

Becoming an accredited medical teacher in the UK

Given that teaching and training are core roles of a trainee and there continues to be a shift in the medical profession towards credentialing skills, postgraduate qualifications in medical education are likely to be of increasing importance for professional development. In recent years, the number of medical education awards and training programmes has increased rapidly. This pluralism however may become a source of confusion for those considering enrolling on them. This article seeks to summarise the nomenclature, awarding bodies, levels of qualification, programmes, and positions available to those wishing to advance their educational practice, with a focus the opportunities available to UK based doctors, particularly for doctors in training.

Case scenario

Fernando is commencing his GPST2 year. He enjoys supervision and teaching and hopes to work within his local deanery as a medical student and trainee supervisor when he becomes a GP partner. He currently has no formal qualifications in medical education, and he decides to undertake a certificate in medical education to add to his portfolio.

He enquires to the local university where he graduated from medicine 4 years before, but the postgraduate certificate in medical education by distance learning is £5000, and his study budget for the year is £600. To pay the rest with his own money would use all his savings, and short staffing due to the COVID-19 pandemic means that he will only be able to take a few days of study leave. He is currently volunteering as a problem-based learning tutor for medical students in the local undergraduate faculty.

What other options are available to him as a way of demonstrating interest in medical education, as well as getting some formal training in supervision?

Background

The last decade has seen rapid expansion in courses certifying doctors in medical education in the UK and globally. These are on a continuum from a "continued professional development" day course in teaching through to a PhD. This has followed the establishment

of medical education as its own sub-specialty, with bespoke societies, journals, professional standards, and qualifications (Eitel et al, 2000). Medical education now incorporates multiple disciplines within, including empirical research, student support, international development and more (Cristancho and Varpio, 2015). In 2016 the General Medical Council (GMC) formalised undergraduate and postgraduate training standards in "Promoting Excellence: Standards for Medical Education and Training," and made mandatory its "Trainer Recognition Framework" for all registered medical trainers (General Medical Council, 2016). Previously, a 2009 study had shown that of 98% of consultants with one or more such training roles, only 6% had an educational qualification (Schofield et al., 2009). This is unlikely to continue in the future. Educational training is becoming a feature of consultant interviews and even specialty training selection criteria. Medical educators are now more likely to see themselves as "professional experts" and "enthusiasts," and to belong to a community of practice (Nikendei et al., 2015) (Ghataoura and Acharya, 2016) (Sethi et al., 2015). Nevertheless, there is scepticism about value persists: Medical postgraduate training already costs an estimated £17,114, including self-funding of £1,875 for courses (Waters and Wall, 2008) (Jaques, 2011) (Association of Surgeons in Training, 2007).

Entry level courses:

- Train the trainer/teach the teacher
- Massive open online courses (MOOC)

The Royal Colleges of Surgeons of Edinburgh (RCSEd), Glasgow (RCPSG), England (RCSEng), Royal College of Obstetricians and Gynaecologists (RCCOG) and the Northern Ireland Medical and Dental Training Agency (NIMDTA) run regional 1-2 day "Training the Trainer" courses, with others available by private medical training companies and medical schools throughout the year, making it the medical educators' most accessible credential.

The online equivalent of an entry level course, the MOOC has expanded the reach of universities reach beyond the classroom into the virtual sphere (Chen et al., 2019). The

Commented [UCL1]: These two courses are essentially the same but called something different in different contexts.

University of Glasgow's Teaching Healthcare Professionals micro-credential via online platform Futurelearn carries 10 credits toward further learning, while the same online platform offers four modules in clinical supervision from the University of East Anglia. Futurelearns' American counterpart Coursera runs health education courses from the University of Michigan. The distance learning arena is likely to grow considerably in the coming decade fuelled by globalisation and the COVID-19 pandemic.

Academy of Medical Educators, Higher Education Academy, and other university opportunities

Analogous to a Royal College for Medical Educators, the Academy of Medical Educators (AoME) sets professional standards, giving members professional recognition and providing best practice standards for educators in medicine, dentistry, veterinary medicine and beyond. Founded in 2006, its 2009 professional standards framework describes core values and areas of educational activity expected of a clinician-teacher (Academy of Medical Educators, 2014). Membership and fellowship categories exceed the minimum GMC requirements for clinical trainers, and its framework has been adopted by both the GMC and course providers internationally. This means that AoME accredited courses (although not only AoME accredited courses) meet the GMC Trainer Recognition framework for GMC Registered Medical Trainers, a pre-requisite for senior GP or specialist posts. Membership of the AoME (MAcadMEd) is by submission of a portfolio of recent continuing professional development (CPD) in education, a peer-review of educational practice, a reflective submission, and a supervising reference. Educators in all grades of health sciences and disciplines are eligible for membership and fellowship.

