Global Commission on Evidence
to Address Societal Challenges

Strengthening domestic evidence-support systems: Insights from the Evidence Commission

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Impetus for the Evidence Commission came from 12+ (now 26+) months of supporting decision-making about COVID-19 public-health measures, clinical management, health-system arrangements, and economic and social responses

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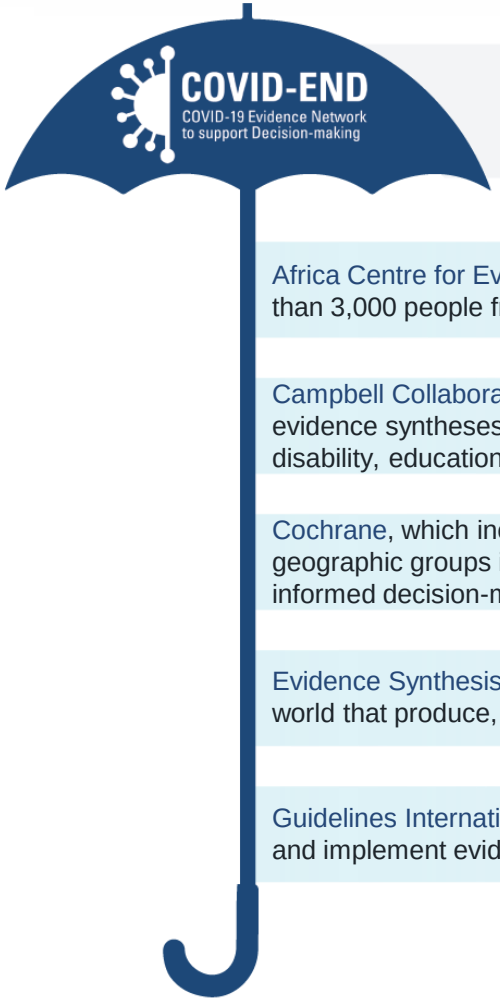

Africa Centre for Evidence, which supports the Africa Evidence Network in bringing together more than 3,000 people from across Africa to support evidence-informed decision-making

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

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- **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)
    → 9,427 non-duplicate syntheses
    → 6,657 decision-relevant syntheses assessed and included in the database
    → 652 'best' evidence syntheses included in the inventory

COVID-END's biggest legacy: 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)

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

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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

Some recent coverage of key messages from the report

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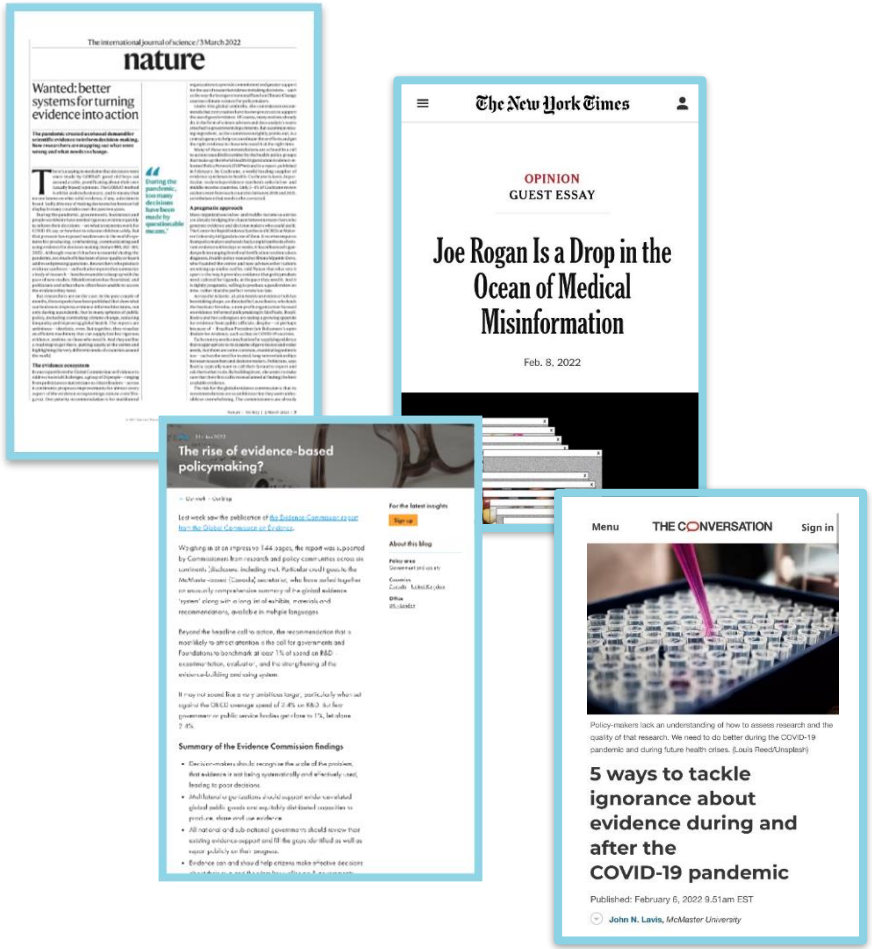
- **Wanted: Better systems for turning evidence into action**
  - *(Nature, 28 February 2022)* – an editorial spurred by the commission
- **Getting rid of Joe Rogan won't solve the health misinformation problem**
  - *(The New York Times, 8 February 2022)* – a guest essay co-written by commissioner Julia Belluz and secretariat co-lead John Lavis
- **5 ways to tackle ignorance about evidence during and after the COVID-19 pandemic**
  - *(The Conversation, 6 February 2022)* – an article written by secretariat co-lead John Lavis
- **The rise of evidence-based policymaking?**
  - *(Behavioural Insights Team, 31 January 2022)* – a blog post written by commissioner David Halpern, head of the UK Cabinet Office's BIT



