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EDITORIALS Clinical Medicine 2014 Vol 14, No 5: 460–1

In praise of clinical examinations

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It was a hectic morning rush hour on the interstate. Fresh off a trans-Atlantic flight, driving bumper to bumper on the 'wrong' side of the road at 60 miles per hour was never going to be straightforward, but the impeccable driving of my fellow road users made it all so easy. I was glad they had driving tests in America.

On a 3-month sabbatical to learn the American approach to the teaching and assessment of the bedside clinical skills of internal medicine residents, I arrived intrigued. Since 1972, US certification in internal medicine had been dependent on completion of a residency programme and safe passage through the American Board of Internal Medicine's knowledge-based examination.[1] The system that I knew in the UK shared these characteristics but had one critical difference. Internal medicine trainees were also required to pass the summative bedside clinical skills examination PACES (Practical Assessment of Clinical Examination Skills).[2] How would my American colleagues assess residents' bedside skills in the absence of such an examination?

The answer, I assumed, must lie with workplace-based assessments. Developed largely in America these assessments, such as the mini-CEX,[3] were now also a mandatory part of internal medicine training in the UK.[4] Our trainees liked the opportunities that they provided for direct observation of their skills and the subsequent feedback that they received from their trainers, but standardising the content, finding the time to deliver them in the busy environment of the National Health Service and translating a fundamentally formative exercise into a defensible summative process had all proved challenging. PACES had survived their introduction.

But to my surprise, the status and practice of workplace assessments were no different from the UK. Some members of the faculty, similar to colleagues in the UK, struggled to find the time to undertake them. Others, perhaps because they had grown up in the same system, felt that their own bedside clinical skills, particularly with regard to physical examination, were not sufficient to allow them to assess residency level trainees competently. Direct observation of trainees at the bedside was sporadic, unstructured and inconsistent. Competence in clinical skills was assessed in a loose, informal manner, and based largely on the ward-round impressions of attending physicians. A vague form of outcomes-based assessment seemed to operate in the minds of some, ie if the patients for whom the resident cared did 'OK', then the resident's clinical skills must also be 'OK'.

Puzzled, I reviewed the Accreditation Council for Graduate Medical Education (ACGME) curriculum for internal medicine.[5] Physical examination and history taking were mentioned briefly, but seemed lost amidst a list of more abstract competencies, and the necessary levels of attainment and requirements for their assessment were unclear. Although the role of bedside skills, particularly physical examination, is increasingly questioned in technologically driven western healthcare environments, I doubted that these skills were being deliberately de-emphasised in a national medical curriculum, in this country, at this time.[6] But, whatever the explanation, their low curricular profile made the lack of rigorous assessment less surprising.

I explained our traditional British ways at grand rounds and informal meetings. Knowledge assessments alone are not enough;

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bedside clinical skills remain valuable, cannot be assumed to develop on their own and are worthy of careful teaching and rigorous assessment. Workplace assessments can help trainees develop but are difficult to use systematically and to translate into a truly summative measure. And so we hold on to PACES.

A few of my hosts questioned the consistency, standardisation and fairness of high-stakes summative clinical examinations. I explained our belief that paired examiners could standardise content difficulty, even when real patients participated, and that we could find no evidence of unfair examiner bias.[7] Surprisingly, some felt that clinical skills examinations were just too uncomfortable an experience for learners – perhaps, I mused, like the driving test?

In return, I asked my own questions. Colleagues clearly did believe that bedside clinical skills were still valuable in current American internal medicine practice, that assessments of knowledge alone did not ensure clinical competence and that the USMLE Step 2 Clinical Skills examination,[8] taken at the point of licensing, was neither intended to be, nor actually was, set at a standard appropriate for exit from internal medicine training. Most who heard my perspective sympathised with the sentiments and expressed concern at the American situation.

Watching residents perform at some superb morning reports it was clear that the best were at least as bright, enthusiastic, committed and knowledgeable as the best I knew at home. But knowing long lists of the causes and features of tremor is very different from analysing the symptom accurately at the bedside. I surveyed residents' views. The great majority valued clinical skills, wanted the faculty to teach and demonstrate how they used those skills, wanted to be observed and be given feedback, and appreciated innovative and structured teaching programmes such as the 'Stanford 25'.[9] Few supported a national summative clinical skills examination at residency level, but a locally delivered, programme-based assessment would be welcomed. One, outstanding enough to be a chief, explained that the emphasis on knowledge rather than bedside skills in their training made them feel like an 'incomplete' physician. I hoped that they wouldn't practise incomplete medicine.

Driving back to the airport on the same hectic interstate for my flight home, I wondered how Americans would react to a proposal that learner drivers need only pass a knowledge test before driving independently, and that directly observed practice and a driving skills test were not required. I suspected that it wouldn't take long for someone to point out that such an approach was not based on common sense or reason.

Trainees in the UK preparing for PACES seek time at the bedside with their trainers, ask to be directly observed assessing patients and search the wards for patients with physical signs that they can elicit, understand, evaluate and demonstrate. The existence of the examination not only ensures that trainees attain an important standard, but also inspires the next generation of bedside teachers, confident enough in their own skills to teach and assess those that follow them. Assessment, quite visibly, drives learning.

The continuing existence of a high-stakes clinical examination such as PACES sends a powerful message to the public – that the profession of medicine still values the ability to assess a patient by talk and touch. And by abandoning such examinations and institutionalising the erroneous belief that assessments of knowledge will ensure that doctors possess all the attributes that patients deserve, bedside clinical skills are systematically and explicitly devalued, neither taught nor learned, and destined to be lost. ■

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