

CORE
TRAINING
FOR DOCTORS

TIPS FROM THE SHOP FLOOR

How to run an acute medical take M178*Jacob F de Wolff*

WHAT YOU NEED TO KNOW ABOUT

The fluttering patient: an approach to the patient with palpitations M182*Sukhjinder S Nijjer, David C Lefroy*

WHAT THEY DON'T TEACH YOU AT MEDICAL SCHOOL

Clinical coding M186*Rachel Hooke*

CLINICAL SKILLS FOR POSTGRADUATE EXAMINATIONS

The bisferiens pulse M189*Judith Finegold, Antonios Pantazis*

COMING NEXT MONTH

WHAT YOU NEED TO KNOW ABOUT

Spinal metastasis

CLINICAL SKILLS FOR POSTGRADUATE EXAMINATIONS

Wrist joint aspiration

TIPS FROM THE SHOP FLOOR

Presenting in the orthopaedic trauma meeting

WHAT THEY DON'T TEACH YOU AT MEDICAL SCHOOL

How to pass the MRCS exam

Edited by **Dr Daniel JB Marks**, Academic Clinical Fellow in Translational Medicine, and **Dr Philip J Smith**, Academic Clinical Fellow and Specialist Registrar in Gastroenterology, University College London

How to run an acute medical take

Introduction

Registrars in the medical specialties who are dually accrediting in both their specialty and general internal medicine commonly run acute medical takes as part of their training. The 2009 curriculum for general internal medicine requires 3 years of general medicine experience, and evidence of caring for 1000 acutely ill patients (Joint Royal Colleges Postgraduate Training Board, 2009). The medical registrar running the acute take is usually responsible for the management of patients admitted acutely from the emergency department, taking referrals and requests for advice from local GPs, offering advice to other specialties (such as general surgery, orthopaedic surgery and obstetrics and gynaecology), and leading the cardiac arrest team. At night and over the weekend and bank holidays, the medical registrar may be responsible for all medical inpatients in the hospital.

The acute take is often regarded as stressful, and personal conversations with core medical training doctors have revealed that many of them feel unprepared for the task. Some go as far as trying to avoid applying to specialties that involve acute medical takes.

This article explores the dynamic of the acute take, the various demands on the registrar leading the take, and how to harmonize these demands.

Before the first take

Every hospital has different policies and conventions for acute takes, and it can be extremely helpful to speak to someone who has been on the registrar rota in that trust for some time. Important questions are:

- Who takes GP referrals or provides telephone advice?
- Where is the list of accepted referrals kept? If it is kept on the trust computer network, does your login give access to the correct folder?

- Have you got access to all the relevant results systems (pathology, PACS, clinic letters and previous discharge summaries)?
- How does one get acute opinions from intensive treatment unit, cardiology (primary percutaneous coronary intervention, acute pacing), renal medicine, neurology, neurosurgery, cardiothoracic surgery and psychiatry?
- What age is the cut-off for admitting teenagers under paediatrics? Does it matter whether they are in school or working?
- Are there rapid access services to which subacute problems can be deflected, such as an acute medical clinic, a chest pain clinic or a transient ischaemic attack clinic? What other ambulatory care pathways exist, such as an out-patient deep vein thrombosis or cellulitis pathway, as now mandated by the Department of Health (2010)?
- Are there important trust guidelines to be aware of? What role does the medical team play in the major incident policy?
- What is the procedure for acute radiology requests?
- To which areas can you admit patients who need close observation or advanced monitoring?
- Who deals with referrals from other departments in the hospital (surgery, orthopaedics)?
- Who accepts repatriations from tertiary services, e.g. neurosurgical patients requiring rehabilitation in their local area?
- Which departments take referrals directly from the emergency department and from GPs? This is mainly relevant in trusts with tertiary services. Will you be taking referrals on behalf of tertiary services in the trust, and who do you contact to discuss these referrals?
- Locations of important equipment: spinal needles and manometers for lumbar punctures, handheld spirometers in case of acute neuromuscular disease (myasthenic crisis or suspected Guillain-Barré syndrome), and magnets to switch off implantable cardioverter-defibrillators and pacemakers.

Dr Jacob F de Wolff is Specialty Registrar in Acute Medicine, Homerton Hospital, London E9 6SR (jfdwolff@doctors.org.uk)

- Where can one get an ultrasound (for chest drains or jugular lines) or echo machine, and who do you need to tell where you are taking it?

Before each take

A few days before a shift comes up, it can be useful to find out which consultant will be on call, and which junior doctors will be part of your team. If one of them is known to be unwell, or the shift appears unfilled on the rota, a quick word with medical staffing can help establish whether locum cover needs to be arranged.

