

Context

- The [Global Commission on Evidence to Address Societal Challenges](#) (the Global Evidence Commission), which began in 2022 as a grassroots effort to improve the use of research evidence, prioritized action to put evidence at the centre of everyday life.
- To further understand the strategies that can be used to put evidence at the centre of citizens' everyday lives, the Global Evidence Commission consulted with subject-matter experts and citizen partners, including the [Citizen Leadership Group](#) and a [series of citizen panels](#), and developed a list of five potentially promising strategies that could help to achieve this aim:
- This living evidence profile (LEP) addresses **strategy 3**, which focuses on helping citizens judge what others are claiming or find reliable information and includes several sub-strategies that could be used to help ensure citizens have access to the skills and information they need in decision-making scenarios.
- These sub-strategies include developing tools and training for citizens to develop their critical-thinking skills, publishing very short citizen-friendly materials summarizing the best evidence on different topics using everyday language, promoting the use of strategies that journalists and science communicators can use to counter misinformation, and building a culture where evidence is understood, valued and used.
- This LEP is the third in a series of five evidence syntheses that collectively aim to examine what is known from the best-available evidence documents about the full list of strategies developed by the Global Evidence Commission for putting evidence at the centre of everyday life, including:
 1. make evidence-based choices the default or easy option (LEP 9a)
 2. make evidence available to citizens when they are making choices (LEP 9b)
 3. help citizens judge what others are claiming or find (and receive) reliable information on a topic (this synthesis, LEP 9c)
 4. engage citizens in asking questions and using new or existing evidence to answer them (LEP 9d)
 5. help health and social systems learn and improve rapidly and contribute to a society-wide transformation (LEP 9e).

Living Evidence Profile #9

Putting evidence at the centre of everyday life: Helping citizens judge what others are claiming or find reliable information

8 December 2025

[MHF product code: LEP 9c]

Box 1: Evidence and other types of information

+ Global evidence drawn upon



Evidence syntheses and single studies selected based on relevance, quality and recency of search

+ Additional forms of evidence used



Qualitative insights



Data analytics

* Additional notable features



Prepared with input from three citizen partners

Question

What is the best-available evidence related to helping citizens judge what others are claiming or find (and receive) reliable information on a topic?

High-level summary of key findings

- We identified 29 evidence documents (25 evidence syntheses, three single studies and one protocol) across the four sub-strategies listed in the framework below related to helping citizens judge what others are claiming or find (and receive) reliable information on a topic.
- The evidence identified highlighted that skill-based and content-based teaching approaches are strongly effective at improving citizens' critical thinking skills, while plain-language summaries that avoid complex language and use active rather than passive voice can improve the understanding, accessibility and communication of research.
- We also found evidence documents that showed citizen-science initiatives that enable partnerships with citizens as part of scientific research and knowledge production are more likely to be successful if the engaged citizens have knowledge about and experience with engaging in research, institutions are motivated to engage citizens, efforts are well-organized and supported with adequate resources, and the interactions between citizens and institutions are maintained throughout the research process.

Box 2: Approach and supporting materials

For this living evidence profile we engaged citizen partners, who read earlier drafts to ensure the summary of the evidence was presented with clear and understandable language from their perspective.

We identified evidence addressing the question by searching Health Systems Evidence, Social Systems Evidence, PubMed, Web of Science, ProQuest and EBSCOhost search. All searches were conducted in April 2024. The search strategies used are available upon request as a supplementary document. In contrast to evidence-synthesis methods that provide an in-depth understanding of the evidence, this profile focuses on providing an overview and key insights from relevant documents.

We searched for full evidence syntheses (or synthesis-derived products such as overviews of evidence syntheses) and protocols for evidence syntheses. We appraised the methodological quality of evidence syntheses that were deemed to be highly relevant using AMSTAR. AMSTAR rates overall quality on a scale of 0 to 11, where 11/11 represents a review of the highest quality. The AMSTAR tool was developed to assess reviews focused on clinical interventions, so not all criteria apply to evidence syntheses pertaining to delivery, financial or governance arrangements within health systems or to broader social systems.

We anticipate completing a jurisdictional scan that will be included in the next update to this LEP.

A separate appendix document includes:

- 1) methodological details (Appendix 1)
- 2) details about each identified evidence synthesis (Appendix 2)
- 3) details about each identified single study (Appendix 3)
- 4) syntheses that were excluded in the final stages of review (Appendix 4)
- 5) references.

Framework to organize what we looked for

The strategy of helping citizens judge what others are claiming or find (and receive) reliable information on a topic was categorized into four sub-strategies:

- developing tools and training for citizens to develop their critical-thinking skills
- publishing very short citizen-friendly materials (documents, infographics, videos, podcasts) summarizing the best evidence on different topics using everyday language
- promoting the use of strategies that journalists and science communicators can use to counter misinformation (e.g., fact-checking services, 'pre-bunking' strategies, 'truth-sandwich' strategy)

- building a culture where evidence is understood, valued and used.

