

Briefing



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Evaluating Outcomes

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It has always been important to measure the impact and benefit of services. But in today's cost-conscious and more competitive health services, it is crucial that nurses, midwives and health visitors are able to evaluate their work effectively. This Briefing provides essential grounding in evaluation techniques.

Measuring services

The need to measure

There are many reasons why nurses, midwives and health visitors need to be skilled in evaluating elements of their services, or changes to services. As registered professionals, they have a duty to provide the best possible care, and to do this they need to know the impact of their work on those it is intended to benefit. The increase in competition to provide services means that professionals need to be able to show how and why their service, or new way of working, is effective in meeting patients' needs. Evaluation is increasingly useful to commissioners and funders, who are keen to see the benefits and wider impacts of services they are funding. Also, service users are often interested to know how services have been evaluated.

However, many nurses recognise that they lack the evaluation techniques and skills to make a confident case. There is confusion about the difference between evaluation, research and audit. Sometimes professionals believe that, unless a service or intervention is subject to 'proper' research, the evaluation is of little worth.

Understanding evaluation

Evaluating a project, change or service does not require a full research project. Research, audit and evaluation, though sharing some common features (such as a structured approach, clear aims and a commitment to objectivity), are different activities (see box 1).

This Briefing is concerned with evaluation which takes place at the level of an individual service, project or change in clinical practice.

The Charities Evaluation Services provides a helpful definition of two key terms:

Monitoring is about collecting information that will help you answer questions about your project. It is important that this information is collected in a planned, organised and routine way.

Evaluation is about using monitoring and other information you collect to make judgements about your project. It is also about using the information to make changes and improvements (CES, 2002).

Just collecting information is not enough to evaluate a service: it can only describe it. Facts and figures, feedback forms and questionnaires developed in a rigorous manner are useful building blocks, but it is the use of the information, and the conclusions legitimately drawn from it, that constitutes service evaluation.

Getting started

As a starting point for evaluation, it is essential to be clear about the aims of the service, project or change that is being evaluated. Only then can a judgement be made about its success. It is also important to distinguish between:

Aims – the beneficial changes intended. These need to be



Box 1
Research, audit and evaluation

- *Research* is a detailed and careful investigation into some area of study to try to discover and apply new facts and information
- *Audit* is about checking, or verifying, against a set standard
- *Evaluation* is an appraisal or judgement of value or worth.

SMART aims

described honestly if the evaluation is to be meaningful. If the aim is to reduce hospital admissions and save money, rather than to improve diabetic control in a group of patients, different measures will be required, and different data will need to be collected. It is of course possible to have both, or several, aims: this will identify the range of information that needs to be collected.

Outputs – what is actually produced to achieve the aims. This might involve putting on education sessions, carrying out clinical reviews, providing leaflets and resources to patients’ families, and/or offering new treatments. This is where appointments created, volume of material produced, or number of clinics held, is measured.

Outcomes – the consequences related to the aims. For the aim of preventing admissions and saving money, the outcomes are measured in number of bed days and costs saved. For the aim of improving diabetic control, the outcomes will be improvements in relevant clinical measures such as blood levels of glycosolated haemoglobin, which indicate benefits to the patient.

Impact – more substantial, longer term consequences. If, in addition to improving the clinical condition and prospects for the patients involved, there is also a change in policy, for example the project may have led to an agreement to implement changes to the care of people with diabetes across several practices, or to revise the hospital admission criteria, or to roll-out training to more nurses - this is impact. This is not always measurable.

Many people trying to evaluate a service tend to focus on outputs alone, recording what they did, and how much of it they did. Measuring outputs, however important and efficiently done, will

not influence funders or managers unless it is linked to clear aims, and to the outcomes and impact of the activity.

Principles for evaluation

Seven key principles can help to ensure that evaluation is effective and impressive:

1. make sure the aims of the project or service are SMART – specific, measurable, achievable, realistic (and resourced) and time-specific (see box 2), and that the measures match them
2. decide relevant measures at the outset, so that you can collect the right information from the start
3. measure the baseline - it is very difficult to demonstrate change if you can’t show what the situation was beforehand and some information cannot be obtained retrospectively
4. use existing data whenever possible – there is a mass of information available, and it is far quicker, and more reliable, to use existing sources than to invent and collect data for new measures (see Tools for evaluation, below)
5. measure what matters to the key audiences – you may need different measures for different audiences. But don’t assume that managers only want to hear about money, and clinicians only about patient care
6. work the data hard – rather than just present information in the form gathered, think about different ways of using it which will capture the imagination of the audience, help them to understand the implications, or grasp the point more easily (see box 3)
7. Don’t be afraid of the results – negative results can be as useful as positive ones in demonstrating where effort should be concentrated; apparently small short-term results may be more



Evaluation tools

valuable than they seem if they continue over the long-term; and keep a look out for unexpected positive outcomes, as well as anticipated benefits.

Tools for evaluation

There is a mass of available information and many existing tools that can help with evaluation.

Local, internal data accessible to most community nurses includes patients' records, management/administrative information (e.g. costs, historical service data), other professionals' information (e.g. use or costs of related services such as physiotherapy), patients'/clients' views from local surveys, previous local audits, health needs assessments and local health plans. There are also validated assessment tools in most areas of health care which have the enormous advantages of credibility, objectivity and standardised use. Examples are the Edinburgh Postnatal Depression Score, and the Hospital Anxiety and Depression Scale.

