

## 6.1 Global public goods needed to support evidence use

A paradox keenly felt by those supporting the use of evidence to address societal challenges is that there are both significant gaps in the global public goods that evidence intermediaries rely on, and significant waste arising from how these global public goods are produced and how their use is supported.

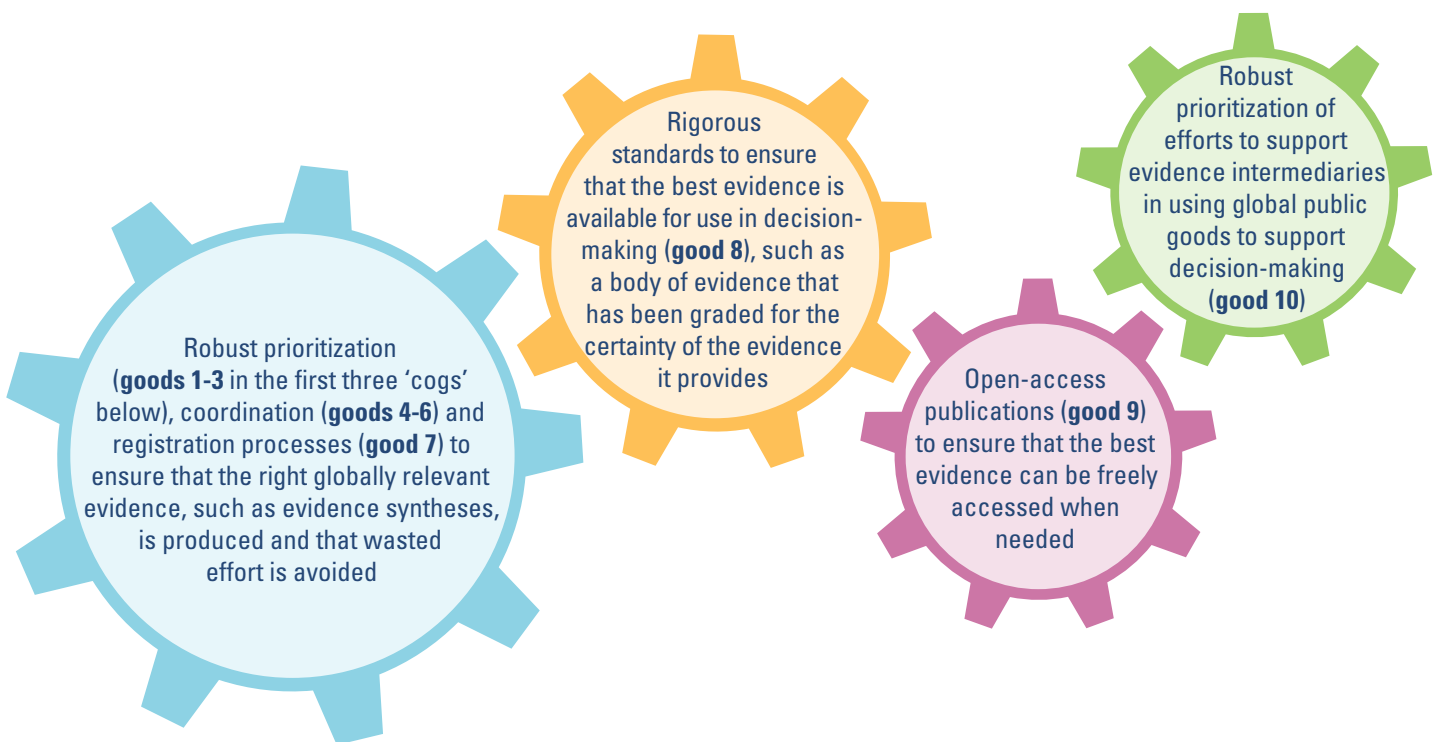
A global public good is:

- non-rival – one person ‘consuming’ it does not reduce its availability to others
- non-excludable – no one can be denied access.

Reading a Cochrane or Campbell evidence synthesis – with its bottom-line statements about what is known, based on all critically appraised studies that have addressed the same question, including how this may vary by groups and contexts – does not make the synthesis any less available to others. Anyone can access PROSPERO to see if others have already registered a protocol for an evidence synthesis on a specific topic and, if not, to register a protocol to fill this gap.

Some leaders in international development have called for expanding the notion of global public good to include global public functions (e.g., cross-national coordination) that support the type of international collective actions needed to address supranational societal challenges.(1) This broader definition includes global convening to support prioritization and other processes that underpin the efficient production of global public goods. We adopt this broader framing here.

Evidence-related global public goods and related functions include:



Yet purveyors of global public goods like Cochrane and Campbell have not been supported at a proper scale, leaving many gaps in the global evidence base. The PROSPERO synthesis-registration platform did not have the resources to follow up with the 138 teams that registered a COVID-19 topic already registered by one of 57 other teams, especially the 14 teams addressing hydroxychloroquine and seven addressing tocilizumab. As a result, as many as 138 syntheses of the best global evidence about COVID-19 were duplicated work in the September 2020 to August 2021 period. And since only a small fraction of protocols are ever registered, this is a significant undercount of the waste in the COVID-19 evidence response.

