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# Fast and frugal tools for shared decision-making: how to develop Option Grids

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## Abstract

Option Grids provide a fast and frugal approach to supporting shared decision-making, providing a promising solution to the implementation gap experienced by longer decision aids. On one page they present evidence-based summaries of the available condition-specific treatment options, alongside patients' frequently asked questions, helping patients to discuss the key features, risks and benefits of treatment options in relation to their personal values and preferences. They are designed to be sufficiently brief enough for use in clinical encounters and accessible enough to support a better dialogue between patients and clinicians. The Option Grid Collaborative was formed in 2009 and operates on a not-for-profit basis to manage the development process as well as provide support to around 65 multi-disciplinary stakeholders currently involved in developing Option Grids. The Option Grid website (www.optiongrid.org) hosts 13 Option Grids and there are a further 31 Option Grids in development as of January 2013. This paper provides guidance for individuals or teams who are interested in facilitating shared decision-making using short tools on how to develop an Option Grid.

## Keywords

Clinical equipoise, communication skills, evidence, option grids, multi-disciplinary approach, patient-centered care, patient involvement, person-centered medicine, preference-sensitive decisions, shared decision-making

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## Introduction

Brief decision support tools offer a promising solution to the problems of embedding shared decision-making in clinical practice [1]. Option Grids are one-page tables that compare a limited set of treatment options which are derived from patients' "frequently asked questions". In effect, these are short tools that summarize information about different ways to manage problems, yet do so from the patient perspective. They are designed to be brief enough so that they can be used in clinical encounters and accessible enough to support a better dialogue between patients and clinicians. In this article, we describe their underlying principles and present the protocol for the development of these tools.

### Why Option Grids?

The political and ethical imperative for shared decision-making is widely promoted [2-4]. A strong evidence base for the proven benefits of using patient decision support tools exists, demonstrating benefits for both patients (increased knowledge, self-determination and involvement in decision-making) and the population (likely reduced costs and litigations) [5-7]. However, despite enthusiastic policy and research support, the

adoption of shared decision-making in routine practice remains difficult. Patient decision support tools are often complex, costly to develop, take time to be completed and sometimes require a high level of health and computer literacy [8]. Recent attempts at implementing these tools have confirmed their 'lack of fit' with clinics' workflows and clinical pathways, resulting in poor spread and adoption in routine care [8-11]. Ultimately, these innovations, many of which have been developed and tested in academic contexts, fail to meet practical challenges and demands within routine clinical practice and do not pass the implementation test despite promising results in research contexts [12]. Alternative approaches and methods are therefore required.

## What are Options Grids?

Drawing on theories that propose that human decision-making is largely based on 'rules of thumb' – so called heuristics - or adaptive thinking [13], Option Grids are developed collaboratively with multidisciplinary clinical teams and offer a promising solution to existing implementation challenges.

Typically, Option Grids are one-page evidence-based summaries of the available condition-specific treatment or screening options, presented in a tabular format, listing patients' essential trade-offs or frequently asked questions [1,14]. The underpinning theory and rationale for Option Grids as well as guidance for their use in the clinical encounter is reported elsewhere [1,15]. The Option Grid website (www.optiongrid.org) hosts 13 Option Grids and there are a further 31 Option Grids in development as of the time of writing in January 2013. There has been considerable interest in Option Grids from both the medical and policy communities; the Option Grid website (www.optiongrid.org) received more than 3310 visitors in November and December 2012 and there were 2032 downloads of Option Grids. Early evidence from The Health Foundation 'MAGIC' Programme indicates that clinicians find these short tools helpful and are willing to adopt the grids beyond the duration of funded research [16]. The layout of the grid helps patients to discuss the key features, risks and benefits of treatment options in relation to their values and preferences [1]. The Option Grid Collaborative was formed in 2009 and operates on a not-for-profit basis to manage the development process as well as provide support to around 90 multidisciplinary stakeholders who are currently involved in developing Option Grids. Reflecting this interest, the aim of this article is to share our experience and provide practical structured guidance on how to develop an Option Grid for individuals or teams who are interested in facilitating shared decision-making using brief tools. All Option Grids are developed under a Creative Commons License that allows sharing and dissemination of the tools at no charge and without commercial use.