Formal training of university staff has been shown to increase student-centeredness, itself a driver of deep learning and other higher cognitive outcomes (Gibbs and Coffey, 2004). The UK professional standards framework (PSF) is a voluntary scheme which stratifies relative

competencies for university level teachers within the UK, and increasingly abroad. It outlines the professional values and core knowledge it expects across all areas of practice of a teacher in higher education in all disciplines not only medicine and has established international currency in higher education expertise (Newton and Gravenor, 2020) (Bell and Brooks, 2016). The four levels of the Higher Education Academy (HEA) are: Associate Fellow (AFHEA), Fellow (FHEA), Senior Fellow (SFHEA) and Principal Fellow (PFHEA) (Higher Education Academy, 2011). Associate Fellow status is broadly equivalent to MAcadMEd. Fellowship level equates broadly to a postgraduate certificate (PGCert) in education and align with the expected proficiency of a substantive academic role. Fellowship categories can be obtained by applying directly to the HEA, thus clinicians can credit for yet unaccredited prior expertise and scholarship.

There are multiple entry-level university run courses at Masters' level which serve as an introduction to medical education and can be completed over 4-10 weeks. These can be later used towards further degrees and are aimed to be flexible with a working schedule. The University of Bristol offers a "Teaching and Learning for Healthcare Professionals" 30-credit online module, while Warwick University runs a similar 20 credit module which can be used towards continuing education (Postgraduate Certificate and Diploma Programmes equate to 60 and 120 credits respectively). Others, such as the University of Cambridge Foundation Programme for Clinical Educators and University of Edinburgh Clinical Educator Programme for staff from local trusts are free and accredited by the HEA and AoME. The Association for Medical Education in Europe (AMEE) Essential Skills in Medical Education (ESME) online course lasts 12 weeks and is accredited by four universities for Accreditation of Prior Learning (APL).

University courses at Postgraduate Certificate, Postgraduate Diploma and Masters' level

For doctors affiliated to a university through the teaching of its undergraduates, and/or pursuing further research degrees, there are many similar options. Most universities run a PGCert in Higher Education /Academic Practice for staff, the equivalent of the PGCert in Medical Education, often conveying Fellowship of the HEA. These can be cost-free, even for faculty members without substantive roles. Similar shorter 'entry-level' certificate courses for teaching assistants and demonstrators (Introduction to Academic Practice, First Steps in Teaching, Introduction to Teaching in Clinical Settings) are usually accredited at AFHEA. Designed to increase levels of accreditation within a mobile workforce, these courses are open to accreditation of Prior Learning. Similarly, universities will often support teachers in achieving HEA Fellowship status or offer their own unique brand of 4 equivalent awards which mirror the PSF.

The number of masters courses in medical education the UK have increased markedly from one in 1998, 8 in 2009, 20 in 2012 to 36 in 2022 (Table 1) (Cusimano and David, 1998). (Cohen et al., 2005) (Tekian and Harris, 2012). This explosion has raised concerns around quality, as well as the teaching and assessment of qualitative methods that have hitherto been unfeatured in training (Pugsley et al., 2008) (Al-Subait and Elzubeir, 2012). The option to leave at PGCert or PGDip level is commonplace. Most part time programmes span 1-4 years, and include flexible options such as taking breaks, completing standalone modules and APL. Wherever possible, APL is an attractive option, as programmes may overlap in content with already completed courses, and with fees exceeding £5000 per PGCert, entry into the programme at a more advanced stage can be very cost effective. Year 1/PGCerts typically focuses on basic pedagogical theory, with coursework offering feedback on teaching practice and reflective exercises; Year 2/PGDip frequently offer sub-specialist modules in education such as simulation, curriculum design, research techniques, quality improvement and leadership. The final Masters' year requires a research project.

