

Ciara Keenan, PhD, MSc, BSc (Hons)

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Background

I am a post-doctoral researcher with strong quantitative background and an established international reputation in evidence synthesis methodology. I am proficient with the R statistical environment and use this for all meta-analysis including meta-regression, network meta-analysis, obtaining cluster-robust variances etc.

I am most committed to capacity building in evidence synthesis which has led to my work as Founder and Editor of the [meta-evidence blog](#) and twitter's [@evidencerobot](#) and [@COVID_Evidence](#). I provide regular training and workshops across various evidence synthesis topics and am currently leading several review teams. In conjunction with these roles, I am a Methods Editor and Information Retrieval specialist for Campbell's Education Coordinating Group (ECG).

Research experience

Since completion of my PhD in 2018, I have established a considerable track record of publications and international collaborations, for example, all 15 of my peer reviewed articles have been co-authored with colleagues from other UK and international academic institutions. My research also impacts policy and three of my papers have informed [NICE guidelines](#).

I have experience leading large review teams and bringing together skills and expertise of various groups to collaborate towards the research objectives, I am now actively leading applications for research funding and have already been co-investigator on successful grant applications totalling £555k.

Teaching experience

I have extensive teaching experience in higher education, much of it focused on multidisciplinary research methods including systematic reviews and meta-analysis. I teach a range of participants including undergraduate and postgraduate students, university staff and other individuals from both

the private and public sector who attend for continued professional development purposes. This experience has been across multiple teaching strategies including direct instruction, online webinars, small group tutorials, and personalised teaching. The variety in my teaching experience has afforded me a well-rounded skill set and confidence in public speaking and teaching. Importantly, my work to date provides a useful link between sociology, social work, education and social psychology encouraging teaching collaborations and research.

I have recently designed bespoke programmes of study for Cochrane Fellows. As part of this programme, I designed learning experiences that take Fellows from beginning knowledge of evidence synthesis, through the use of advanced software for conducting reviews, to the advanced statistical methods required to undertake meta-analyses.

Education

MSc Biostatistics (NUIG, 2022)

Dissertation: Examining solutions to the missingness issue in meta-analysis.

Supervisor: Professor John Newell

PhD Sociology/ Psychology (QUB, 2018)

Dissertation: Universal Preschool- and School-based Education Programmes for Reducing Ethnic Prejudice and Promoting Respect for Diversity among Children Aged 3-11: A Systematic Review and Meta-Analysis.

Supervisors: Professor Paul Connolly, Dr Clifford Stevenson, and Dr Laura Taylor

MSc Autism Spectrum Disorders (QUB, 2014)

Dissertation: Video-based interventions for promoting positive social behaviour in children with autism spectrum disorders: a systematic review and meta-analysis.

Supervisor: Professor Allen Thurston

BSc (Hons) Social Psychology (UUC, 2009)

Supervisor: Professor Ronnie Wilson

Employment

Research Fellow, School of Psychology. 2021 – present

Research Fellow, Campbell UK & Ireland. 2017 – 2021

Associate Director, Cochrane Ireland. 2020

Editorial Assistant, Cochrane. 2017

Systematic Reviewer, Kleijnen Systematic Reviews Ltd., 2017

Internships

Vanderbilt University, Nashville (Mar – May 2015)

Purpose: Training in meta-analysis and employment on various research projects.

Skills acquired: Effect size computation, primary data analysis, advanced meta-analysis.

Supervisors: Professors Sandra-Jo Wilson, Emily Tanner- Smith, and Mark Lipsey.

Western University, Ontario (Nov 2014)

Purpose: Training in information retrieval

Skills acquired: The use of Pearl Harvesting information retrieval and its application to systematic reviews through one-to-one training with the developer of the method.

