Title: Evaluation: importance and challenges for nursing

Abstract: This article describes the basic tenets of evaluation, focusing on the evaluation of health care services. The importance of evaluation in the current health care climate and the need for nurses to understand some of the principles of evaluation are discussed. Evaluation is defined and theoretical approaches are explained, providing insight into the types of evaluation conducted. Essential features of preparing for an evaluation are considered along with some key guidance on working ethically in the National Health Service. The importance of involving patients and the public in evaluation activity is expounded, offering some key guidance and principles of best practice. Finally, some of the challenges of undertaking evaluations are considered with suggested ways forward offered which are drawn from our experience as evaluators.

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#### Introduction

EVALUATION is increasingly undertaken in health care environments and aims to answer questions about how well an intervention, practice or policy is working (Clarke, 2001). In nursing the focus is often on care delivery systems, where evaluation answers questions about how effective a service is (Moule and Goodman, 2014). As an important part of the health care workforce, nurses can be the focus of evaluation, and are increasingly undertaking evaluations themselves. The demand for nurse led evaluations underlines the need for nurses to develop some understanding of evaluation. To address this need a number of undergraduate and postgraduate courses include evaluation methods as part of the curriculum and assess the nurse's ability to plan and undertake small-scale evaluations. However, these initiatives are only reaching a limited number of staff and there is need to develop a wider appreciation of the importance of evaluation in practice.

In this article we discuss the relevance of evaluation for health care and what it involves. We consider the importance of preparing to undertake evaluations and how to involve members

of the public in evaluation activity. Finally, we explore some of the challenges of undertaking evaluations and how to overcome these, drawing on our experience as evaluators.

## Why is evaluation important?

Evaluation has emerged as a significant contributor to health care provision reflecting an increasing need to determine the quality and effectiveness of public funded services such as the National Health Service (NHS). The NHS and other third sector health care providers are required to demonstrate that they are using resources to deliver care and services in the most efficient and effective way (Department of Health (DH), 2012). There is also an increasing demand on service providers to ensure that they are continuously improving the delivery of services for patients and practising with the best evidence base (DH, 2010), using research and evaluation evidence and guidance from organisations such as the National Institute for Health and Care Excellence (NICE) (see <a href="www.nice.org.uk">www.nice.org.uk</a>). The NHS Five Year Forward View (NHS England et al., 2014) aims to see new models of care delivery developed that will require evaluation. It will be important to understand what works, with The King's Fund suggesting there needs to be commitment to real-time evaluation as part of the implementation process (Ham and Murray, 2015).

With growing pressure on resources and the need to improve services, there is an ever-increasing demand to evaluate not only the effectiveness of services but also their cost-effectiveness (DH, 2012). This is seen in the new approach to the commissioning of health services. The NHS Future Forum (DH, 2011) expressed an intention for the Secretary of State to promote research as an evidence base for commissioning. This included creating a new duty for clinical commissioning groups (CCGs) to promote research and a culture of innovation in the NHS. In addition to evaluating existing services, there is an increasing expectation that any new service or intervention will be formally evaluated to ensure it meets any intended aims and outcomes and delivers the anticipated level of service and care. Consequently there is a need to evaluate current practice as well as new and innovative approaches to care delivery. This is evidenced in a number of funding calls, where the need for an element of evaluation is included to determine, for example, the effectiveness of a new intervention, the impact of new ways of working or the quality of care delivery.

#### What is an evaluation?

The term evaluation is regularly used within nursing and healthcare and is interchangeable with the terms research and audit, with the differences between the three often being confused. To avoid this confusion and ensure the three terms are understood, it is important to ascertain what is meant by "evaluation" and to consider the distinctions between evaluation, research and audit. All three approaches should start with a question, and ultimately aim to influence future practice. Accordingly, if undertaken correctly, they should all use a systematic approach to collect, analyse, and interpret data; however they each have a different purpose and context.