Mentoring

Mentoring is a supportive relationship whereby one individual benefits from the experience, perspective, and encouragement of another. It is increasingly promoted by organisations within and without medicine to develop healthy trainees, and ultimately, leaders. The Faculty of Medical Leadership and Management (FMLM), the British Medical Association, and many Royal Colleges run mentorship schemes, supplemented by many grassroots and more informal schemes within deaneries and health trusts. A formal role as a mentor, verified by official documentation from one of these institutions, demonstrates vision for excellence and cultivates the next generation of leaders.

Other options

The Resuscitation Council (UK) trains around 900 generic instructors each year. There is potential to specialise, for instance in Paediatric Life Support, and these well-regulated courses are internationally acknowledged. Advanced Trauma Life Support (ATLS) developed by the American College of Surgeons provides an international standard of training, with students with instructor potential being invited to pursue facilitator training.

Similarly, official appointments to visiting or honorary positions at universities are available to most clinicians engaged in teaching in some capacity. Ranging from honorary teacher roles to lecturers and fellows, such roles demonstrate ongoing commitment to an institution and may be linked to other research capacities. These grant access to university library facilities, a university email account and internal professional development opportunities.

Conclusion

To conclude, the medical education landscape is complex and growing, but with plentiful opportunities for doctors to receive training, both to improve their own skills and gain

credentials for professional career development. This time of change is also a time of challenge: the specialty of medical education is a social science populated by empiricists, currently reconciling schools of thought less than 50 years old with “trial and improvement” or questionnaire feedback alone (Norman, 2003) (Leif et al., 2019) (Reid et al., 2018). **While there are more opportunities for accreditation than ever before**, educators face a transitioning and unprecedentedly troubled cohort needing equipped for an increasingly outcome-driven domain (Seiffge-Krenke and Weitkamp, 2019) (Southgate, 2019). **Clear guidelines for which qualifications are appropriate for each stage of training and standardisation of the qualification will help UK doctors benchmark their practice both locally and internationally.** It is hoped that professional development will standardise best practice and increase the enthusiasm which has driven medical education until the present, so that ultimately patients benefit.

Key points

- Medical education as a field is increasingly organised, professionalized and accredited.
- A range of activities demonstrate commitment to Medicals Education, ranging from day courses to whole Masters' Degrees.
- Understanding the interface between the medical education and higher education contexts will ensure study is most likely to be dual accredited.
- Costs of courses is a major deciding factor between courses, with some offering considerably greater value for money than others.
- Aside from more traditional degree courses, a variety of lecturing and mentoring activities can be used as experience towards a higher degree, or as accredited roles.

Funding

No funding to declare

Declaration of Interests

None to Declare

References and further information

Academy of Medical Educators (2014) *Professional Standards*. 3rd ed. Cardiff.

Al-Subait R and Elzubeir M (2012) Evaluating a masters of medical education program: Attaining minimum quality standards? *Medical Teacher*, 34(sup1), S67-S74. doi: 10.3109/0142159X.2012.656746.

Association of Surgeons in Training (2007) *The Cost of Surgical Training Position Statement By The Association Of Surgeons In Training*. London: Royal College of Surgeons of England. Available at: www.asit.org/assets/documents/ASiT_Cost_of_Surgical_Training_final.pdf (accessed 24 August 2022).

Bell A and Brooks C (2018) Is There a 'Magic Link' Between Research Activity, Professional Teaching Qualifications and Student Satisfaction?. *Higher Education Policy*, 32(2), 227-248. doi: 10.1057/s41307-018-0081-0

Cohen R, Murnaghan L and Collins J et al. (2005) An update on master's degrees in medical education. *Medical Teacher*, 27(8), 686-692. doi: 10.1080/01421590500315170

Cristancho S and Varpio L (2015) Twelve tips for early career medical educators. *Medical Teacher*, 38(4), 358-363. doi: 10.3109/0142159X.2015.1062084

Cruess R, Cruess S and Steinert Y (2018) Medicine as a Community of Practice. *Academic Medicine*, 93(2), 185-191. doi: 10.1097/acm.0000000000001826

Cusimano M and David M (1998) A compendium of higher education opportunities in health professions education. *Academic Medicine*, 73(12), 1255-9. doi: 10.1097/00001888-199812000-00014

Eitel, Karl-Georg Kanz, Arthur Tesc F (2000) Training and certification of teachers and trainers: the professionalization of medical education. *Medical Teacher*, 22(5), 517-526. doi: 10.1080/01421590050110812

General Medical Council (2015) Promoting Excellence: Standards For Medical Education And Training. Available from: https://www.gmc-uk.org/-/media/documents/promoting-excellence-standards-for-medical-education-and-training-2109_pdf-61939165.pdf (accessed 23 August 2022).

