Twelve Tips for specialists teaching generalists

Ahmed Rashid[1], Faye Gishen[1]

Corresponding author: Dr Ahmed Rashid ahmed.rashid@ucl.ac.uk
Institution: 1. UCL Medical School
Categories: Educational Strategies, Teaching and Learning, Continuing Professional Development

Received: 04/12/2020
Published: 27/05/2021

Abstract

Generalist clinicians play a vital role as the spine of a modern healthcare system. As a result of the breadth of their practice, they require high quality continuous professional development (CPD) training to keep up with important developments in all areas of their practice. Specialist clinicians are often well placed to provide such training but should recognise the ways in which this may differ from undergraduate and postgraduate training, and design tailored education that takes account of power dynamics, professional roles, and contemporary healthcare challenges. Prior engagement with the learning group to understand their aims and priorities is a crucial first step. Case-based learning, practical diagnostic and referral tips, patient communication and information advice, prioritising discussion and feedback, and reflecting on changes in evidence and guidelines are all suggested areas of focus that can provide a framework to design effective and engaging training for generalist groups.

Keywords: Specialists; generalists; generalism

Background

Generalism is having a renaissance, and those involved in providing continuous professional development (CPD) training to this group of professionals face a challenging but important task. Such training is necessarily fundamentally different to undergraduate and postgraduate training, and differs in many ways from CPD training for those working in specialist disciplines. As authors from both sides of the specialist-generalist chasm, it is our experience that such training is not always fit-for-purpose, and this article seeks to provide a set of principles that help to guide effective teaching and training for this professional group.

Generalism in healthcare is relative. When compared to a cardiologist, an acute medicine physician is a generalist, in that they deal with conditions from various different body systems and not only those relating to the heart and vascular system. However, compared to a primary care doctor, an acute medicine physician is a specialist, in that they diagnose and treat only medical conditions, and not those from psychiatry or gynaecology, for example. Similarly, a general surgeon is a generalist compared to a breast surgeon, but a specialist when compared to an emergency physician, who assesses and manages medical as well as surgical presentations. Although there will clearly be differences between groups of generalist clinicians depending on the breadth and spectrum of their clinical practice, they all intrinsically share a need to keep up to date with best practice in a variety of different topic areas.
Life expectancy rates are rising and populations are aging, bringing about a consistent set of challenges for healthcare systems around the world, including multimorbidity, polypharmacy, and increasing medical complexity (Wallace et al., 2015). In turn, this has led to a growing need for healthcare workers who are suitably trained to deal holistically with health needs across multiple disease groups and specialty areas (Reeve et al., 2013). The trend of super-specialism, prevalent for many decades previously, has thus started to reverse, and there has instead been a growing focus on prioritising generalist practice (Wachter and Bell, 2012).

Invariably, specialists are well positioned to provide CPD training to generalist colleagues, but will typically already have a number of educational audiences including undergraduate students and postgraduate trainees in their discipline. The particular challenge of the generalist group is that they are often highly experienced and yet may be seeing presentations of disease that are different to those seen in specialist settings (Jelinek, 2008). The basis of the advice stems from existing literature on CPD training, as well as our personal experience from both sides of the specialist-generalist spectrum, with an emphasis on educational practice that is well received by generalist audiences. Every setting is different, but we aim to discuss important factors that commonly need consideration.

**Tips**

**Tip 1: Use clinical cases**

Although covering basic principles can sometimes be a helpful starting point, dwelling on this may be perceived as being patronising and unhelpful for doctors who are already independent professionals and are likely to be highly experienced. Case-based learning is well established in the education literature (Irby, 1994), and has been consistently demonstrated to be highly effective at various stages of medical education (Thistlethwaite et al., 2012). Focussing on problem solving and decision making processes helps to broaden the focus from a single case to variations, thus making the teaching more ‘real world’ and applicable to many patients. The benefits of using real patients to enhance authenticity in learning environments is well established (Bokken et al., 2009), and this is likely to help generalist doctors to relate new learning to their own existing or future patients. If educators are unsure what type of case would be realistically encountered by a particular audience, participants can be invited to share real (anonymised) cases, volunteered either at the start of the session or pre-session.

**Tip 2: Offer practical tips**

Specialist doctors are likely to encounter scenarios in their discipline on a more regular basis than those working across a broader spectrum of practice, meaning they are more likely to have encountered a greater number of variations in presentation and response to treatment. This has many implications, one of which is that specialist doctors will most likely have found anecdotes and ‘hacks’ that could be enormously useful for their generalist colleagues. These might include diagnostic clues to look out for, key patterns of information from investigations, or practical prescribing tips. With laboratory investigations they might include absolute figures to use as thresholds, or for prescribing they may include specific drug classes, names, routes, and doses.