- 1. Evaluation of a service seeks to rigorously review existing care provision, or an aspect of an existing service, to appraise how well the service in question is meeting its aims and objectives (Healthcare Quality Improvement Partnership (HQIP), 2011). Service evaluations are therefore specifically designed around the context of the service being evaluated, and do not produce generalisable data. They can however be powerful in determining which parts of a service are effective and which parts require improvement, providing an evidence base for future service improvement plans. As service evaluations do not derive "new" knowledge, they do not normally require full ethical approval.
- 2. Research studies attempt to address a clearly defined question in order to derive new knowledge (Health Research Authority, 2013a), which is transferable beyond the scope of the study. As such, research studies require full ethical approval, whereas this is not normally the case for audits and service evaluations. This is a significant difference between research and service evaluations. Whereas the former seeks to extend or generate new knowledge, the later seeks to answer questions about how effective a service is.
- 3. Audits measure an aspect of practice against a recognised standard (HQIP, 2011). Audits aim to ascertain if current practice meets best practice standards, so that actions can be taken to improve practice. Audits are usually identified via an organisation's clinical audit plan as part of clinical governance and quality

monitoring mechanisms. They require good clinical governance but do not require full ethical approval, and should be a routine part of nurses' clinical practice.

**Service Evaluation** measures an existing service without reference to a standard, and seeks to assess how well a service is meeting its aims and objectives.

**Research** attempts to extend or generate new knowledge, which is transferable beyond the scope of the study.

**Audit** measures existing practice against a pre-determined standard.

(HQIP, 2011).

Service evaluation is accordingly undertaken to benefit the people using the service by systematically reviewing the existing service. It is concerned with assessing whether a service delivers what is expected of it, as well as to establish what standard the service does achieve (HRA, 2013a).

Theoretical approaches to service evaluation

There are three key theoretical approaches to service evaluation: formative, process and impact (sometimes referred to as outcome) evaluation. Formative evaluation appraises how a service or project can be improved whilst it is still being implemented (Bowling, 2014). Process evaluation reviews the implementation of a project, evaluating how activities were executed and whether this was as intended in the project plan. Finally, impact evaluation focuses on a project or service's short-term and long-term outcomes, often in the context of assessing whether a project or service is meeting its intended aims and objectives (Billings, 2000).

Evaluation may therefore be summative, occurring at the end of a project or after a new service has been designed and implemented; or formative, occurring at one or more stages during the implementation of a project or new service with the objective of assessing whether the project is kept to schedule and improving performance formatively if it does not meet expectations (Bowling, 2014).

Many evaluations use a mixed methods approach collecting both quantitative and qualitative data (Moule and Goodman, 2014). The methodology used depends on the aims of the service evaluation, that is, what you are intending to measure. An evaluator's role is

to bring together multiple strands of evidence in order to form a judgement on the value of the service or intervention in question.

## How do you prepare for an evaluation?

Prior to planning an evaluation it is important to clarify the intended aims and objectives of the work involved (Parry et al., 2013). In other words, what do the funders of a service want the evaluation to tell them? This should be established by reviewing written documentation that may be provided, such as a project proposal or evaluation proposal and can be clarified through conversations with all key stakeholders involved such as any funders of the service, providers and service users. A good understanding of the aims, objectives and key stakeholders will inform decisions around what the evaluation needs to measure or review, who needs to be involved in the evaluation and what methods and methodologies to use. It may be that the funder and key stakeholders have been involved in drawing up guidelines of what they would like the evaluation to look at and they may suggest who is involved and even some of the methods that might be used. This can help as the stakeholders will have been engaged in developing a plan for the evaluation and are more likely to be supportive to an evaluation team, helping with access to sites and recruitment of participants. However, the evaluation team may want to suggest subtle changes to a proposed evaluation plan, which should be discussed and explained at an early stage of the process.

