Amsterdam Public Health

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Research Quality Visit:
Open up research practice and foster scientific quality

The Why

Promoting ongoing improvement in research quality is one of the primary goals of Amsterdam Public Health (APH) research institute. The scope of these efforts include all phases of research, that is study conceptualization, design, participant recruitment, data collection, data analysis, reporting, archiving, sharing, and dissemination. Across the research life cycle, APH stimulates and supports researchers in pursuing the highest degrees of soundness, trustworthiness, honesty, accuracy, and fairness. Opening up research practices in ongoing research projects to colleagues within the research institute fosters a research culture of transparency, trust, mutual support, and continuous improvement. Aggregation of research quality issues helps to identify trends and issues in research quality and can inform other researchers. A tool developed by the APH Scientific Quality Committee (SQC), to foster the research quality of research projects is the Research Quality (RQ) Visit.

Value of the RQ visit

RQ visits can increase research quality along the research life cycle. The visits can detect barriers for practicing good quality research and provides expert-level recommendations. The visit can also inform project leaders whether their research project is on the right track. The RQ visits also collect best practices that can be shared with other researchers and lead to recommendations at a strategic level for research institutes and research boards to remove obstacles in practicing good quality research.

The What

The RQ visit is a peer-led procedure that can take place at any point during the research life cycle of a research project. The additional peer feedback provided with the RQ visit, is of added value, since for most research projects peer feedback occurs only at the proposal and reporting phase. With these RQ visits, the APH SQC provide the possibility for peer feedback across all three phases of the research life cycle, complementing other systems in which research is embedded, relating to compliance, training, and supervision (Figure 1).

The How

The APH SQC and its secretary organize research quality visits at the request of project leaders, PIs, or department heads. The APH SQC may also randomly select research projects from the APH research project database and invite them for a RQ visit. The RQ visit is conducted in the form of a semi-structured interview with a topic list (Appendix 1) by peers invited by the APH SQC , supported by the SQC secretary. The topic list is structured along the research life cycle (Figure 1) as in the APH quality handbook.

Figure 1 Three phases have been defined in the Lifecycle: (1) Design, Plan & Propose, (2) Set-up & Conduct and (3) Reporting, Review & Knowledge Utilization. Each of the phases have been divided in three sections in the broader scope of (4) Compliance, Training & Supervision

Requirements for participation and procedure

Research projects that are suitable for the RQ visit can be in any phase of the research life cycle, although its added value is greatest for research projects that are ongoing (i.e., the set-up and conduct phase). Before the actual RQ visit, the research project team is invited to select at least three topics as a starting point. The list of topics is presented in Appendix 1.

A RQ visit can take approximately 1-2 hours and is recorded to ensure complete documentation afterwards. After the RQ visit, a draft report will be generated by the SQC secretary and handed over to the project leader for verification and further sharing. A member check by the project leader is included. The SQC secretary archives these reports and subjects these reports to content analysis at regular intervals. A list of visited research projects will be published in annual reports. Project leaders of visited research projects will be asked for permission to be entered in a database of potential peer volunteers for future RQ visits.

Expected output from APH SQC to researcher

The report of the visit summarizes the feedback given on the topics as discussed. Additional links to the APH Quality Handbook are provided to give the project leader further insights of the concerning issues. If needed, the APH SQC can also establish contact with other relevant APH researchers with expertise on the research issue.

The RQ visit requires minimal preparation from the peers conducting the visit. The project leader is asked to provide summary information about the research project in the registration form, indicate in which phase of the research life cycle the research project currently is, and indicates the three starting topics of preference. With the information, the APH SQC can tailor the visit to the needs. Signing-up is done through an online form.

For questions, send an email to aph.sqc@amsterdamumc.nl

Appendix 1: Topic overview

Research life cycle phase	Section	Topic
Design, Plan & Purpose	Ideas	1) Develop a hypothesis 2) Literature study 3) Feasibility 4) Innovative strength
	Partner	5) Relationship with external funder
	Proposal writing	6) Proposal writing
Set-up & Conduct	Study preparations	7) Research protocols
	Methods & Data Collection	8) Data collection 9) Qualitative research 10) Data provided by third parties 11) Source population and sampling 12) Randomization 13) Blinding 14) Sample size and power calculations 15) Questionnaires 16) Physical measurement instruments 17) Pilot study
	Process & Analyze Data	18) Data processing 19) Data entry accuracy 20) Data cleaning 21) Data transformation 22) Analysis plan 23) File maintenance 24) Initial data analysis 25) Post-hoc and sensitivity analyses 26) Data analysis documentation 27) Prognostic models
Reporting, Review & Knowledge Utilization	Writing & Publication	28) Reporting guidelines 29) Systematic reviews
	Achieving & Open Data	30) Data sharing 31) Back-up 32) FAIR data
	Knowledge Utilization	33) Valorization of scientific knowledge
Compliance, Training & Supervision	Compliance	34) Privacy 35) Use of human tissue
	Training	36) Mentoring and supervision 37) Advice and support
	Supervision	38) Mentoring and supervision