



Insights from the Evidence Commission:

How can we engage citizens, policymakers, funders and others in strengthening the global evidence architecture in ways that support the production and use of high-quality guidelines

23 September 2022 | 11:30am-12:15pm



Gillan Leng



Jeremy Grimshaw



Julian Elliott



Maureen Smith



Ivan Florez

The Evidence Commission report

- Two main **goals** of the report
 - Provide the context, concepts and vocabulary that underpin work in this area
 - Provide recommendations about how we can and must improve the use of evidence, both in routine times and in future global crises
- Available in Arabic, Chinese, English, French, Portuguese, Russian and Spanish → **evidencecommission.org**
- Versions available now
 - Online executive summary
 - Online full report
 - Online chapters and sections (or infographics)
 - Print-on-demand full report (at cost through Amazon)
- **Current implementation priorities**
 - Formalizing and strengthening domestic evidence-support systems
 - Enhancing and leveraging the global evidence architecture
 - Putting evidence at the centre of everyday life for citizens



Our commissioners, who collectively cover all types of societal challenges, decision-makers and evidence, and all regions



Amanda Katili Niode
Talented policy advisor and non-governmental organization director advancing dialogue about environmental action, including climate action



Andrew Leigh
Seasoned politician bringing economics and legal training to public-policy writing and debate



Antaryami Dash
Non-governmental organization leader bringing nutrition expertise to the development and humanitarian sector



Asma Al Mannaei
Experienced public servant leading quality improvement and stewarding research and innovation across a health system



Daniel Iberê Alves da Silva
Young Indigenous leader educating students and others about Indigenous ways of knowing



David Halpern
Trusted policy advisor bringing formal experimentation and behavioural insights into governments, first in the United Kingdom and now in many countries



Donna-Mae Knights
Career public servant, specialized in poverty reduction and development, driving policy change towards building sustainable communities



Fitsum Assefa Adela
Committed policymaker striving to bring a whole-of-government perspective to cabinet-level planning and development



Gillian Leng
Experienced executive leading a technology-assessment and guideline agency that supports health and social care decision-making by governments, service providers and patients



Gonzalo Hernández Licona
Distinguished economist bringing rigorous evaluation methods to the fields of poverty measurement and economic development



Hadiqa Bashir
Young leader advocating for girls' rights and gender equality in male-dominated environments



Howard White
Research leader supporting the use of robust evaluation and evidence synthesis in decision-making in international development and across sectors



Jan Minx
Impact-oriented scholar bringing innovative evidence-synthesis approaches to domestic policy advice and global scientific assessments about climate change and sustainability



Jinglin He
Non-governmental organization leader engaging policymakers and stakeholders, as well as UN agencies, in advancing social-development initiatives



Julia Belluz
Respected journalist bringing rigour to reporting about what the best available science does and doesn't tell us about the major challenges of our time



Julian Elliott
Clinician researcher leveraging technology for efficiently preparing and maintaining 'living' evidence syntheses and guidelines to inform decision-making



Kenichi Tsukahara
Engineering leader supporting disaster risk management in government, a development bank, and international agency



Kerry Albright
Eternally curious international public servant bringing passion about evidence-informed decision-making, systems thinking, and helping others understand the value of evidence to international development



Larry Hedges
Applied statistician driving the use of evidence synthesis in educational policy and practice



Maureen Smith
Citizen leader championing the meaningful engagement of patients and citizens in conducting research and using it in their decision-making



Modupe Adefeso-Olateju
Non-governmental organization leader pioneering the use of citizen-led assessments and public-private partnerships to improve educational outcomes for children



Neil Vora
Interdisciplinary professional bringing planetary-health thinking to the interface between conservation efforts (such as preventing deforestation) and pandemic prevention



Petrarca Karetji
Entrepreneurial policy advisor innovating in the use of data analytics to support evidence-informed policymaking about sustainable development



Soledad Quiroz Valenzuela
Government science advisor contributing her national experiences to regional and global efforts to improve the quality of government scientific advice



Steve Kern
Foundation leader using data analytics and other forms of evidence to fight poverty, disease and inequity around the world

