

# Part G

# Evaluating research

## A summary of Part G

### Why is Part G important?

Evaluation of research can happen in several ways. Research and development projects are evaluated for a number of reasons - to see if:

- the aims of the research have been fulfilled
- they have been done well
- it helps tell us more about a specific issue
- the results are accurate
- the results suggest a change in practice/services

In Part G participants will learn about these ways of evaluating research and analyse real examples. They will also consider the practical issues of user involvement in evaluating research to help them decide if this work interests them.

### What will participants learn by doing Part G?

At the end of this part participants will be able to:

- Understand what evaluating research means
- Understand what happens in the evaluating research stage

- Discuss the practical issues of user involvement in the evaluating research stage

## **Skills participants will strengthen or develop**

Skills that participants will strengthen or develop include:

- Level 2: Further practice with thinking about issues
- Level 2: Further practice with developing and presenting an argument
- Level 2: Further practice with speaking in large groups
- Level 2: Further practice with planning what to do next
- Level 3: Demonstrate ability to think about issues
- Level 3: Demonstrate ability to think about case examples

## Background information

The background information provides trainers with additional information that prepares them for issues that may be discussed during the training.

### What is evaluation?

Evaluation is work to explore “the value, merit, worth or significance of the thing in question” (p.5).<sup>6</sup> We evaluate things all the time in our daily lives, for example:

- what the weather is like in the morning and what we should wear that day
- the best route to take somewhere so you miss the worst traffic or go the most scenic and pleasant way
- which brand of tomato sauce is the best value for money or the most tasty

We do evaluation work in research when we need to decide if, and how well, a project has met its goals or intentions. It also helps to identify where more research is needed.

Users can get involved in evaluating research in a number of ways. They can either become:

- a systematic reviewer as part of the Cochrane Collaboration,
- a peer reviewer of systematic reviews, or
- review a research topic to decide upon clinical guidelines within their local trust (or nationally with the National Institute for Clinical Excellence - NICE).

The practicalities of being involved in these areas will be discussed and examples explored in this part.

## **Systematic Reviewer**

A Systematic Reviewer is part of a group of people who have knowledge and experience of a given topic. The group looks at the research evidence produced for that topic, and evaluates and summarises it to provide an overview of what is currently known about the area. An example of where this occurs is within the Cochrane Collaboration. A systematic reviewer:<sup>2</sup>

- states the objectives of the review and what questions should be addressed
- states the types of studies to be included and methods used in the studies
- searches for studies (published and unpublished)

- lists the characteristics of each study and assesses their design
- attempts to bring as much of the information (data) together as possible from all studies reviewed
- analyses all the information together
- writes a structured report of the findings

Over the last few years the Cochrane Collaboration have set up a consumer section to their organisation so consumers can take part in a range of Collaboration activities. This includes being on a systematic review group. They believe that, "consumer participation is an important part of the development of high quality and relevant systematic reviews."<sup>1</sup>

### **Peer reviewing of systematic reviews**

As well as carrying out systematic reviews the Cochrane Collaboration asks users to 'peer review' systematic reviews and protocols (written descriptions of how the review will be carried out). They send out draft reviews and protocols to people with an interest in the subject, who in turn peer review and forward their comments back to the reviewer.

The systematic review group considers the suggestions they receive and sometimes make changes to their review. Peer

reviewers are then able to review the next version of the review prior to final publication. The questions they might ask include:<sup>1</sup>

- Can I understand the language of the review and does it consider users?
- Does the review need to be done and are the reviewers the most appropriate team to do this?
- Does it make sense for people with different backgrounds and from different parts of the world?
- Are the outcomes important to users?
- Has the reviewer considered potential harm as well as benefit?

### **Reviewing research to formulate Clinical Guidelines**

Research also needs to be evaluated in order that clinical recommendations can be made through clinical guidelines.