It is of course very difficult to predict whether a take is going to be busy, but trust staff usually circulate information over email about upcoming major events in the area, as well as planned changes in service provision (e.g. maintenance of computed tomography scanners and contingency plans for this).

It is generally not a good idea to schedule meetings or other responsibilities while on call. If this is absolutely necessary, warn the other party that you are on call and may cancel at the last minute, or run away in mid-sentence for a cardiac arrest call. See if a colleague can hold the bleep for the duration of the meeting, but do not expect him/her to see patients in person except in emergencies.

The day of the take

Arriving on time is unquestionably important, so the previous shift can go home. Should you experience any delays (e.g. cancelled trains), informing the consultant on-call can help arrange short-term cover.

At handover, check whether there are any patients waiting to be seen, and whether any arrivals are expected. This is the time, particularly over the weekend, to discuss patients on the ward who need input during the course of the shift. The departing team should also inform you about important outstanding test results that may require immediate action (e.g. computed tomography head, lumbar puncture microscopy).

Once the previous shift has left, make sure all bleeps are working, and consider exchanging mobile telephone numbers. Establish everyone's identity, grade (there may be foundation year 2, core trainee year 1 and core trainee year 2 doctors on the 'medical senior house officer' rota)

and level of experience. If a member of the team has important learning goals or needs workplace-based assessments, this could be taken into account. Discuss who will take referrals from the emergency department and GPs – this may be an appropriate task for a senior medical senior house officer but not for an foundation year 2. If your team is responsible for inpatients (e.g. over the weekend), a list of those requiring review or attention should be available.

After handover, the team may need to go on a ward round (particularly over the weekend), but agree a time when you can meet up to discuss what is happening.

If one of your team is a locum, consider taking some extra time to ensure that he/she has had some form of induction. Does he/she know the hospital? What job does he/she do normally, and what level of experience can you count on? Has he/she received an identity card, swipe cards for doors, and passwords for the computer systems? (Some trusts have IT policies that threaten staff who share passwords with disciplinary action.) The quality of locums is very unpredictable, and some need more supervision than others.

After meeting the team, consider making contact with senior emergency department staff (consultant or registrar 'on the floor', as well as the nurse in charge). It helps to get an idea of how many patients there are in the emergency department, and which ones are likely to get referred in the foreseeable future. This may help plan the workload later on. You may also be asked to see emergency department patients with likely medical pathology directly in the capacity of 'clinical decision maker' to minimize 'time to treatment' in the context of the emergency medicine quality indicators (Department of Health, 2010).

Check with the consultant on call when ward rounds are due to take place. Many hospitals have an afternoon or evening ward round, in keeping with national guidelines (Acute Medicine Task Force, 2007).

During the take

It can be tricky to stay on top of things during a busy take, particularly if there are many referrals or patients are moving rapidly between emergency department, the acute medical unit and other wards. Have

an idea what is going to happen with every patient that is accepted, and ensure that all the doctors on the team are seeing the 'right' patients. The foundation year 1 doctor may not be the best person to see someone with multiple active medical problems. Sometimes, a senior house officer can spend more time with a complicated patient than a registrar, without being interrupted with other tasks.

Make it clear in advance if you want to review a patient after being seen by a junior member of your team. All patients clerked by an foundation year 1 doctor should be reviewed by someone senior, but it may be appropriate to leave this for the consultant ward round if you are reasonably certain that the patient can wait until then. The author does not routinely review patients clerked by foundation year 2 or core medical trainee doctors, but will generally ask them their impression and plan for each patient, and offer to review if there are important outstanding issues, the patient appears to be deteriorating, or the patient may be discharged subsequent to senior review. A direct request for a review should always be honoured.

If it gets busy, and the number of referrals outstrips the number of doctors on your team, there is a risk of 'paradoxical slowing': the registrar is so busy coordinating the take that he/she becomes unable to admit patients in person. Prioritize: someone who is reasonably well and has already had the correct treatment (such as a suspected acute coronary syndrome with limited electrocardiographic changes who is now pain free) can be seen later. Quickly 'eyeballing' a patient to ensure that he/she is stable and comfortable can help you decide.

Always ensure that everyone, including yourself, gets appropriate breaks. It may not be possible to take breaks together, but do not allow staff to go hungry or thirsty (and grumpy) just because there are patients waiting to be admitted.

Certain situations are capable of throwing a well-running take into disarray: cardiac arrests (most team members need to drop everything), urgent calls to deteriorating patients on the ward, complicated discussions with families, but also urgent practical procedures (see below). The ultimate disruption, however, can be the ward round.

Ward rounds

Morning post-take ward rounds tend to be traditional, well organized and with clear responsibilities. In contrast, the 'mid-take' or 'intra-take' ward round means that doctors stop seeing patients to present cases to the consultant. The late afternoon and early evening is also the time of day when many patients are referred from the emergency department, and GP referrals from earlier in the day could still be arriving. Your organizational skills may be tested.

