Cochrane Agenda and Priority setting Methods Group

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Outline

- **What is research priority setting?**
- Why do we need research priority setting? Decision making process vs Quality of research
- Different types of research priority setting?
- Evidence in research priority setting methods
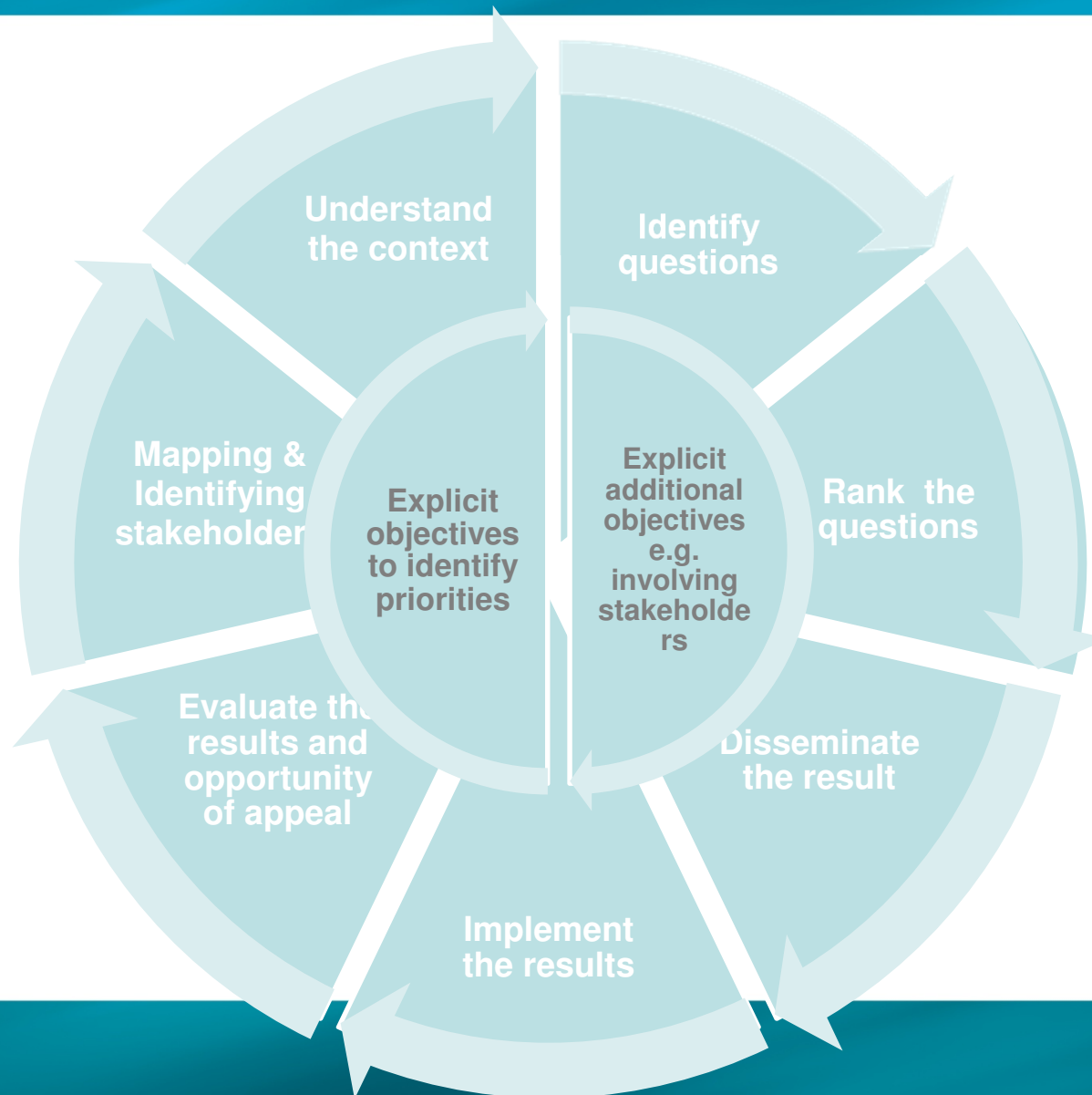- The Cochrane Methods Group

What is research priority setting?