These are recommendations for the care of service users by health and social service professionals. These statements are developed in a systematic way by consulting the published evidence, health and social service staff, users, carers and the public about their experiences and opinions. They assist staff and service users to make decisions about appropriate care for

specific health and social issues, e.g. coronary heart disease, cancer, diabetes, mental illness, etc.

This work is done locally within the trust and also occurs nationally through the National Institute for Clinical Excellence (NICE).<sup>4</sup> Within each organisation there is a protocol for how to produce clinical guidelines. It usually has a similar process to a systematic review in that a subject is identified and the research in that area is reviewed. However, the review team also make recommendations for clinical practice within the review. Users can get involved with the review group for their trust, but this is relatively new to the NHS and some trusts have not involved users as yet.

## About NICE

NICE<sup>4</sup> is part of the NHS and was established as a Special Health Authority in 1999. Their aim is to promote clinical excellence by producing clear national standards for services and treatment. The Department of Health and Welsh Assembly Government are responsible for selecting the topics for review (see [www.doh.gov/nice/consultation2002](http://www.doh.gov/nice/consultation2002) for further details of the process for selecting topics). Users can get involved with this process in two ways, either as a part of the Guideline



Development Group or independently as an interested party (reviewing draft guidelines).

The Guideline Development Group is a group of professionals, users and carers with knowledge and or experience of a given topic. Their aim is to review the evidence and develop the guideline for two public consultations before making their final recommendations. The Patient Involvement Unit (PIU) in NICE provides support and training to users in this process.

## **Issues with user involvement in evaluating research**

There is evidence to show that user involvement in evaluation has an impact on the quality of health services. For example, INVOLVE (formerly Consumers in NHS Research) reported that the Cochrane Collaboration conducted a survey on user involvement in evaluating research (systematic reviews). The health service staff described the benefits of user involvement as they:<sup>3</sup>

- offer a 'reality check'
- bring an 'antidote to jargon and pomposity'
- help make reviews relevant to and readable for everyone, not just healthcare professionals

INVOLVE also state that:

"An evaluation led by consumers can bring an important critical perspective to a piece of research, giving rise to new questions and topics that are specifically relevant to consumers and not just academics." (p.30)<sup>5</sup>

User involvement within evaluating research appears to focus on the national and international organisations, such as NICE and the Cochrane Collaboration. There is little knowledge and activity in user involvement in evaluation at local levels. This unit gives participants an opportunity to find out what evaluation of research happens within your local area and how users, carers and the public are either involved already or can become involved. Therefore, some of the activities advise you to find local examples for users to learn from.



**TOP TIP**

Case examples are limited in this area, so consider alternatives to the one included for Activity 2.

## References

1. Cochrane Collaboration (undated). *Consumer peer reviewing/peer refereeing*. Available online at:  
<http://www.cochrane.no/consumers/Docs.aspx?wfID=24&lid=1&wdID=94>

2. Cochrane Collaboration (undated). *Writing systematic reviews*. Available online at:  
<http://www.cochrane.no/consumers/Docs.aspx?wfID=37&lid=1&wdID=105>
3. Hanley, B. (1999). *Involvement Works: The second report of the Standing Group on Consumers in NHS Research*. Winchester: Consumers in NHS Research Support Unit. Available online at <http://www.conres.co.uk/pub.htm>
4. National Institute for Clinical Excellence (2003). *A guide to NICE*. Available online at:  
[http://www.nice.org.uk/pdf/Guide\\_to\\_NICE\\_13\\_March\\_03.pdf](http://www.nice.org.uk/pdf/Guide_to_NICE_13_March_03.pdf)
5. Royle, J., Steele, R., Hanley, B. & Bradburn, J. (2001). *Getting involved in research: A guide for consumers*. Winchester: INVOLVE (Consumers in NHS Research Support Unit). Available online at:  
<http://www.invo.org.uk/pub.htm>
6. Wadsworth, Y. (1997). *Everyday evaluation on the run* (2<sup>nd</sup> ed). St Leonards, NSW: Allen & Unwin.

