

#### **COVID-19 SHORT REPORT**

# **COVID-19 Emergency Evidence Response Service: report from Ireland**

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Participating groups: Evidence Synthesis Ireland, Cochrane Ireland, Health Research Board Trials Methodology

Research Network, Cochrane COVID-19 Working Group, iHealthFacts.ie

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# Introduction and background

Evidence Synthesis Ireland (evidencesynthesisireland.ie), Cochrane Ireland (ireland.cochrane.org), and the Health Research Board Trials Methodology Research Network (hrb-tmrn.ie), were asked by the Irish Department of Health to focus our collective resources on prioritised evidence gaps for COVID-19 to support healthcare policy and practice decision-making. We harnessed existing connections and developed new collaborations with international colleagues and organisations to reduce duplication of effort, minimize research waste, share information, and ensure continued capacity building. The group, called the Emergency Evidence Response Service (EERS) worked quickly and flexibly on relevant questions that the World Health Organization (WHO), Cochrane, and ministries of health prioritized to be addressed using evidence synthesis skills.

The core EERS team, which was established at the National University of Ireland Galway (nuigalway.ie) on 15 March 2020, worked across more than 25 projects to address COVID-19 evidence gaps including infection prevention and control, impacts on healthcare and mental health, as well as supporting evidence dissemination, education, and advocacy.

## **Key activities and strategies**

Working with networks including the Cochrane COVID-19 Working Group, led by Editor in Chief Karla Soares-Weiser, and the WHO Evidence Collaborative for COVID-19, we sought to support organizations that were answering critical questions and required evidence synthesis capacity. We provided experienced methodologists and systematic review authors, as well as information retrieval and peer-review expertise. We led on a number of reviews with support from the Cochrane Central Editorial Service (community.cochrane.org/review-production/production-resources/cochranes-central-editorial-service).[1] We also developed iHealthFacts (ihealthfacts.ie) as a resource where the public can quickly and easily check the reliability of a health

claim circulated by social media and thereby help tackle the 'infodemic' that continues to spread alongside COVID-19 in the wider community.

#### **Outcomes and impact of activities**

We were involved in four Cochrane COVID-19 reviews published to date, [2,3,4] as well as a review of clinical practice guidelines, and curation of a special collection. We have published eight rapid reviews in total to date. The team participated in two Cochrane podcasts and two webinar conversations with the Editor in Chief. We collaborated with 11 centres (Figure 1) and had membership of three international COVID-19 networks. We featured in 21 media items, and placed eight volunteers with Evidence Aid (evidenceaid. org), who helped with screening, website support, and writing evidence summaries.

Evidence Synthesis Ireland is leading on a priority-setting partnership to establish the top 10 uncertainties in rapid review methodology, the Priority III project (evidencesynthesisireland.ie/priority-iii). Though this project was planned and funded prior to the pandemic, its significance has been highlighted further with the explosion of rapid reviews during the COVID-19 crisis. Priority III aims to identify research priorities about how to improve how we plan, do and share the results of rapid reviews in the context of healthcare.

The study employs a priority-setting partnership based on the methods of the James Lind Alliance, which brings patients, carers and healthcare professionals together to identify and prioritise unanswered questions about healthcare that they jointly agree are the most important. We are partnering with COVID-END (covid-end.org),[13] and we are looking to recruit patient and public representatives, review authors, researchers, clinicians, or policymakers who are willing to share their views with us. There are

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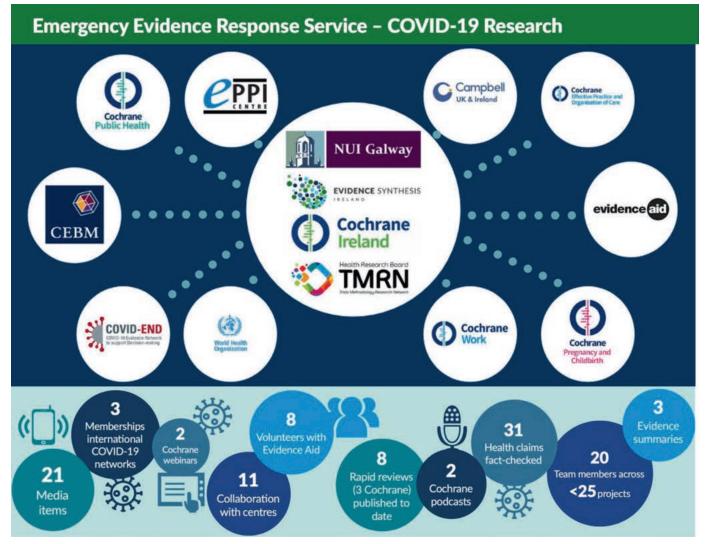


Figure 1. Emergency Evidence Response Service: COVID-19 research

three stages to the Priority III project, including two online surveys and a workshop.

