# **BMJ Open** Equity of financial protection for health in high-income countries: scoping review protocol

Edward C Xie ,<sup>1,2</sup> Shehzad Ali ,<sup>3,4</sup> Michael Law ,<sup>5</sup> Sara Allin ,<sup>1</sup> Diego Proaño,<sup>6</sup> Beate Sander ,<sup>1</sup>

#### ABSTRACT

To cite: Xie EC, Ali S, Law M, et al. Equity of financial protection for health in highincome countries: scoping review protocol. *BMJ Open* 2024;**14**:e081029. doi:10.1136/ bmjopen-2023-081029

Prepublication history and additional supplemental material for this paper are available online. To view these files, please visit the journal online (https://doi.org/10.1136/ bmjopen-2023-081029).

Received 16 October 2023 Accepted 17 October 2024

Check for updates

© Author(s) (or their employer(s)) 2024. Re-use permitted under CC BY-NC. No commercial re-use. See rights and permissions. Published by BMJ.

For numbered affiliations see end of article.

Correspondence to Dr Edward C Xie; edward.xie@utoronto.ca **Introduction** Financial protection (FP) is a central function of health systems to enhance access to essential care and improve health equity. We aim to characterise evidence on the distribution of FP in high-income countries as well as how equity of FP is conceptualised and measured in these settings. Findings from this review can advance methodological and conceptual knowledge about equity in FP, guide the evaluation of health systems and inform policy on eliminating inequitable barriers to care to achieve universal health coverage.

Methods and analysis We will undertake a scoping review following guidance from Colguhoun *et al* and the Preferred Reporting Items for Systematic Reviews and Meta-Analyses Extension for Scoping Reviews. We will search four academic databases covering health sciences and economic literature as well as four grey literature sources for relevant publications. Screening for eligibility will be performed independently by two reviewers after calibration of screening criteria. Data will be charted using a standardised form and summarised by thematic analysis. Ethics and dissemination Institutional research ethics review was not required; however, research ethics will be considered iteratively throughout the research process. Research findings will be disseminated to scientific and policy meetings, summarised for lay audiences and submitted for publication in a peer-reviewed journal.

#### **INTRODUCTION**

A major objective of health systems is to mitigate financial hardship related to the use of health services. Attending to the interdependence of health and social conditions, this financial protection (FP) function aims to prevent deterioration of living standards when people experience illness.<sup>1</sup> Within the WHO's determinants of health and universal health coverage (UHC) frameworks, FP is a mechanism for improving health equity through equity of access to healthcare based on need rather than ability to pay.<sup>2-5</sup> Consequently, as a key indicator of health system performance, FP has interrelated health, economic and ethical implications that must be explored.<sup>36</sup>

#### STRENGTHS AND LIMITATIONS OF THIS STUDY

- ⇒ In order to capture a large breadth of knowledge, multiple academic and grey literature sources will be searched.
- ⇒ Following best practices, the search strategy was developed without language limits and extensively tested, revised and validated.
- ⇒ Screening criteria and data charting forms were reviewed by all authors and will be iteratively revised during calibration procedures.
- ⇒ Given the heterogeneity and complexity of data on this topic, narrative synthesis will be conducted using the original authors' interpretations.
- ⇒ Grey literature sources were limited to major international institutions.

FP for health can take many forms, such as benefits and transfers from governments to defray or eliminate out-of-pocket (OOP) health expenditures or the pooling of healthrelated financial risk.<sup>7</sup> In the UHC context, we are most concerned about the OOP health expenses comprising payments for services or materials, insurance premiums, costsharing mechanisms (eg, copayments, coinsurance, user fees) or indirect costs for items or services (eg, transportation) required to access healthcare.<sup>89</sup>

While much is known about FP in broad terms, two major gaps in the literature persist: systematic efforts to characterise FP in high-income countries are relatively few and even less is known about the equity of FP in these settings.<sup>10 11</sup> In this protocol, we present rationale for studying the distribution of FP in high-income countries followed by proposed methods to conduct a scoping review of academic and grey literature. Findings from this review can guide the evaluation of health systems as well as inform policy on eliminating inequitable barriers to care.