## Activity 1

### What does evaluating research mean?

There are several activity options. Each one has a suggested time allocation. This is a rough guide and can be extended according to the programme you have set up. Combine different activity options depending upon your chosen programme and your participants' needs. Suggested combinations are:

- Large group discussion + mini-presentation
- Small group discussion + mini-presentation

#### Things to get ready

- Print the Unit 5 - Part G PowerPoint files 1A - 1G in 'note pages' for you and, where appropriate, 'handouts' (two slides/page) of the presentation material for participants
- Whiteboard and coloured whiteboard markers
- Flipchart paper and coloured markers

## Activity Option 1

### Large group discussion - Existing knowledge in evaluating research (10-15 minutes)

The purpose of the large group discussion is to practice skills in thinking about issues and speaking to large groups:

- Ask if any participants have ever been involved in evaluating research and development projects
- If no, move on to the mini-presentation
- If yes, ask these people to share their experience with the group if they are willing. Here are some prompt questions to help facilitate the story:
  - \* How were you invited to be involved?
  - \* What did you get to do?
  - \* What did they do with your ideas?
  - \* What feedback did you get about what happened with their recommendations?
- Encourage other participants to ask questions about the process and discuss the issues being raised
- If needed tell participants that evaluating research is when users, carers and the public are asked to review completed research to see how well the project was done well, what it tells us and what we should do with the results

## Activity Option 2

### Small group discussion - Existing knowledge in evaluating research (10-15 minutes)

The purpose of the small group discussion is to practice skills in thinking about issues and speaking to large groups:

- Divide people into groups of 3-4. Give them a few minutes to think about and discuss this question
  - \* What do you think happens if you are involved in evaluating research and development projects?
  - \* What opportunities would you want to get to do this?
  - \* What support would you like to get?
- Ask them to write key points about their answers for each question on flipchart paper and identify a person to present this to the wider group
- Listen to the feedback from all groups - facilitate further discussion as needed
- If needed tell participants that evaluating research is when users, carers and the public are asked to review completed research to see how well the project was done well, what it tells us and what we should do with the results

## Activity 3

### OVERHEADS 1A - 1G

#### **Mini-presentation - What does evaluating research mean? What happens in this stage? (15 minutes)**

The purpose of the mini-presentation is to gain knowledge in this area. Cover these areas using the PowerPoint slides:

- What does evaluating research mean?
- Who is involved in evaluating research?
- Why is this stage of the research and development cycle important?
- During or after the mini-presentation facilitate further discussion as needed

## Activity 2

### Examples of user involvement in evaluating research

There are several activity options. Each one has a suggested time allocation. This is a rough guide and can be extended according to the programme you have set up. Combine different activity options depending upon your chosen programme and your participants' needs. Suggested combinations are:

- Mini-presentation and case example analysis + evaluating research practice large group discussion
- Guest presentation and large group discussion + evaluating research practice small group discussion

#### Things to get ready

- Print the Unit 5 - Part G PowerPoint files 2A - 2G in 'note pages' for you and, where appropriate, 'handouts' (two slides/page) of the presentation material for participants
- Flipchart paper and coloured markers
- If you choose Activity Option 1 then make sufficient copies of Unit 5 - Part G Appendix 1 for all participants - also create 'posters' on A4 paper by writing in clear large writing



the following ratings: Poor, OK, Good, Excellent

- As an alternative for Activity Option 1, identify a local case example of evaluation happening within your local trust
- If you choose Activity Option 2, you will need to identify an appropriate presenter who can discuss a current example of evaluating research - meet with them to ensure they understand the task and prepare anything that they need
- If you choose Activity Option 3 or 4, go to the Cochrane Collaboration website ([www.cochraneconsumer.com](http://www.cochraneconsumer.com)) and download a 'lay summary' example of a systematic review and review guideline - make sufficient copies for all participants

**TOP TIP**

You may want to alter the review guideline to make it shorter and simpler for the activity.