It is frequently the case that NHS ethical approval processes are not required for service evaluations and the Health Research Authority (HRA, 2013a) provide guidance to help determine the nature of the study. However, it is important to inform the Research and Development (R&D) office at any NHS Trust taking part in the evaluation, especially if participants are going to be recruited from there; be they service users, carers or staff members. The R &D office may require the evaluation to be registered, and this is something that should be started as early as possible so as not to delay the process. The R&D is also a useful resource for advice and support and can offer early guidance in a number of governance areas.

The time taken to complete evaluations can vary from a few months to two years. Planning and time management is key, especially in shorter projects. The ability to 'hit the ground running' will be paramount in this instance. A clear timetable/project plan should set out

what tasks are required by when and by whom in the team. Reviewing this frequently will ensure the project is running to target. Alongside the project plan a risk register can be used which includes the risks/barriers to meeting the aims and objectives and what contingencies can be put in place to minimise these. These can be discussed with the project funders if issues arise and the project team can try to establish solutions to any issues as early as possible to avoid delays and overcome problems.

It is also important that the evaluation team seek out and build relationships early on with the gatekeepers to potential data or participants. A personal approach is best, and members of the evaluation team can consider attending team meetings/service user meetings to promote the project. Providing a 'face' to the project can help with recruitment and local support.

Some useful questions that can be asked when doing an evaluation include:

- Is everyone clear what the aims and objectives of the evaluation are?
- Who are the key stakeholders and has the team made contact with them?
- What will be role of the patients and public be?
- What are the best methods to collect the data required to answer the questions?
- Is the proposal achievable in the time scale available?
- Is the proposal achievable in the budget available?
- Are necessary approvals in place before starting this evaluation?
- Is it clear how to access the information/data required?
- Are any gatekeepers (staff who will facilitate access to an evaluation site or data) known? Are they able to recruit participants/promote the evaluation?
- What contingencies are in place if things don't go according to plan?

### How do you involve members of the public?

The involvement of patients and members of the public in health and social care research is now a policy requirement (HRA, 2013b; National Institute for Health Research (NIHR), 2014).

Patient and public involvement (PPI) is context specific; for instance influenced by financial considerations (is there a PPI budget?); therefore PPI activities may differ from project to project. Questions that should be asked include, 'What do you want to involve patients and members of the public for? Are you looking to involve them at all stages of the project, from deciding the research question through to the dissemination of the findings, or are you looking to involve people in an advisory capacity?' Being clear about the purpose of their involvement will help shape up correctly the practicalities of their inclusion.

Ideally, the same core principles that apply to research should also apply to evaluation activities and many guidelines and supporting documentation are widely available (see INVOLVE's website www.invo.org.uk). If involving PPI contributors they should be approached as early as possible in the project to work as part of an evaluation team. They can be involved to reflect personal experience of the evaluation topic. Service users can be involved at different stages of the process, frequently advising on the development of an evaluation design, recruitment and data collection. Some may be keen to be involved in all aspects of the study including helping with the data collection and analysis, writing a report, dissemination activities such as presentations of the findings and co-authoring articles. In terms of good practice, at least two PPI members should be involved from the very beginning, or as early as possible (Pollard et al., 2015). This provides an opportunity for shared working and support between public members. The inclusion of a named person within the research management team whose responsibly is to look after all aspects of PPI (from acting as an intermediary between PPI members and the project itself to performing all the practicalities such as payments to PPI members, Disclosure and Barring Service Checks etc.) is increasingly recommended as a way of enhancing PPI (INVOLVE, 2009; NIHR, 2013).

The University of the West of England, Bristol has developed a set of *Guidelines for good* practice regarding PPI in research (University of the West of England, 2011), which have subsequently been evaluated (Pollard et al., 2015). The *Guidelines* highlight in some detail the challenges of doing PPI in research and evaluation and offer practical solutions. In effect, involving members of the public in evaluation requires care, time, clarity of purpose and flexibility; it also requires good logistics, and good communication skills and set-up. For instance, the evaluation of the *Guidelines* brought into relief the challenge of meeting very

real logistical realities when involving members of the public who have specific involvement needs due to impairments/disabilities.