Supervisor: Professor Robert Sandieson

Successful Research Grants

COHERE Phase 2: Suite of living systematic reviews on determinants of COVID Health Related Behaviour (April 2021- October 2022) Funder: UKRI COVID Rolling Call (**£380,000**) Role: Co-Investigator

A rapid EGM on education research during COVID-19 (March – June 2021). Funder: Department of Education, Northern Ireland (**£15,000**) Role: Co-Investigator

A rapid systematic review on Kidney research during COVID-19 (June – August 2020). Funder: Insilica LLC. (**\$2,000**) Role: Principal Investigator

Three systematic reviews on the prevention of homelessness (Jan-Sept 2019). Funder: Crisis UK (**£157,680**). Role: Co-Investigator

Other Funding

2016 - BERA student bursary to attend BERA conference

2015 - Emily Sarah Montgomery travel scholarship to travel to Nashville

2014 - DEL studentship to complete PhD research

2014 - Smith Richardson Foundation research grant to employ four coders on PhD project

Professional Affiliations

- Advisory group for Evidence Synthesis Taxonomy Collaboration 2021 – present.
- Organising committee of the [Evidence Synthesis Hackathon, 2021](#).
- Organising committee of [Virtually Cochrane, 2021](#).
- Steering group for Priority III, Evidence Synthesis Ireland 2020 – present.
- Review Panel for shortlisted grants, CEDIL commissioned projects 2019.
- Grant peer reviewer, CEDIL commissioned projects 2019.

Editorial appointments

- Campbell’s working group for Meta-Reviews 2020- present.
- Methods Editor, Campbell Collaboration 2018 – present.
- Founder and Editor, [Meta-Evidence blog](#) 2018 – present.
- Co-convenor, Campbell’s information retrieval group 2018- present.
- Information retrieval specialist, Campbell Collaboration 2017 – present.

Selected invited talks

October 2021: Evidence for Development | What Works Global Summit. Topic: Future of evidence synthesis (Online - conference) Role: Chair.

July 2021: GESI – Campbell Collaboration webinar series. Topic: Searching in Campbell reviews: Improving and creating the evidence base (Online - webinar) Role: Facilitator.

April 2021: International Collaboration for the Automation of Systematic Reviews. Topic: Covid-19 and the meta-evidence project. Role: Speaker.

January 2021: Evidence Synthesis and Meta-Analysis in R (ESMA-R) Conference. Topic: Evimappr: an R package for producing interactive bubble plots of evidence. Role: Speaker.

November 2020: Housing studies association. Topic: Effectiveness of interventions to prevent homelessness. Role: Invited panel member.

May 2020: OECD Centre for Education Research and Innovation panel. Topic: COVID-19: implications for education experts and evidence. Role: Invited panel member.

May 2020: GESI – Campbell Collaboration webinar series. Topic: Plain Language Summaries: Improving the reach of your Systematic Review. Role: Facilitator.

July 2018: Guest on Podcast by Party of Reason and progress (PORP) to discuss Science communication.

June 2018: UK parliament. Topic: Are we looking at what people need to know? Role: Invited panel member.

Masters Students (2020- 21)

Cristiana Carvalho, Master's student at the School of Nursing & Midwifery, NUI Galway.

Project: Nurses' knowledge about Palliative Care in long term care facilities for older people: A scoping review.

Rachel Charles, Master's student at the School of Education at Queen's University Belfast.

Project: food selectivity in children with Autism Spectrum Disorder (ASD)

Roberta Mallia, Master's student at the School of Education at Queen's University Belfast.

Project: The application of Applied Behaviour Analysis principles to the treatment of Restricted and Repetitive Behaviours in individuals with Autism Spectrum Disorder (ASD)

Advisory Role (2020- 21)

Aideen Johnson, PhD student at the School of Education and Centre for Public Health at Queen's University Belfast. **Project:** An EGM on physical activity in schools

Dr Karen McConnell, ESI fellow at Campbell UK & Ireland in Queen's University Belfast. **Project:** Video-based interventions in children with Autism Spectrum Disorders

Conference Presentations

April 2021: Covid-19 and the meta-evidence project. International Collaboration for the Automation of Systematic Reviews. Online.

Jan 2021: Evimappr: an R package for producing interactive bubble plots of evidence. Evidence Synthesis & Meta-Analysis in R Conference. Online.

Nov 2020: Presentation of homelessness reviews. ESRC Festival of Social Science. Online.

Oct 2018: Presentation of PhD research. Global Evidence and Implementation summit. Melbourne.