#### FP in high-income countries

Most UHC policy efforts have focused on enhancing FP in low- and middle-income

countries<sup>10</sup> and FP is well-studied and politically salient in these settings.<sup>2 12</sup> However, given rising concerns about health inequities, fairness in the allocation of healthcare, health system resource demands and diminishing gains to some forms of marginal health spending, FP is also increasingly relevant for high-income countries.<sup>2 13 14</sup> Moreover, the effect of previously existing protections may be eroded over time, due, for example, to social transfer levels that do not account for changing demographic, economic or health system conditions.<sup>15 16</sup>

In addition to generating evidence to inform policy, two other contributions can be made by reviewing FP in highincome countries. First, although standard approaches for studying FP exist,<sup>17</sup> it is not known whether these or other methods are being applied, in practice. Second, evidence from settings with high-quality, context-specific data may reveal novel methods for characterising FP that would not be possible in international studies requiring comparable statistics.<sup>18</sup>

#### **Indicators of FP**

Statistical indicators of FP can be organised into three broad categories: 'threshold indicators' of OOP spending in relation to defined financial boundaries or limits, the value of FP provided to recipients and the consequences of financial barriers to healthcare.<sup>14</sup><sup>19</sup> For example, threshold indicators of catastrophic or impoverishing OOP health spending can be measured in relation to a certain proportion of consumption or poverty line, respectively.<sup>17</sup> Although useful for comparative international analysis, these may have limited utility for domestic policy-making.<sup>20</sup> In addition, these indicators do not capture *cost-related* health inequalities or instances where healthcare is delayed, foregone or inadequate due to a lack of FP.<sup>21</sup> It may be argued that, within a UHC framework, evaluating the *impact* of financial barriers falls outside the scope of FP as an *instrument* of health coverage.<sup>19 22</sup> However, understanding these consequences can provide new insights into important phenomena absent from traditional analyses of health and financial dimensions of coverage in isolation, such as the joint distribution of health and financial outcomes, dynamic changes in tradeoffs and health effects attributable to a lack of FP. Such integration of health and financial outcomes remains a methodological challenge<sup>14 23</sup> and a variety of quantitative indicators may be needed to characterise the equity of FP.

#### **Equity of FP for health**

In addition to the relatively limited evidence from highincome countries, little is known about the equity of FP for health in these settings.<sup>10 24</sup> Previous analyses of the equity of FP in these settings tend to focus on distribution by income thresholds.<sup>18</sup> Attaining a more extensive understanding of equity in FP poses both conceptual and methodological challenges. Conceptually, the flexible meaning of 'equity' within and between different settings leads to inconsistent applications in research and policy.<sup>25–27</sup> Elucidating the conceptual underpinnings of research about equity can identify important knowledge for the interpretation of findings and may also reveal patterns of thought across the literature.

Methodologically, decisions about which variables are considered 'equity-relevant' are important to how equity is operationalised in research and policy.<sup>11</sup> A common strategy for evaluating equity in FP has been to use indicators of OOP spending and indices of inequality to summarise distributions of FP by recipient income.<sup>28</sup> However, many sociodemographic variables that are likely to determine differences in FP, such as immigration status, geography, sex and gender are relatively less studied.<sup>29 30</sup> In addition, decisions on how to construct and calculate statistics for FP may result in substantial equity implications. For example, Cylus, Thompson and Evetovits<sup>31</sup> found that different methods to calculate catastrophic spending would identify different segments of the population as facing the greatest hardship. Such decisions or non-decisions may reflect different unstated or implicit ethical or methodological paradigms.<sup>23</sup>

In the present study, we focus on the distributive justice dimension of equity in terms of how FP is distributed according to equity-relevant variables in high-income countries. By 'distribution', we refer to the pattern of differences in FP within a population, with particular attention to differences that are considered unjust in each context.<sup>5 13 23</sup> We also examine the conceptual basis for claims about its distributional fairness.<sup>13 32</sup> Understanding these features of the literature will provide insights into value judgements that are often undeclared but fundamental to research and policy.