## What are some of the challenges?

Unrealistic expectations

At times, funders and those commissioning an evaluation may expect and hope for more than can be delivered. Evaluators need to be clear about the aims and objectives of an evaluation and what can and cannot be achieved (Parry et al., 2013). The aims and objectives need to be referred to as the project develops to ensure the evaluation is continuing to deliver what it originally set out to do.

There can also be issues for staff and members of the public taking part in evaluations, either as participants or as members of the evaluation team. It is important that any participants are clear about what they are committing to and what will be expected of them. In addition, when clinical staff are involved, there can be tensions between practice needs and time for the evaluation. It is important that managers understand the time commitments involved and have a commitment to supporting staff release and input. This will require early negotiation and agreement of resources, which can include budget commitment within an evaluation project to fund staff time.

# Relationships

There can be challenges with identifying and recruiting key stakeholders for the evaluation. Failure to fully identify all stakeholders can lead to some people feeling excluded, which may impact adversely on the evaluation and hinder the process, for example, there may be reduced commitment to recruitment and data collection. Furthermore, if the evaluation is being carried out from a distance it can be difficult to determine any particular local sensitivities, expectations or experiences of stakeholders and assess the appetite for the evaluation. In these cases it is important to employ strategies to engage stakeholders and participants such as identifying a small number of local advocates who can promote the project, using various methods to support recruitment such as poster/media advertising and ensuring the funders are able to help with recruitment strategies.

Evaluations are often long term projects and during the evaluation there may be a number of changes in the organisation or amongst staff involved. There may be a change in personnel which results in key contacts moving on and being replaced by others. The new members may have different working styles, have less engagement with the evaluation or different expectations and interpretations of what the evaluation seeks to achieve. This can be particularly challenging if the audit trail of written communication does not reflect what has been verbally arranged and agreed. It is important to ensure any changes are known and responded to. This can include informing new staff of the project and in extreme cases if funders or commissioners of the evaluation change this may require a change in the project aims or proposed plan.

### Cultural environment

By its nature, evaluation takes place either when a change in practice has been made, or when it is suggested (Pollard et al, 2015). Staff may be resistant to the changes and become defensive of the service they provide. Furthermore, they may feel suspicious of the motivation for the evaluation and vulnerable to any change that may occur as a consequence of the evaluation. This may result in staff resisting the evaluation and restricting access to all relevant data. In these cases it is important to ensure that staff understand what the aims and objectives of the evaluation are and what any involvement might include. It is also important to include participants in the evaluation as much as possible, for example, in helping to design data collection tools or advising on the best ways to collect data. Depending on the evaluation approach and methods it may be possible to involve staff in reviewing data collected and commenting on draft reports.

#### **Conclusions**

This article has described the main principles of evaluation, focusing on the evaluation of services. Evaluation is increasingly important in the health care arena and nurses as a key member of the work force are increasingly involved as participants and importantly as evaluation leads. When undertaking an evaluation it is critical that the aims and objectives of the evaluation are shared and understood by the funder or commissioner of the evaluation and the evaluation team. These should be revisited throughout the evaluation process and any changes to these as the project progresses should be agreed.

Evaluations are seeking to establish which parts of a service are effective and which parts require improvement, providing an evidence base for future service improvement plans. To successfully do this it is important to have local support within the evaluation and to ensure staff understand that it is important that the evaluation team can understand what is happening, positive or not, in order to learn and recommend changes for the future benefit of service users, staff and the organisation. Establishing relationships with the local participants and key stakeholders is important to ensuring that the evaluation is able to establish a true sense of what is happening.