General Medical Council (2016) Recognition and Approval Of Trainers. Available from: <https://www.gmc-uk.org/education/how-we-quality-assure/medical-schools/recognition-and-approval-of-trainers> (accessed 23 August 2022).

Gibbs G and Coffey M (2004) The Impact Of Training Of University Teachers on their Teaching Skills, their Approach to Teaching and the Approach to Learning of their Students. *Active Learning in Higher Education*, 5(1), 87-100. doi: 10.1177/1469787404040463

Commented [UCL2]: Thank you this reference was incorrect, it now has been updated.

Ghataoura R and Acharya V (2016) Selecting the right postgraduate course in medical education. *BMJ*, h6883. doi: 10.1136/bmj.h6883

Higher Education Academy (2011) *Professional Standards Framework For Teaching And Supporting Learning In Higher Education*.

Jaques H (2011) Junior doctors spend £17 114 on postgraduate training. *BMJ*, d6446. doi: 10.1136/bmj.d6446

Leif M, Semerad N and Ganesan V et al. (2019) The Quality Of Evidence In Preclinical Medical Education Literature: A Systematic Review. *Advances in Medical Education and Practice*, Volume 10, 925-933. doi: 10.2147/amep.s212858

Newton P and Gravenor M (2020) A higher percentage of Higher Education Academy (HEA) qualifications among universities' staff does not appear to be positively associated with higher ratings of student satisfaction. A Letter of Concern in response to Nurunnabi et al *MethodsX*6 (2019) 788–799. *MethodsX*, 7, 100911. doi: 10.1016/j.mex.2020.100911

Nikendei C, Ben-David M and Mennin S et al. (2015) Medical educators: How they define themselves – Results of an international web survey. *Medical Teacher*, 38(7), 715-723. doi: 10.3109/0142159x.2015.1073236

Norman G (2003) RCT = results confounded and trivial: the perils of grand educational experiments. *Medical Education*, 37(7), 582-584. doi: 10.1046/j.1365-2923.2003.01586.x

Pugsley L, Brigley S and Allery L et al. (2008) Counting quality because quality counts: differing standards in master's in medical education programmes. *Medical Teacher*, 30(1), 80-85. doi: 10.1080/01421590701763038

Reid A, Brown J and Smith J et al. (2018) Ethical dilemmas and reflexivity in qualitative research. *Perspectives on Medical Education*, 7(2), 69-75. doi: 10.1111/j.1365-2648.2011.05632.x

Schofield S, Nathwani D and Anderson F et al. (2009) Consultants in Scotland: Survey of Educational Qualifications, Experience and Needs of Scottish Consultants. *Scottish Medical Journal*, 54(3), 25-29. doi: 10.1258/rsmsmj.54.3.25

Seiffge-Krenke I and Weitkamp K (2019) How Individual Coping, Mental Health, and Parental Behavior Are Related to Identity Development in Emerging Adults in Seven Countries. *Emerging Adulthood*, 8(5), 344-360. doi: 10.1177/2167696819863504

Sethi A, Schofield S and Ajjawi R et al. (2015) How do postgraduate qualifications in medical education impact on health professionals? *Medical Teacher*, 38(2), 162-167. doi: 10.3109/0142159x.2015.1009025

Southgate e (2019) Freshers declaring mental illness up 73% in 4 years. *The Times*, Available from: <https://www.thetimes.co.uk/article/freshers-declaring-mental-illness-up-73-in-4-years-00sw2bdb2>. (accessed 23 August 2022).

Tekian A and Harris I (2012) Preparing health professions education leaders worldwide: A description of masters-level programs. *Medical Teacher*, 34(1), 52-58. doi: 10.3109/0142159x.2011.599895

Waters M and Wall D (2008) Educational CPD: An exploration of the attitudes of UK GP trainers using focus groups and an activity theory framework. *Medical Teacher*, 30(8), e250-e259. doi: 10.1080/01421590802258888

Figure 1. Number of Masters courses in Medical Education in the UK per year 1998-2012

