

1(a) Philosophy of the course (including aims of course, learning environment, assessment strategy, assessment structure)

During the Covid 19 pandemic, undergraduate medical schools have moved towards an online learning format to provide undergraduate medical student education for students who would otherwise have been rotating through clinical placements in medicine and surgery in affiliated teaching hospitals in the West of Scotland. Whilst this has provided theory based learning opportunities, in NHS Lanarkshire we recognise that students returning to placement in the 'clinical' phases (eg: phase 3 and 4 University of Glasgow) will require hands on experience in suitable clinical learning environments to develop the practical skills necessary in direct patient assessment. This will need to be delivered in a changed learning environment, with appropriate risk assessment / social distancing. Alongside this, most departments have been somewhat restructured to cope with increased demand for services and the availability of usual clinical teachers is reduced in the consultant body. It is recognised that tutorial based learning may not offer the high yield learning opportunities needed to fulfil the outcomes for these students at this time.

Previous undergraduate educational delivery work at University Hospital Wishaw has included the development and delivery of individualised learning plans – student sessions with Clinical Teaching Fellows where by the university learning outcomes for the particular block are reviewed with the student group in the conjunction with an introduction to adult based learning theory. Students are then guided through setting realistic learning outcomes relevant to the block taking into account their previous experience, achievement and areas of lower confidence. This may entail for example, identifying 'the clinical assessment of a patient with chronic heart failure and its management' as an ILP and formatting learning opportunities directly related to this eg: attendance at outpatient clinics / cardiology ward rounds. The individual objectives are then reviewed week by week in CTF sessions, with reflection and debrief in a group setting. This has given the opportunity not just for focussed teaching on relevant LO but the opportunity to share learning and unveil some of the 'hidden curriculum' aspects of clinical practice. NHS Lanarkshire also provides a 'Preparation for Practice' course for final year students based on a structured student apprenticeship model. One component of this programme is mentorship from junior doctors who sign up for the programme and receive training in mentoring and junior supervising clinician responsibilities.

Based on this prior work, a project is proposed whereby junior doctors are trained as clinical educators for eg: UoG 3<sup>rd</sup> and 4<sup>th</sup> year undergraduate students undertaking their clinical phase '4' of the curriculum in the secondary care setting. This will require a structured and formal training programme for the clinical educators and the aspiration is to provide them with a tangible outcome in terms of educational skills development. This application to AoME is for accreditation of this clinical educator training programme which will be described later. In order to provide context and describe how the clinical educator training programme is situated within the broader educational project, the following general information is provided: The undergraduate teaching project sets out the following aims:

- 1) Enable students to acquire patient assessment skills through an 'apprenticeship' model'
- 2) Guide students to set individualised learning plans based on learning outcomes set by the University of Glasgow for phase 4 and Universities of Edinburgh and Dundee for their clinical placement blocks
- 3) Encourage use of curriculum maps which students can use to identify appropriate learning environments to fulfil particular learning needs / outcomes
- 4) Provide an induction to individualised learning plans, weekly review of these goals / feedback and further goal setting through formal weekly tutorial sessions with clinical teaching fellows
- 5) Enable reflection and recording of learning opportunities via a structured reflective diary
- 6) **Provide structured formative feedback via 'clinical educators'– specifically trained trainee doctors who will guide 'shop floor' learning activity by signposting patient selection / specific patient interaction / observation / feedback. These clinical educators will liaise directly with clinical teaching fellows to guide content of weekly student tutorials**
- 7) Provide clarity to informal clinical setting shadowing of FY1 doctors via pairing with 'FY1 buddies' who will provide day to day direction and signposting on a given ward
- 8) Assessment of outcomes through UoG / UoE / UoD standard end of placement supervised learning events and end of block review with educational supervisors

The aims of the junior doctor clinical educator training course (the subject of this application) are therefore to provide a spiral curriculum for trainee doctor mentors as follows:

- 1) Identify and recruit medical and surgical trainees and career grade doctors (CT1 grade and above) who are rotating through placement at University hospitals in NHS and will be in post for the full academic year August 2020-21. This will be done by introduction of the project at hospital induction and invitation to a more detailed meeting outlining the course as above.
- 2) Provide a formal training course via webinar with group discussions, interactive group work and screen share slides. This course has been run by the applicant / block lead in NHS for six years as a face to face course. The content will cover adult learning theory; curriculum mapping; identifying learning outcomes and expanding these to learning objectives; individualised learning plans; shop floor teaching in a clinical environment (eg: ward rounds / clinics / bedside); specific tasks and tools (eg: using one minute teacher / SETGO observations / focussed task setting / feedback). This course will be delivered in evenings via weblink in 4 x 1.5 hour sessions with a sessions duplicated to allow 11 to participate. Sessions will take place every two weeks. Following the completion of the formal course additional sessions will be provided via 'virtual rooms' whereby invited faculty educators will host online workshops in additional educational skills – clinical educators will be able to sign up for workshops of their choice.
- 3) Enable clinical educator reflection via completion of a reflective logs for student contact. Following allocation to students, a structured placement of one day a week directly shadowing the clinical educator will be advised, along with additional learning opportunities as identified in ILPs. Review meetings between clinical educator and student