**Tip 3: Offer referral advice**

The natural course of events in healthcare is often that generalists need to refer patients to specialists. This may be because they are unable to make a diagnosis or offer the necessary treatment, or the patient’s condition is worsening despite optimal initial treatments. Knowing the appropriate stages at which to make specialist referral is crucial information for a generalist doctor. Referring too early or too late can be problematic for the healthcare system, the specialist receiving the referral, and most importantly, the patient.

**Tip 4: Indicate reassuring findings**
One of the most pressing considerations for any generalist doctor is to avoid missing serious, life-threatening clinical presentations. Although this is, of course, a consideration for any doctor, it is particularly true for generalists, who may feel more vulnerable because of the inherent risk associated with seeing undifferentiated presentations and working across such a diverse spectrum of practice. Indeed, this fear of error seems to be rising and leading to negative outcomes such as defensive practice and burnout. It can therefore be extremely beneficial if specialist doctors can highlight conditions that are benign and signs and symptoms that do not require urgent action. Few statements are more satisfying for a generalist doctor to think or say than “this is nothing to worry about”.

Tip 5: Share your explanations and pitch them appropriately

One of the most important aspects of a doctor’s work is the way in which they conceptualise a condition when they describe it to a patient or carer. Although this applies to any medical condition, it is especially the case in diseases with unclear or questionable aetiologies, such as fibromyalgia or regional pain syndrome. Specialist doctors are more likely to be aware of the current thinking in the field and better practiced at having these challenging conversations. By sharing these descriptions, and potentially the discussions that might typically follow them, generalist doctors can be better equipped for those crucial moments when they have to help patients make sense of a complex or confusing new diagnosis.

Tip 6: Highlight evidence that has changed practice

Thousands of clinical research papers are published every week. Even for doctors in narrow specialist fields, it is not easy to stay up-to-date with all the latest research developments. For generalist doctors working across multiple disciplines, it is effectively impossible. The reality, though, is that it is actually quite rare for research to be sufficiently rigorous and important to compel a significant change in clinical practice. Specialists tend to know which developments are noteworthy and which will be coming in the near future, and these make for great content to cover with generalist colleagues, ideally in a critical, balanced, and ‘bite size’ way.

Tip 7: Outline patient pathways

What does the patient journey actually look like? From the moment of first presentation to the final engagement, which part of the healthcare system is best placed to deliver care? These questions are particularly important as healthcare increasingly moves from the hospital to the community, with many new patient pathways focussing explicitly on ‘admissions avoidance’. Specialists often provide training to generalist colleagues within a particular local or regional area, and it can therefore be helpful to highlight any new configurations, with a focus on what options generalists have to seek specialist care or advice and what the criteria are for new services.

Tip 8: Suggest interim solutions

Sometimes, letting a patient know that they have been referred for specialist tests or treatments can in itself make patients feel better, presumably because of the reassurance that they were right to have flagged the problem and the relief that they have been taken seriously. However, on other occasions, patients remain symptomatic and in distress until they have been seen for specialist assessment and treatment. These scenarios can be extremely challenging, particularly when usual treatment options have been exhausted. The use of rarer or unlicensed treatments may be needed in such scenarios, and advice on this can be extremely valuable.

Tip 9: Leave time for discussion

Interactive methods are a core part of good educational practice, and this is particularly important in adult and professional learning (White, 2011). Given that CPD tends to mostly cover areas that refines rather than extends existing practice, the likelihood is that participants will know the areas that they are struggling with and be able to set at least some of the educational agenda themselves. Specialists may feel less comfortable fielding questions than
covering pre-prepared material, but leaving at least some time in the body of the session for this will mean that they can ensure that the content of their session better meets the needs of the learners.

**Tip 10: Reciprocal advice and discussion**

By definition, specialists work in specific medical fields and will often be faced with patients whose problems cross into medical areas outside of their own expertise. Some of the best cross-disciplinary teaching sessions involve an exchange of information, leaving both parties enriched with a deeper understanding of the challenges faced in other settings. Such sessions can thus build important bridges between different disciplines, encourage networking, establish professional relationships, flatten hierarchies, and perhaps even a chance to challenge existing practices and redesign local services.

**Tip 11: Signpost to resources**

A well-designed and informative information leaflet, educational video, risk assessment tool, or smartphone app can be transformative for clinicians and patients alike. Importantly, they can be extremely difficult to find and appraise. As a generalist doctor with a broad spectrum of practice, the single most useful outcome from a CPD session may be the discovery of such a tool or resource. Not only is this a tangible benefit that can be taken away, it is also an opportunity to discuss more broadly the strategies for using different resources in clinical encounters or consultations.