Aug 2018: Presentation of PhD research. World education research association conference. Cape town

Sep 2017: Presentation of PhD research. British educational research association conference. Brighton

Sep 2017: Poster of PhD Research. The Global evidence summit. Cape town

Sep 2016: Presentation of ‘Pearl Search Harvesting.’ What Works Global Summit. London

Sep 2016: Presentation of PhD research. What Works Global Summit. London

Jun 2016: Presentation of PhD research. All Ireland Doctoral Conference. Belfast

Dec 2015: Presentation of ‘Grey literature.’ Student Led Seminar Series. Belfast

Sep 2015: Presentation of ‘What is a systematic review?’ PRDP. Belfast

Detailed teaching / supervision experience

Current Teaching and/or Supporting Learning Roles at Queen’s	Dates
Developing teaching for the online open programme 'Systematic Reviews in Social Sciences'. This programme will be run over a number of months for all students and staff at Queen’s to attend. I will be teaching three modules on searching, formulation of the research question, and data extraction. I will be using connected, online learning using a mixture of synchronous and asynchronous teaching (6 hours teaching)	Aug – Nov 2021
Co-facilitator of 2-day online workshop on Evidence and Gap Maps. Ran for Campbell UK & Ireland within Centre for Evidence and Social Innovation (CESI) (8 hours teaching)	May 2021
Provision of ongoing mentorship to an Evidence Synthesis Ireland fellow based in Queen’s. This fellowship was a competitive process which provides the fellow the opportunity to learn more about evidence synthesis from an experienced methodologist, such as myself (approx. 2 hours tutoring per week).	Mar 2021
I am currently mentoring various academic staff from QUB, helping them undertake evidence syntheses within the Cochrane/Campbell framework (approx.1 hour tutoring per week).	Nov 2017 - ongoing
An advisory role for a PhD student at the School of Education and Centre for Public Health at Queen’s University Belfast (approx.1 hour tutoring per week).	Dec 2020 - ongoing
Primary supervisor for a master’s student (student one) at the School of Education at Queen’s University Belfast (approx.1 hour tutoring per week).	Mar – Nov 2020
Primary supervisor for a master’s student (student 2) at the School of Education at Queen’s University Belfast (approx.1 hour tutoring per week).	Mar – May 2020

Facilitator of full day in-person workshop on Advanced search methods for systematic reviews and meta-analysis in school of Medicine, Dentistry and Biomedical Sciences (7 hours teaching)	Nov 2018
Co-facilitator of three day in-person workshop on Introduction to Systematic Reviews & Evidence and Gap Maps for Campbell UK and Ireland within Centre for Evidence and Social Innovation (CESI) (12 hours teaching)	May 2018
Facilitator of full day in-person workshop on Advanced search methods for systematic reviews and meta-analysis in school of Medicine, Dentistry and Biomedical Sciences (7 hours teaching)	Nov 2017
Teaching and/or Supporting Learning Roles outside Queen's	Dates
Primary supervisor of a Master's student at the School of Nursing & Midwifery, NUI Galway (approx.1 hour tutoring per week).	Nov 2020 - ongoing
Co-facilitator of 3 full day in-person workshop (21 hours) on Systematic reviews. Ran for Campbell Collaboration in Lanzhou University, China (12 hours teaching)	Feb 2019
Plain Language Summaries: Improving the reach of your Systematic Review. GESI – Campbell Collaboration webinar series (1 hour webinar)	May 2020
Effective searching. Cochrane Ireland (20-minute online video)	Nov 2020
Plain Language Summaries. Cochrane Colloquium (1.5 hour workshop).	Sep 2018

Recent Publications (* indicates open access)

- ***Keenan, C.**, Noone, C., McConnell, K., Cheng S.H. (2021). A rapid response to the COVID-19 outbreak: the meta-evidence project. *Journal of EAHIL*, 17 (2)
- ***Keenan, C.**, Miller, S., Hanratty, J., Pigott, T. D., Hamilton, J., Coughlan, C., . . . Cowman, J. (2021). Accommodation-based interventions for individuals experiencing, or at risk of experiencing, homelessness. *Campbell Systematic Reviews*, 17(2), e1165.
doi:<https://doi.org/10.1002/cl2.1165>
- ***Keenan, C.**, Thurston, A., Storey, C., & Urbanska, K. PROTOCOL: Video-based interventions for promoting positive social behaviour in children with autism spectrum disorders: a systematic review and meta-analysis. *Campbell Systematic Reviews*. 2021; 17:e1171.
<https://doi.org/10.1002/cl2.1171>