We can't continue to allow a low signal-to-noise ratio – uneven coverage, low quality and outdatedness – to be a hallmark of the evidence response to societal challenges like COVID-19

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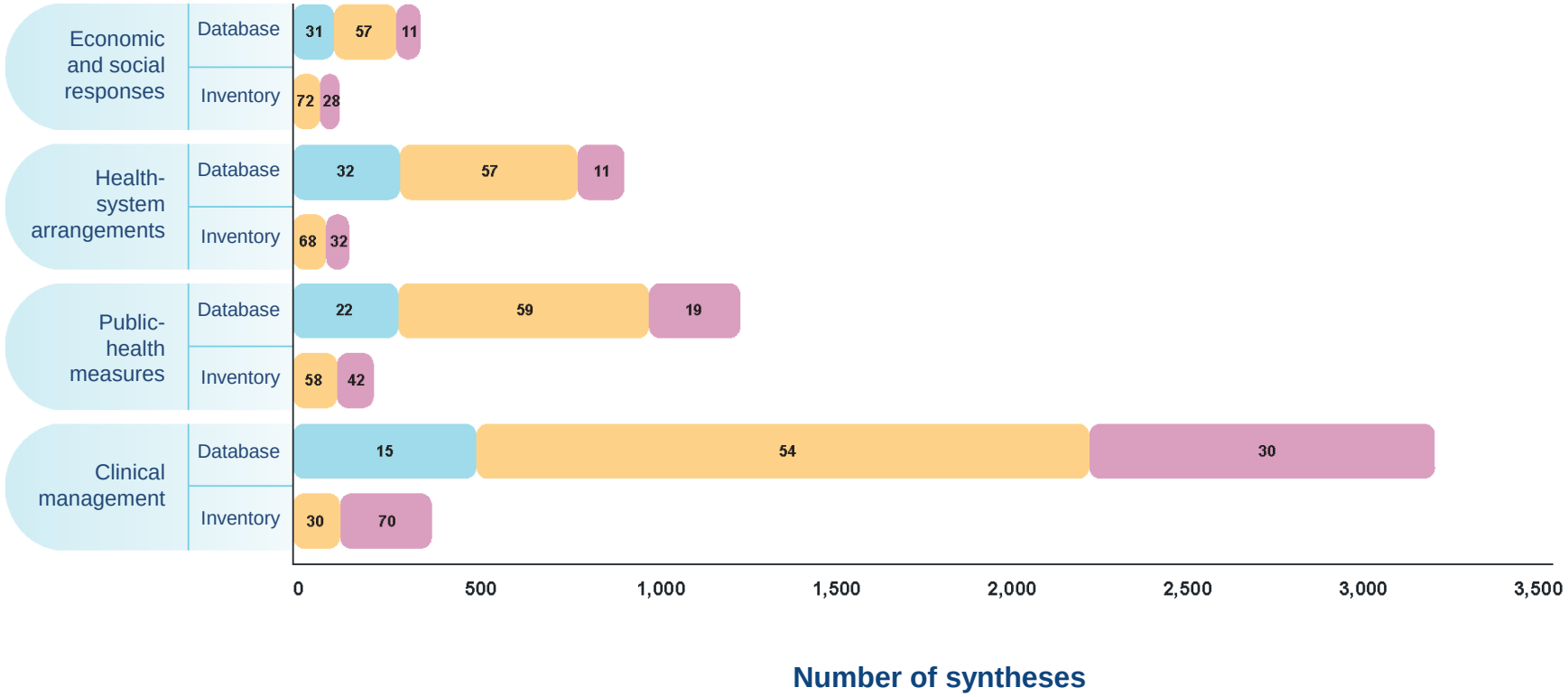

