to remember that learning is a process and that, as there are a number of models for giving feedback,

Einstein said, 'Knowledge is experience – everything else is just information.'

Case study

A 74-year-old man was admitted to the AMU after recurrent falls. During the ward round, the consultant sent the registrar and house officer to assess the patient and come up with a management plan. Their brief was to access relevant guidelines on the internet, and spend no more than 20 minutes on the case.

The consultant and another trainee continued the ward round. Twenty minutes later, the registrar presented their

assessment and plan, and the consultant used the one-minute preceptor model (see Box 1). Everyone went to see the patient, and the consultant demonstrated how to assess an elderly patient with falls.

The trainees learned something new, and the registrar agreed to 'homework' for later that day (reading NICE Clinical Guideline 21: The assessment and prevention of falls in older people).

it is important to ensure that the approach does not become overly formulaic.

Feedback also helps to encourage reflection, a vital aspect of developing expert professional practice.¹⁰

4 Teach in chunks

In addition to the techniques above, trainers can also 'teach in chunks' – short tutorials involving a small group of trainees, often during a ward round. The one-minute preceptor model is very useful when a trainee is presenting a case they have seen (see Box 1).¹¹ Another useful technique is to get everyone in the team to take turns leading a '10-minute tutorial', which could be at the end of the round. It is important to keep this strictly to 10 minutes. Suitable topics could be summaries of guidelines relevant to acute medicine.

5 Make classroom-based teaching accessible

The Acute Medicine Task Force report pointed out that an AMU is not a 'traditional medical ward', but a busy area operating 24/7 for the assessment and treatment of patients with acute medical illness. It recommended that all AMUs should be designed with easy access to a dedicated teaching space, ideally embedded within the unit.¹

Classroom-based teaching is more accessible for busy clinical staff when it is located nearby, scheduled at times that fit in with the AMU workload, and protected as far as possible from interruptions. This is best facilitated by more frequent, shorter sessions, eg at lunchtimes (noon tutorials), rather than a longer session once a week. The purpose of classroom-based teaching is to complement work-based learning, never to replace it

What teaching should cover

Teaching on the AMU needs to cover generic topics relevant to acute medicine, as well as clinical ones. Generic topics are particularly appropriate for interprofessional learning (see Box 2). Examples include:

- > how to communicate effectively (eg use of the 'situation, background, assessment, recommendation' method)



Box 1 The one-minute preceptor model

The trainee presents a case, then the teacher:

- > gets the trainee to commit to what he/she thinks the problem is
- > probes reasoning and alternative explanations
- > teaches one or two general principles (eg the correct use of d-dimer, the main ways that pulmonary embolism presents)
- > feeds back on what the trainee did well
- > corrects actual errors in reasoning (eg a normal SpO₂ does not exclude pulmonary embolism) while focusing teaching on the key issues.

The trainer and trainee then see the patient together.

- > aspects of patient safety (eg human factors training, audit, morbidity and mortality reviews)
- > how to hand over effectively between shifts
- > infection prevention and control
- > dealing with violent patients
- > the Mental Capacity Act and the Mental Health Act

The theory of practical procedures is an important but often neglected topic. The *New England Journal of Medicine* has a series of high-quality 'videos in clinical medicine', demonstrating the correct performance of common practical procedures, eg lumbar puncture, useful for tutorials. They are available at www.nejm.org/multimedia/medical-videos.

Box 2 Interprofessional learning

Acute medicine has a strong interprofessional ethos and there are many overlapping educational topics where different professionals can teach and learn from each other. Examples include:

- > the generic topics listed above
- > mental health and addiction
- > medicines reconciliation and prescribing
- > care bundles on the AMU.

The Association for the Study of Medical Education (ASME) has the guide *Interprofessional education* as part of its Understanding Medical Education series.¹² www.asme.org.uk/publications.html



Box 3

Workplace-based assessments as tools to facilitate learning

Workplace-based assessments in postgraduate medical education were developed to provide feedback to trainees to aid development.¹³

Workplace-based assessments facilitate trainers observing and giving feedback to trainees. Focused feedback is provided with the aim of improving a trainee's overall performance, whether they are doing well, or whether there are concerns. However, there is evidence to suggest that consultants have significant deficiencies in clinical skills and fail to detect substandard performance in observation exercises.¹⁴ Nevertheless, it is essential that assessments are viewed as learning opportunities.

A vital aspect of these assessments is that everyone should know that an assessment is taking place in advance. If a trainee asks, 'can I use that as an acute care assessment tool?' after a post-take ward round, the answer should be, 'no'. Proper assessment means the assessor knows they are assessing at the time, can make judgements, and can provide effective feedback. All consultants should be trained in the correct use of workplace-based assessments. ■

Assessment drives learning.

Recommendations:

- 1 Every AMU should have an education lead to promote and coordinate work-based teaching and learning.
- 2 The importance of learning and teaching in the workplace should be emphasised.
- 3 Consultant physicians should have no other commitments when they are on call or on the AMU.
- 4 Education leads should facilitate a good learning environment.
- 5 Trainees should spend blocks of time on the AMU, not just when they are on call.
- 6 Consultant physicians should be trained in techniques that explicitly facilitate work-based learning, including teaching when time is limited and how to give frequent, effective feedback.
- 7 All AMUs should have easy access to a dedicated teaching space, ideally embedded within the unit.
- 8 Classroom-based teaching should be delivered in shorter, more frequent sessions at times that fit in with the AMU workload. Sessions should complement, not replace, work-based learning, and be 'protected' as far as possible.

Further information

To find out more about post graduate education visit:
www.amee.org

‘The word ‘doctor’ comes from the Latin docere meaning ‘to teach’.



References

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This is the fifth in a series of acute care toolkits published by the RCP:

Acute care toolkit 1: Handover was published in May 2011

Acute care toolkit 2: High-quality acute care was published in October 2011.

Acute care toolkit 3: Acute medical care for frail older people was published in March 2012.

Acute care toolkit 4: Delivering a 12-hour, 7-day consultant presence on the acute medical unit was published in October 2012.

The toolkits can be accessed online at www.rcplondon.ac.uk/resources/acute-care-toolkits

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