Four types of **decision-makers** and how each may approach decisions



Government policymakers

Need to be convinced there's a compelling problem, a viable policy and conducive politics



Organizational leaders

(e.g., business and non-governmental organization leaders)
Need a business case to offer goods and services



Professionals

(e.g., doctors, engineers, police officers, social workers and teachers)
Need the opportunity, motivation and capability to make a professional decision or to work with individual clients to make shared decisions



Citizens

(e.g., patients, service users, voters and community leaders)
Need the opportunity, motivation and capability to make a personal decision, take local action or build a social movement

Forms in which **evidence** is typically encountered in decision-making





Level (and sector) at which a challenge is typically addressed

Domestic sectoral

- Health systems failing to improve health outcomes and care experiences
- Schools struggling with virtual instruction
- Declining living standards

Domestic cross-sectoral

- Antimicrobial resistance
- Gender-based violence
- Growing levels of inequality
- Lack of trust in institutions
- Missed targets for the Sustainable Development Goals

Global (or regional) coordination

- Inequitable patterns in COVID-19 vaccination
- Climate change

- What have we learned in the COVID-era about...
 - the future of evidence-support systems to support decision makers of all types (Jeremy)
 - guidelines and the opportunities ahead for better collaboration amongst clinicians+ (Julian)
 - the opportunities for better collaboration with patients and citizens (Maureen)
 - Respondent (Ivan)
 - Q&A



The future of evidence-support systems to support decision makers of all types



Jeremy Grimshaw

Impetus for the Evidence Commission came from 12+ (now 28+) months of supporting decision-making about COVID-19 public-health measures, clinical management, health-system arrangements, and economic and social responses



Africa Centre for Evidence, which supports the Africa Evidence Network in bringing together more than 3,000 people from across Africa to support evidence-informed decision-making

Campbell Collaboration, which supports teams around the world to prepare and support the use of evidence syntheses in areas like business and management, climate solutions, crime and justice, disability, education, international development, and social welfare

Cochrane, which includes review groups around the world that prepare evidence syntheses, and geographic groups in 45 countries and thematic networks in 13 domains that support evidence-informed decision-making on health-related topics

Evidence Synthesis International, which supports evidence-synthesis organizations around the world that produce, support, and use evidence syntheses

Guidelines International Network, which supports 130 organizations around the world that develop and implement evidence-based guidelines.

COVID-19 Evidence Network to support Decision-making (COVID-END), a partnership of

- [55 global partners](#): world-leading evidence synthesis, technology assessment and guideline groups, many of which act as an 'umbrella' for many other partners
- 40+ Canadian teams

Two examples of COVID-END's achievements

- **Ultra-rapid and living evidence syntheses** (some contextualized, and others global public goods)
 - Supported by evidence demand and supply coordination (and by monthly horizon scanning)
 - 150+ products by month 17
 - Examples
 - Living evidence profiles on LTC crisis management, vaccine roll-out, and COVID-19 lessons learned
 - Three living evidence syntheses about vaccine effectiveness (adults, children, and waning immunity)
- **COVID-END inventory of evidence syntheses** (to improve the signal-to-noise ratio)
 - 13,288 syntheses from high-quality/high-yield sources (of which 96 are living evidence syntheses) by month 25
 - 9,427 non-duplicate syntheses
 - 6,657 decision-relevant syntheses assessed and included in the database
 - 652 'best' evidence syntheses included in the inventory



