

Postgraduate Medical Education (PGME)

Title:	Quality Assurance Policy	Number:	014
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Preamble

I. Royal College Expectations

Each residency program should develop clear objectives in quality assurance/improvement and these should be reflected in a defined curriculum. This will encompass knowledge, attitudes and skills. Many and diverse methods will be used.

Definitions

QA/QI is defined as a systematic assessment of the appropriateness of patient care and the quality control of laboratory and other procedures. It includes both assessment of quality of care and the mechanisms established to improve the quality when necessary. This sounds very impressive and daunting, but the actual fact is that we are all carrying out QA/QI in our practises and on the ward without even recognizing that we are doing it. Rather, we think of it as “good medical practise”. To effectively teach QA, it is first necessary to recognize that what we are doing fits the definition of QA.

Policy

II. What are the available tools

- a. Critical appraisal of the literature and evidence based medicine
- b. Clinical practice guidelines : formulation and evaluation
- c. Chart audits
- d. Post mortem analysis
- e. Morbidity and mortality rounds
- f. Peer review
- g. Technical quality improvement
- h. Small area variation analysis
- i. Questionnaires or focus groups
- j. Meeting management

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III. What Do These Tools All Have in Similar

All of the above should start with the identification of a simple question, and I list the following as simple questions that we ask every day and are the basis of QA:

- What antibiotic should I choose if my differential diagnosis for this fever is X –Z
- Why did this patient spend two extra days on the ward before I could discharge her
- Why did I not get my report until 5 days after the specimen was taken
- Should I do an open versus a laparoscopic procedure
- Why have there been so many liver ultrasounds in the past 3 months
- Why did I not get my consult until two days after I asked one to be done
- Why did I not recognize that this patient had an intraabdominal abscess

IV. What is The Role of Each of the Above Tools

- a. Critical appraisal of the literature and evidence based medicine. This helps to answer the day to day questions that all of us have in the investigation and management of patients. To be an appropriate QA experience, it is necessary to carefully formulate the question which needs answering, search the literature using the available search engines, evaluate the articles using knowledge of statistics, formulate an answer to the original question, implement the desired treatment, and assess whether it was appropriate in this individual patient.
- b. Clinical practice guidelines: formulation and evaluation. This involves a management team approach to a specific question, and although it may involve residents, it is probably too large and time consuming a project to be initiated by residents. In its absolute form, it involves current practices, scientific information related to treatments, acceptance/feasibility issues, resource utilization assessment, compliance (physician/patient), and outcome analysis. It is, however, quite feasible to have a resident develop practice guidelines for a specific issue.
Examples:
 - a. the development of practice guidelines related to whether each patient who develops a headache in ICU, and who does not have visual alterations should have a CT scan
 - b. The development for the appropriate INR for a patient with pulmonary emboli and congestive heart failure on the medical ward
- c. Chart Audits. Chart audits are actually mandatory for Family Physicians, and are an integral portion of their training. It involves selection of a topic, prior establishment of target standards or performance criteria, comparison of performance with targets, implementation of changes, repetition of review to ensure that changes were implemented or quality of care enhanced. It is important that this be performed in a non-punitive fashion.
- d. Post Mortem Analysis. This is occasionally performed to answer epidemiological questions. Pertinent examples include: what is this strange pneumonia which many of the homosexual community are dying from. What is the specific pulmonary condition that patients given amiodarone are dying with. It can be performed prospectively, in which case it is probably not

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feasible for a resident project, or it can be performed retrospectively. Note that the question precedes the analysis.

- e. Morbidity and Mortality Rounds. This is a very common form of QA, but is perhaps not always being performed in the optimum fashion. It should not merely be a recitation of the patient's course while in hospital, but should be performed so as to answer specific questions. Although "Why did this patient die" is certainly appropriate, it should not stop there, but lead to other questions designed to improve hospital practice.
- f. Peer Review. This is difficult to do without causing a certain amount of stress on the involved parties. It would, however, be appropriate for a group of residents to create a "focus" group of residents to discuss a certain type of management. How has Dr. X managed a group of patients with congestive heart failure, compared to the management of Dr. Y. What is the basis of each type of management, and what are the outcomes of each.
- g. Technical Quality Improvement. This is very common in the laboratory medicine and radiology disciplines, but also can be assessed in the medical and surgical disciplines. It involves assessment of the "tools" of medicine including equipment, dictation/written components, and efficiency of process. Pertinent questions for medical/surgical disciplines include:
 - a. assessment of timing between ordering to administration of treatment
 - b. what is the type of equipment which optimizes ease of use, best results, longevity, and price
 - c. which bronchoscope, electrocautery apparatus etc. should the department buy
 - d. what is the reason for the time lag between asking for a consult and consult report
- h. Small Area Variation Analysis. This is a tool which allows assessment of how rates of health care use and events vary over well-defined geographic areas. Pertinent questions would be:
 - a. vaginal versus abdominal hysterectomy rates in rural versus urban sites
 - b. hospitalization for acute asthma in area A versus area B
 - c. These are usually complicated analyses since sources of variation include differences in underlying morbidity, access to care, physician judgment and capabilities, patient demand for services, and random variation. Methodological concerns include the definition of the areas, definition of the at risk population, appropriate sample size, case mix adjustment, and stability of rates over time. This would be a very difficult type of analysis for a resident project
- i. Questionnaires or Focus Groups. This is a very feasible type of project and would involve developing the most appropriate questions to ask to answer the problem identified, structuring the questionnaire, informing the respondents about the survey, pre-testing or post-testing, analysis of the data, dissemination of the results. A very simple example was the study performed to answer the question "do the people who enter your office wish to be referred to as patients or clients".

V. Meeting Management

These are the procedures used in meetings, the rules of order, development of the order of business, and preparations necessary for each meeting. They will be necessary for almost any QA activity.

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VI. Use of The Tools in Resident Education

Obviously, all tools are not appropriate for all programs, and each program should select those which suit them the best. The problem is not actually in selecting the tools, it is in how to evaluate them. The questions you need to ask yourself are:

- what is the appropriate minimum amount that the resident should know about each of the QA tools appropriate for my discipline
- is a completed resident project(s) the best way you can evaluate QA skills
- should QA be a recognized part of the charting (you can include communication skills in this part of the evaluation if you choose this)
- should QA be a short answer examination type question, or could it be a component of an oral examination. If this is your choice, remember that you will have to decide the points which will be necessary for a “pass” in this type of question. What are these points:
 - identification of a problem
 - form an investigative team (use of appropriate help)
 - logically divide the problem into potential components
 - assess the components objectively (ie: data)
 - critical appraisal of literature (if necessary)
 - develop solution
 - implement solution
 - evaluate solution

VII. Summary

Remember, these really are the things physicians of all sorts do every day, but do not recognize them as QA activities. It is easy to recognize them and difficult to evaluate them. However, even if the residents recognize or realize what are potential QA activities, you will have advanced your program.

Action	Committee	Date	Status