Fact sheet 4: What is the difference between research, evaluation and audit?

This fact sheet aims to give you information to help you to understand:

- Definitions of:
  - Research
  - Service evaluation
  - Audit
- Ethical considerations when carrying out research, evaluation or audit.
- Other useful definitions of:
  - Health Impact Assessment (HIA)
  - Health Needs Assessment (HNA)

It will also provide links to other useful fact sheets, documents and resources that relate to research and evaluation.

1. What is research?

The Department of Health defines research as:

“Research can be defined as the attempt to derive generalisable new knowledge by addressing clearly defined questions with systematic and rigorous methods.”
Research Governance Framework, 2005

Characteristics of research may include:

- Research answers a specific question
- Research increases knowledge
- Research has clearly defined aims and objectives throughout
- Research aims to test hypotheses
- Research can be generalisable or transferable to other groups outside those who participated in the research
- Research can involve data collection, treatments, interventions, samples or investigations additional to routine care
- Research assists in establishing best practice and provides new knowledge to enhance quality in the production of guidelines of best practice.
- Research uses randomisation – allocation to groups
- Research should be theoretically driven
- Research should aim for publication/wider dissemination

2. What is service evaluation?

“Evaluation provides practical information to help decide whether a development or service should be continued or not. Evaluation also involves making judgments about the value of what is being evaluated.”
NHS Research & Development Forum, 2006

Characteristics of service evaluations may include:
• Service evaluations define and judge existing service delivery, where research may trial a new approach
• In service evaluations, agreed levels of service are systematically monitored and evaluated
• Service evaluation determines the value of a service
• In service evaluations, participants are usually patients/service users, carers or staff
• Service evaluations do not require ethical approval
• Service evaluations provide practical information such as costs, benefits, strengths and weaknesses of a service
• Service evaluations can use number of qualitative and/or quantitative research methods
• Service evaluations provide a ‘Snapshot’ of a service
• The data collected during an evaluation can be used at a later date for research providing it meets ethical standards

3. What is clinical audit?

“Clinical audit is a quality improvement process that seeks to improve patient care and outcomes through systematic review of care against explicit criteria and the implementation of change.”
Department of Health, 2004, Standards for Better Health

Characteristics of audits may include:
• An audit assesses care currently being provided against a predetermined standard (e.g. of performance or clinical benefit)
• An audit may involve patients/service users, carers or staff input
• An audit aims to determine if improvements or changes to the current level of service provided are required
• An audit does not carry out any experiments or new treatments on patients
• An audit never involves disturbance to patients beyond normal clinical management
• An audit does not require ethical approval
• An audit has potential to influence changes in practice
• No randomisation involved
• Clinical audit forms one area of quality assurance

4. Ethical considerations

Research
Research in the NHS requires review by a Research Ethics Committee, which seeks to:
• Protect the dignity, rights, safety and wellbeing of participants, patients and staff involved
• Ensure confidentiality and data storage meets the requirements of Research Governance Framework
• Consider any disturbance to patients/staff that may result
• Enable research that is of benefit to society and that will increase knowledge or provide new knowledge and best practice

Evaluation
Unlike research, the purpose of evaluation is not to generate new generalisable knowledge. As such, service evaluations do not require ethical review under the terms of the National Research Ethics Service guidelines.

However, it can be difficult to distinguish some types of evaluation from research. Both research and evaluation involve addressing clearly defined questions using systematic and rigorous methods.
Evaluation may include elements of research e.g. collecting additional data or changes to choices of treatment and both research and evaluation may:

- Provide cost and/or benefit information on a service
- Use quantitative and qualitative data to explore activities and issues
- Identify strengths and weaknesses of services

The key difference is that research seeks to derive new knowledge and test hypotheses beyond what could be considered an expected level of care, where evaluation seeks to assess the actual level of care. For example, a research project might seek to establish what added benefit results from the introduction of a new way of care not previously tried. An evaluation might seek to assess users' experience of existing available care and identify ways in which it could be improved.

Evaluation must be conducted to the highest ethical standards, including due care and attention paid to data protection, health and safety and informed consent for participants. However, because nothing new is being done to participants beyond what they might expect as routine care, evaluations do not generally involve additional risk (e.g. of intrusion, clinical safety) and therefore do not require the same level of ethical scrutiny as research projects.

**Audit**

Audits do not usually require review and approval by a Research Ethics Committee. They measure the extent to which accepted standards of care are being met and therefore, as above, do not involve additional risk to any users or staff. In fact, audits should not involve any interruption or disruption of usual practice if they are to be effectively performed.

**4. Health Impact Assessment (HIA)**

Health Impact assessment (HIA) is “A combination of procedures, methods and tools by which a policy, programme or project may be judged as to its potential effects on the health of a population, and the distribution of those effects within the population.”

European Centre for Health Policy, WHO Regional Office for Europe. Gothenburg Consensus Paper (1999)

A HIA may be undertaken prior to the implementation of a policy, programme or project and assesses the potential positive and negative impacts on the health of populations both directly and indirectly affected by the policy, programme or project. The assessment should assess the severity and likelihood of the identified positive and negative impacts and recommend mitigation measures to maximise positive health impacts and minimize negative health impacts. A HIA may encompass a range of structured and evaluated sources of evidence that include public and other stakeholders' perceptions and experiences as well as public health, epidemiological, toxicological and medical knowledge. Although the methods of gathering information for a HIA are similar to those used in research, it is a consensus building process around the future positive and negative health consequences of changes that affect defined populations of people, rather than to generate new information about a specific question.

**5. Health Needs Assessment (HNA)**

“Health needs assessment (HNA) is a systematic method for reviewing the health issues facing a population, leading to agreed priorities and resource allocation that will improve health and reduce inequalities.”

A HNA is a service planning tool for identifying the health needs and inequalities in a given population. The purpose of needs assessment in health care is to gather the information required to bring about change beneficial to the health of the population. It is a systematic method of identifying unmet health and health care needs of a population and setting priorities. Although the methods of gathering information for a HNA are similar to those used in research, is a systematic method for reviewing the health issues facing a population, leading to agreed priorities and resource allocation that will improve health and reduce inequalities, rather than to generate new information about a specific question.

More on this topic and further reading

Ethical approval:
See ‘Defining Research’ leaflet on the National Research Ethics Service website:
http://www.nres.npsa.nhs.uk/applications/is-your-project-research/


HIA:
http://www.liv.ac.uk/ihia/index.htm

HNA:
http://www.nice.org.uk/aboutnice/whoweare/aboutthehda/hdapublications/health_needs_assessment_a_practical_guide.jsp

http://www.erpho.org.uk/Download/Public/12482/1/Health_Needs%20Assessment%20June%202005.pdf