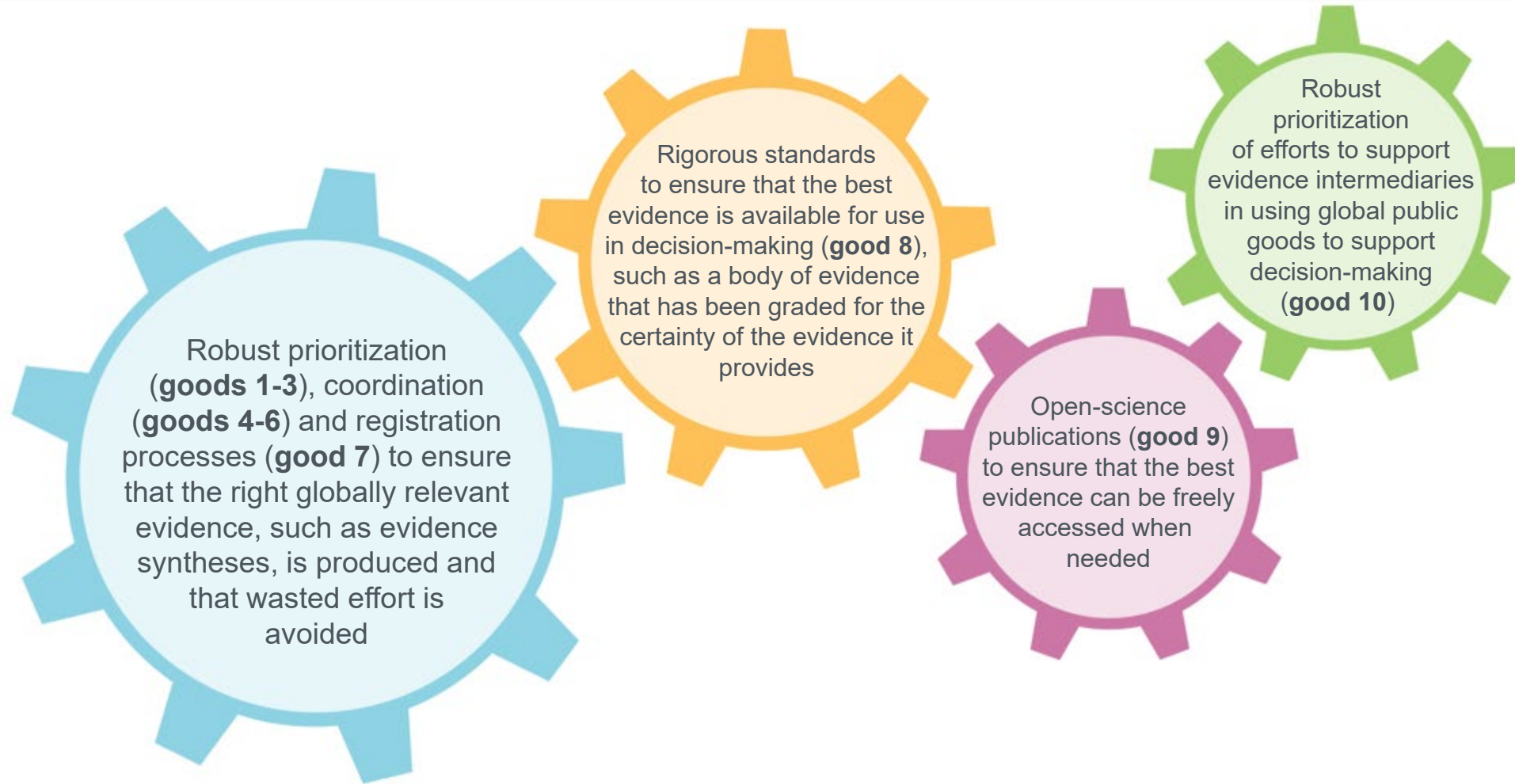
We need to formalize and strengthen the evidence-support system alongside the research system and the innovation system