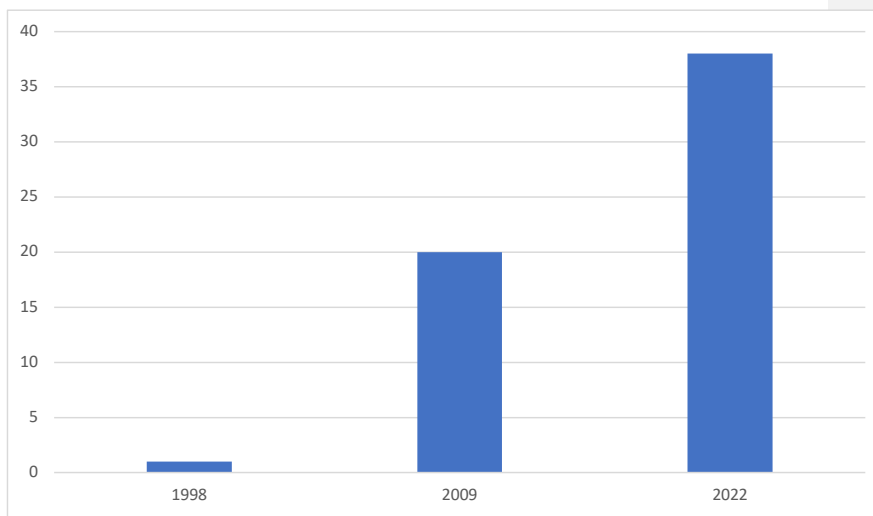


Table 1 Summary of Postgraduate Certificate, Postgraduate Diploma and Masters qualifications in 2022

Name of University	Certificate	Diploma	Masters	Can complete online	Start Dates	Cost per 60 credits/PGC/AoME	Accredited	HEA Accredited
University of Aberdeen	yes	yes	yes	yes	Jan, Sep	4680	yes	
Anglia Ruskin University	yes		yes	yes	Jan, Sep	3650		yes
Bangor University	yes			yes	Jan, Sep	2667		yes
University of Bedfordshire	yes				Feb	2750	yes	
University of Birmingham	yes	yes	yes		Sep	4290		yes
University of Bristol	yes	yes	yes	yes	Mar, Sep	3960	yes	yes
University of Buckingham	yes			yes	Jan, Sept	3479	yes	yes
University of Cambridge	yes	yes	yes		Oct	4350	yes	yes
Cardiff University	yes	yes	yes	yes	Sep	4850	yes	yes
University of Dundee	yes	yes	yes	yes	Jan, May, Sep	4620	yes	
University of East Anglia		yes	yes	yes	Sept	2967	yes	
Edge Hill University	yes		yes		Feb, Sept	2340	yes	yes
University of Edinburgh	yes	yes	yes	yes	Sep	5400	yes	yes
University of Essex	yes	yes	yes		Oct	unspecified		
University of Exeter	yes	yes	yes		Sep	3200	yes	
University of Glasgow	yes	yes	yes	yes	Jan, Apr, Sep	5001		
University of Hertfordshire	yes	yes	yes		Jan, Sep	3160		
Kings College London	yes	yes	yes		Sep	3680	yes	yes
Keele University	yes	yes	yes	yes	Apr, Oct	3400		yes*
University of Central Lancashire	yes	yes	yes	yes	Jan, Sep	3090		
University of Lincoln	yes				Jan	2800	yes	yes
University of Leicester	yes	yes	yes		Sep	3163		yes
University College London	yes	yes	yes		Sep, Jan	4900		
University of Manchester	yes			yes	Sep, Feb	5000	yes	
Manchester Metropolitan University	yes	yes	yes	yes	Sep	2400	yes*	
University of Nottingham	yes	yes	yes		Sep	3683	yes	yes
Newcastle University	yes	yes	yes	yes	Sep	3400	yes	yes
University of Oxford			yes		Oct	2357		
University of Plymouth	yes		yes	yes	Sep	3300	yes	yes
Queens' University Belfast	yes	yes	yes	yes	Feb, Sep	2235		
University of Reading	yes	yes	yes		Sep	2700	yes	
Royal College of Physicians/UCL	yes	Yes	yes		Sep	4900		
University of Sheffield	yes				Sep	3600	yes	
University of South Wales		yes	yes	yes	Mar, Sep	2250		
Staffordshire University	yes		yes	yes	Sep	2745		yes
University of Sunderland	yes		yes		Sep	2500		yes
Brighton and Sussex Medical School	yes	yes	yes		Sep	3084	yes	yes
Swansea University	yes	yes	yes	yes	Jan, Sep	3200	yes	yes
Warwick University	yes	yes	yes		Oct	4210		yes
University of Winchester	yes	yes	yes		Sep	2136	yes	
University of Wolverhampton	yes	yes	yes		Sept	3017		
Hull York Medical School	yes	yes	yes	yes	Jan, Sep	3720	yes	yes

Commented [UCL3]: I've provided a separate excel sheet with this table. When the table is inserted within a word document as an editable table it is not well formatted, but I have done so all the same.