The role of patients and the public is vital in the evaluation of health care services and it is important that the evaluation team are aware of best principles and guidance, which should include being clear about the nature of involvement and having a number of practical considerations in place such as support and resources. Whilst there are many challenges to undertaking evaluation, the key to successful completion requires effective communication and clarity of expectation.

### References

Billings, J.R. (2000) Community development: a critical review of approaches to evaluation. *Journal of Advanced Nursing*, *31*(2), 472-480.

Bowling, A. (2014) *Research methods in health: Investigating health and health services*. 4<sup>th</sup> Edition. Berkshire: Open University Press.

Clarke, A. (2001) Evaluation research in nursing and healthcare. *Nurse Researcher*. 8 (3), 4-14.

Department of Health (2010) *Liberating the NHS*. The Stationery Office, London. Accessed at: <a href="https://www.gov.uk/government/publications/liberating-the-nhs-white-paper">https://www.gov.uk/government/publications/liberating-the-nhs-white-paper</a>.

Department of Health (2011) *The NHS future forum: recommendations to government on NHS modernisation*. Department of Health, London.

Department of Health (2012) *Health and Social Care Act 2012*. The Stationery Office, London. Accessed at http://www.dh.gov.uk/healthandsocialcarebill.

Ham, C. and Murray, R. (2015) *Implementing the NHS five year forward view: aligning policies with the plan*. Accessed at www.kingsfund.org.uk/publications/implementing-the-nhs-five-year-forward-view.

Healthcare Quality Improvement Partnership (HQIP) (2011) A Guide for Clinical Audit, Research and Service Review. Accessed at http://www.hqip.org.uk.

Health Research Authority (HRA) (2013a) Defining Research. HRA: London.

Health Research Authority (2013b) *HRA Strategy for Public Invovlement*. London: Health Research Authority.

INVOLVE (2009) Research Design Services and public involvement: Road map. Eastleigh: INVOLVE. Accessed at: <a href="http://www.invo.org.uk/wp-content/uploads/2011/11/INVOLVERDSpublicinvolvementmap190410.pdf">http://www.invo.org.uk/wp-content/uploads/2011/11/INVOLVERDSpublicinvolvementmap190410.pdf</a>.

Moule, P. and Goodmand, M. (2014) *Nursing Research: An introduction*. 2<sup>nd</sup> Edition. London: Sage.

NHS England, Care Quality Commission, Helath Education England, Monitor, Public Health England, Trust Development Authority (2014) *Five year forward view*. London: NHS England. Accessed at: www.england.nhs.uk/ourwork/futurenhs/.

NIHR (2013) Patient and Public Involvement (PPI) in the NIHR Comprehensive Clinical Research Network Specialty Groups: Guide and Toolkit. London: DH. Accessed at: <a href="http://www.fifthsense.org.uk/wp-content/uploads/CCRN-Specialty-Groups-PPI-Toolkit-v.6-FINAL.pdf">http://www.fifthsense.org.uk/wp-content/uploads/CCRN-Specialty-Groups-PPI-Toolkit-v.6-FINAL.pdf</a>.

NIHR (2014) Patient and public involvement in health and social care research: A handbook for researchers. London: National Institute for Health Research.

Parry, G. Carson-Stevens, A. Luff, D. McPherson, M. Goldman, D. (2013) Recommendations for evaluation of healthcare improvement initiaitives. *Acdemic Pediatrics*. 13 (6), 23-30.

Pollard, K C. Donskoy, A-L. Moule. P, Donald. C, Lima. M, Rice. C. (2015). Developing and evaluating guidelines for patient and public involvement (PPI) in research. *International Journal of Health Care Quality Assurance*, 28(2), 141-155.

University of the West of England (2011) *Public involvement in research: guidelines for good practice*. Bristol: UWE. Accessed at: <a href="http://hls.uwe.ac.uk/suci/Default.aspx?pageid%9">http://hls.uwe.ac.uk/suci/Default.aspx?pageid%9</a>