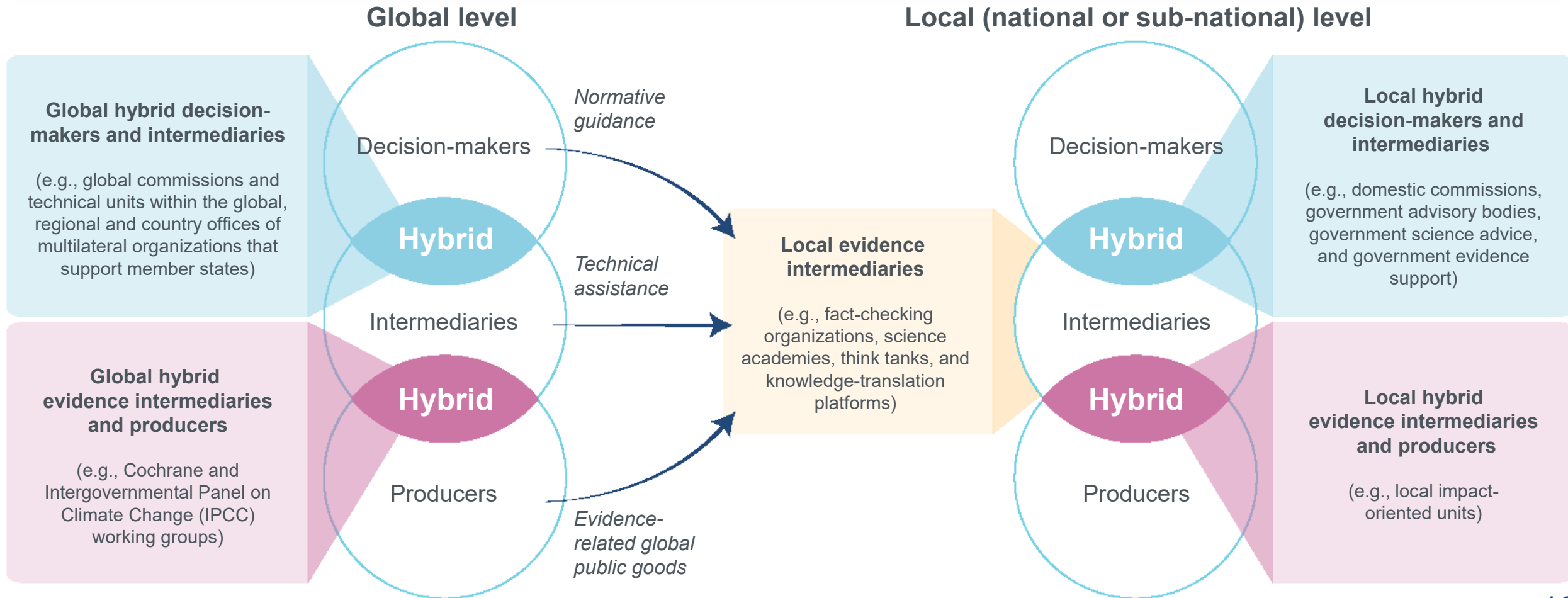


Evidence-support system – Grounded in an understanding of a national context (including time constraints), demand-driven, and focused on contextualizing the evidence for a given decision in an equity-sensitive way

Examples of infrastructure:

- evidence-support units that can combine the power of national evidence and the power of global evidence
- expert panels that include people with methods expertise and lived experience, pre-circulate evidence summaries, and clarify what evidence and experiences underpin the recommendations, as well as citizen- and stakeholder-engagement processes that provide ways in for evidence
- government science advisors who speak in a way that makes it possible to judge their accuracy
- processes to:
 - 1) elicit and prioritize evidence needs
 - 2) find and package evidence that meets these needs within set time constraints (and build additional evidence as part of ongoing evaluations)
 - 3) strengthen capacity for evidence use (e.g., evidence-use workshops and handbook)
 - 4) incorporate evidence use into routine processes (e.g., memoranda to cabinet, budget proposals, spending plans)








Guidelines and the opportunities ahead for better collaboration amongst clinicians+