Name of University	Qualification Level				Start Dates	Cost/60 credits	Accredited by	
	PGC ert	PG Dip	Mast ers	Distance Learning			AoM E	HE A
University of Aberdeen	yes	yes	yes	yes	Jan, Sep	4680	yes	
Anglia Ruskin University	yes		yes	yes	Jan, Sep	3650		yes
Bangor University	yes			yes	Jan, Sep	2667		yes
University of Bedfordshire	yes				Feb	2750	yes	
University of Birmingham	yes	yes	yes		Sep	4290		yes
University of Bristol	yes	yes	yes	yes	Mar, Sep	3960	yes	yes
University of Buckingham	yes			yes	Jan, Sept	3479	yes	yes
University of Cambridge	yes	yes	yes		Oct	4350	yes	yes
Cardiff University	yes	yes	yes	yes	Sep	4850	yes	yes
University of Dundee	yes	yes	yes	yes	Jan, May, Sep	4620	yes	
University of East Anglia		yes	yes	yes	Sept	2967	yes	

Anglia								
Edge Hill University	yes		yes		Feb, Sept	2340	yes	yes
University of Edinburgh	yes	yes	yes	yes	Sep	5400	yes	yes
University of Essex	yes	yes	yes		Oct	unspecified		
University of Exeter	yes	yes	yes		Sep	3200	yes	
University of Glasgow	yes	yes	yes	yes	Jan, Apr, Sep	5001		
University of Hertfordshire	yes	yes	yes		Jan, Sep	3160		
Kings College London	yes	yes	yes		Sep	3680	yes	yes
Keele University	yes	yes	yes	yes	Apr, Oct	3400		yes
University of Central Lancashire	yes	yes	yes	yes	Jan, Sep	3090		**
University of Lincoln	yes				Jan	2800	yes	yes
University of Leicester	yes	yes	yes		Sep	3163		yes
University College London	yes	yes	yes		Sep, Jan	4900		
University of Manchester	yes			yes	Sep, Feb	5000	yes	
Manchester Metropolitan University	yes	yes	yes	yes	Sep	2400	yes*	
University of Nottingham	yes	yes	yes		Sep	3683	yes	yes
Newcastle University	yes	yes	yes	yes	Sep	3400	yes	yes
University of Oxford			yes		Oct	2357		
University of Plymouth	yes		yes	yes	Sep	3300	yes	yes
Queens' University Belfast	yes	yes	yes	yes	Feb, Sep	2235		
University of Reading	yes		yes		Sep	2700	yes	
Royal College of Physicians/UCL	yes	yes	yes		Sep	4900		
University of Sheffield	yes				Sep	3600	yes	
University of South Wales		yes	yes	yes	Mar, Sep	2250		
Staffordshire University	yes		yes	yes	Sep	2745		yes
University of Sunderland	yes		yes		Sep	2500		yes
Brighton/Sussex Medical School	yes	yes	yes		Sep	3084	yes	yes
Swansea University	yes	yes	yes	yes	Jan, Sep	3200	yes	yes
Warwick University	yes	yes	yes		Oct	4210		yes

University of Winchester	yes	yes	yes		Sep	2138	yes	
University of Wolverhampton	yes	yes	yes		Sept	3017		
Hull York Medical School	yes	yes	yes	yes	Jan, Sep	3720	yes	yes

*The Education and Training in Practice Module is Accredited by the Academy of Medical Educators

**Face to face route only

Footnote to Table. Information as of April 2022, as available through institution websites. No request of further information was sought from institutions. Further study options, flexibility and accreditation may be available on further enquiry.

Recognition of Prior Learning (RPL): If RPL was encouraged on the institution's website as part of the programme advertisement, this was ticked.

Cost Per 60 Credits: Where PG Cert Courses were not offered independently this was calculated as a fraction of more extensive courses