We organize our findings around each sub-strategy, with a specific focus on what we know about the:

- benefits of the approach
- challenges/harms when using the approach
- costs and/or cost-effectiveness of the approach
- adaptations that must be made when using the approach
- views about and experiences with the approach

What we found

For this LEP, we identified a total of 29 evidence documents (25 evidence syntheses, three single studies and one protocol) relevant to helping citizens judge what others are claiming or find evidence on a topic. There are four sub-strategies identified under this approach. Below, Table 1 provides a high-level summary of our key findings, and the sections that follow provide a detailed description of our findings for each sub-strategy.

Table 1: What we know from identified evidence documents about helping citizens judge what others are claiming or finding reliable information

	What does the evidence say about strategy #3: Helping citizens judge what others are claiming, or more generally find evidence on a topic? And, in particular, what do we know about the: • benefits of the approach? • challenges/harms when using the approach? • costs and/or cost-effectiveness of the approach? • adaptations that must be made when using the approach? • views about and experiences with the approach?
Developing tools and training for citizens to develop their critical-thinking skills	• Skills-based and content-based teaching approaches have been found to be strongly effective at improving the critical-thinking skills of citizens [benefits] • Adaptations to training for citizens should consider the teaching methods used, individuals' learning styles and preferences, and contextual factors such as the learning environment [adaptations] • No key insights about challenges/harms, costs and/or cost-effectiveness, or views about and experiences with the approach
Publishing very short citizen-friendly materials (documents, infographics, videos, podcasts) summarizing the best evidence on different topics using everyday language	• Plain-language summaries of evidence that use active rather than passive voice and that are void of complex language can improve the understanding, accessibility and communication of research [benefits] • The plain-language summaries of Cochrane reviews are examples of how evidence can be presented in a citizen-friendly way with different forms of simple descriptive and numerical presentations [adaptations] • No key insights about challenges/harms, costs and/or cost-effectiveness, or views about and experiences with the approach

Promoting the use of strategies that journalists and science communicators can use to counter misinformation (e.g., fact-checking services, ‘pre-bunking’ strategies, ‘truth-sandwich’ strategy)*	• Education strategies can be effective at changing the beliefs of citizens exposed to misinformation [benefits] • Monitoring and fact-checking strategies have proven to be effective at stimulating intentions to take protective actions [benefits] • Credibility labelling can be used to assist citizens in evaluating a given message or accurately identifying misinformation [benefits] • Trusted peer role models using social media ads can be effective at countering misinformation and promoting accurate information [benefits] • Financial incentives may not be beneficial in reducing people’s willingness to share misinformation [costs and/or cost-effectiveness] • No key insights about challenges/harms, adaptations or views about and experiences with the approach *Source: Living evidence synthesis on mitigated health-related misinformation
Building a culture where evidence is understood, valued and used	• Creating a culture where citizens can review, understand and use evidence enables citizens to positively contribute to the research process and to increase their knowledge and evidence-based thinking [benefits] • Consideration should be given to the applicability and feasibility of citizen-science initiatives and the ways that citizens’ insights will be incorporated into the research process [challenges/harms] • To improve citizen involvement in research, evidence suggests creating a clear recruitment plan, using different engagement methods and tools, providing training for citizens, establishing clear guidelines for the research process, and ensuring quality checks by researchers [adaptations] • No key insights about costs and/or cost-effectiveness or views about and experiences with the approach

Key findings from included evidence documents

In the category of helping citizens judge what others are claiming, we identified a total of 29 evidence documents (25 evidence syntheses, three single studies and one protocol) relevant to the four sub-strategies.

Sub-strategy 1: Developing tools and training for citizens to develop their critical-thinking skills

For the first sub-strategy, two evidence syntheses found that both skill-based and content-based teaching approaches are strongly effective at improving the critical-thinking skills of citizens, and particularly for students.(1; 2) According to the available evidence, the effectiveness of teaching programs depends on an individual’s learning preferences and motivation, the teaching methods used in programs, and contextual factors such as the learning environment and supportive learning initiatives.

We did not identify any evidence documents for this sub-strategy that explicitly focused on challenges/harms, costs and/or cost-effectiveness, or interest holders’ views about and experience with developing tools and training for citizens to develop critical thinking skills.

