The UK Foundation Programme

Academic Compendium

July 2013

The information contained in this Compendium is intended for foundation doctors considering an academic career. Medical students, academic supervisors, educational supervisors and programme leads may also find this resource useful.

The information herein is correct at the time of printing and may be subject to change. This is not intended as legal guidance, but instead is intended as a training aid. For policy guidance please go to the Foundation Programme Reference Guide which is available at www.foundationprogramme.nhs.uk.

This publication is also available at www.foundationprogramme.nhs.uk.

Academic Compendium

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Contents

What is the purpose of this document?

What methodology did we use to select these outcomes?

What is the purpose of this document?

The Academic Compendium aims to bring together outcomes and competences that foundation doctors could work towards during their foundation programme (FP) to demonstrate academic achievement, particularly doctors following an academic foundation programme (AFP). These have been categorised into:

(i) Research programmes

(ii) Medical Education programmes

(iii) Leadership and Management programmes.

There is enormous diversity in the range of AFPs on offer for which the Compendium aims to provide a "pick and mix" resource for foundation doctors and their supervisors. The outcomes and competences are designed to assist academic foundation doctors and their supervisors to plan work and monitor learning. We also include the types of supporting evidence that could be included in a foundation doctor's e-portfolio.

We would encourage all users to extract those bits of the Compendium that are most relevant (i.e. do not feel that all outcomes have to be achieved!). **Successful completion of an AFP does NOT depend on achieving these outcomes**. We hope that the Compendium will give programme designers, academic leads, foundation training programme directors/tutors and foundation school directors further ideas around the educational sessions that could support academic foundation doctors.

What methodology did we use to select these outcomes?

We reviewed: (i) outcomes and competences for current academic foundation doctors around the UK; (ii) the content of taught diplomas and masters programmes focusing on research and/or medical education and/or clinical management/leadership.

We discussed possible content with: (i) local academic foundation programme leads; (ii) academic foundation doctors; (iii) recent graduates of academic foundation programmes; (iv) The Academy of Medical Sciences; (v) the Academy of Medical Educators and (vi) the Faculty of Medical Management and Leadership.

We brought all of this information together to form the Academic Compendium which we hope will be a useful resource, along with the Rough Guide to the Academic Foundation Programme.

Key outcome and competences common to research, medical education and management/leadership

Key outcome and competences common to research, medical education and management/leadership

Outcome(s)

Brings together a multidisciplinary group to collaborate on a specific research/education/leadership project.

Competences

- Identifies key stakeholders/collaborators.
- Organises meetings of stakeholders/collaborators to address the specific issue(s).
- Develops an action plan/proposal involving the multidisciplinary team.

Examples of relevant supporting evidence

- Agenda/minutes from meetings.
- Reflection on multidisciplinary collaboration.

Content suggestions for programme designers

- Provide educational sessions that cover how to be an effective team player and team leader.
- Assigning an academic supervisor for doctors to contact prior to the official programme start date.

Research [1]

Outcomes that foundation doctors could consider working towards if completing a research-focussed academic foundation programme.

Outcome(s)

Identifies a specific research question and develops an appropriate study protocol.

Competences

- Performs a systematic review of the literature.
- Formulates a credible/realistic research question.
- Describes different research methods available.
- Develops mechanisms to ensure translation of the research into the clinical setting.

Examples of relevant supporting evidence

- A systematic review.
- Proposed research question.
- The study protocol.

Content suggestions for programme designers

- Provide access to local university online journals.
- Provide educational sessions that cover research question development, critical appraisal, and systematic review methodology.

[1] Developed in association with The Academy of Medical Sciences.

Outcome(s)

Writes and submits an application for funding.

Competences

- Describes the different funding sources available.
- Accurately estimates the study costing.
- Completes a funding application.

Examples of relevant supporting evidence

- Completed funding application.
- Funding approval/feedback from a funding source.

Content suggestions for programme designers

- Provide educational sessions that explore the techniques for completing funding applications and the principles of full economic costing.
- Guidance and resources to identify suggested funding sources.

Outcome(s)

Writes and submits an application for ethical approval (local/national).

Competences

- Describes the general ethical principles that underpin research.
- Describes the process for ethical approval in a university setting and/or the NHS (local/national).
- Completes an application for ethical approval (local/national).

Examples of relevant supporting evidence

- Completed application for ethical approval.
- Ethical approval (local/national).

Content suggestions for programme designers

- Provide educational session that explores the techniques for completing applications for ethical approval in various settings.

Research

Outcome(s)

Conducts a study/experiment (lab-based study, a study that uses patients/human volunteers or a population-based study).

Competences

Lab-based

- Performs laboratory techniques specific to their area of study.
- Applies laboratory safety principles specific to their area of study.