will be encouraged, in order to review the students own reflective summary logbook. More fluid learning at ward level is also expected, with cases (eg: patient history / exam / radiology review etc) being discussed with clinical educators. Clinical educators will be required to identify educational learning points in their own reflective logs and use these as a basis for discussion with course faculty at specified meeting points (either face to face or virtual). These will occur once a month and will enable clinical educators to personally set goals for their own development with regards to teaching and training.

- 4) Observe clinical educator teaching via validated teaching observation tools. This will provide opportunity to show progression throughout the year, with faculty providing a minimum of two observations to feed into the end of course review.
- 5) Review of student feedback on clinical educators as a group at the end of each block. This will be a facilitated debrief led either face to face or virtually by the block lead / faculty and will enable further development of the student course as required / identify learning opportunities for clinical educators.
- 6) End of year debrief meeting (face to face or virtual) between faculty and clinical educator to review educational skills attainment and progress through the year. If student feedback has been satisfactory, CTF contact maintained and a cut off of 70% of elements of the course completed (ie: webinars / engagement with reflective practice / attendance at workshops) it is anticipated that clinical educators will be awarded a certificate of completion of the accredited NHSL course.

\*\* See timeline for projected dates and progression

#### 1(b) Quality assurance processes

##### (i) Internal validation

In addition to the aims, training program, standards for assessment, and resources detailed above, validation of the mentor training programme is anticipated to be achieved by providing a substantial example of teaching activity for participating trainees. It is hoped that this will afford greater opportunity for trainees completing the project in future educational initiatives (eg: applying for fellow posts) but also for competitive application to higher specialist training etc. Benchmarking for standards of attainment in medical educational development will largely follow the attainment of the Academy standards, with the aim for attainment of level 1 standards in all domains by the end of the course (see later section). The clinical educator training programme is designed with explicit reference to the GMC requirement for teaching engagement and capability for all clinicians; to that end it maps to GMC standards for education and also to the GMC general professional capabilities, along with HEE and higher education academy standards.

With regard to board involvement, the project is being presented to the NHSL learning strategy group and appropriate educational governance groups and has also gained organisational support from the executive medical director.

Regarding longer term sustainability within the secondary care setting in NHSL, the project sets out the following goals:

- 1) Integration of undergraduate medical students into the fabric of hospital life, with 'shop floor' teaching and learning opportunities available always for larger numbers of students. The aspiration is that the trainee clinical educator course becoming a long-term feature of rotation through NHSL
- 2) Consideration of a 'hybrid' model of apprenticeship delivery should clinical pressures from the pandemic recede. This would entail ongoing clinical educator supervision as already detailed along with focused re-introduction of consultant lead speciality tutorials. This would be comparable to secondary care educational delivery in other clinical centres, with the addition of an accredited clinical educator project with appropriate educational governance
- 3) Widening of the trainee clinical educator course to other groups eg: Advanced Nurse Practitioners / Physicians Associates to re-enforce the multi-professional nature of modern medical practice and build relationships at early career stage

Risk assessment for the project involves the following considerations:

- 1) Maintenance of safe teaching activity according to government guidance on social distancing in the workplace during the Covid-19 pandemic. This will involve mask wearing; standard infection control policy; barrier nursing in specific covid areas; minimising moves through covid / non-covid workstreams. Much of the content and reflective elements of the mentor training programme will be situated in the virtual environment
- 2) To enable as wide a participation as possible, platforms utilisable on smartphones will be used and there is library access to secure online meeting facilities within NHSL
- 3) Pastoral support for student concerns either clinical, professional or otherwise which are brought to the attention of the trainee clinical educators will be provided by educational supervisors, block lead and subdean as per existing practices for clinical blocks
- 4) Workload for trainee clinical educators will be monitored via reflective sessions with faculty, with options for immediate troubleshooting if required. This should provide a failsafe for trainees who cannot provide educational interaction with students at short notice or if trainees should feel that they are unable to continue with the project for any reason

(ii) External validation

The changes to undergraduate course delivery has been approved by the university placement committees (the course has been devised as a mechanism to meet the goals set by the undergraduate schools). Accreditation of the 'trainee clinical educator course' is sought from AoME to provide a tangible goal for trainee to work towards and give a formal quality to the service provided. The WoS lead for Internal Medical Training has been contacted for a response and it may be possible to integrate the webinar

based teaching into the entire IMT teaching curriculum. Clinical educators will be encouraged and supported to apply for AoME membership. The clinical educator programme has been approved by the NHSL hospitals Training Quality Leads, Medical Directors and the hospital IMT tutors. This will ensure that trainees are supported in engaging with this programme and that the aims of the broader student apprenticeship are situated and sustainable within the hospital setting.

