



# Principles for good evidence synthesis for policy

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Medical Sciences

# Introduction

These principles for good evidence synthesis for policy have been developed by the Royal Society and Academy of Medical Sciences, with input from a range of experts. They outline the fundamental features of good evidence synthesis regardless of the precise timeframe, topic or methods.

They are intended as both a set of guidelines for synthesising evidence and a checklist against which the quality of the synthesis process and results can be assured.

We encourage researchers, policymakers, brokerage organisations and others to apply these principles when undertaking or commissioning evidence synthesis to inform policy. By promoting best practice among a range of organisations and sectors the role of high-quality synthesised evidence in supporting well-founded policy decisions and public debate can be maximised.

For more information please visit  
**[royalsociety.org/evidence-synthesis](https://royalsociety.org/evidence-synthesis)**



**Image:** Many policy challenges, such as air quality, require evidence from a range of sources and disciplines. Evidence synthesis is required to draw together a large amount of information and turn it into accessible, usable knowledge © chrismhs.

## Inclusive



- Involves policymakers and is relevant and useful to them.
- Considers many types and sources of evidence.
- Uses a range of skills and people.

## Rigorous



- Uses the most comprehensive feasible body of evidence.
- Recognises and minimises bias.
- Is independently reviewed as part of a quality assurance process.

## Principles for good evidence synthesis for policy

## Accessible



- Is written in plain language.
- Is available in a suitable timeframe.
- Is freely available online.

## Transparent



- Clearly describes the research question, methods, sources of evidence and quality assurance process.
- Communicates complexities and areas of contention.
- Acknowledges assumptions, limitations and uncertainties, including any evidence gaps.
- Declares personal, political and organisational interests and manages any conflicts.



## Inclusive



Evidence synthesis that involves policymakers throughout – from the design of the research question to the interpretation of findings – is most likely to yield significant policy insights. Keeping the process inclusive makes it more likely that it will identify the full range of relevant evidence types, sources and expertise. Teams of contributors should have a mix of skills in synthesis and could include some or all of the following: policymakers, practitioners, subject experts, statisticians, experts in databases and search terms, objective writers (usually non-subject experts), and independent reviewers. In practice, policymakers may be less involved during parts of the process if the aim is to scan the horizon for future priorities or to synthesise evidence on a topic that is yet to attract major policy interest.

## Rigorous



Researchers should be as comprehensive as possible in identifying all the relevant sources and types of evidence on the topic within the timeframe and with the available resources, before critically appraising the quality of the evidence and analysing it rigorously. Those carrying out the synthesis should acknowledge potential sources of bias and aim to minimise their influence. Many of the principles outlined here help to minimise bias, or to disclose and explain any potential biases that exist. Given the challenges of combining different forms of evidence, independent expert scrutiny is always essential, although its scale and nature will need to be proportionate.

## Transparent



Synthesised evidence that is transparent is likely to be more credible, replicable and useful. A clearly described study design should include the search terms used, the databases and other evidence sources considered and when they were accessed, and the criteria that determine which studies are and are not included and why. Such measures make the synthesised evidence more useful in its own right and as a basis for undertaking further synthesis. In addition, explicitly acknowledging complexities, areas of strong consensus and contention – particularly where there are fundamental disagreements within the project team – is essential for a policymaker attempting to interpret the findings, and is important for ensuring well-founded public debate more broadly.

## Accessible



For synthesised evidence to be both useful and used it must be accessible. To be useful to the policymaker, either the main report or, if necessary, a short summary should be written in plain language by a writer who is experienced in presenting information clearly, concisely and as objectively as possible. To ensure the synthesised evidence is used, it must – of course – be made available in time to contribute to the decision-making process. In all but the most confidential situations, the full text and search terms should be published in an open access repository to allow the synthesised evidence to be extended, reproduced or updated in light of new evidence.



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- Promoting excellence in science
- Supporting international collaboration
- Demonstrating the importance of science to everyone

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- UK and global health is improved by the best research.
- The UK leads the world in biomedical and health research, and is renowned for the quality of its research outputs, talent and collaborations.
- Independent, high quality medical science advice informs the decisions that affect society.
- More people have a say in the future of health and research.
- Our work focusses on four key objectives, promoting excellence, developing talented researchers, influencing research and policy and engaging patients, the public and professionals.

#### **For further information**

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