## Core principles underlying Option Grids

The Option Grid Collaborative has developed and published 13 Option Grids based on the 4 core principles discussed below.

### 1. Ensuring clinical equipoise

Option Grids are advocated in situations where there is clinical equipoise, that is, where the availability of reasonable, competing treatment or management options legitimates the expression and consideration of patients' preferences and justifies their involvement in decision-making [17]. Therefore, an Option Grid should only be developed in situations where there are 2 or more reasonable options routinely available and where it is important to inform patients about these choices and elicit their preferences.

### 2. Translating theory into practical interventions

The content of Option Grids is limited to one page. The information is therefore brief and limited to describing a small number of attributes. The format of Option Grids draws on models of bounded rationality (i.e., heuristics or rules of thumb) which postulate that most decisions are made under constraints, such as limited time or information. Using fast and frugal heuristics can yield decision outcomes that are as good, if not better, than those based on complex computations [18]. The use of a comparison table is informed by Svenson's differentiation and consolidation theory which proposes that decisions are made by progressively differentiating between competing options and categorizing options according to their attractiveness and importance [19,20]. Appendix 1 presents the Option Grid for breast cancer surgery options – others are published at: www.optiongrid.org.

### 3. A multidisciplinary collaborative process

A multidisciplinary approach is essential and collaboration with stakeholders from a range of disciplines including healthcare professionals, psychology and third sector organizations is encouraged. The National Institute for Health and Clinical Excellence (NICE)[1] collaborates on the development process to ensure that Option Grids align with their guidance where relevant. We enlist patient representatives and users to take part in the Option Grid development process and review the Option Grid content before publication on the website (see 'Step 7' in the section which follows).

[1] NICE is UK organisation providing independent, authoritative and evidence-based guidance on the most effective ways to prevent, diagnose and treat disease and ill health, reducing inequalities and variation in practice.

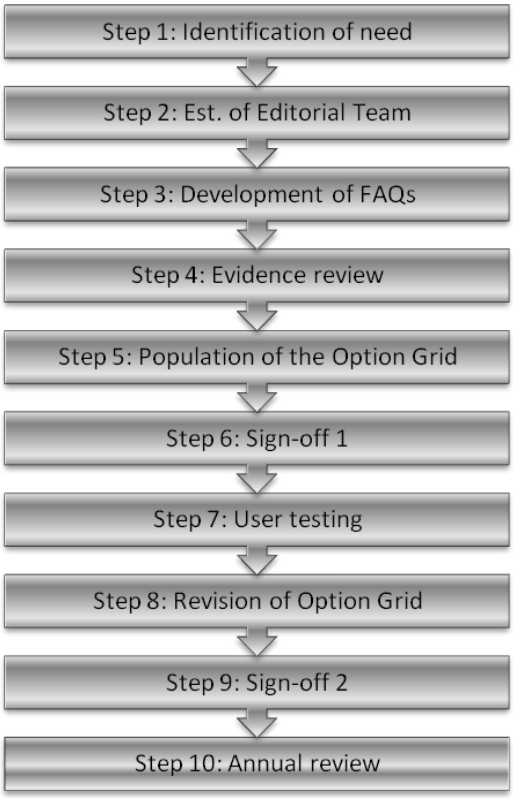
### 4. An iterative development process

Option Grid development is an iterative process of editorial input, user testing and regular revisions. The questions covered in the Grid may be amended or new options and questions added if this is justified by the latest literature review results or feedback from clinicians and patients. The Option Grid development process follows a cycle of improvement and user testing. The first version of an Option Grid released on the website is updated yearly, through pilot testing and users' feedback collected on the website.