At least 10 types of global public goods and related functions are needed to support the use of evidence to address societal challenges. These are listed below, along with examples drawn from the health sector and (where possible) from other sectors. It is critically important that international organizations like the World Bank, UNICEF, WHO and other funders invest in these global public goods and related functions within their own agencies and with key external partners. It is also critically important that national government policymakers and other funders invest in local (national or sub-national) efforts to adapt these global public goods to their context and to complement them with the best local evidence. Without such investment, the cost of ‘free riding’ will continue to be significant gaps and significant waste.

### 1 Harmonization of evidence requirements for regulatory and other assessments globally *(to streamline evidence needs)*

- International Council for Harmonisation of Technical Requirements for Pharmaceuticals for Human Use (ICH) for evidence required to ensure the safety, effectiveness and high quality of prescription drugs
- Independent Panel on Climate Change for evidence required for its periodic assessment reports about human-induced climate change, its impacts, and possible response options

### 2 Listening and foresight *(to anticipate and make sense of emerging issues for which evidence may be needed globally)*

- The COVID-19 Evidence Network to support Decision-making (COVID-END) global horizon-scanning panel for emerging issues related to COVID-19-related public-health measures, clinical management, health-system arrangements, and economic and social responses, as well as international HealthTechScan (i-HTS) for emerging issues related to health technologies

### 3 Prioritization of globally needed evidence *(to ensure pressing evidence needs are recognized)*

- James Lind Alliance for patients, carers and clinicians to prioritize the top 10 unanswered questions or evidence uncertainties
- An application of the same approach for students, parents and teachers to prioritize the top 10 unanswered questions in the field of English as an additional language (2)

### 4 Coordination of syntheses of the best evidence globally *(to fill gaps while avoiding duplication, as with cogs 5 and 6)*

- Cochrane’s COVID reviews for the production and editorial review of a set of rapid syntheses addressing prioritized COVID-19 questions

### 5 Coordination of other types of evidence that is best produced globally or at least regionally

- Coalition for Epidemic Preparedness Innovations (CEPI) for vaccine development and Joint Programming Initiative on Antimicrobial Resistance (JPIAMR) for a One Health approach to antimicrobial resistance

### 6 Coordination of globally relevant living evidence products that can be used or adapted locally

- COVID-NMA for living meta-analyses of drug treatments, prophylaxis and vaccines for COVID-19 (and it had some success in sharing data with other groups attempting something similar)

### 7 Registration of plans to produce or synthesize evidence *(to avoid duplication in evidence production and minimize reporting bias)*

- International Clinical Trials Registry Platform for the prospective registration of one type of health evaluation (randomized clinical trials) and PROSPERO for the prospective registration of health evidence syntheses
- PROCEED (in development by the Collaboration for Environmental Evidence) for the prospective registration of evidence syntheses of environmental evidence

### 8 Standards setting and support *(to ensure quality of evidence)*

- PRISMA and AGREE Enterprise standards for the transparent reporting of health evidence syntheses and guidelines, respectively, as well as Cochrane for methods development, capacity building and rigorous editorial processes for health evidence syntheses
- Campbell Collaboration and Collaboration for Environmental Evidence for methods development, capacity building and rigorous editorial processes for evidence syntheses in other sectors



**9** Open science, including open publications, data, physical samples, and software *(to ensure access to evidence)*

- Open-access publications like those supported by the Public Library of Science (PLOS), Empirical Software Engineering (which encourages the submission of a replication package), and Open Library of Humanities
- Open-data platforms like Vivli
- Open-access software like the Open Source Framework ([osf.io](https://osf.io))



**10** Coordination of efforts to support evidence intermediaries in using global public goods to support local (national or sub-national) decision-making *(to ensure quality in and timeliness of evidence support)*

- Cochrane ‘plain-language summaries,’ which are translated into multiple languages (as an example of coordinating efforts to package evidence in ways that can be used or adapted locally)
- What Works Clearinghouse for US educators and Evidence Aid for humanitarian-aid providers (as examples of one-stop evidence shops that are optimized for decision-makers’ needs)
- Evidence-Informed Policy Networks (EVIPNet) for groups supporting evidence use by health policymakers with a rapid-evidence service, by building their capacity to find and use evidence, and by convening deliberative dialogues

The ‘quintet of change’ meant to support the UN’s transformation from 2021 to 2025 explicitly includes data analytics and behavioural / implementation research, and implicitly includes evaluation (under performance and results orientation). While it is silent on the other needed forms of evidence, it also explicitly includes strategic foresight and innovation (and digital transformation), which are two powerful complements to evidence and which also have features of global public goods depending on how they are operationalized.