- If you choose Activity Option 3 then you will need strips of scrap paper for people to use in the secret ballot

## Activity Option 1

### OVERHEADS 2A - 2G

#### **Mini-presentation and case example analysis - Analysing a case example of evaluating research (40 minutes)**

The purpose of the mini-presentation and case example analysis is to build on knowledge in this area and demonstrate the ability to think about case examples.

- Using the PowerPoint slides provide a description of the case example (Cochrane Collaboration or local example)
- Once you have presented the case example, give out Unit 5: Part G - Appendix 1 which has a written version of the PowerPoint slides and the steps needed to do the case example analysis
- Ask participants to divide into four groups
- Each group will follow the steps for analysing the case example listed at the end of Unit 5: Part G - Appendix 1
- They need one person to record the answers of the group for each question and another to be a representative to share their decisions with the large group.
- Allow time for the small groups to do this analysis and be available to answer questions as needed

- When all groups have got through the questions ask the representatives of each group to come to the front
- Go through each of the questions listed at the end of Unit 5: Part G - Appendix 1 - ask the representatives to stand next to the poster that matches their group's answer
- For each question check the spread in answers between the groups and then invite people from the groups to explain why they chose that answer - for example, if two chose 'OK' and two chose 'Good', then ask the groups who chose OK to give their reasons, and then the groups who chose 'Good' to explain why they gave a higher rating
- Continue until all questions have been discussed

## Activity Option 2

**OVERHEADS** provided by guest presenter

### **Guest presentation and large group discussion - Analysing a case example of evaluating research (40 minutes)**

The purpose of the guest presentation and large group discussion is to build on knowledge in this area and demonstrate the ability to think about case examples. The presenter will cover these areas:

- A case example of evaluating research

- Roles of user consultants, support provided and level of involvement in decision making for user consultants
- What has been learned from doing this work - outcomes achieved, strategies for success and benefits gained
- What is happening to improve or expand this work - problems that occurred and how they were or could be addressed
- During and after the guest presentation encourage questions from participants to facilitate a discussion about the examples and issues raised

### **Activity Option 3**

#### **Evaluating research practice large group discussion - (20-30 minutes)**

The purpose of the evaluating research practice exercise is to practice skills in thinking about issues, and developing and presenting an argument:

- Give out copies of the 'lay summary' systematic review example and review guideline to all participants
- Read through the systematic review summary with the group
- Using the steps outlined in the review guideline assess the example systematic review summary

- Point out that if you were doing this in reality then you would spend more time reviewing a review summary than you will today
- When you reach the final step hand out the strips of paper to all members of the audience and ask them to do a silent ballot
- They must write the score and description on the strip of paper to indicate whether or not they support the review
- Add up the ballot outcomes and announce the results
- Facilitate further discussion as needed

### **Activity Option 4**

#### **Evaluating research practice small group discussion - (20-30 minutes)**

The purpose of the evaluating research practice small group discussion is to practice skills in thinking about issues, and developing and presenting an argument:

- Give out copies of the 'lay summary' systematic review summary and the review guideline to all participants
- Ask the group to divided into 3 smaller groups and read out the systematic review summary in that group

- Using the steps outlined in the review guideline assess the systematic review summary
- When they get to the last point see if they can reach a consensus as a group as to how they will score the review - they need to note down their reasons for this score
- Ask people to return to the large group and listen to each group's score and reasons
- Facilitate further discussion as needed, particularly on why there were differences or similarities between the groups' decisions

## Activity 3

### What could user involvement in evaluating research mean for you?

There are several activity options. Each one has a suggested time allocation. This is a rough guide and can be extended according to the programme you have set up. Combine different activity options depending upon your chosen programme and your participants' needs. Suggested combinations are:

- Mini-presentation + small group discussion
- Mini-presentation + values walk

#### Things to get ready

- Print the Unit 5 - Part G PowerPoint files 3A - 3B in 'note pages' for you and, where appropriate, 'handouts' (two slides/page) of the presentation material for participants
- Whiteboard and coloured whiteboard markers
- Flipchart paper and markers

## Activity Option 1

### OVERHEADS 3A - 3B

#### Mini-presentation - Review practical issues in user involvement work (5-10 minutes)

The purpose of the mini-presentation is to build on knowledge and support skills thinking about issues. Cover these areas using the PowerPoint slides:

- Review the practical issues that are important to think and ask about before taking on user involvement work

#### TOP TIP

If this group has done Core 2 - Unit 2: Part C then they have covered this material. Remind them that they have already discussed these issues. If the group has not done this part of the training, it may be useful to go back and do Activity 1 and 2 with them first.