External to the practice or primary care organisation, a lot of very useful background information that can help support the conclusions of an evaluation report is easily available from websites and publications from various bodies:

- Government departments and agencies such as Department of Health, Home Office, Office of Public Statistics, Confidential Enquiries: for reference costs, Hospital Episode Statistics, targets, priorities, prevalence, good practice, lessons from failures

- Independent 'think tanks' or research units such as the King's Fund or health services management centres: for overview of policy reports, research, evidence and trends

- Statutory bodies such as strategic health authorities and local authorities – for wider plans, service gaps, local/regional priorities, and public consultations.

- Academic literature – searching resources and databases in hospital or university. Hospital libraries often hold copies of local evaluations that may not be available from other agencies

There is often more practical help available too. Clinical audit staff in local primary or secondary care organisations, or primary care support agencies, can be very helpful on design, data collection and analysis. Administrative staff may be able to turn data tables into graphs or pictorial representations that will strengthen an evaluation report and make it easier to follow and understand.

Supporting the findings

There are two common challenges to the findings of evaluations that are worth anticipating. As evaluation takes place in the real world, and it is impossible to control the health care service environment as a researcher would control an experiment, service evaluations have to address the issues of 'causality' and 'deadweight'.

Causality is the question of whether the outcomes or impact were actually due to the intervention or service being

Box 2 SMART aims

Un-SMART aim:

To set up a child constipation clinic

SMART aim:

To help up to 100 children under 10 in X town who need to re-establish normal bowel habits

Intended outcomes :

- All targeted children establish normal bowel habit [as defined] within 6 months
- To reduce school days lost because of constipation to maximum 3 days per child over the school year
- To reduce the number of children needing specialist referral for constipation by 50% in 12 months

Un-SMART aim:

To increase the uptake of childhood immunisations

SMART Aim:

To increase the uptake of childhood immunisations in the 0-3 age group across xxx PCT from X% to X%

Intended outcomes:

- All parents aware of the importance of immunisation
- Increase in parents' awareness of venues where immunisations are given
- All health professionals in contact with parents of 0-3 age group address the issue of immunisations
- All targeted families have access to opportunistic immunisations at GP practices or clinics

- charities such as Crisis or the British Heart Foundation: information on prevalence, research, treatment options, patients' views, personal stories, variations in service

evaluated; or whether they were caused by something else. Did the new primary care centre reduce inappropriate attendances at A&E, or was it the local hospital's publicity campaign about when to attend?

Deadweight is the issue of whether the change would have happened anyway, without the intervention or service. Would attendances have reduced because of annual seasonal variations?

In the nature of local, small scale evaluations, it is impossible to claim absolute certainty on any outcomes. Trying to control for all variables, or set up control sites, is beyond the scope of service evaluation. But it is possible to anticipate these challenges, and find out enough about what is happening locally, and in similar service settings, to make a strong case to defend your outcomes. Acknowledging that these questions exist, and using language in your evaluation like 'this suggests that' rather than 'this shows,' and 'assessing' rather than 'measuring' impact, can help reassure the audience that you are aware of these issues.

Top tips for evaluations

There are some common pitfalls to be avoided when planning evaluations, to save time,

unnecessary effort and stress. Common examples are:

- Aiming too high – rather than aiming to reduce the incidence of heart disease over a 10 year period, aim to improve the delivery of evidence-based interventions that are likely to reduce the incidence in due course

- The scattergun approach – measuring lots of different aspects of the service and the patient's experience, in the hope that one or two will show benefits; fewer, significant measures are more impressive

- Mistaking popularity for success – relying on glowing feedback from service recipients rather than measures that reflect the key audience priorities – which are unlikely to be solely about popularity with patients.

The following 10 useful tips are condensed from an NHS Institute for Innovation and Improvement publication 'Getting the basics right' (NHS Institute, 2007):

1. use simple methods
2. have 3-5 key indicators only
3. use routinely collected data
4. have a comparator
5. match each objective with a measure
6. involve information specialists

7.set realistic timeframes and specific responsibilities for the evaluation

8. finding out what doesn't work is also useful

9. use on-going measures to spot longer-term change

10. get external help wherever possible.

Summary

Evaluation is an increasingly essential skill for nurses, particularly in the community where services are under scrutiny, and many new and innovative projects take place. By taking time to plan evaluation, identifying each step of the project from aims to impact, and using existing data and the expertise of others whenever possible, evaluation can be relatively straightforward. And regardless of the reception it receives from others, it is very satisfying to the professional to have an objective assessment of their project or service, which can be used to generate further improvements in care to patients.

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Useful websites

- www.ces-vol.org.uk
The Charities Evaluation Services
- www.institute.nhs.uk
The NHS Institute for Innovation and Improvement
- www.hesonline.nhs.uk
Hospital Episode Statistics in searchable online form
- www.library.nhs.uk
The former National Electronic Library for Health
- www.statistics.gov.uk
Useful Government statistical information

References

- Charities Evaluation Services (2002) First steps in monitoring and evaluation. CES, London
- NHS Institute for Innovation and Improvement (2007) Getting the basics right. NHS Institute, Warwick

Box 3 Working the data

1. Use percentages and trends as well as raw numbers: 'Number of patients needing specialist referral (n) was down by X% on last year, having risen in each of the previous X years'

2. Make comparisons: 'The recurrence rate of leg ulcers treated in this clinic is X%, compared to X% in the PCT and X% nationally'

3. Make predictions: 'These outcomes mean that patients are less likely to ... or more likely to ...'

4. Use different units of measurement: 'Reducing nurse visits to 1 per week by equipping these patients with X will free up X hours a month, and save £X in staff time and costs of investigations.'

5. Extrapolation: 'If these savings were replicated across all four localities, the PCT would save £XX,XXX a year'

6. Presentation: use line graphs, pie charts, visual icons; highlight a few key findings that will impress the audience.

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