**Tip 12: Teaching and learning for the times**

Clinical practice guidelines have been an important component of the evidence-based medicine movement (Feder et al., 1999). Although they have significant benefits for standardising practice, they also have important limitations (McCartney, 2014). Generalist doctors often encounter uncertainty and operate in the greyness that exists between the black and white of guidelines, and sharing reflections about them with specialist colleagues can help to legitimise the calculated divergence from them in particular circumstances. In addition to guideline changes, other areas of practice that have changed rapidly, such as the widespread adoption of remote consultations and other altered practices during the COVID-19 pandemic, are likely to be highly useful and interesting to generalists who are usually facing similar challenges.

**Conclusion**

There are many factors that require consideration when delivering education to professional colleagues. When those colleagues work in related but different clinical settings, the overall challenge is ensuring relevance, and this is only possible through setting the right level, pitch, tone, and atmosphere of training sessions. The power dynamics are fundamentally different to those seen in more conventional education and training settings, and must be recognised in order to develop sessions that actually meet expectations and provide utility. Crucially, engaging with the audience in advance to understand their aims of the session and set the tone of reciprocity is a seemingly obvious, but unfortunately not always practised, first step.

In our experience, it is too often the case that training for generalists is designed by adapting existing lessons that may have been used in other training formats, but they actually require a bespoke approach. The principles outlined in the paper highlight that a preferred approach is to develop entirely new lessons based on the pre-agreed goals of the generalist group, using a case-based, practically focussed, and genuinely interactive approach.
Take Home Messages

- Generalist clinicians need to stay up-to-date in a broad range of specialty areas and have different learning needs to specialists
- Specialist clinicians are well placed to provide education to generalist colleagues
- When designing sessions for generalists, specialists should design bespoke sessions rather than adapt sessions that are used for other clinical groups
- Interactive, case based sessions with practical advice and tips tend to work well
- A focus on current trends, evidence, and practices is likely to be useful for generalist learners

Notes On Contributors

Dr Ahmed Rashid is Clinical Associate Professor (Teaching) and Enterprise Director at UCL Medical School and a primary care physician in the UK NHS.

Dr Faye Gishen is Clinical Associate Professor and Associate Head of MBBS at UCL Medical School and a consultant physician in the UK NHS.

Acknowledgements

None.

Bibliography/References

Bokken, L., Rethans, J. J., van Heurn, L., Duvivier, R., et al. (2009). ‘Students’ views on the use of real patients and simulated patients in undergraduate medical education’, Academic Medicine. 84(7), pp.958-963.
https://doi.org/10.1097/ACM.0b013e3181a814a3

Feder, G., Eccles, M., Grol, R., Griffiths, C. et al. (1999). ‘Using clinical guidelines’, BMJ. 318(7185), pp.728-730.
https://doi.org/10.1136/bmj.318.7185.728

Irby, D. M. (1994). ‘Three exemplary models of case-based teaching’, Academic Medicine. 69(12), pp.947-53.
https://doi.org/10.1097/00001888-199412000-00003

Jelinek, M. (2008). ‘Spectrum bias: why generalists and specialists do not connect’, BMJ Evidence-Based Medicine. 13(5), pp.132-133. http://dx.doi.org/10.1136/ebm.13.5.132

McCartney, M. (2014). ‘Margaret McCartney: Have we given guidelines too much power?’, BMJ. 349, p.g6027.
https://doi.org/10.1136/bmj.g6027

Reeve, J., Blakeman, T., Freeman, G. K., Green, L. A., et al. (2013). ‘Generalist solutions to complex problems: generating practice-based evidence-the example of managing multi-morbidity’, BMC Family Practice. 14(1), p.112.
https://doi.org/10.1186/1471-2296-14-112

Thistlethwaite, J. E., Davies, D., Ekeocha, S., Kidd, J. M., et al. (2012). ‘The effectiveness of case-based learning in health professional education. A BEME systematic review: BEME Guide No. 23’, Medical Teacher. 34(6), pp.e421-
References

Wachter, R. M. and Bell, D. (2012). ‘Renaissance of hospital generalists’, *BMJ*. 344, p.e652.
https://doi.org/10.1136/bmj.e652

Wallace, E., Salisbury, C., Guthrie, B., Lewis, C., *et al*. (2015). ‘Managing patients with multimorbidity in primary care’, *BMJ*. 350, p.h176. https://doi.org/10.1136/bmj.h176

White, G. (2011). ‘Interactive lecturing’, *The Clinical Teacher*. 8(4), pp.230-235. https://doi.org/10.1111/j.1743-498X.2011.00457.x

Appendices

None.

Declarations

The author has declared that there are no conflicts of interest.

This has been published under Creative Commons "CC BY 4.0" (https://creativecommons.org/licenses/by-sa/4.0/)

Ethics Statement

Ethical approval was not required for this Practical tips and/or guidelines article because it is not reporting research findings.

External Funding

This article has not had any External Funding

MedEdPublish: rapid, post-publication, peer-reviewed articles on healthcare professions’ education. For more information please visit www.mededpublish.org or contact mededpublish@dundee.ac.uk.