Health research priority setting processes assist researchers and policymakers in effectively targeting research that has the greatest potential public health benefit.
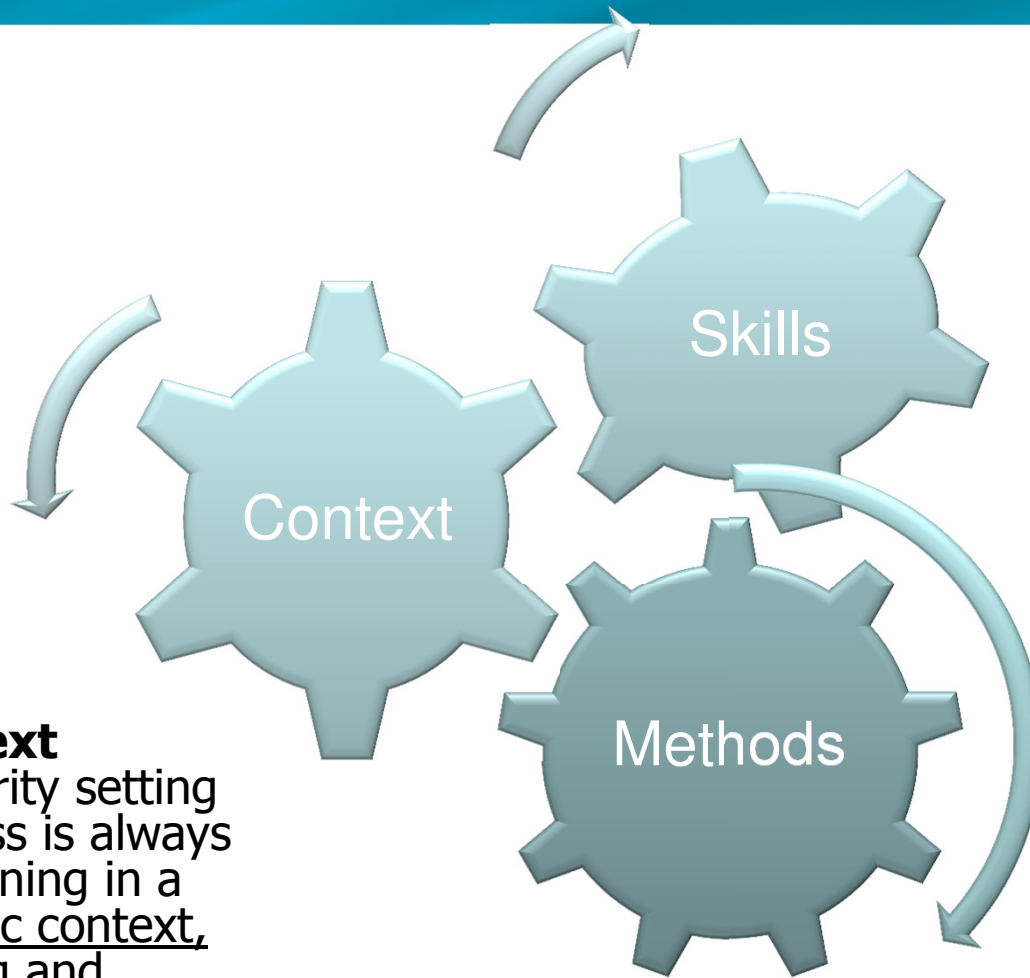
Viergever RF, Olifson S, Ghaffar A, Terry RF. A checklist for health research priority setting: nine common themes of good practice. Health Res Policy Syst. 2010 Dec 15;8:36.

