

# THE ECOSYSTEM OF EVIDENCE

Lessons learned in the pandemic era and future challenges

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#EBHC2023



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### Disclosures

#### **SL Norris**

- Member GRADE Working Group (2001-present)
- Former employee
  - US Centers for Disease Control and Prevention (1999-2004)
  - US Agency for Healthcare Research and Quality (2004-2005)
  - World Health Organization (2012-2020)
- Consultant (2020-present)
  - WHO, US CDC, UCSF, other national entities
- Owns pharmaceutical and other medically-related individual stocks (list available upon request)

#### **HK Holmer**

- Employee US Veteran's Affairs Foundation (2022-present)
- Consultant: World Health Organization (2020-2022)

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# Background

- This study was commissioned by the US CDC (Office of Science) to provide background information and a framework for development of optimal processes and methods to produce guidance in future emergencies.
- CDC has acknowledged that they could have done better in their response to COVID-19, and has committed to assessing what was done and to implementing changes going forward.







# Study Aims

- Compare the processes, methods, tools, and platforms used by key organizations to develop and publish guidance in response to the COVID-19 pandemic
- Summarize challenges; advantages and disadvantages of various approaches; and lessons learned





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# Methods: Landscape Analys

- Cross-sectional convenience sample of organizations
- Inclusion criteria
  - Exemplary organizations, in high-income country, produced COVID-19 guidance in **English**
- Examined guidance that:
  - Addressed public health and/or therapeutic interventions
  - Was produced early (2020) and/or late (2022) in the pandemic
- Information sources
  - Websites of selected organizations, methods manuals, guidance, journal articles
  - Key informant interviews

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# Methods: Key Informant Interviews

- For each organization: ~2 technical experts familiar with their organization's guideline development approach
- Interview guide with open-ended prompting questions, developed a priori
  - O What were processes and methods, key successes, challenges?
- For each organization/interview, we summarized processes, procedures, and methods
  - Sent to interviewees for verification and clarification







### Results

### Organizations included in sample (n=9 orgs, 19 interviews)

- Australia National Clinical Evidence Taskforce
- Australia Department of Health and Aged Care
- College of Public Health Medicine, South Africa
- German Association of the Scientific Medical Societies (AWMF)
- Pan American Health Organization (PAHO)
- Public Health Agency of Canada
- UK National Institute for Health and Care Excellence (NICE)
- US Centers for Disease Control and Prevention (CDC)
- World Health Organization (WHO)







### Results (cont.)

### Public Health

### Clinical / Therapeutic

Early (2020) Australia Dept of Health and Aged Care College of Public Health Medicine, South Africa Public Health Agency of Canada US CDC Pan American Health Organization

Australia National Clinical Evidence Taskforce Pan American Health Organization UK National Institute for Health and Care Excellence US CDC World Health Organization

Late (2022)

World Health Organization Australia Dept of Health and Aged Care Public Health Agency of Canada US CDC Pan American Health Organization World Health Organization

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World Health Organization







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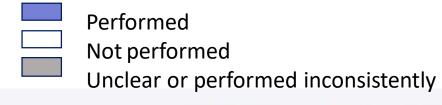




# Results (cont.)

### Processes and methods used by key organizations producing <u>clinical guidance late</u> in COVID-19

	Systematic / Rapid review	Certainty evidence (with RoB)	External panel	EtD framework	QA process	Living SR/ guideline	COI for review/guid eline
Australia							
Germany							
PAHO							
NICE							
CDC							
WHO							









# Additional findings

- Processes and methods largely unreported
- Most organizations
  - tried to ensure guidance was free from political influence
  - performed SRs/rapid reviews of the best available evidence
- Successful organizations
  - had strong, pre-existing workforce, infrastructure for producing standard guidelines
  - were able to implement rapid living reviews
  - used standard template for updating
- Challenges across organizations
  - · coordination of guidance across technical units
  - keeping recommendations, publications up-to-date
  - management of web-sites
  - meeting needs of multiple end-users
  - achieving cross-organization collaboration and coordination

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## Study limitations

- Convenience sample of organizations
- Small number of interviewees
- Challenging to identify information: methods largely unreported
- Formal qualitative analysis of interviews not performed
- Not all interviewees responded to multiple requests to validate our summary







### Conclusions

- There were significant commonalities in processes and methods across organizations
- Successful organizations:
  - had pre-existing capacity for standard guidelines with updates
  - were able to pivot to rapid, living reviews and guidelines
  - used standardized templates for reporting
- Interviewees valued:
  - independence from political interference, transparency
  - collaboration/coordination across orgs although rarely occurred







### Conclusions

Now is the time to reflect, evaluate, share, and plan for the next public health crisis.







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