Julian Elliott

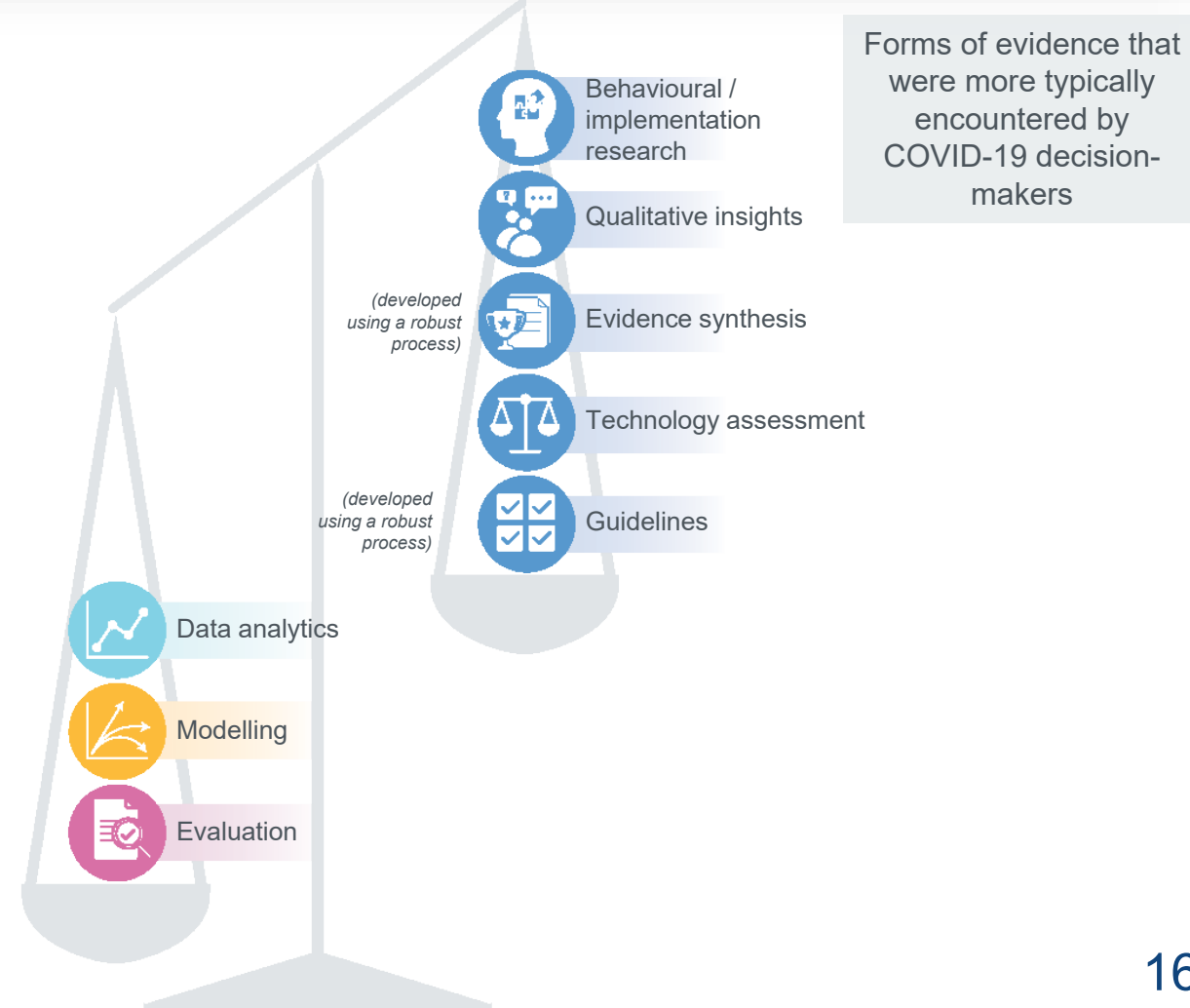
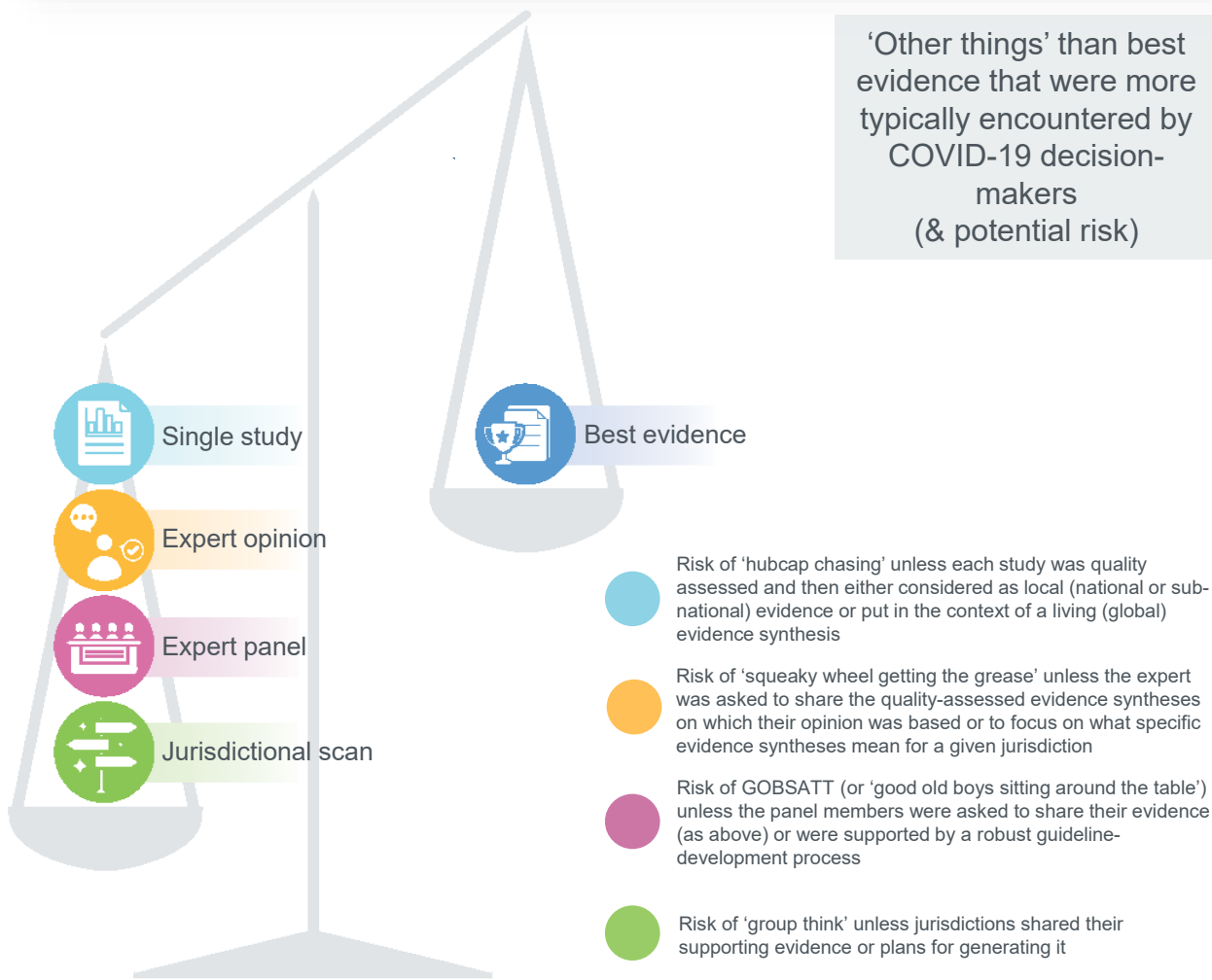
4.2 Definitions of forms in which evidence is typically encountered