Research priority setting

Understand the context

Identify questions

Mapping & Identifying stakeholder

Explicit objectives to identify priorities

Explicit additional objectives e.g. involving stakeholders

Rank the questions

Evaluate the results and opportunity of appeal

Disseminate the result

Implement the results

Research priority setting

Context
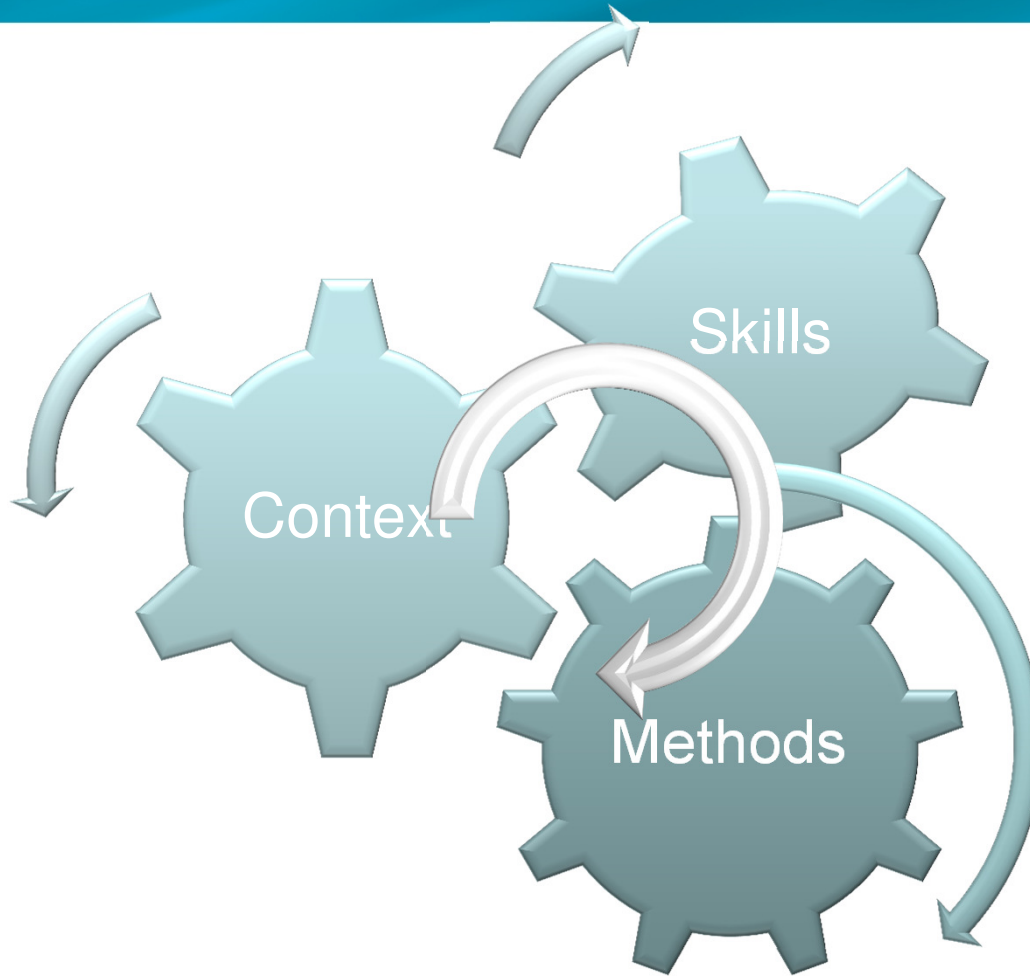A priority setting process is always happening in a specific context, setting and population.

Skills
Finally, a priority setting process needs specific skills to coordinate and chair the session to balance conflicting interest between different groups and to manage the process to ensure that the process goes on in an inclusive, open and transparent way and meets the objective of the priority setting process. Skills also include appropriate communication and relationship building with the stakeholders. It should ensure that the stakeholders feel comfortable enough with the methods and skills used in the priority setting processes

Methods
In order to achieve the objectives of the priority setting process, the methods used in the process needs to be evidence based, transparent and democratic. The methods need to ensure that the objectives of the process are achieved, the principle of the process has been considered and the methods should be defendable. Methods need to be high quality and compatible with the context to accept or challenge it.

Research priority setting

Principles

Some priority setting methods might have certain principles. Principles intend to harmonize the context, skills and methods to align with certain objectives and conceptual frameworks and ensure that all the stakeholders have the same understanding in the process.

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Decision making vs Quality assurance

As a decision making tool

Organizational aspect

- Have a systematic approach to start conducting or funding research
- A way to engage with stakeholders& funders
- Having a more accountable, defendable approach to manage research
- Avoidance of wasting money

Individual aspect

- Identify questions that researchers wouldn't come up with by themselves
- Depending on the data and stakeholders involved, priority setting is a systematic approach to collect "choices" of thoses individuals

Decision making vs Quality assurance

„Maybe sometimes it's the questions that are biased, not the answers," John Ioannidis

- Can "research questions" be biased? *Can research questions or group of research questions formulated in a specific way based on their potential results? On can research questions be skewed inappropriately in one direction?*

  - *Pharmaceutical companies designing research questions comparing drugs-placebo instead of drug – common treatment or design certain structure for a research question (surrogate outcomes versus patient relevant outcomes!)*
  - *MSc students might do something similar to find questions that get quickly easy and positive answers*

Decision making vs Quality assurance

„Biased/Skewed research agenda"

- The example on trials on abundant studies on drug-placebo and limited studies on drug-common therapy also applies here.
- Lack of research on important clinical questions with everyday implications (which affects 80% of the dental research literature) [Fashion!]
- Duplication of research in one area and lack of research in another area

Decision making vs Quality assurance

„Can a systematic approach to identify and prioritise research questions not only inform decisions but also minimize bias in shaping research questions or setting a research agenda"

„Can a systematic approach to identify, scope, map and prioritise research questions not only inform decisions but also demonstrate and minimize bias in shaping research questions or setting a research agenda"

Decision making vs Quality assurance

„Research starts and ends with systematic reviews! Iain Chalmers"

Systematic reviews & Research maps can be used to scope and map research and demonstrate the gaps in research. They demonstrate gaps but can they address bias in research questions/agenda?

Research gaps vs Research needs

Some research priority setting exercises might be able to minimize bias in research questions and agenda

Decision making vs Quality assurance

Currently not every research question starts with a research priority setting exercise!

Shall we recommend that this changes?

