DEMONSTRATING ACADEMIC COMPETENCIES FOR TRAINEES:

A PRACTICAL GUIDE FOR TPDs

Background

In order to be awarded an outcome 6 at final ARCP, trainees must be able to demonstrate that they have met a number of specialty-specific certification requirements. Within the list of requirements, trainees are required to demonstrate the following research and academic competencies[1,2]:

1. **The demonstration of evidence-based practice.**

2. **Understanding how to critically appraise literature and conduct literature searches and reviews.**

3. **Understanding and applying basic research principles.**

4. **Understanding the basic principles of research governance and how to apply relevant ethical guidelines.**

The demonstration of understanding could either be through a recognised publication of output (for example an appropriate peer reviewed paper or a national or international podium presentation as the presenting author), attainment of an assessed qualification (for example higher degree certification or course certified achievement of a set standard) or work undertaken supported by an appropriately validated Work Based Assessment (WBA).

Authorship of a peer-reviewed paper[2] is defined as being a named author (in any position) on a PubMed indexed paper. For these purposes, authorship as part of a collaborative and case reports will not count as a peer reviewed paper.

The current curriculum does not explicitly specify the nature of the evidence that needs to be demonstrated by the Trainee to the ARCP panel. Given the breadth of research undertaken and given the multitude of evidence that can be provided, the aim of this document is to provide guidance for TPDs and ARCP panels to evaluate academic competencies. The suggested types of evidence are not exhaustive and equivalent sources are permitted provided the four academic competencies are achieved. Many forms of evidence (for example a higher research degree or a publication in a peer reviewed journal) may demonstrate achievement of more than one competency. The overall aim is to help the trainee to develop their own research interests and to encourage Evidence Based Practice (EBP) as a consultant and trainer.

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[1] Domain 9: Capabilities in Research and Scholarship. Generic Professional Capabilities Framework. General Medical Council. https://www.gmc-uk.org/-/media/documents/generic-professional-capabilities-framework--2109_pdf-70417127.pdf#page=25.

[2] Authorship should conform to: Guidelines on authorship. International Committee of Medical Journal Editors. Br Med J (Clin Res Ed) 1985; 291.

Within each competency area, trainees are expected to provide evidence of their ability to (i) understand and (ii) demonstrate, the required skills. Trainees should aim to provide evidence in both of these domains for each competency.

Competency 1: The demonstration of evidence-based practice (EBP)

The understanding of evidence-based practice can be achieved by one or more of the following:

a.   Completion of a certified course on evidence-based medicine with a set syllabus and set outcome measures.

b.   Attendance at, and with written reflection from, formal regional or national teaching programs

c.   Organising a teaching session where EBP is discussed and is confirmed by a validated WBA

The application of evidence-based practice can be demonstrated by one or more of the following:

a.   Involvement in a Quality Improvement Project or Audit utilising EBP. This is evidenced by completion of a validated WBA.

b.   Publication of a peer reviewed paper or National / International Presentation where an EBP project is involved

c.   Presenting and critically appraising EBP as part of a Journal Club Presentation or a formal teaching session. This is evidenced by completion of a validated WBA

d.   Completion of a Higher Research Degree (MSc, MD, PhD or equivalent)

where EBP was integral to the research project

Competency 2: Understanding how to critically appraise literature and conduct literature searches and reviews

Understanding how to critically appraise literature can be demonstrated by one or more of the following:

a.   Attendance at a Research Methodology Course (with appropriate reflection and certification of attendance).[3]

b.   Completion of a Higher Research Degree (MSc, MD, PhD or equivalent)

c.   Attendance at Regional Teaching where a formal literature appraisal session is conducted. This should be accompanied with a formal piece of reflection

Demonstrating the ability to conduct a literature search and review can be achieved by:

a.   Completion of a Higher Research Degree (MSc, MD, PhD or equivalent)

b.   Presentation of a literature review at a Journal Club. This should be accompanied by a validated WBA.

c.   Publication of a peer-reviewed paper (as a named author in any position and excluding case reports).

d.   Production of a written critical appraisal of the literature as part of a Quality Improvement Project, Audit, Systematic Review or part of a formal grant application. This should be accompanied by a validated WBA

e.   Recruitment of patients (ideally 5 or more) into a research study. This should be demonstrated by completion of a validated CBD that addresses research methodology and demonstrates a relevant literature review which should be formally documented within the CBD. A CEX-C would also be appropriate provided the review is documented within the discussion.

f.   Acting as a reviewer for peer-reviewed journal. This should be evidenced by certificate / evidence of the review being performed

Competency 3: Understanding and Applying Basic Research Principles

Understanding basic research principles can be evidenced by one or more of the following:

a.   Attendance at Regional Teaching where research principles are taught in a formal session. This is evidenced by a written reflection and accompanied by a validated CBD

b.   Attendance at a Research Methodology Course (with appropriate reflection and certification of attendance)

c.   Completion of a Higher Research Degree (MSc, MD, PhD or equivalent)

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3 A number of different courses are available

Application of those basic research principles can be demonstrated by one or more of the following:

a.   Completion of a Higher Research Degree (MSc, MD, PhD or equivalent)

b.   Publication of a peer-reviewed paper (as a named author in any position and excluding case reports)

c.   Presentation of a research project at a National / International meeting as the primary presenter

d.   Associate Principal Investigator for a Research Study. This should be evidenced by Certification by the Study organisers and a validated WBA.

e.   Submission of a Study Protocol as part of a Research Study. This could be in the form of a formal grant proposal to a funding body, an IRAS (integrated research application system) application or an application for ethical approval via a local NHS ethics committee

Competency 4: Understanding the basic principles of research governance and how to apply relevant ethical guidelines

Understanding the basic principles of research governance should be evidenced by one or more of the following:

a.   Completion of the GCP (Good Clinical Practice) course:

(https://www.nihr.ac.uk/health-and-care-professionals/learning-and-support/good-clinical-practice.htm).

Trainees should be in date for the duration of their training with   re-certification occurring every 3 years

Application of relevant ethical guidelines can be demonstrated by:

a.   Completion of a Higher Research Degree (MSc, MD, PhD or equivalent)

where ethical approval was required

b.   Publication of a peer reviewed journal where ethical approval was required for the study

c.   Presentation at a National / International meeting where ethical approval was required for the study

d.   Submission of a study protocol for which ethical approval was required

e. Submission of a research study to the Regional Ethics Committee

f. Organising formal teaching on research ethics. This should be evidenced by a validated WBA.