A global investment in an evolving suite of high-quality living evidence syntheses would have saved us from **tremendous amounts of research waste globally** (and would have allowed countries to focus on contextualizing this global evidence alongside national evidence in equity-sensitive ways)

LEGEND

- **% low quality**
- **% medium quality**
- **% high quality**

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We can't continue to respond to policymakers' questions with preprints, squeaky-wheel experts & old-school expert panels (instead of 'best evidence') or with select forms of evidence (instead of the right mix of forms of evidence)

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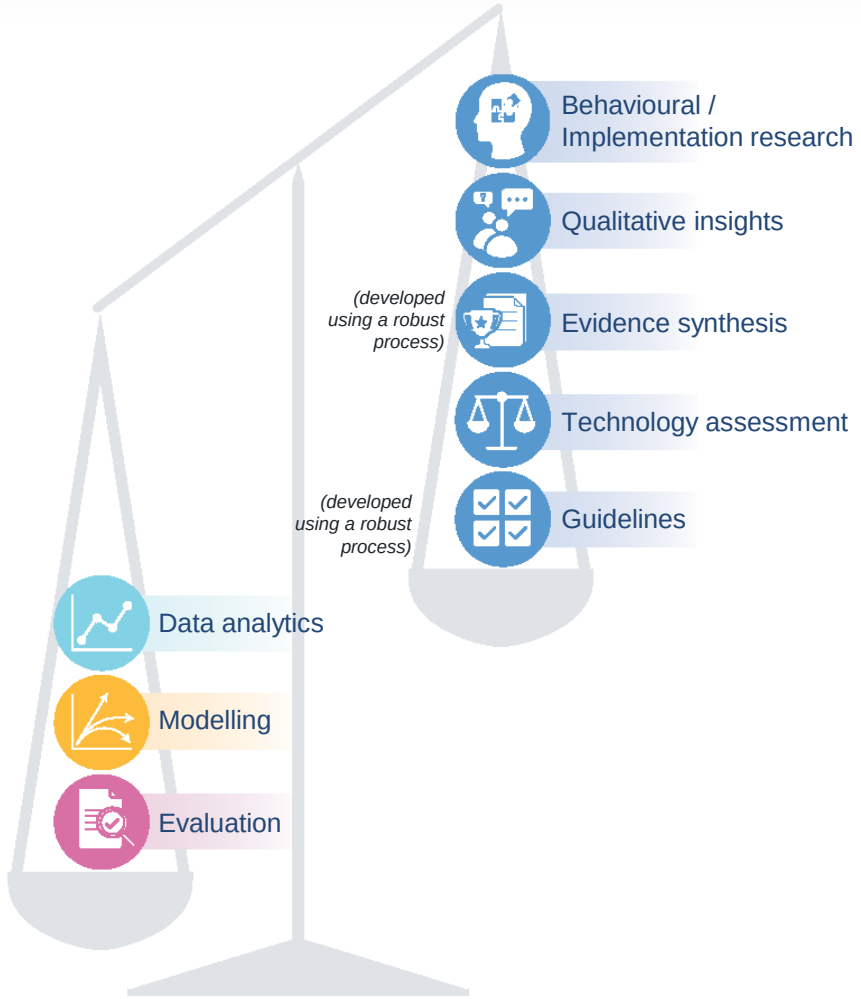
'Other things' than best evidence that were more typically encountered by COVID-19 decision-makers



