

## ***Research Project (for trainees who commenced training before 2017)***

### ***Types of research project***

There are seven acceptable types of Geriatric Medicine research projects. These are:

- Case Report
- Audit or quality assurance project
- Research study
- Research proposal
- Literature review
- ANZSGM Position Statements
- Other original scholarship

#### ***Case report***

For the purpose of the Advanced Training project, a case report/s should be used as a clinical illustration of the Geriatric Medicine topic that is the focus of the project. As a case report is a relatively simple format, a higher standard of case presentation (such as a published case study that has generated novel insights relevant to Geriatric Medicine) and/or sophisticated discussion of the literature are expected. Only one of the two projects may be a case study

#### ***Audit or quality assurance project***

The aim of an audit or quality assurance project is to identify an important clinical issue and then to compare the local performance against the 'gold standard'. This will identify substandard areas and specific recommendations should be made to implement improvements, based on a succinct review of the literature. Ideally, the audit should then be repeated to assess the success of the interventions.

#### ***Research study***

All Advanced Trainees are encouraged to develop experience in research skills including literature review, study design, ethics and grant submissions, data collection, analysis (including statistics) and interpretation.

A research project is always a major task. It is vital to seek advice from a supervisor with research expertise and/or access specialist statistical advice. The ANZSGM Scientific and Research Committee members are also available to give advice regarding research project design and execution (see above).

A research project may take more than one year to complete. The first step in a research project is to identify a gap in the current evidence by undertaking a literature review. Then a single primary research question is formulated to address this gap. The aims, objectives and hypotheses should be explicitly stated. Next, the methodology is designed to be both feasible and to answer the primary research question. This includes defining the population sample to be studied (including sample size, inclusion and exclusion criteria), primary outcomes and data required, and planned statistical analyses. Approval should then be obtained from the local Human Research Ethics Committee.

All these steps should be completed before the study begins. Once the data are collected, analyses can be carried out. The trainee should then compare the key results with other similar published research and reach conclusions relating to the original aims of the study.

Research should be presented using the IMRD format: Introduction (why the research was done, i.e. identifying a gap in the evidence and why it is important); Methods (how the research was

undertaken and the data collected); Results (reporting the details of the subjects and the outcomes of the study); and Discussion (what the results mean).

### ***Research proposal***

If a major research project is planned, then the research proposal may be sufficient to submit as a stand-alone project. This should include the supporting literature review, planned methodology, data collection sheets, proposed statistical analyses and evidence of any relevant approvals (e.g. ethics committee approval).

### ***Literature review***

This refers to a comprehensive review of the relevant current literature applied to an important focused question. The specific question and search strategy, including key terms, should be clearly stated (including the methodology used to find, sort, select and appraise the literature). All significant and current papers should be identified. The review should critically appraise the research and apply it to the specific question to be answered. This will include comparing and contrasting different papers and assessing their strengths and weaknesses (including discussing the characteristics of the subjects studied, methodology, outcomes and conclusions). Research gaps requiring further study, and important deficiencies in the published literature, should be identified.

### ***ANZSGM Position Statements***

The role of ANZSGM Position Statements is to publicly state the Society's attitude and approach to a core issue in Geriatric Medicine in the local context of Australia and New Zealand. As such, each Position Statement is authored and reviewed by experts in the relevant specialty area of Geriatric Medicine. As part of the review process, the Position Statement is sent to multiple experts and subcommittees within the ANZSGM for comment. If a trainee wants to contribute to either updating or writing a new Position Statement under the supervision of an expert, the work should be submitted in the form of a literature review with supporting materials (such as the draft Position Statement). If the purpose is to revise an existing Position Statement, then a summary of the recommended revisions should also be included, along with the literature review.

### ***Other original scholarship***

Other project formats may be acceptable but should be discussed with a member of the ATC/NZ ATS.

### ***Advanced Trainee Contribution***

Trainees must be the main contributor to the project submitted. If a trainee has worked on a larger project as part of a group, the submitted project should focus on the work contributed by the trainee. Published work in which the trainee is not the first author would need to be rewritten by the trainee focusing (in 2000–3000 words) on their work.

The trainee must explicitly state their contribution to a project in detail, including their contribution to the topic selection, study design, ethics submission, data collection, statistical analysis, interpretation of results, development of discussion and conclusions. The trainee's contribution should be clearly stated in the methods section of the submitted work (or, if this is not possible, in a cover letter co-signed by the supervisor). The trainee's contribution can be excluded from the word count.

The same work may not have been used for any other purpose, such as a project for another training program. A thesis or project prepared for a higher qualification such as a Doctorate or Masters may not be submitted as a project. Holding a PhD, Masters, or other postgraduate qualification does not

waive the requirement for an Advanced Trainee to submit two projects as summative tasks for Advanced Training in Geriatric Medicine. However, original work undertaken as a component of a higher degree may potentially be submitted as an Advanced Training project. Trainees are encouraged to seek the advice of a member of the ATC/NZ ATS before embarking on this option.

**Note:** Full-time research (as a formal postgraduate research degree or not) must be prospectively approved by the ATC/NZ ATS in Geriatric Medicine as part of Advanced Training in Geriatric Medicine if the year is to be included as a component of Advanced Training in Geriatric Medicine.