- *Gillies, K., Kearney, A., **Keenan, C.**, Treweek, S., Hudson, J., Brueton, V. C., . . . et al. (2021). Strategies to improve retention in randomised trials. *Cochrane Database of Systematic Reviews*(3). <https://doi:10.1002/14651858.MR000032.pub3>
- *Haddaway, N. R., Akl, E. A., Page, M. J., Welch, V. A., **Keenan, C.**, & Lotfi, T. (2020). Open synthesis and the coronavirus pandemic in 2020. *Journal of Clinical Epidemiology*, 126, 184-191. <https://doi.org/10.1016/j.jclinepi.2020.06.032>
- *Burke, N. N., Galvin, S., Devane, D., & **Keenan, C.** (2020). COVID-19 Emergency Evidence Response Service: report from Ireland. *Collaborating in response to COVID-19: editorial and methods initiatives across Cochrane. Cochrane Database of Systematic Reviews*, 12.
- *Mahalingasivam, V., Craik, A., Tomlinson, L. A., Ge, L., Hou, L., Wang, Q., . . . **Keenan, C.** (2020). COVID-19 and kidney transplantation: A systematic review. *Kidney international reports*. 6(1) 24-45. <https://doi.org/10.1016/j.ekir.2020.10.023>
- Hennessy, E. A., Johnson, B. T., & **Keenan, C.** (2019). Best practice guidelines and essential methodological steps to conduct rigorous and systematic meta-reviews. *Applied Psychology: Health and Well-Being*, 11(3), 353-381.
- *Connolly, P., **Keenan, C.**, & Urbanska, K. (2018). The trials of evidence-based practice in education: a systematic review of randomised controlled trials in education research 1980–2016. *Educational Research*, 60(3), 276-291.
- *Riemsma R, Corro Ramos I, Thielen F, Fayter D, Armstrong N, Wei C-Y, **Keenan C**, Huertas Carrera V, Büyükkaramikli N, Misso K, Worthy G, Kleijnen J. (2017). Obinutuzumab for untreated advanced follicular lymphoma: A Single Technology Assessment for NICE. York: Kleijnen Systematic Reviews Ltd.
- *Riemsma R, Corro Ramos, I, Büyükkaramikli N, Fayter D, Armstrong N, **Keenan C**, Swift S, Huertas Carrera V, Misso K, Worthy G, Al M, Kleijnen J. (2017). Grazoprevir–elbasvir for treating chronic hepatitis C: A Single Technology Assessment for NICE. York: Kleijnen Systematic Reviews Ltd.

Protocols, Preprints and papers in press

- *In press: **Keenan, C.**, Connolly, P., Urbanska, K., & Taylor, L. (2021). Universal preschool-and school-based education programmes for reducing ethnic prejudice and promoting respect for

diversity among children aged 3-11: A systematic review and meta-analysis. Campbell Systematic Reviews