#### **Research questions**

FP is central to efforts to achieve health equity, within the WHO's UHC framework and as an objective of national health systems.<sup>4 5</sup> By undertaking this review, we seek to understand how conceptualisations of health equity have been operationalised in research and reporting on the distribution of FP, as well as how FP has been applied in the evaluation of health system performance. Our scoping review aims to address four related questions:

- 1. Which variables were considered equity-relevant or relevant to the distribution of FP for the population under study?
- 2. Which indicators were used to measure and evaluate the distribution of FP?
- 3. What was the reported distribution of FP for health and/or healthcare in high-income countries?
- 4. Which theories, frameworks, models, distributive principles or value judgements were invoked in the analytical design or interpretation of findings?

#### **METHODS**

A scoping review will be undertaken following standard methods described in the literature.<sup>33 34</sup> Scoping reviews are designed to characterise and synthesise literature in

order to understand the extent, boundaries and nature of existing knowledge on a topic.<sup>35</sup> A chief advantage of this method is the ability to summarise diverse sources of information in a systematic manner while allowing flexibility to iteratively explore the literature.<sup>33 34</sup> Reporting will follow guidance described in the Preferred Reporting Items in Systematic Reviews and Meta-Analyses extension for scoping reviews (PRISMA-ScR).<sup>36</sup>

#### Sources and search strategy

The search strategy was developed with the assistance of a research librarian and included academic and grey literature sources. Sources were selected based on a broad representation of fields of study relevant to health policy and economics. Searches will be limited to records published since 2010. This date was chosen to maintain recency of findings and aligns with the publication of an agenda-setting World Health Report from the WHO on health system financing.<sup>4</sup> Four electronic databases will be searched: Embase, MEDLINE, EconLit and International Bibliography of the Social Sciences. Grey literature searches will be conducted using Research Papers in Economics as well as the public search features of the websites of the WHO, the World Bank Open Knowledge Repository and the Organisation for Economic Co-operation and Development iLibrary.

Search terms were selected based on the iterative development of synonyms and subject headings where relevant. These were supplemented with search terms from exemplar articles. Search terms included synonyms for three main concepts: FP, equity and health. The strategy was first developed in Embase (OvidSP platform), validated by confirming that key relevant articles were identified among results,<sup>37</sup> and then translated to the other sources using thesaurus or subject heading functions, where available. The Embase search strategy is presented in online supplemental table 1. The initial search was conducted on 14 July 2023 with plans to update the search and begin a synthesis of findings in August 2024.

#### **Study selection**

Selection criteria were guided by the research questions and refined after exploratory searches in Embase. The unit of analysis focusses on population-level FP for health or healthcare pertaining to broad-based interventions (programmes or policies) at regional, national or international jurisdictional levels. Records will be included if they pertain to high-income countries listed in the 2023 World Bank classification<sup>38</sup>; contain outcomes addressing the research questions; and were published in any language since 1 January 2010. Peer-reviewed articles and working papers, reports or government documents containing original work will be included from the academic databases and grey literature, respectively. A complete summary of selection criteria can be found in online supplemental table 2).

All records will be uploaded to the Covidence (Veritas Health Innovation) electronic platform and

deduplicated.<sup>39</sup> Duplicates identified by Covidence will be manually reviewed for errors prior to screening. Records will be screened in two stages: first, for inclusion based on titles and abstracts and second, based on reviewing full texts. Two reviewers will assess all records for eligibility. In order to establish consistency, both reviewers will screen a sample of 100 publications, discuss decisions and, if appropriate, revise the screening criteria and data extraction guide.<sup>36</sup> Disagreements will be documented and resolved by consensus after discussion between the two reviewers or consultation with a third reviewer. A flow chart of study selection will be produced according to PRISMA-ScR guidelines.<sup>36</sup> Inter-reviewer reliability statistics will be reported as kappa values.