## Activity Option 2

#### Large group discussion - Plans for dealing with practical issues (30 minutes)

The purpose of the large group discussion is to demonstrate skills in thinking about issues and practice planning what to do next:



- As a large group, go through the 15 points in the mini-presentation **one at a time** using the following steps
- On the whiteboard draw a picture of a hot air balloon with a basket at the bottom
- Ask participants to name any practical issues that would concern people if they were involved in evaluating research - write them in the basket - these are the things that weigh the balloon down and stop it from flying
- Then ask participants to suggest ways of dealing with these issues - write them in the hot air balloon - these are the things that make the balloon rise and lead to a good experience of user involvement in evaluating research
- Assist participants with suggestions as needed for either concerns or ways of dealing with issues
- Make sure that there is a positive response to all of the concerns raised
- If you run out of room draw another hot air balloon on a piece of flipchart paper and continue

### Activity Option 3

#### Small group discussion - Plans for dealing with practical issues (30 minutes)

The purpose of the small group discussion is to demonstrate skills in analysing issues and practice planning action steps:

- Ask participants to divide into 4 groups - each group will have 3-4 of the 15 points in the mini-presentation to discuss using the following steps
- On the whiteboard draw a picture of a hot air balloon with a basket at the bottom - ask each group to copy this drawing on a piece of flipchart paper
- For the points their group are given they must name any practical issues that would concern people if they were involved in evaluating research - write them in the basket - these are the things that weigh the balloon down and stop it from flying
- Then for each of these same points they must suggest ways of dealing with these issues - write them in the hot air balloon - these are the things that make the balloon rise and lead to a good experience of user involvement in evaluating research

- Tell them to just deal with one point at a time - do the concerns and then the suggestions
- Circulate among the groups and assist participants with suggestions as needed for either concerns or ways of dealing with issues
- After 20 minutes bring the group back together and ask them to share their ideas - facilitate a discussion
- Make sure that there is a positive response to all of the concerns raised

### Activity Option 4

#### Values walk - Plans for dealing with practical issues (30 minutes)

The purpose of the values walk is to demonstrate skills in analysing issues and practice planning action steps:

- As a large group, go through the 15 points in the mini-presentation **one at a time** doing a values walk for each one based on a 'situation statement' that you create and read out
- For example, for 'dealing with personal issues' the statement could be: "You are on a systematic review team. You let the team coordinator know that the research topic will raise some sensitive issues for you. They discuss who your support

people are if this happens, and also offer to be available to you do discuss any issues."

- Ask participants to decide how concerned they would be about this situation, where 1 = not at all concerned and 10 = extremely concerned - make the line for this go from one side of the room to the other
- After participants stand on the line, check what range of numbers there are - ask people from different areas of the line to explain why they are there and what should happen to deal with the concern
- Assist participants with suggestions as needed, or ask other participants to offer ideas for ways of dealing with issues
- Make sure that there is a positive response to any concern raised
- Repeat this process for the other 14 points using a situation statement that you have created that is relevant to your group
- Facilitate further discussion as needed

## Personal exercises

Here are two exercises to help participants think about the ideas in Part G.

### Learning from examples

They will think about the example of user involvement for evaluating research in Activity 2 and answer these questions:

- What did they learn from the discussion that will help them in their future user involvement work?
- Is there anything else they want to learn about this stage? If yes, they will identify who can help them with this. This may be a Link Person in their organisation.

