

# COVID-END

COVID-19 Evidence Network  
to support Decision-making

## How can we better co-ordinate the next phase of the evidence synthesis response to COVID?

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HEALTH FORUM



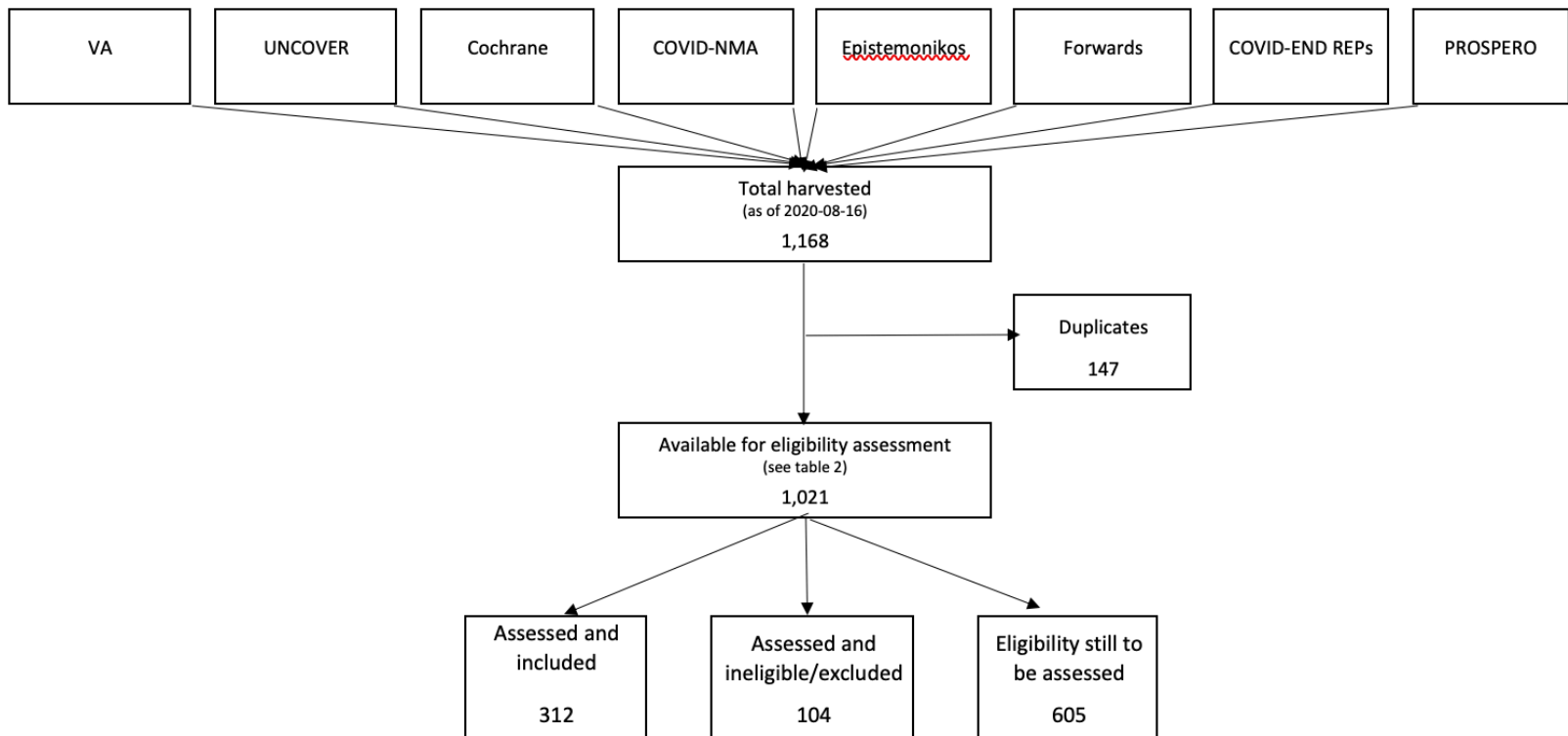
The Ottawa  
Hospital  
Centre for Implementation  
Research

## Initial evidence synthesis response (1)

- Substantial increase in evidence synthesis (and supporting) activities
- Lots of new entrants to the field
- Focus on rapid reviews (largely) on clinical and public health topics
- Variable quality
- Huge duplication of effort
- Discoverability and longevity of (rapid) reviews uncertain
- Relatively few living systematic reviews/guidelines
- Evidence synthesis capacity and conduct issues in LMICs

### ■ **Noise**-to-signal problem

# Initial evidence synthesis response (2)



## Initial evidence synthesis response (3)

(Health warning – very preliminary results that may change)