Team members (Tom Conway, Ciara Keenan) are also working on a Cochrane Review (Cochrane Methodology) on interventions for retention in trials (led by Katie Gillies, Aberdeen, UK) and an EERS informational specialist (Mike Smalle) provided assistance with the search on the Cochrane Rapid Review (Cochrane Public Health) on digital solutions for contact tracing.[16]

We continued supporting dissemination and amplifying emerging evidence including sharing Cochrane Reviews and evidence in our newsletters, on social media, and producing three visual evidence summaries. Capacity building and education continues to be supported through Evidence Synthesis Ireland, Cochrane Ireland and the HRB Trials Methodology Research Network

through a Special Symposium, (www.hrb-tmrn.ie/training-education/2020-special-symposium-trials-in-a-pandemic) ESI webinars (evidencesynthesisireland.ie/resources), and funding COVID summer studentships and collating resources (evidencesynthesisireland.ie/covid-19).

iHealthFacts.ie (ihealthfacts.ie), a new health-claim fact-checking service for the public was developed within four weeks and has robust processes underpinning how we determine the reliability of health claims circulating on social media. This includes searching for systematic reviews of studies to help us inform decisions, independent review by a second researcher, a healthcare specialist and public representative, and a health journalist. We review claims continuously and a number have been updated and some, such as masks and ibuprofen, more than once.



Table 1. Key reviews of the Emergency Evidence Response Service

Туре	Title	Group	Role	Reference
Cochrane Rapid qualitative evidence synthesis	Barriers and facilitators to healthcare workers' adherence with infection prevention and control (IPC) guidelines for respiratory infectious diseases: a rapid qualitative evidence synthesis	Cochrane EPOC	Lead	Houghton 2020[2]
Cochrane Rapid Review	Video calls for reducing social isolation and loneliness in older people	Cochrane Public Health	Lead	Noone 2020[3]
Cochrane Review update	Personal protective equipment for preventing highly infectious diseases due to contact with contaminated body fluids in health care staff	Cochrane Work	Co-authors (Toomey, Blackwood)	Verbeek 2020[4]
Review of clinical practice guidelines	COVID-19 review of clinical practice guidelines for key questions relating to the care of pregnant women and their babies	Cochrane Pregnancy and Childbirth	Lead	Devane 2020[5]
Cochrane Library Special Collection	Coronavirus (COVID-19): remote care through telehealth	Cochrane Editorial & Methods Department and others	Lead	Cochrane 2020[6]
Living mapping and living systematic review	The COVID-NMA initiative: a living mapping and living systematic review of Covid-19 trials	Cochrane France, Cochrane Germany, Cochrane Chile, and others	Steering Group, mapping (Devane, Quirke)	Boutron 2020[7,8]
Rapid review of reviews	What remotely delivered interventions can reduce social isolation and loneliness among older adults?	EPPI-Centre	Co-author (Casey)	Boulton 2020[9]
Rapid evidence review	What is the efficacy of standard face masks compared to respirator masks in preventing COVID-type respiratory illnesses in primary care staff?	Centre for Evidence-Based Medicine	Co-authors (Devane, Toomey)	Greenhalgh 2020[10]
Rapid evidence review	What is the evidence that COVID-19 personal protective equipment should include shoe covers?	Centre for Evidence-Based Medicine	Co-authors (Devane, Toomey)	Khunti 2020[11]
Rapid evidence review	What is the efficacy of eye protection equipment in primary care settings?	Centre for Evidence-Based Medicine	Co-authors (Devane, Toomey)	Khunti 2020[12]
Rapid evidence review	What is the performance and impact of disposable and reusable respirators for healthcare workers in the context of COVID-19?	Centre for Evidence-Based Medicine	Co-author (Toomey)	Burton 2020[13]
Rapid evidence review	Extended use or re-use of single-use surgical masks and filtering facepiece respirators: a rapid evidence review	Centre for Evidence-Based Medicine	Lead (Toomey, Conway Y)	Toomey 2020[14]