Forms of evidence that were more typically encountered by COVID-19 decision-makers

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

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Evidence-support system – Grounded in an understanding of a national (or state) 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 (or state) 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)

An evidence-support system needs to match the form of evidence to the right step in the decision-making process

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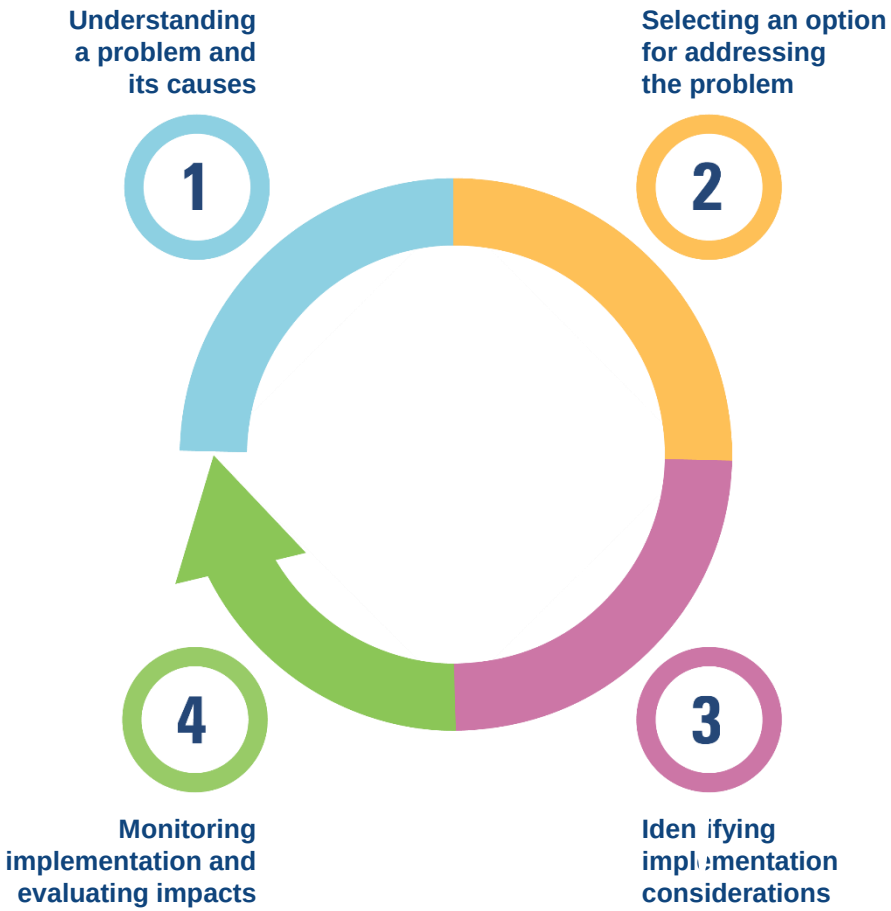
Forms of evidence	Steps where it adds the greatest value
Data analytics	1, 4
Modelling	1, 2
Evaluation	4
Behavioural / implementation research	3
Qualitative insights	1, 2, 3, 4



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An evidence-support system needs to rely on the combined power of local evidence (what has been learned in Australia or NSW) and global evidence (what has been learned from around the world, including how it varies by groups and contexts)

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Vantage point	Forms of evidence
Local (national or state) evidence 	Data analytics; Modeling; Evaluation; Behavioural/ implementation research; Qualitative insights
Global evidence 	Evidence synthesis (esp. living)
Local (national or state) recommendations or evidence support informed by local and global evidence 	Technology assessments/ cost-effectiveness analysis; Guidelines

- **Living** evidence syntheses add new evidence as it's made available, **based on its quality**, so that we have a continually evolving picture of what the entire evidence base, not just the newest study, tells us
- They don't accept a journal's peer review as synonymous with quality
- Good ones also describe how much certainty we have about particular findings
- Living evidence syntheses can include both:
  - **demand-driven, contextualized, equity-sensitive syntheses**
  - global public goods