## How to develop an Option Grid

Underpinned by the principles outlined above, the Option Grid Collaborative's approach to developing an Option Grid can be broken down into 10 steps (see Figure 1). This is an iterative process and Option Grids are updated when new evidence is published. The Option Grid development process can take around 6 months, with annual updates thereafter.

Figure 1 Option Grid development process




### Step 1: Identification of need

The topic for an Option Grid should be based on an identified need for decision support around specific preference-sensitive decisions. In practice, this means that reasonable competing treatment or management options will be available (e.g., for breast cancer surgery, lumpectomy with radiotherapy and mastectomy options are considered).

### Step 2: Establishment of editorial team

For each Option Grid, an editorial team is organized. The overall process is managed by a co-ordinator (Marie-Anne Durand) and by an Editor-in-Chief (Glyn Elwyn). A Lead Editor is appointed and is responsible for overseeing and co-ordinating the Option Grid development process, convening the editorial team and guiding them through each step, while consulting the Option Grid Co-ordinator and Editor-in-Chief for advice and guidance. An Editorial Team of between 4 and 8 multidisciplinary stakeholders with expertise in the condition area is then established. The editorial team may also include a member of the public who has experience of the condition or a representative from a relevant patient organization.

### Step 3: Development of frequently asked questions

The role of the Option Grid Collaborative (OGC) Editorial Team is to consider key statements or frequently asked questions to be included in the Option Grid, in light of the latest research evidence available in the literature. These key questions should aim to cover all essential factors and issues that the patient will need to consider when making a 'preference-sensitive' decision. For example, for breast cancer surgery treatment options, the Option Grid will compare issues relating to overall survival, loss of breast, cancer reoccurrence and recovery time. Where appropriate, the selection of key questions should be supported by clinical guidelines (e.g., in the UK, NICE guidance) and a review of the literature (e.g., needs assessment of the target population) (see Step 4), as well as user testing (see Step 7). The Editor-in-Chief and Lead Editor facilitate discussions among the editorial team over what questions/statements are included and aim to gain consensus about which issues should be addressed in the Option Grid.

### Step 4: Evidence review

The Lead Editor reviews the available evidence in light of the key statements/or questions using clinical guidance and high quality systematic reviews. Where feasible, a new systematic review may be performed in order to gather the required evidence-based information relating to each statement or question. However, when this is not feasible and published scientific evidence is not available, clinical consensus is sought in which the editorial team is consulted in order to agree the final selection and wording of the statement or question. The evidence for each Option Grid is recorded in a corresponding Evidence Document which is made available alongside each published Option Grid.

### Step 5: Populating the Option Grid

The Option Grid is populated with information drawn from the evidence review in line with the key statements/questions. Option Grids do not normally include direct recommendations, given the underlying rationale that patients' decisions are ideally determined by their own values, preferences and circumstances. However, when available, all Option Grids are aligned with clinical recommendations (e.g., the Glue Ear Option Grid is aligned to NICE guidance for otitis media with effusion) and include clear, evidence-based statements and outcome probabilities [21]. Option Grids are written in non-technical language and aim to achieve a Gunning Fog Index score of 6 [22].

### Step 6: Sign off 1

The Lead Editor and Editor-in-Chief moderate debate about the content of the Option Grid until a consensus is gained amongst the editorial team. When consensus is reached, the Editor-in-Chief signs off the Option Grid as ready for user testing.

### Step 7: User testing

User feedback is embedded in the Option Grid development process in order to refine its content and format and verify its relevance to lay people with the condition. The engagement of individuals who have personal experience of the condition presented in the Option Grid and the method of gaining their feedback is flexible according to available resources. For example, the Option Grid Collaborative has successfully accessed members of the public through patient organizations and charities. Methods of feedback can be face to face (e.g., interviews, focus groups) or remote (e.g., electronic and postal surveys or telephone interviews). Feedback covers issues such as understanding of the purpose of the Option Grid, whether content is clear and easy to follow both in terms of language and format and whether the questions include patient's essential concerns and trade-offs and are ranked in order of importance.