- *Published protocol: **Keenan, C.**, Miller, S., Hanratty, J., Pigott, T. D., Mackie, P., Cowman, J., ... & Fitzpatrick, S. (2020). PROTOCOL: Accommodation-based interventions for individuals experiencing, or at risk of experiencing, homelessness. Campbell Systematic Reviews, 16(3), e1103.
- *Published protocol: Bergero, G., **Keenan, C.**, & Liew, A. (2021). PROTOCOL: The efficacy and safety profile of leptin replacement therapy for non-HAART associated lipodystrophic syndromes: A systematic review and meta-analysis. Inplasy protocol 202110047. doi:10.37766/inplasy2021.1.0047
- *Published protocol: Maynard, B. R., Duvendack, M., Hennessy, E. A., **Keenan, C.**, Lunny, C., & Welch, V. A. (2021). Protocol: Methodological Expectations of Campbell Collaboration Intervention Meta-Reviews: Conduct and Reporting Standards. Retrieved from osf.io/knvg4
- *Published protocol: Carvalho, C., & **Keenan, C.** (2021). PROTOCOL: Nurses' knowledge about Palliative Care in long term care facilities for older people: A scoping review. <https://doi.org/10.6084/m9.figshare.14040035.v3>
- *Published protocol: **Keenan, C.**, Pigott, T.D., Newell, J. (2020). PROTOCOL: Examining solutions to the missingness issue in meta-analysis: A Systematic Review. <https://doi.org/10.6084/m9.figshare.13270298.v1>
- *Published protocol: Cáceres-Escobar, H., Broad, S., Challender, D. W. S., Kinnaird, M. F., **Keenan, C.**, Lichtenstein, G., Rodriguez, J. P., Roe, D., Rouan, A. D., Van Dijk, P. P., Zambrana-Torrelío, C., & Kock, R. (2020). PROTOCOL: an Evidence and Gap Map (EGM) about the Roles and Risks of Wildlife Trade in the Emergence of Human Infectious Diseases and Zoonoses. <https://doi.org/10.6084/m9.figshare.13392275.v2>
- *Published protocol: Hull, K.L., Selvaskandan, H., Cheung, C.K., **Keenan, C.**, Simmons, B., Lightstone, L., Griffith, M., Ge, L., Zhu, H., Lim M. PROTOCOL: Evaluating the impact of immunosuppressive agents used for the treatment of auto-immune kidney disease on COVID-19 severity: A systematic review. PROSPERO 2020 CRD42020226260 Available from: https://www.crd.york.ac.uk/prospero/display_record.php?ID=CRD42020226260
- *Published protocol: Miller, S., **Keenan, C.**, Hanratty, J., Hamilton, J., Coughlan, C., Mackie, P., ... & Maddock, A. (2020) PROTOCOL: Improving access to health and social services for

individuals experiencing, or at risk of experiencing, homelessness. *Campbell Systematic Reviews*, 16(3), e1109.

- *Published protocol: Hanratty, J., Miller, S., **Keenan, C.**, Cowman, J., Hamilton, J., & Mackie, P. (2020). PROTOCOL: Discharge programmes for individuals experiencing, or at risk of experiencing, homelessness: A systematic review. *Campbell Systematic Reviews*, 16(3), e1109.
- *Protocol in press: Vasconcello-Castillo L, Torres-Castro R, **Keenan C**, Collins K, Solís-Navarro L, Cano-Cappellacci M, Vilaró J. Exercise after bariatric surgery for obese adults. *Cochrane Database of Systematic Reviews*. Art. No.: CD014894.
- *Protocol in press: Young S, Bethel A, **Keenan C**, Ghezzi-Kopel K, Moreton E, Pickup D, Premji ZA, Rogers M, Arleth Viinholt BC. Searching and reporting in Campbell Collaboration systematic reviews: An assessment of current methods. *Cochrane Database of Systematic Reviews*. Art. No.: CA000196.
- *Protocol in press: Maynard B, Maynard JA, **Keenan C**. High School Esports: Describing the Current State of the Literature and Exploring Effects on Student Outcomes. *Cochrane Database of Systematic Reviews*. Art. No.: CA000197.
- *Protocol in press: Haddaway N, **Keenan C**, Young S, Kohl C. Bibliographic database searching methods across CEE and Campbell Collaboration systematic reviews and maps: a systematic review. *Cochrane Database of Systematic Reviews*. Art. No.: CA000232.
- *Protocol in press: Liew, A., **Keenan C**. (2021) The clinical outcomes of optimal versus sub-optimal time in blood glucose range among critically ill patients receiving intravenous insulin therapy: A systematic review and meta-analysis. *Inplasy*
- *Published protocol: **Keenan, C.**, Connolly, P., & Stevenson, C. (2016). PROTOCOL: universal preschool-and school-based education programmes for reducing ethnic prejudice and promoting respect for diversity among children aged 3-11: A systematic review and meta-analysis. *Campbell Systematic Reviews*, 12(1), 1-45.

References available on request