- Less than 10% of reviews were living systematic reviews
  
- We have appraised 191 reviews using AMSTAR 1:
  - 13% in lowest AMSTAR tertile
  - 47% in middle AMSTAR tertile
  - 40% in highest AMSTAR tertile

# Initial evidence synthesis response (4)

- Current coverage:
  - Clinical management      75%
  - Public health              48%
  - Health system              20%
  - Economic and social      2%

## Initial evidence response (5)

### Duplication of effort

- NCCMT in Canada undertook rapid review of maternal and fetal risk of COVID exposure in early May.
- When undertaking a planned update in August, they identified more than 50 reviews on the same topic published in the interval!

## Next evidence synthesis phase

- The world will be best served by:
  - A global stock of high quality, open-access living systematic reviews covering (80% of) key (healthcare, public health, health system, economic and social) issues faced by decision makers (to allow them to focus on contextualization of evidence within their setting)
  - Evidence synthesis capacity to undertake priority syntheses where high quality living systematic reviews are not available
  - Local evidence-support initiatives that can support decision makers to find and interpret best evidence
  - Global evidence synthesis infrastructure (building wherever possible on existing evidence synthesis organisations) to facilitate efficient conduct and sharing of evidence syntheses
  - Secure funding to support these activities

# Beginning with needs of (local and global) evidence users

## COVID-END user cases

- Comprehensive searchers eg Researcher conducting a new review on a COVID related review
- Decision-support searchers eg Policy analyst looking for ‘just the best’ synthesis
- Citizen searchers eg Parent looking for advice on school openings
  
- Multiple formats
- Multiple channels
- Linguistic accessibility



## Living evidence syntheses (1)

- Likely that any topic requiring rapid review will remain current for the next 18-24 months, especially given the rapid accumulation of primary COVID research
- If rapid review undertaken consider converting to full systematic review and living review
- Need to ensure coverage of key questions across clinical management, public health, health system and economic and social areas
- Need minimum standards and quality assurance for living systematic reviews (next discussion with Nathan)
- Need standardized meta-data to facilitate discoverability

## Living evidence syntheses (2)

### ■ Implications:

- We need to prioritise key questions that need living systematic reviews
- Need a major push on health system, economic and social areas
- Need some methodological and technological standardisation
- Individual evidence synthesis organisations may undertake fewer (rapid) reviews but contribute high value living evidence resources to global stock of priority living systematic reviews

## Living evidence syntheses (3)

- Recognising:
  - that there will always be the need for local contextualization of living systematic reviews and the need for rapid reviews for emergent issues or specific locally emergencies
  - the need for some replication of syntheses (to ensure robustness of findings and as insurance in case a review team drops out)

## Open science perspective

- Registration of reviews
- Publicly available (PRISMA-P compliant) protocols
- Publicly available (PRISMA compliant) final reports (permanent DOIs)
- Shareable evidence tables
  
- Encourage re-use of review findings (and data) (with credit)

# Global equity for evidence synthesis and support

- Majority of evidence syntheses are undertaken by researchers based in the high income countries
- Potential risks:
  - Lack of priority for reviews relevant to decision makers in LMICs
  - Lack of contextualisation of reviews to LMIC settings
  - Lack of engagement between synthesists and decision makers in LMICs
  - Failure to strengthen research systems in LMIC settings

## Supportive global infrastructure

Strengthen existing institutions providing key global infrastructure:

- Evidence inventories (see slide 3)
- Software platforms (Cochrane, EPPI-CENTRE, Covidence, MAGIC, Grade PRO)
- Synthesis registration infrastructure (PROSPERO)
- Build capacity for evidence synthesis and evidence support in LMIC (Global Evidence Synthesis Initiative, EVIP-NET)
- Translation support for linguistic accessibility (Cochrane, Evidence Aid)
- Explore opportunities for efficiencies through collaboration

## Funding co-ordination

- Work with governments and funders to adequately fund next evidence synthesis phase

## Summary

- The explosion of primary COVID related research needs to be appraised and summarized in evidence syntheses
- Opportunity to move **FROM** initial high ‘**NOISE**-to-signal’ evidence phase (rapid reviews, variable quality, quickly out-of-date, huge duplication of effort, pick-your-own) **TO** high ‘**SIGNAL**-to-noise’ evidence phase (curated, high-quality, living evidence syntheses and evidence-support initiatives)
- Requires evidence synthesis and evidence support organizations to co-ordinate activities with key decision making bodies (eg WHO) and funders globally