Sub-strategy 2: Publishing very short citizen-friendly materials (documents, infographics, videos, podcasts) summarizing the best evidence on different topics using everyday language

Two evidence syntheses, three single studies and one protocol focused on the second sub-strategy. According to one evidence synthesis, plain-language summaries that avoid complex language and use active rather than passive voice can improve the understanding, accessibility and communication of research.(3) The other evidence synthesis concluded that while plain-language summaries aim to improve the accessibility, communication and understanding of research in general, the empirical evidence on the criteria for high-quality plain-language summaries remains scarce.(4) Two of the three single studies focused on plain-language summaries of Cochrane evidence syntheses as examples of patient- and clinician-friendly materials capturing health-related evidence from reviews in a simple way using descriptive and numerical presentations.(5; 6) One of these studies highlighted that, while these plain-language summaries are helpful in general, there are improvements that can be made, including providing more information about the study characteristics of the Cochrane syntheses and using simpler and clearer language.(6) The third single study concluded that these kinds of plain-language tools should be developed with the input of multidisciplinary investigators and patients so that they are helpful and supportive for patients and clinicians making decisions about care.(7)

Evidence documents were not identified for this sub-strategy that specifically addressed challenges/harms, costs and/or cost-effectiveness, or interest holders' views about and experience with citizen-friendly materials summarizing evidence.

Sub-strategy 3: Promoting the use of strategies that journalists and science communicators can use to counter misinformation (e.g., fact-checking services, 'pre-bunking' strategies, 'truth-sandwich' strategy)

For evidence focused on the third sub-strategy, we drew on the McMaster Health Forum's living evidence synthesis on types of misinformation and interventions to address it.(8) This related but stand-alone evidence synthesis analyzed several types of studies, including randomized controlled trials, quasi-experimental studies, implementation research studies, cross-sectional studies, and other types of observational study. Several strategies to counter misinformation were identified, including monitoring and fact-checking, campaigns to counter misinformation, credibility labelling, and strategies that are educational, economic, legislative, narrative and technical. Monitoring and fact-checking strategies were found to be effective at stimulating intentions to take protective actions, and credibility labelling was useful for assisting citizens in evaluating a given message or accurately identifying misinformation. Education strategies proved to be effective at changing the beliefs of people exposed to misinformation, and campaigns focused on countering misinformation, including social media campaigns involving trusted peer role models, were beneficial for promoting accurate information and reducing beliefs in misinformation. Additionally, the evidence synthesis pointed out that neither financial nor legislative incentives may have a beneficial effect in reducing people's willingness to share misinformation. More details about the impact of these strategies can be found in the living evidence synthesis linked to above.

We did not identify any key insights about challenges/harms, adaptations, or interest holders' views about and experiences with this approach.

Sub-strategy 4: Building a culture where evidence is understood, valued and used

Finally, regarding the fourth sub-strategy on building a culture where evidence is understood, valued and used, we identified 21 relevant evidence syntheses that mostly focused on citizen-science initiatives. Citizen science enables partnering with citizens in scientific research and knowledge production, and the evidence we reviewed provided insight into the use of citizen science in several research areas, including health and well-being, climate action and the environment, and education and student learning. Some evidence syntheses acknowledged the need for an open mind, mutual respect and flexibility across research phases in citizen science, and attributed success in implementing citizen science initiatives to the knowledge and experience of citizens with engaging in research, institutions' motivation to engage citizens, availability and organization of resources, and the interactions between citizens and institutions.(9-11) Other evidence documents indicated that citizen-science initiatives had positive impacts on not only the research process but also citizens themselves when contributing to problem-solving.(12-15) One evidence synthesis explored the potential of the use of mobile apps in citizen science and concluded that apps can be effective at increasing the availability and convenience of data collection, enabling sustainable and consistent data tracking, increasing citizen

knowledge, and empowering citizens to participate in causes that are meaningful to them.(16) Suggestions from some identified evidence syntheses to improve citizen involvement in research included creating a clear plan for recruitment, using different engagement methods (e.g., citizen focus groups, digital tools, patient panels), providing training for citizens, having clear guidelines on participants' roles and responsibilities, and ensuring quality checks by researchers during the research process.(17-20)

Several evidence syntheses explored the impacts of environmental citizen-science initiatives and found them to be effective at increasing evidence-based thinking among citizens about environmental sciences and allowing citizens to contribute to data collection in environmental research.(15; 18; 21) Unconventional citizen-science contributors, such as tourists and students, have been identified as potentially impactful but untapped sources of citizen knowledge that can have positive impacts on certain types of research (e.g., environmental, student learning).(22; 23) However, consideration needs to be given to the potential applicability and feasibility of citizen-science approaches before they can be more widely used, as well as the ways citizens' insights will be incorporated into formal decisions.(18; 19; 24) Finally, at the global level, some evidence documents highlighted that citizen science can contribute to the work of the United Nations' Sustainable Development Goals by facilitating the measurement of goal indicators and by increasing the availability, quality, granularity, applicability and timeliness of health and well-being related data to mobilize action.(25; 26)

While we did identify several benefits and challenges of citizen-science initiatives described above, we did not identify any evidence documents that explicitly focused on costs and/or cost-effectiveness or interest holders' views about or experiences with building a culture where evidence is understood, valued and used.

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