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An evidence-support system also needs to use the right strategies to support the use of best evidence for the right issues and contexts

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Strategies	Descriptions
	• e.g., requiring **government science advisors** (and asking all experts, including those on expert panels) to speak in a way that makes it possible to judge their accuracy (e.g., by describing how they identified, assessed and interpreted the evidence they're drawing on), rather than accepting unquestionably their personal opinions
	• e.g., supporting **co-production** – with decision-makers, diverse affected communities, and researchers – of **new local evidence** (data analytics, modeling, evaluations, behavioural / implementation research, qualitative insights), **syntheses of the best evidence globally** (evidence synthesis), and **recommendations** for Australia or NSW that leverage both national and global evidence (technology assessments and guidelines)
	• e.g., Integrating different forms of evidence into **timely, demand-driven, contextualized, equity-focused evidence products** (e.g., data analytics to clarify a problem and its causes, evidence synthesis to describe the likely benefits and harms of an option to address a problem, and behavioural science to develop an implementation plan)
	• e.g., using **one-stop evidence shops** that are optimized for decision-makers' needs (e.g., COVID-END Inventory of Evidence Syntheses that identifies the **'best' evidence syntheses** for any COVID-19 decision; Health Systems Evidence and Social Systems Evidence that quality rate evidence syntheses for health and all other sectors, respectively; evidence maps that profile the evidence available about climate change impacts and both mitigation and adaptation strategies)
	• e.g., convening '**living' citizen panels and stakeholder dialogues** – informed by citizen briefs and evidence briefs, respectively – to elicit citizen values and stakeholder insights that can drive action

Efforts to formalize and strengthen domestic evidence-support systems need to leverage existing strengths and fill the most important gaps: Example of priorities for Canada's federal government

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- Privy Council Office
  - Set standards and procedures (**S&P**) **for evidence use** in mandate letters (to ministers), memoranda to cabinet, and commissions of inquiry
  - Complement existing S&P for three of eight forms of evidence – namely data analytics* (initiated through a 2018 PCO report), evaluation** (Treasury Board), and cost-benefit analysis*** (Treasury Board) – with **S&P for the next most critical form of evidence, namely evidence synthesis**, and liaise with Public Services & Procurement to adjust procurement standards for evidence synthesis accordingly
  - Establish evidence checklist for briefings, handbook for public servants, metrics for performance, and other more **'holistic' supports** for evidence use
- Department of Finance
  - Set S&P for evidence use in **budget proposals**
  - Adjust existing standards and procedures for **cost-benefit analysis** to draw upon high-quality evidence syntheses about benefits
  - Complement the existing standards and procedures for three of eight forms of evidence – data analytics, evaluation, and cost-benefit analysis – with standards and procedures for **modeling**
- Treasury Board Secretariat
  - Set S&P for evidence use in **spending submissions**
  - Adjust existing S&P for **evaluation** that inhibit ongoing evidence-driven learning and improvement (e.g., fixed policy and program objectives coupled with five-year evaluation cycles)
  - Engage the Canada School of Public Service in providing **training** in evidence support with the goal of this one day becoming a mandatory feature of professional development in the public service

** annual departmental data strategies and chief data officers*
*** policy and directive on results, evaluation standards, annual departmental evaluation plans, and departmental heads of evaluation*
**** cost-benefit analysis (which we label elsewhere technology assessment/CEA) applied primarily to regulation*

Example of priorities for Canada's federal government (2)