The broader context of the programme within the GMC standards is described above. The project aims to enable trainees to commence a pathway of lifelong learning with regard to educational development, with the ultimate aim of promoting roles such as educational and clinical supervision, along with becoming recognised as a trainer as careers progress. The portfolio of evidence gained during the process of the clinical educator programme will form a solid basis for this.

Evaluation of the proposed programme would directly influence development and expansion of the clinical educator project into other secondary care areas with highly heterogeneous timetables and curricula eg: Obstetrics and Gynaecology or Paediatrics.

(iii) Internal monitoring

Clinical educator progress to be monitored by block lead and faculty via the previously described reflective sessions, engagement with group learning and teaching observations.

(iv) External monitoring (e.g. use of external examiners)

Moderators and undergraduate deans from the UoG, UoE and UoD will be invited to observe any / all parts of the training programme. Subdeans and shop floor educators from other secondary care settings (ie: those providing clinical education for uoG / UoE / UoD students) will also be invited to attend sessions to ensure parity.

Where trainee clinical educators are on a registered training programme, ARCP will provide a means of evidence review, with this function being served by appraisal (SOAR) for career grade doctors. In both instances, clinical educator programme aims can form part of personal development planning, with opportunity for review of goals with faculty prior to appraisal / ARCP.

(v) Examples of changes to the course which have occurred as a result of the quality monitoring process

The goal is to collect data on student individual learning plans (anonymised) and perform paired student t test analysis at the start and end of the block in order to ascertain which goals have been met and how. This will guide sessions for future blocks of students in terms of enabling realistic goal setting and finding out if any areas of the curriculum are underrepresented. The sharing of this feedback and analysis with trainee clinical educators will allow end of block clinical educator sessions to include a problem

solving and focussed goal setting section for clinical educators to work on with their next undergraduates.

#### Candidate information

##### (i) Candidate selection process

Students – phase 4 (3<sup>rd</sup> year – five week blocks / 4<sup>th</sup> year 10 week blocks) in medicine at UHW

Clinical educators – opportunity offered to all CT1 + trainee doctors / career grade doctors in medical and surgical specialities commencing work in August 2020 in NHSL who will be resident in NHSL for 12 months

Block lead will introduce project at induction

##### (ii) Candidate support structures

Students – CTFs, clinical educators

Clinical educators – CTFs (for individual student concerns); block lead and faculty (for formal support / teaching observation / personalised goal setting / reflective practice / group webinars)

Faculty meetings every month depending on need – site leads / block lead / subdeans and DME to troubleshoot and review progress of students and clinical educators

#### 1(c) Faculty information

##### (i) Faculty selection process

CTFs in post in NHSL from August 2020

Block lead already in place

Senior medical faculty with experience in workshop delivery and teaching observation (senior Clinical Teaching Fellows / Subdean / clinical skills consultants). Faculty have been trained in educational methodology at least to diploma level or are recognised as trainers via RoT, and hold medical education posts within NHSL

##### (ii) Faculty development

Block lead development needs supported by department of medical education and clinical skills lead consultant / deputy director of medical education along with NHSL university subdeans

##### (iii) Faculty support processes

Via subdean / clinical skills lead consultant

#### 1(d) Evidence of scholarship in medical education related to the course

##### (i) Scholarly teaching

Learning opportunities and environment mapped to university curricula (previously presented as a poster at AoME)

'Trainee clinical educator' course based on educational theory and validated teaching tools

Block lead and CTFs wither have or working towards MSc or diploma in MedED

(ii) Contributing to scholarship in medical education

Aspiration to write up the project and present at conference: ILP student t test comparisons (see above); opportunity to perform focus group / semi structured interview of students to thematically analyse their experience of the new format. This would however be difficult to compare as these students will not have previously experienced the 'traditional' block structure. Ethical approval is being sought from university ethics committees.