Since its launch on 7 April 2020, the iHealthFacts website has had:

- 35,000 unique page views from over 90 countries to date (September 2020);
- 500 claims for iHealthFacts to research submitted by the public with over 1000 searches on the website;
- 31 claims answered on the website with five pending publication; claims answered include evidence for the treatment



- or prevention of COVID-19 with Vitamin C and D, chloroquine; or preventing the spread of COVID-19 through disinfecting food packaging, wearing masks or gloves, and more;
- 351,000 Twitter impressions, 3500 impressions on Instagram and Facebook posts reaching over 10,000 people.

iHealthFacts featured in seven newspapers including interviews in *The Irish Times* and *The Sunday Times* and recorded six interviews, including on primetime national radio. We believe it has become a valuable part of the Irish response to COVID-19 as well as addressing a need to counter harmful health misinformation and teach critical thinking skills.

# Lessons for the future: sustainability and transferability

The overall ability for the EERS to be established at such a rapid pace and deliver numerous outputs to such high standards lay in the underlying national support infrastructures, funded by the Health Research Board (HRB-TMRN EUR 2.6 million since 2015) and funding from both the Health Research Board and the Health and Social Care, Research and Development Division of the Public Health Agency in Northern Ireland to ESI and Cochrane Ireland (almost EUR 2.0 million in December 2018).

What this support demonstrated during COVID-19 was a firm foundation of expertise, experience and dedicated personnel, with an excellent knowledge of the research landscape in Ireland, to be able to mount an agile and innovative response to achieve the work required. Not only did this ensure impact in Ireland, it put Ireland on the global COVID-19 map, contributing to an international response.

These infrastructures have worked to ensure their organizational brands are a trusted and reliable source for research activities, ensuring the highest operational standards when conducting and publishing research. This combination of established organizations meant that the EERS was planned, launched and operational in days, with outputs visible in weeks. Key assistance came from NUI Galway core supports and our funders to ensure the rapidity of response that the health emergency required. None of this would have been possible without outstanding team work, cohesiveness, goodwill, talent, capacity and leadership from the researchers, collaborators and volunteers who produced the work with enormous effort, time and commitment. The establishment of the EERS during this pandemic has now built strong networks and a reputation as being a source of robust and reliable evidence and methodologists available for future pandemics.

#### **Additional resources**

- Evidence Synthesis Ireland: evidencesynthesisireland.ie
- Priority III rapid reviews project: evidencesynthesisireland.ie/ priority-iii
- Cochrane Ireland: ireland.cochrane.org

- HRB Trials Methodology Research Network: www.hrb-tmrn.ie
- · iHealthFacts: ihealthfacts.ie
- Webinars: evidencesynthesisireland.ie/resources
- More information: evidencesynthesisireland.ie/covid-19

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- Specific acknowledgements are described directly in the individual publications.

#### **Declarations of interest**

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#### References

1. Wakeford H, Dooley C, Stephani A-M, Marshall R, Featherstone R, Walshe D, et al. The Central Editorial Service: a collaborative editorial process for publishing high-priority Cochrane reviews. In: Collaborating in response to COVID-19: editorial and methods initiatives across Cochrane. *Cochrane Database of Systematic Reviews* 2020;(12 Suppl 1). https://doi.org/10.1002/14651858.CD202002