All (lab-based; human volunteers/patients; population-based)

- Obtains valid research consent.
- Communicates effectively with patients and/or carers.
- Manages research documentation and handles data.

Examples of relevant supporting evidence

- Reflective report on study/experiment.
- Supervised learning events e.g. laboratory techniques, obtaining consent.
- Study/experiment results.

Content suggestions for programme designers

- Provide educational sessions that cover laboratory techniques, laboratory safety and the principles of valid consent.
- Provide teaching session on the types of clinical trial used in research, and their advantages/disadvantages.

Outcome(s)

Writes up a study/experiment for publication in a peer-reviewed journal.

Competences

- Uses appropriate statistical tests to analyse the data.
- Uses appropriate structure and writing style for an academic paper.
- Describes the peer-review process.
- Describes the limitations of the study and its interpretation.

Examples of relevant supporting evidence

- Completed manuscript.
- Acceptance letter from a journal.

Content suggestions for programme designers

- Provide access to local university online journals.
- Organise a regular journal club.
- Provide teaching session on academic writing styles.

Research

Outcome(s)

Presents the study/experiment results at a local/national/international meeting.

Competences

- Describes the purpose of scientific meetings.
- Submits an abstract to a scientific meeting.
- Produces and presents a poster/oral presentation.

Examples of relevant supporting evidence

- Acceptance letter at a local/national/international meeting.
- Poster/PowerPoint slides.
- Published conference abstract/programme.
- Certificate of attendance.

Content suggestions for programme designers

- Provide local opportunities for doctors to present their work.
- Outlines local funding opportunities available for candidates to attend meetings.

Medical Education [2]

Outcomes that foundation doctors could consider working towards if completing a medical education-focussed academic foundation programme.

Outcome(s)

Develops a new module/course in the undergraduate or postgraduate medical curriculum that enhances learning.

Competences

- Describes and applies the principles that underpin curriculum development.
- Constructs and undertakes a Needs Analysis plan.
- Develops patient centred educational and clinical outcomes.
- Identifies and designs a feedback tool(s).
- Appropriately reflects on feedback and adjusts the programme accordingly.

Examples of relevant supporting evidence

- The new course curriculum.
- Feedback from participants.
- Feedback from peers/supervisors.

Content suggestions for programme designers

- Support completion of a postgraduate medical education qualification.
- Provide educational sessions that cover curriculum development, Needs Analysis and feedback.

[2] Developed in association with the Academy of Medical Educators.

Outcome(s)

Adapts teaching style to different learner needs and to different learning environments.

Competences

- Describes and critically appraises the major pedagogic theories.
- Adapts teaching style, as appropriate, during learning events.
- Applies these pedagogic theories to different professional groups, at different career stages (e.g. medical students, doctors, nurses) in different settings e.g. small groups (e.g. seminars, bed side teaching) and large groups (e.g. lecture theatres).

Examples of relevant supporting evidence

- Lesson plans.
- Feedback from participants.
- Reflective logs on teaching sessions.

Content suggestions for programme designers

- Provide educational sessions and electronic resources that cover pedagogic theories.
- Provide opportunities for foundation doctors to teach different professional groups in different settings.

Outcome(s)

Participates in the selection process to medical degree programmes.

Competences

- Describes the different selection methods available and their supporting evidence.
- Describes the relevant equality and diversity legislation.
- Works effectively as part of an admissions team.

Examples of relevant supporting evidence

- Equality and diversity training record.
- Reflective log of interview experiences.

Content suggestions for programme designers

- Provide educational sessions and online resources that cover medical student selection methods and evidence.

Outcome(s)

Develops and then uses an assessment programme to test knowledge, skills and attitudes.

Competences

- Describes and critically appraises the different assessment tools currently used and their underlying evidence base.
- Outlines what constitutes a 'good' assessment.
- Blueprints assessments to the curriculum/learning outcomes.
- Uses technology to add value to medical assessment.

Examples of relevant supporting evidence

- Description of the assessment programme.

Content suggestions for programme designers

- Supports completion of a postgraduate medical education qualification.
- Provide educational sessions/online resources that cover contemporary evidence-based assessment principles.

Outcome(s)

Develops and/or completes a piece of medical education research.

Competences

- See outcomes and competences listed in the research section of the Compendium.

Examples of relevant supporting evidence

- A completed manuscript.
- An accepted abstract at a local/national/international meeting.

Content suggestions for programme designers

- Please see 'Research' section.

Leadership and Management

Leadership and Management [3]

Outcomes that foundation doctors could consider working towards if completing a leadership/management-focussed academic foundation programme.

Outcome(s)

Identifies and articulates an opportunity for improvement in the health and social care or education environment in which they work.