### Practical issues in evaluating research

They will review the practical issues in evaluating research discussed in Activity 3 and answer these questions:

- Identify which of the issues are of most concern to them: Do they have enough ideas about how to deal with these concerns? If no, they will identify who can discuss these issues with them further and help them plan strategies.

## Case examples

### 1. Cochrane Collaboration Peer Review

<http://www.cochraneconsumer.com/>

The Cochrane Collaboration is an international organisation that aims to help people make well-informed decisions about health care by preparing, maintaining and promoting the accessibility of systematic reviews of the effects of healthcare interventions. The NHS research and development levy has been a major source of support for the Collaboration's work.

Cochrane systematic reviews are prepared and maintained by the members of about 50 review groups. They cover most areas of health care from pregnancy and childbirth to stroke and schizophrenia. In addition, a Consumers and Communication Review Group is preparing reviews of the effects of interventions to improve information and communication among consumers and health professionals.

Consumers have made a significant contribution to all aspects of the Collaboration's work. They have:

- identified and defined topics for systematic reviews
- developed protocols and commented on their clarity

- searched journals to identify reports for inclusion in the Cochrane Controlled Trials Register
- prepared and maintained systematic reviews on their own or in partnership with others
- written easy-to-read abstracts of reviews

Through these contributions they have added a perspective to the Collaboration's work that would otherwise be missing.

There is still work to do in supporting users, carers and the public in these roles, but the Collaboration is continuing to work at its user involvement strategies so that more people can be involved and have a positive experience in doing so.

## Useful information for participants

### Useful websites

#### INVOLVE (formerly Consumers in NHS Research)

<http://www.invo.org.uk>

INVOLVE believes that members of the public should be involved at all stages of the R&D process. This means users, carers and the public are active participants, not just 'subjects' of research. INVOLVE supports and advocates for this to happen through working with the NHS, and providing training materials and guidebooks for health and social service staff, and users, carers and the public. They also monitor and assess the effects of public involvement in NHS, public health and social care research.

**Ease of reading:** Good

#### Folk.us

<http://latis.ex.ac.uk/folk.us/findex.htm>

This is the website of a user/carer and health and social service staff collaborative project. It aims to promote a research culture that is meaningfully controlled and influenced by service users, disabled people and informal



carers, so that research and implementation reflects the concerns of ordinary folk.

**Ease of reading:** Good

## National Institute for Clinical Excellence (NICE)

<http://www.nice.org.uk>

NICE is part of the National Health Service (NHS). It aims to provide users, carers, health professionals and the public with convincing, clear and reliable guidance on current 'good practice.' This includes information about health assessments and treatments, and the management of specific conditions. The work of NICE will help improve the quality of care that users and carers receive in the NHS.

**Ease of reading:** Average

## Useful reading

Royle, J., Steele, R., Hanley, B. & Bradburn, J. (2001). *Getting involved in research: A guide for consumers*. Winchester:

Consumers in NHS Research Support Unit. Available online at:

<http://www.invo.org.uk/pub.htm>

This is an excellent document with valuable information for users, carers and members of the public who want to become more involved in research. It describes the different stages

in the research process and how people can be involved. On the website there is also a document for health and social service staff called 'Involving the public in NHS, public health and social care: Briefing notes for researchers.'

**Ease of reading:** Good

## Sources used for the material in this part

Cochrane Collaboration (undated). *Consumer peer reviewing/peer refereeing*. Available online at:

<http://www.cochrane.no/consumers/Docs.aspx?wfID=24&lid=1&wdID=94>

Cochrane Collaboration (undated). *Writing systematic reviews*. Available online at:

<http://www.cochrane.no/consumers/Docs.aspx?wfID=37&lid=1&wdID=105>

Royle, J., Steele, R., Hanley, B. & Bradburn, J. (2001). *Getting involved in research: A guide for consumers*. Winchester: INVOLVE (Consumers in NHS Research Support Unit).

Available online at: <http://www.invo.org.uk/pub.htm>