**1. Comparison with The Academy's Professional Standards**

*The Academy of Medical Educators identifies a set of core values for all medical educators. In addition, it identifies five domains of activity, each divided into three levels. These domains are*

*Domain 1 - Design and planning of learning activities*

*Domain 2 - Teaching and supporting learners*

*Domain 3 - Assessment and feedback to learners*

*Domain 4 - Educational research and evidence-based practice*

*Domain 5 - Educational management and leadership*

*For Membership of the Academy, a medical educator needs to demonstrate a level of commitment which generally exceeds Level 1 and meets most of the Standards at Level 2. However, it is recognised that few will achieve every element in the Themes at every level or some Themes at any level. You are asked to show:*

- 2(a) How your course supports attainment of the Academy's Standards at the level required for Membership

Core theme	Demonstration
Promotes quality and safety of care	Clinical educators are post ARCP in foundation or core / higher training. Ongoing patient safety monitoring provided by own educational supervisors in context of eg: supervised learning events. Webinar / virtual training course provides discussion around guidelines of ethical patient involvement in teaching activity. Risk management discussed in earlier section. Faculty point of contact and scheduled reflective sessions for any challenges raised by clinical educator regarding eg: student professionalism or by faculty with regard to clinical educator engagement or performance
Demonstrates professional identity & integrity	Professional standards provided by GMC 'good medical practice'. Trainee clinical educator course aligns to AoME professional standards. Ethical codes of practice from UoG, UoE and UoD have been reviewed in the design of this course. Clinical educators will be expected to engage with all aspects of the course to provide evince of ongoing learning and adherence to all standards
Is committed to scholarship and reflection in medical education	Clinical educators will goal set and review own reflective dairies in sessions with faculty. End of block feedback review will allow synthesis and application of new ideas for further development of teaching opportunities between clinical educators and students
Demonstrates respect for others	Initial introduction will include an overview of NHS and university policies for inclusion, equality and diversity. Ethical inclusion of patients in teaching activity will be covered in webinar / virtual training course. It is anticipated that team based learning / MDT working will be facilitated by work shadowing days (student with

	clinical educator s) and also allow for role modelling. The hidden curriculum and professionalism will be a workshop title available for trainee clinical educators as they progress through the course / project
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Standard	Attainment	Assessment
Designing and planning learning	Webinar / virtual course includes section on learning styles / learning objectives / leaning needs and learning opportunities in different settings. Clinical educators will work with students own individualised learning plans and supervise clinical activity, with this reflected on in student logbooks for further discussion with clinical educators. Clinical educators will also record reflective dairies on educational interactions. Student feedback at the end of the block will form part of end of block reflective sessions with faculty	Satisfactory participation in webinar / virtual course and subsequent workshops / reflective sessions
Teaching and facilitating learning	Lesson planning / learning environment and task utilisation is covered in the webinar / virtual course. Clinical educators will be asked to reflect specifically on aspects of the project (eg: providing examples of supervision in different environments / using specific tasks to engage students / adapting learning goals to a particular level of knowledge or skill)	Satisfactory participation in webinar / virtual course and subsequent workshops / reflective sessions. Teaching observation with faculty
Assessment of learning	Clinical educators will be trained in feedback methods (and eg: questioning and listening skills) in the virtual course / webinar. Clinical educators will be provided with an overview of expected level of attainment for students at this level of training, including prior student leaning activities. CTFs will provide direct contact with clinical educators to check if students are meeting the expected standards. Clinical educators will not have a summative role in assessment but will contribute to student progress and formative feedback via CTFs and educational supervisors	Satisfactory participation in webinar / virtual course and subsequent workshops / reflective sessions. Assessment will be a workshop title available for trainee clinical educators as they progress through the course / project
Educational research and scholarship	Educational theory / adult leaning theory underpins the values and content of the webinar / virtual course and makes reference to relevant literature. Clinical educators will have the opportunity to review student ILO comparison (via paired student t-test) in reflective sessions with faculty – this will allow goal setting for further student teaching development and also broader discussion around education research and academic aspects of medical education	Satisfactory participation in webinar / virtual course and reflective sessions
Educational management and leadership	Delivery of medical education in the clinical setting and managing time and resource will be covered in the webinar / virtual course. Participation in the reflective sessions will allow discussion of own role within medical education and possible career development	Satisfactory participation in webinar / virtual course and reflective sessions

2(b) How you can be assured your candidates attain these Standards  
Please see above

## 2. Self-assessment and reflective writing

*The assessment process for Membership of the Academy of Medical Educators (like that of the Higher Education Academy) is based on self-assessment by applicants reflecting on the evidence they are able*

*to put forward for their commitment or achievements. You are asked to provide information on the following – we are not prescriptive in how this information is provided.*

3(a) Where assessed coursework has involved reflective writing

Written reflective logs by trainee clinical educators will provide the basis for discussions with faculty. These reflections will be structured: description of the event; context; challenges and triumphs; learning points; how practice will change for next time and what needs to be done to achieve this change. Reflections will be clinical educator selected (eg: trainee clinical educator asked to reflect on a particular example of educational activity significant to them that week) and also prescriptive (eg: an example of using an educational task with a student)

3(b) Where candidates have been required to self-assess in response to feedback (for example peer review)

Reflective practice will be encouraged for trainees after specific timepoints: following end of block student feedback and following observed teaching sessions