Competences

- Applies understanding of the organisation and environment including culture, internal and external priorities and challenges.
- Applies the academic literature underpinning quality improvement (e.g. Deming, Shewhart, Institute for Health Improvement, NHS Institute for Innovation and Improvement).
- Discusses and questions current systems and practices with a multidisciplinary team.
- Articulates the benefit and potential unintended consequences of the improvement with consideration of the impact on patients, staff and other stakeholders.
- Uses specific quality improvement tools (e.g. Needs Analysis, Process Mapping, Statistical Process Control (SPC), Stakeholder Mapping etc).
- Develops a project proposal to further scope or implement the improvement.

Examples of relevant supporting evidence

- Initial project proposal.
- Literature search.
- Reflection on the process of identifying an opportunity and developing a project proposal.

Content suggestions for programme designers

- Provide educational or training sessions that cover different quality improvement tools, project management and academic theories that underpin quality improvement.
- Assistance with identification of an improvement project.
- Identify an appropriate mentor or supervisor for the project.
- Link doctors up to participants in the NHS management training scheme or colleagues with relevant skills and experience in this area.

[3] Developed in association with the Faculty of Medical Leadership and Management.

Outcome(s)

Produces a plan for improving an aspect of the healthcare or education environment in which they work through engaging individuals and teams from a range of backgrounds and professions.

Competences

- Promotes discussions and invites opinions from all relevant individuals and teams with a role in the improvement or its outcome.
- Takes time to understand how other staff and professional groups function and make decisions.
- Listens to and encourages feedback on improvement proposal and plan.
- Accesses information and develops networks within and from outside the organisation to support ideas for service improvement.
- Works effectively in a team and where appropriate, leads a team.
- Tests feasibility of change with patients, colleagues and staff.

Examples of relevant supporting evidence

- Meeting minutes or summaries.
- Certificate of attendance at any relevant courses.
- The project plan.
- Reflection on achievements and challenges in bringing teams together and then working with them effectively.

Content suggestions for programme designers

- Provide internal events to network with relevant professionals.
- Provide educational or training sessions on how to facilitate or chair meetings and/or improvement events, interacting with/managing/leading teams and project management.

Outcome(s)

Works effectively with a team to implement an improvement project in the healthcare or education environment in which they work.

Competences

- Engages with multi-professional groups e.g. the project team and external stakeholders.
- Takes responsibility for leading and managing a specific element of the project.
- Understands their personal impact on others and how to influence effectively.
- Takes time to understand how individuals and teams function and the most effective way to work with them e.g. theories of organisational behaviour.
- Invites and encourages regular feedback from patients/service users/ multidisciplinary team/senior colleagues/peers on personal and project performance and acts upon this.
- Uses appropriate improvement tools and techniques to implement change.
- Delegates where appropriate.

Examples of relevant supporting evidence

- Reflects on the project implementation process including working with others.
- Evidence of achievements against milestones as set out in the project plan or similar document.

Content suggestions for programme designers

- Provide educational and training sessions on influence and negotiation.
- Access to project managers for advice.
- Access to resources on relevant improvement tools and techniques.
- Provide opportunities to visit other departments and/or organisations to learn from other professionals.

Outcome(s)

Evaluates the effectiveness of a project and develops recommendations for the future to further improve patient care.

Competences

- Appraises the different evaluation and measurement options available and uses those most appropriate for their specific project.
- Understands the importance of sustainability of the improvement and identifies how this may be achieved.
- Uses appropriate individuals, teams and networks to develop recommendations for the future.
- Seeks feedback on the effectiveness of the project and future recommendations from patients, the multidisciplinary team, senior colleagues and peers.

Examples of relevant supporting evidence

- Relevant documents from the evaluation and measurement exercise.
- Summary of actions taken.
- Reflection on evaluation process and end result.

Content suggestions for programme designers

- Provide education and training sessions on evaluation and measurement of projects, and sustainability.

Outcome(s)

Presents and disseminates learning from an improvement project.

Competences

- Reflects on and articulates learning.
- Effectively disseminates results to enable lessons to be learnt by identifying relevant audiences for sharing learning and adapting presentation style (e.g. written report, poster/oral presentation) and content to suit the specific audience.
- Seeks feedback from relevant audiences on presentation content and delivery.

NB: All further dissemination such as national and international presentations should be supported by a local presentation and a strategy to disseminate learning locally.

Examples of relevant supporting evidence

- Written report.
- Poster or oral presentation.
- Video presentation.
- Letters of acceptance and thanks.
- Formal feedback from presentation.
- Reflection on process of disseminating and presenting learning.

Content suggestions for programme designers

- Provide local opportunities for doctors to present their work.
- Provide support in determining relevant stakeholders for presenting.
- Provide educational and training sessions on presenting to different audiences.

Notes