Forms of evidence	Definitions	Steps where it add the greatest value
 Data analytics	Systematic analysis of raw data to make conclusions about that information	1 4
 Modelling	Use of mathematical equations to simulate real-world scenarios (i.e., what is likely to happen if we don't intervene) and options (i.e., what happens if we intervene) in a virtual environment	1 2
 Evaluation	Systematic assessment of the implementation (monitoring) and impacts (evaluation) of an initiative for the purposes of learning or decision-making	4
 Behavioural / implementation research	Study of methods to promote the systematic uptake of effective approaches into routine practices at the personal, professional, organization and government levels (implementation research) Systematic examination of what people (citizens and professionals) do, what drives them to do it, and what can sustain or change what they do (behavioural research)	3
 Qualitative insights	Study of (typically non-numerical) data – obtained from interviews, focus groups, open-ended questionnaires, first-hand observation, participant-observation, recordings made in natural settings, documents, and artifacts – to understand how individuals and groups view and experience problems, options, implementation considerations (barriers, facilitators and strategies), and metrics	1 2 3 4
 Evidence synthesis	Systematic process of identifying, selecting, appraising and synthesizing the findings from all studies that have addressed the same question in order to arrive at an overall understanding of what is known, including how this may vary by groups (e.g., racialized communities) and contexts (e.g., low socio-economic neighbourhoods)	1 2* 3 4
 Technology assessment/ cost-effectiveness analysis	Assessment of all relevant aspects of a 'technology' (e.g., a product or service), including safety, effectiveness, and economic, social and ethical implications (technology assessment), with an evidence synthesis often contributing to the assessment of effectiveness Comparison of the relative outcomes (effectiveness) and costs of two or more options, again with an evidence synthesis often contributing to the assessment of effectiveness	2* 3 4
 Guidelines	Systematically developed statements that recommend a particular course of action, often for citizens and professional and sometimes for organizations and governments, with one or more evidence syntheses contributing to the assessment of effectiveness, values and preferences, and other factors	2