Before starting a ward round, ask the consultant which doctors are needed, and which patients will be seen. The exact location of each patient should be known to prevent multiple journeys between various clinical areas.

Establish who is taking responsibility for any jobs arising from the ward round. A patient may need an urgent computed tomography scan, further bloods or discussion with specialists. Is this the task of the admitting doctor, or are there other doctors, for instance on an acute medical unit, who can take care of this? How are these jobs handed over, especially the urgent ones?

With regards to the morning post-take ward round, different hospitals have specific arrangements as to whether the team from the previous day presents their admissions to the consultant, or whether paper notes will be used for presenting by another team. In the author's view paper notes often do not give the entire story. Furthermore, this is a time to get feedback on admissions, and to do workplace-based assessments. If you have other duties (seeing your own inpatients, clinic, endoscopy) it may be practically impossible to go on the morning post-take ward round.

Practical procedures

Some patients need to have an urgent practical procedure. These can be time-consuming (often requiring both the junior team member and the registrar for supervision). Do not give in to the temptation to defer procedures if they will influence management; if someone needs a lumbar puncture, do it there and then and accept that you may need to hand over more patients to the next team. Some procedures, however, can be deferred safely (e.g.

a pleural tap in someone at low risk of pyemia). Intercostal drains for effusions and jugular lines are best performed under ultrasound guidance; some hospitals have unwritten rules that jugular lines must be inserted in theatres, causing significant delays. Always check whether this rule is actually in force.

Problems

Apart from 'known unknowns' that can destabilize an acute take, some uncommon scenarios can severely disrupt matters. Becoming unwell or having urgent personal life issues (e.g. sick family member) can impair your judgement. Inform the consultant on call at the earliest opportunity and agree on a plan. If you need to go home, try to establish whether another team member could 'act up' (e.g. a core trainee year 2 who has passed the MRCP), or whether the team is so junior that the consultant needs to be present in person.

Having another sick or stressed team member can also cause significant trouble. Discuss the situation with the doctor in question, and make sure he/she is not carrying on working if he/she is too unwell; doctors are well known for their culture of presenteeism and not wanting to let down their colleagues. If a doctor needs to go home, try to gauge the impact on the take. The consultant on-call and the duty hospital manager should be aware, as they might be able to arrange last-minute cover. At night, other teams may be willing to assist, e.g. emergency department doctors doing a part-medical clerking of relatively uncomplicated patients, or other members of the hospital at night team taking care of ward jobs.

Much disruption can be caused by arguments as to whether other specialties should take particular patients. In many cases, a trust policy or long-term arrangement is in place (e.g. which specialty takes acute cholangitis or pancreatitis, acute back pain, head injury requiring inpatient observation, and shoulder or pubic rami fractures not requiring orthopaedic intervention). Members of other departments may not (yet) be aware of local arrangements. Ask an experienced member of staff, such as the emergency department nurse in charge or the site manager, whether he/she is aware of policies or arrangements. If no

agreement can be reached, it is sometimes in the patient's interest to be admitted by the medical team and further specialty review to take place the next morning. If you believe another department is genuinely being obstructive, escalate the matter up rather than wasting time over circular arguments or 'ping-pong'. If the referral is coming from a foundation year 2 doctor in the emergency department, involve the emergency department middle grade doctor or consultant – sometimes seniority can be persuasive. If all else fails and you remain convinced that you are being made to admit someone inappropriately, consider escalating the matter to your consultant. At the same time, be prepared for your consultant to agree to admit said patient 'diplomatically'.

It is possible that during the take you discover that a team member is not performing adequate assessments of patients, or is not communicating adequately with other staff. This may happen in various ways. A nurse may contact you with concerns, a patient may deteriorate unexpectedly, or important test results may be missed. Speak to the doctor, giving – if possible – the benefit of the doubt. In the majority of cases there is a logical explanation, and sheer incompetence and malice should not be presumed in the absence of clear evidence. At the same time, do not ignore these signals out of concern that you might upset the doctor in question. Safety remains paramount, and the team member may eventually be grateful that you picked up on an important problem.

Handover

Handover is an opportunity to take stock, identify unresolved issues, and make plans for the next 12–24 hours. Every patient admitted on the take should therefore be discussed with the team coming on shift, if ever so briefly. Current inpatients who need a review or a scheduled test (such as a troponin, urea and electrolytes or an arterial blood gas) should also be flagged up, as should be outstanding test results. Potential staffing issues and bed occupancy state may need to be discussed.