#### **Data charting and synthesis**

Data will be extracted by two reviewers using a standard form (online supplemental table 3). The charting form and procedure will be piloted on two eligible publications as a calibration exercise to qualitatively assess the robustness of variables between the reviewers. Any updates to the form will be documented and reported.<sup>33</sup> Following the calibration process, data charting will be performed separately by each reviewer, with discussion as required.

Research articles will be reviewed in their entirety for data. Non-research reports and government documents will be reviewed for sections relevant to the research questions. Record characteristics including study design, population, geographic setting, financing model, time period, limitations and competing interests statements will be collected and descriptively coded.

Findings will be configured using tabular summary, narrative synthesis and thematic analysis in relation to the research questions. To answer research question 1, we will extract determinant factors arising in each record as well as the presence or absence of categories appearing in the PROGRESS-plus framework for identifying characteristics and relationships that contribute to health equity such as sex, age, socioeconomic status and geographic location. Indicators (question 2) and distributions (question 3) from each eligible record will be charted and summarised according to their description in the original text. The presence or absence of theories, frameworks and explicit value judgements (question 4) will be coded during the close reading of each text with a narrative summary of the data and charting of source literature, if cited in the original text. Integration of review findings will be conducted by thematic analysis and interpretation will address each of the research questions and the study rationale. Charting will be performed in Microsoft Excel.<sup>40</sup>

#### Patient and public involvement statement

There was no patient or public involvement in this research protocol.

#### **Ethics and dissemination**

Research ethics board review was not required for this study. However, ethical issues, such as the nature of the

#### **Open access**

questions, plausible benefits and burdens and potential long-term consequences will be considered in an ongoing manner using a framework proposed by Willison and colleagues that encourages continuous learning and ethical reflection throughout the research lifecycle.<sup>41</sup>

Preliminary findings of the scoping review will be submitted as an abstract for discussion at research and policy meetings. We will identify key stakeholders and experts for consultation on the initial synthesis. A manuscript with complete findings and analysis will be prepared for publication at the completion of the review. In addition, our findings will be distributed to international academic and policy networks related to health systems research or health equity. As our scoping review will address knowledge gaps related to FP and the equity of FP in high-income countries, including how it is measured and conceptualised, the findings will be of interest to academic and policy stakeholders with the aim of enhancing health system performance.

#### **Author affiliations**

<sup>1</sup>Institute of Health Policy, Management and Evaluation, University of Toronto Dalla Lana School of Public Health, Toronto, Ontario, Canada

<sup>2</sup>Public Health Economics Research, University Health Network, Toronto, Ontario, Canada

<sup>3</sup>Epidemiology and Biostatistics, University of Western Ontario, London, United Kingdom, Canada

<sup>4</sup>Health Sciences, University of York Faculty of Sciences, York, New York, UK <sup>5</sup>Centre for Health Services and Policy Research, School of Population and Public Health, The University of British Columbia, Vancouver, British Columbia, Canada <sup>6</sup>Faculty of Dentistry, University of Toronto, Toronto, Ontario, Canada

<sup>7</sup>Toronto Health Economics and Technology Assessment (THETA) Collaborative, University Health Network, Toronto, Ontario, Canada

X Edward C Xie @edwardcxie and Diego Proaño @diegoproanof

Acknowledgements We wish to acknowledge Whitney Berta for feedback on an initial draft of this protocol and Vincci Liu for expert guidance on the search strategy.

**Contributors** ECX conceptualised the study, designed study methods and wrote the original draft of the protocol. ShA contributed to methodological design, review and editing. ML contributed to methodological design, review and editing. SA contributed to methodological design, review and editing. DP contributed to methodological design, and review. BS contributed to methodological design, review and editing and overall supervision. All authors have approved the version submitted and agree to be accountable for all aspects of the work.

**Funding** This research was supported by funding from the Canadian Institutes of Health Research (CIHR) (Reference Number 202211FBD-493546-77046) held by Edward Xie and a Canada Research Chair in Economics of Infectious Diseases held by Beate Sander (CRC-950-232429).