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- Science ministry (Innovation, Science and Economic Development Canada) and granting councils (CIHR and SSHRC)
  - Complement ongoing upgrades to the research system and to the innovation system with investments in the **evidence-support system**
  - Set S&P for **government science advice** (e.g., be transparent about the evidence underpinning claims) and for **expert panels** (e.g., supported by pre-circulated evidence summaries and focused on interpreting what this evidence means for Canada, which means moving beyond GOBSATT, or 'good old boys sitting around the table')
- Line ministries (with our initial focus being PHAC, Health Canada, DND, and Veterans Affairs Canada)
  - Lead or participate in processes to **prioritize evidence needs and** to **commission evidence** to address these needs (and ensure that evidence providers use the right strategies, have the right skills, and meet the right standards for evidence products and processes)
  - Establish and update regularly a list of preferred **stocks of existing evidence** (e.g., database of quality-appraised evidence syntheses) in key areas of focus
  - Ensure that at least some **science advisors** are trained in evidence support (not only in research and/or innovation)
  - Ensure that **expert panels** are supported by pre-circulated evidence summaries and focused on interpreting what this evidence means for Canada
- All of the above
  - Re-balance among significant **flows** of some key forms of evidence (data analytics and evaluation), more narrowly defined flows of other forms of evidence (modeling, behavioural/implementation research, and technology assessment/CEA), and no apparent flows of other forms of evidence (robust living evidence syntheses, robust living guidelines, and qualitative insights)
  - Use the comprehensive Strategic Policy Review and the re-examination of planned spending decisions in Budget 2022 as **test cases**
- Auditor General
  - Consider some or all of the above in future **audits**

For another day:
We need to enhance and leverage the global evidence architecture

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- **WHO and UNICEF:** need the funds to sustain rigorous approaches – in norms and standards, in technical assistance, and in evidence-related global public goods – and apply them across the full range of health and child well-being challenges we face
- **Most other UN system entities**: need to move away from an 'expert knows best' model for normative guidance and technical assistance and from an underinvestment in evidence-related global public goods
  - e.g., UN's 'quintet of change,' which is meant to support the UN's transformation from 2021 to 2025, needs to be expanded beyond data analytics, behavioural/implementation research, and evaluation to include the many other needed forms of evidence
  - e.g., reinvigoration of the UN Secretary-General Scientific Advisory Board, as mentioned in the UN Secretary General's Our Common Agenda report, provides an opportunity to do better with an important independent expert panel, comprised of social as well as natural scientists
- **Producers of evidence-related global public goods**: need to improve prioritization, increase coordination, and foreground equity and context considerations in their work, and need the funds to maintain a suite of high-quality living evidence syntheses on priority topics
- **Funders**: need to invest in the global evidence architecture (and national evidence-support systems)

<u>For another day</u>:
We need to engage citizen leaders and citizen-serving NGOs in putting evidence at the centre of everyday life

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- **Focus** of curated resources
  - Making decisions about one's and ones' family's well-being based on best evidence (e.g., drug facts boxes)
  - Spending money on products and services that are backed by best evidence (e.g., Wirecutter)
  - Volunteering time and donating money to initiatives that use best evidence to make decisions about what they do and how they do it (e.g., 80,000 hours and GiveWell)
  - Supporting politicians who commit to using best evidence to address societal challenges and who commit (along with others) to supporting the use of evidence in everyday life
- **Types** of curated resources
  - Access to best evidence (e.g., Cochrane plain-language summaries)
  - Access to evidence-checked claims (e.g., fact-checking websites)
  - Simple-to-use evidence-backed resources and websites to make informed choices (e.g., impact investing sites)
  - Training to build media and information literacy (e.g., thatsaclaim.org)
  - Transparency for citizens to know when decisions, services and initiatives are based on best evidence (e.g., food labels and kitemarks)
  - Culture where evidence is understood, valued and used (e.g., Sense About Science)

Why now?

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- Cadre of political leaders who have personal experience with what worked well during COVID-19 and what could work better (and with how their counterparts in other countries appeared to be better supported with best evidence)
  - We're currently working with partners to conduct rapid assessments in 20 jurisdictions and support 'rapid learning and improvement'
  - Our focus is primarily:
    - Central agencies where many of the 'rules of the game' are set (not just line ministries like health)
    - Building evidence into routine processes (not just ad hoc or research-led ones)
    - Setting standards and procedures for, and ensure a steady flow of, all key forms of evidence (not just today's favourites)
- Innovations in evidence products and processes, such as living evidence syntheses and living guidelines
- Lesson learned about needing to have evidence supports in place that can pivot to address future crises
- COVID-19 evidence investments coming to an end
- Recognition of the growing array of health and broader societal challenges where best evidence is needed, such as climate action