The ideal handover is in a dedicated area and protected from interruptions (NHS Modernisation Agency and National Patient Safety Agency, 2005). You may

TOP TIPS

- Before your first take in a new trust, familiarize yourself with the procedures, roles and equipment.
- During the take, make sure you know who is doing what, and where.
- Do not allow ward rounds to destabilize the take.
- Take time for practical procedures, especially those that can not wait.
- If unexpected problems arise, have an idea what could be done and know who to call.
- Use handover to review progress of admitted patients and plan ahead.
- Keep a private list of all patients you have admitted, and check up on their progress later to learn from your successes and mistakes.

need to ask a doctor wanting to make a referral to ring back after the conclusion of the meeting.

A night shift handover meeting is generally attended by medical staff from all inpatient departments, as well as bed and site managers, night nurse practitioners, and other members of the multidisciplinary team. There may be a trust-specific template that allows the details of all patients handed over to be recorded in a systematic fashion, together with the name and contact details of the person responsible for follow up.

Handover after a night shift is often more perfunctory, but if an unwell patient has been admitted to an outlying ward, or a current inpatient has deteriorated overnight, the team working in that clinical area should be alerted.

The aftermath

It may be hard to wind down after being on take, but do not neglect yourself. When working nights, it can be difficult getting sufficient sleep during the day, with ambient light and noise in ready supply.

Always make an effort to follow up patients you have admitted, in person or through the hospital's results system. It can be quite a boost to discover you were correct about an unusual diagnosis.

In view of the general internal medicine curriculum requirements discussed above, it has become important that you keep an anonymized list of all the patients you have admitted or reviewed. Make sure that in doing so you do not fall foul of the Data Protection Act. If you have an ePortfolio, you can upload word processor documents or spreadsheets with the relevant data, which can help at your next general inter-

nal medicine ARCP (annual review of competence progression).

Make sure that you also get sufficient workplace-based assessments. The curriculum states that over a year you need to do between three and six Acute Care Assessment Tools, for which the acute take is the best opportunity, as well as four mini-clinical evaluation exercises and four case-based discussions. If you did any procedures under supervision of a colleague (e.g. jugular line with the intensive treatment unit registrar or consultant) make sure you request a direct observation of procedural skills unless you were already fully assessed in that procedure.

Acute takes sometimes unearth previously unknown problems, such as unavailable equipment, unclear departmental policies or disagreements with other specialties. Do not ignore them, because either yourself or a colleague may encounter the same problems again, often with a potential risk of harm to patients. Complete an incident form (IR1) if you believe this is necessary, and flag up important political issues with the consultant (or alternatively your supervisor or the clinical director). If your concerns are reasonable, you should

not be treated as a troublemaker but thanked for following something through.

Conclusions

The acute medical take is a marvellous way of developing organizational skills. You are the competent decision maker at the centre of a lot of clinical activity (Acute Medicine Task Force, 2007). It can also be a source of significant stress or unease, particularly when things have gone less than smoothly, but do not let this spoil things. Juniors on your team greatly appreciate someone who provides clear leadership yet gives them an opportunity to develop their own practice. Colleagues in other specialties have a great deal of respect for a confident and sensible medical registrar, and sometimes you can hear an audible sigh of relief when you arrive on the scene and resolve a tricky problem. You are very likely to encounter interesting pathology, clinical signs, diagnostic or therapeutic conundrums, or opportunities to provide high-quality care to unstable patients. Make the best of it. **BJHM**

Conflict of interest: none.

- Acute Medicine Task Force (2007) *Acute Medical Care: the right person, in the right setting - first time*. Royal College of Physicians, London
- Department of Health (2010) *A&E Clinical Quality Indicators Data definitions*. Department of Health for England, London (www.dh.gov.uk/prod_consum_dh/groups/dh_digitalassets/@dh/@en/@ps/documents/digitalasset/dh_122892.pdf accessed 24 August 2011)
- Joint Royal College Postgraduate Training Board (2009) *Specialty training curriculum for General Internal Medicine*. Joint Royal College Postgraduate Training Board, London (www.jrcptb.org.uk/specialties/ST3-SpR/Documents/2009%20GIM%20curriculum.PDF accessed 23 August 2011)
- NHS Modernisation Agency and National Patient Safety Agency (2005) *Hospital at Night Patient Safety Risk Assessment Guide*. National Patient Safety Agency, London (www.nrls.npsa.nhs.uk/resources/?entryid45=59820 accessed 24 August 2011)

KEY POINTS

- Registrars in many medical specialties run acute medical takes as part of their training.
- Some practical tips are provided to help cope with what is generally regarded as a stressful affair.
- Before each shift, particularly the first one, some information gathering is highly advisable.
- During the take, several approaches can be used to keep everything running smoothly.
- Practical procedures, ward rounds and unpredictable problems can destabilize the take, and advice is provided on how to approach this.