**Competing interests** Xie, Ali, Allin, Proaño and Sander have no competing interests. Law consulted for Health Canada and CADTH, and acted as an expert witness for the Federation of Post-secondary Educators and the Durham Police Association.

Patient and public involvement Patients and/or the public were not involved in the design, or conduct, or reporting, or dissemination plans of this research.

Patient consent for publication Not applicable.

Provenance and peer review Not commissioned; externally peer reviewed.

Supplemental material This content has been supplied by the author(s). It has not been vetted by BMJ Publishing Group Limited (BMJ) and may not have been peer-reviewed. Any opinions or recommendations discussed are solely those of the author(s) and are not endorsed by BMJ. BMJ disclaims all liability and responsibility arising from any reliance placed on the content. Where the content includes any translated material, BMJ does not warrant the accuracy and reliability

of the translations (including but not limited to local regulations, clinical guidelines, terminology, drug names and drug dosages), and is not responsible for any error and/or omissions arising from translation and adaptation or otherwise.

**Open access** This is an open access article distributed in accordance with the Creative Commons Attribution Non Commercial (CC BY-NC 4.0) license, which permits others to distribute, remix, adapt, build upon this work non-commercially, and license their derivative works on different terms, provided the original work is properly cited, appropriate credit is given, any changes made indicated, and the use is non-commercial. See: http://creativecommons.org/licenses/by-nc/4.0/.

#### **ORCID iDs**

Edward C Xie http://orcid.org/0000-0003-1498-3530 Shehzad Ali http://orcid.org/0000-0002-8042-3630 Michael Law http://orcid.org/0000-0002-5637-6053 Sara Allin http://orcid.org/0000-0002-0579-8985 Beate Sander http://orcid.org/0000-0002-7836-2656

#### REFERENCES

- World Health Assembly, 58. Resolution WHA58.33 sustainable health financing, universal coverage and social health insurance. World Health Organization; 2005. Available: https://apps.who.int/iris/ bitstream/handle/10665/20383/WHA58\_33-en.pdf?sequence=1
- 2 Hendrix N, Bolongaita S, Villano D, et al. Equitable Prioritization of Health Interventions by Incorporating Financial Risk Protection Weights Into Economic Evaluations. V H 2023;26:411–7.
- 3 Kutzin J. Health financing for universal coverage and health system performance: concepts and implications for policy. *Bull World Health Organ* 2013;91:602–11.
- 4 World Health Organization. The world health report: health systems financing: the path to universal coverage. World Health Organization; 2010. Available: http://apps.who.int/iris/handle/10665/44371
- 5 CSDH. Closing the gap in a generation: health equity through action on the social determinants of health. final report of the commission on social determinants of health. Geneva World Health Organization; 2008.
- 6 Abiiro GA, De Allegri M. Universal health coverage from multiple perspectives: a synthesis of conceptual literature and global debates. BMC Int Health Hum Rights 2015;15:17.
- 7 Moreno-Serra R, Thomson S, Xu K. Measuring and comparing financial protection. In: Papanicolas I, Smith P, eds. *Health system performance comparison: an agenda for policy, information and research.(European Observatory on Health Systems and Policies Series)*. Maidenhead: Open University Press, 2013.
- 8 Rice T, Quentin W, Anell A, et al. Revisiting out-of-pocket requirements: trends in spending, financial access barriers, and policy in ten high-income countries. BMC Health Serv Res 2018;18:371.
- 9 Wagstaff A, Eozenou P, Smitz M. Out-of-pocket expenditures on health: a global stocktake(policy research working paper). 8808. Washington, USA The World Bank; 2019. 10.1596/1813-9450-8808 Available: http://hdl.handle.net/10986/31537
- 10 Bhatia D, Mishra S, Kirubarajan A, et al. Identifying priorities for research on financial risk protection to achieve universal health coverage: a scoping overview of reviews. *BMJ Open* 2022;12:e052041.
- 11 Cookson R, Mirelman AJ, Griffin S, et al. Using Cost-Effectiveness Analysis to Address Health Equity Concerns. V H 2017;20:206–12.
- 12 Erlangga D, Suhrcke M, Ali S, et al. The impact of public health insurance on health care utilisation, financial protection and health status in low- and middle-income countries: A systematic review. PLoS ONE 2019;14:e0219731.
- 13 Powers M, Faden R. Structural Injustice: Power, Advantage, and Human Rights. New York: Oxford University Press, 2019.
- 14 Verguet S, Norheim OF. Estimating and Comparing Health and Financial Risk Protection Outcomes in Economic Evaluations. V Health 2022;25:238–46.
- 15 Hacker JS. Privatizing Risk without Privatizing the Welfare State: The Hidden Politics of Social Policy Retrenchment in the United States. *Am Polit Sci Rev* 2004;98:243–60.
- 16 Wagstaff A, Flores G, Smitz MF, et al. Progress on impoverishing health spending in 122 countries: a retrospective observational study. *Lancet Glob Health* 2018;6:e180–92.
- 17 Eozenou P, Wagstaff A, Smitz M, et al. The 2019 update of the health equity and financial protection indicators database: an overview. Washington, DC World Bank; 2019. Available: https://hdl.handle.net/ 10986/31869