*Adds the greatest value in this step but can add value in other steps



4.13 Weaknesses in many COVID-19 evidence-support systems



4.7 Living evidence products

Forms of evidence	Examples of living evidence products
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Data analytics

- The WHO COVID-19 Dashboard provides a set of data analytics about the stringency of public-health measures being taken to address COVID-19, the UK Health Security Agency surveillance reports (bit.ly/3DeaSlc) provide a set of data analytics about COVID-19 in the UK, and Opportunity Insights' Economic Tracker provides a set of data analytics about COVID-19 impacts on the economic prospects of people, businesses and communities in the US
- The Organisation for Economic Co-operation and Development (OECD) Weekly Tracker of Economic Activity provides a set of data analytics about economic activity for most OECD and G20 countries

Modeling

- The European COVID-19 Forecast Hub presents every week a forecast of cases and deaths per week per 100,000 people – both overall and by country – based on an ensemble of models, while the Institute for Health Metrics and Evaluation COVID-19 Projections updates every two weeks a model of projected deaths from COVID-19, both those reported as COVID-19 and those attributed to COVID-19, that could be used to explore a range of scenarios (e.g., about mask use and vaccine uptake) in specific countries
- The Intergovernmental Panel on Climate Change presents every five-to-seven years an assessment report that draws on modeling of human-induced climate change, its impacts, and possible response options, although strictly speaking this is a synthesis of findings from models (which may or may not be living) informed by a robust process of inter-model comparisons (which is undertaken by different scientists for each assessment report – see bit.ly/3wKQy8D for an example)

Evidence syntheses

- COVID-END living evidence synthesis #6 provides updates every two weeks about COVID-19 vaccine effectiveness against variants, and COVID-NMA updates weekly evidence syntheses about all drug treatments for COVID-19 (and later added preventive therapies and vaccines)
- The Global Carbon Project updates annually, based on modeling and empirical studies, estimates of the five major components of the global carbon budget (anthropogenic carbon-dioxide emissions and their redistribution among the atmosphere, ocean and terrestrial biosphere in a changing climate) and their associated uncertainties

Guidelines

- The Living WHO Guideline on Drugs for COVID-19 provides updates every one-to-four months about COVID-19 drug treatments, and the National COVID-19 Clinical Evidence Task Force updates weekly evidence-based COVID-19 guidelines for Australian health professionals
- The Education Endowment Foundation maintains living guidance for schools as part of their Teaching and Learning Toolkit, such as the one addressing teaching-assistant interventions

Conventional model

Updated every 3-5 years



Living evidence model

Updated 1-3 monthly



Feature



ILLUSTRATION BY JASIR KREZETOVIC/NATURE

HOW COVID BROKE THE EVIDENCE PIPELINE

The pandemic stress-tested the way the world produces evidence – and revealed all the flaws. **By Helen Pearson**

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Global Commission on Evidence
to Address Societal Challenges





The opportunities for better collaboration with patients and citizens



Maureen Smith



Respondent



Ivan Florez



Q&A



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Jeremy Grimshaw



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Maureen Smith



Ivan Florez