### Step 8: Revision of Option Grid

The Lead Editor shares user feedback with the Editorial Team, working with the Editor-in-Chief to moderate debate over any amendments that may be required and gain consensus about the final version.

### Step 9: Sign off 2

The Editor-in-Chief reviews the final version of the Option Grid and evidence document. Once both documents meet the Collaborative quality standards and have been signed off by the Editor-in-Chief, an International Standard Book Number will be issued. The Option Grid and evidence document will be published on the front page of the Option Grid website, as a PDF and made available open access on-line.

### Step 10: Annual review

Option Grids should be updated on a yearly basis, particularly if new evidence has become available. Members of the Editorial Team should be asked to renew their commitment to authorship of the Option Grid before being involved in the update. The literature review should be updated and all statements reviewed to verify their alignment with new peer-reviewed evidence or new/updated NICE guidelines. Feedback from patients and clinical teams who have used the Option Grid should also be considered and reviewed by the Editorial Team and a final version agreed and signed off by the Editor-in-Chief.

## Summary

In this article we provide a practical guide for individuals and teams who wish to develop evidence-based, user-driven short decision support tools in a systematic way. Clinician feedback and the demand for the development of Option Grids suggest that these tools may provide a solution to some of the problems encountered when attempting to embed shared decision-making in routine practice using longer decision aids [1]. Further evaluation is planned to assess the efficacy of Option Grids in facilitating shared decision-making and on improving informed patient choice. An Option Grid for osteoarthritis of the knee is currently being tested in a Phase 2 trial funded by the Bupa Foundation. Funding has also been received from NIHR to develop and test an Option Grid for breast cancer in older women in collaboration with the University of Sheffield, England, UK.

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# Appendix 1

option grid

## Breast cancer surgery

Use this grid to help you and your clinician decide whether to have mastectomy or lumpectomy with radiotherapy.

| Frequently asked questions | Lumpectomy with Radiotherapy | Mastectomy |
|---|---|---|
| **Which surgery is best for long term survival?** | Survival rates are the same for both options. | Survival rates are the same for both options. |
| **What are the chances of cancer coming back in the breast?** | Breast cancer will come back in the breast in about 10 in 100 women in the 10 years after a lumpectomy. Recent improvements in treatment may have reduced this risk. | Breast cancer will come back in the area of the scar in about 5 in 100 women in the 10 years after a mastectomy. Recent improvements in treatment may have reduced this risk. |
| **What is removed?** | The cancer lump is removed with some surrounding tissue. | The whole breast is removed. |
| **Will I need more than one operation on the breast?** | Possibly, if there are still cancer cells in the breast after the lumpectomy. This can occur in up to 20 in 100 women. | No, unless you choose breast reconstruction. |
| **How long will it take to recover?** | Most women are home within 24 hours of surgery | Most women are home within 48 hours after surgery. |
| **Will I need radiotherapy?** | Yes, for up to 6 weeks after surgery. | Radiotherapy is not usually given after a mastectomy. |
| **Will I need to have my lymph glands removed?** | Some or all of the lymph glands in the armpit are usually removed. | Some or all of the lymph glands in the armpit are usually removed. |
| **Will I need chemotherapy?** | You may be offered chemotherapy, but this does not depend on the operation you choose. | You may be offered chemotherapy, but this does not depend on the operation you choose. |
| **Will I lose my hair?** | Hair loss is common after chemotherapy. | Hair loss is common after chemotherapy. |

You can find more information at www.bresdex.com

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**For more information about how Option Grids are developed, visit:** http://www.optiongrid.org/about.php
**Evidence document:** http://www.optiongrid.org/resources/breastcancer_evidence.pdf

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