Maybe not all initiate by a prioritisation exercise but the process of shaping a research questions should be informed by some systematic and accountable approach which could be a research priority setting exercise

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Types of research priority setting?

Two broad approaches to set priorities:

- **Technical assessment** dominated by quantifiable data (epidemiological and cost data)
- **Interpretive assessments** dominated by consensus views of informed participants.

Two main methodological steps:

Identifying research priorities and then ranking them.

Lomas J, Fulop N, Gagnon D, Allen P. On being a good listener: setting priorities for applied health services research. Milbank Q. 2003;81(3):363-88. Review.

Types of research priority setting?

Two approaches to identify research priorities:

Compound approaches – compile existing data
- ENHR
- Burden of Disease
- 3D Combined Approach Matrix
- Child Health Priorities Approach

Foresighting techniques – insight in future health priorities
- Visioning
- Scenario creation
- Delphi
- Road maps

Montorzi G, de Haan S, IJsselmuiden C. Priority setting for Health Research: A management process for countries. Council on Health Research for Development (COHRED). Draft version Dec 2009.

Types of research priority setting?

Two approaches to rank research priorities:

Direct valuation techniques
• Comparison in pairs (weighting against each other)
• Anchored rating scale

Indirect valuation techniques
• Hanlon methods
• ENHR method

There are further methods…

Montorzi G, de Haan S, IJsselmuiden C. Priority setting for Health Research: A management process for countries. Council on Health Research for Development (COHRED). Draft version Dec 2009.

Good practice in priority setting

Preparatory work
1. Context
2. Use of comprehensive approach
3. Inclusiveness
4. Information gathering
5. Planning for implementation

Decision on priorities
6. Criteria
7. Methods for decision on priorities

After prioritisation
8. Evaluation
9. Transparency

Viergever RF, Olisfoson S, Ghaffar A, Terry RF. A checklist for health resaerch priority setting: nine common themes of good practice. Health Research Policy and systems. 2010; 8: 36.
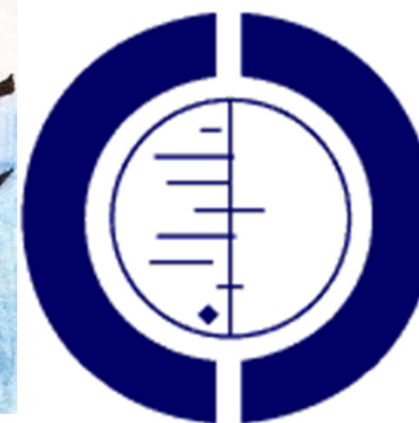
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Reviews of reviews?

- Consistency, efficiency, objectivity, responsiveness and transparency are important factors to be considered
- Criteria for establishing priorities needs to be used transparently.
- Data used to make judgements need to be transparently reported (and also if it is lacking or unmeasured)
- A well-structured and fair process needs to be used to involve stakeholders. Group processes need to ensure the full participation of stakeholders.

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Methods group

The Cochrane Agenda Setting and Priority setting Methods group aims to inform the Cochrane entities on the empirical evidence available for methods to set research agendas or priorities, in particular (but not limited) for methods to set a research agenda for systematic reviews. In addition to this, it will endeavour to serve as a forum for discussion, connecting interested people from outside the Cochrane Collaboration.

Methods group

Secondary objective:

The Methods group will also apply for funding and grant proposals to conduct empirical studies to develop an evidence base for the methodology of setting a research agenda and research priority setting.

NATURE | NEWS

Citizen science goes 'extreme'

Researchers push for wider use of community-generated data in science and poli

Katherine Rowland

17 February 2012

In the Congo Basin, Bayaka pygmies patrol their forests with handheld tracking devices. Using the devices to record instances of poaching, industrial roads and illegal logging, they map their landscape, documenting the course of deforestation and harmful development.

The project is part of an emerging field that its champions describe as the 'new wave' of citizen science. With endeavours ranging from air-pollution assessments in Europe to chimpanzee counting in Tanzania, the next generation of citizen science attempts to make communities active stakeholders in research that affects them, and use their work to push forward policy changes. This is one of the main points of focus of the London Citizen Cyberscience Summit being held this week at the Royal Geographical Society and University College London.

Cameroon Baka in the Nki National Park map their territory using handheld Global Positioning System devices to track illegal logging and poaching.

print

email

Although researchers have been calling on amateurs and enthusiasts for decades to aid in collecting and processing large volumes of data, **the latest approaches aim to enlist the public in helping to shape research questions**, says Francois Grey, a physicist at Tsinghua University in Beijing and coordinator of the Citizen Cyberscience Centre in Geneva, Switzerland. Grey, an organizer of the summit, maintains that communities can play a valuable part in setting the agenda for scientific investigations.

Join us on our journey…

http://capsmg.cochrane.org