- 2. Houghton C, Meskell P, Delaney H, Smalle M, Glenton C, Booth A, et al. Barriers and facilitators to healthcare workers' adherence with infection prevention and control (IPC) guidelines for respiratory infectious diseases: a rapid qualitative evidence synthesis. *Cochrane Database of Systematic Reviews* 2020;(4):CD013582. https://doi.org/10.1002/14651858.CD013582
- 3. Noone C, McSharry J, Smalle M, Burns A, Dwan K, Devane D, et al. Video calls for reducing social isolation and loneliness in older people: a rapid review. *Cochrane Database of Systematic Reviews* 2020;(5):CD013632. https://doi.org/10.1002/14651858.CD013632
- 4. Verbeek JH, Rajamaki B, Ijaz S, Sauni R, Toomey E, Blackwood B, et al. Personal protective equipment for preventing highly infectious diseases due to exposure to contaminated body fluids in healthcare staff. *Cochrane Database of Systematic Reviews* 2020;(4):CD011621. https://doi.org/10.1002/14651858.CD011621.pub4
- 5. Devane D, Alfirevic Z, Kellie F, Finucane E, Beecher C, Hanrahan V, et al. Review of clinical practice guidelines for the care of pregnant women and their babies during COVID-19. 2020. pregnancy.cochrane.org/news/covid-19-review-national-clinical-practice-guidelines-key-questions-relating-care-pregnant
- 6. Cochrane. Coronavirus (COVID-19): remote care through telehealth. 2020. www.cochranelibrary.com/collections/doi/SC000043
- 7. Boutron I, Chaimani A, Meerpohl JJ, Hróbjartsson A, Devane D, Rada G. et al. The COVID-NMA Project: building an evidence ecosystem for the COVID-19 pandemic. *Annals of Internal Medicine* 2020;September 15. https://doi.org/10.7326/M20-5261
- 8. Boutron I, Tovey DI, De Nale L, Chaimani A, Devane D, Meerpohl JJ, et al. COVID-NMA: a collaborative COVID-19 living evidence project. In: Collaborating in response to COVID-19: editorial and methods initiatives across Cochrane. *Cochrane Database of Systematic Reviews* 2020;(12 Suppl 1). https://doi.org/10.1002/14651858.CD202002
- 9. Boulton E, Kneale D, Stansfield C, Heron P, Sutcliffe K, Hayanga B, et al. Rapid review of reviews: what remotely delivered interventions can reduce social isolation and loneliness among older adults? 2020. EPPICentre. Available at eppi.ioe.ac.uk/cms/Default.aspx?tabid=3770
- 10. Greenhalgh T, Chan X-H, Khunti K, Durand-Moreau Q, Straube S, Devane D, et al. What is the efficacy of standard face masks compared

- to respirator masks in preventing COVID-type respiratory illnesses in primary care staff? 24 March 2020. cebm.net/covid-19/what-is-the-efficacy-of-standard-face-masks-compared-to-respirator-masks-in-preventing-covid-type-respiratory-illnesses-in-primary-care-staff
- 11. Khunti K, Greenhalgh T, Chan X-H, Durand-Moreau Q, Straube S, Devane D, et al. What is the evidence that COVID-19 personal protective equipment should include shoe covers? 7 April 2020. cebm.net/covid-19/what-is-the-evidence-that-covid-19-personal-protective-equipment-should-include-shoe-covers
- 12. Khunti K, Greenhalgh T, Chan X-H, Durand-Moreau Q, Straube S, Devane D, et al. What is the efficacy of eye protection equipment compared to no eye protection equipment in preventing transmission of COVID-19-type respiratory illnesses in primary and community care? 3 April 2020. cebm.net/covid-19/what-is-the-efficacy-of-eye-protection-equipment-compared-to-no-eye-protection-equipment-in-preventing-transmission-of-covid-19-type-respiratory-illnesses-in-primary-and-community-care
- 13. Burton C, Coles B, Adisesh A, Smith S, Toomey E, Chan X-H, et al. What is the performance and impact of disposable and reusable respirators for healthcare workers in the context of COVID-19? 22 May 2020. cebm.net/covid-19/what-is-the-performance-and-impact-of-disposable-and-reusable-respirators-for-healthcare-workers-in-the-context-of-covid-19
- 14. Toomey E, Conway Y, Burton C, Smith S, Smalle M, Chan X-H, et al. Extended use or re-use of single-use surgical masks and filtering facepiece respirators: a rapid evidence review. 3 June 2020. cebm.net/covid-19/extended-use-or-re-use-of-single-use-surgical-masks-and-filtering-facepiece-respirators-a-rapid-evidence-review
- 15. Grimshaw JM, Tovey DI, Lavis JN, on behalf of COVID-END. COVID-END: an international network to better co-ordinate and maximize the impact of the global evidence synthesis and guidance response to COVID-19. In: Collaborating in response to COVID-19: editorial and methods initiatives across Cochrane. *Cochrane Database of Systematic Reviews* 2020;(12 Suppl 1). https://doi.org/10.1002/14651858.CD202002
- 16. Anglemyer A, Moore TH, Parker L, Chambers T, Grady A, Chiu K, et al. Digital contact tracing technologies in epidemics: a rapid review. *Cochrane Database of Systematic Reviews* 2020;(8):CD013699. https://doi.org/10.1002/14651858.CD013699