4

## <u> d</u>

### **Open access**

- 18 Thomson S, Cylus J, Evetovits T. Can People Afford to Pay for Health Care? New Evidence on Financial Protection in Europe. World Health Organization. Regional Office for Europe, 2019:119.Available: https:// apps.who.int/iris/handle/10665/311654
- 19 Saksena P, Hsu J, Evans DB. Financial risk protection and universal health coverage: evidence and measurement challenges. *PLoS Med* 2014;11:e1001701.
- 20 Hsu J, Flores G, Evans D, et al. Measuring financial protection against catastrophic health expenditures: methodological challenges for global monitoring. Int J Equity Health 2018;17:69.
- 21 Woolhandler S, Himmelstein DU. The Relationship of Health Insurance and Mortality: Is Lack of Insurance Deadly? *Ann Intern Med* 2017;167:424–31.
- 22 Wagstaff A. 2.4 measuring financial protection in health. In: Smith PC, Mossialos E, Papanicolas I, et al, eds. *Performance measurement for health system improvement: experiences, challenges and prospects*. Cambridge University Press: Cambridge, 2009.
- 23 Cookson R, Griffin S, Norheim OF, et al. Distributional Cost-Effectiveness Analysis: Quantifying Health Equity Impacts and Trade-Offs. Oxford: Oxford University Press, 2021.
- 24 Rahman MM, Jung J, Islam MR, et al. Global, regional, and national progress in financial risk protection towards universal health coverage, 2000–2030. Social Science & Medicine 2022;312:115367.
- 25 Amri MM, Jessiman-Perreault G, Siddiqi A, *et al.* Scoping review of the World Health Organization's underlying equity discourses: apparent ambiguities, inadequacy, and contradictions. *Int J Equity Health* 2021;20:70.
- 26 Lynch J. Regimes of Inequality: The Political Economy of Health and Wealth. Cambridge, England: Cambridge University Press, 2020.
- 27 Sen A. Chapter 1: equality of what. In: *Inequality reexamined*. New York: Russell Sage Foundation, 2006.
- 28 Wagstaff A, Eozenou P, Neelsen S, et al. Introducing the World Bank's 2018 Health Equity and Financial Protection Indicators database. Lancet Glob Health 2019;7:e22–3.
- 29 Essue BM, Jan S, Phuc HT, et al. Who benefits most from extending financial protection for cataract surgery in Vietnam? An extended cost-effectiveness analysis of small incision surgery. *Health Policy Plan* 2020;35:399–407.

- 30 OECD. Health for Everyone?: Social Inequalities in Health and Health Systems. Paris: Organisation for Economic Co-operation and Development, 2019. Available: https://www.oecd-ilibrary.org/socialissues-migration-health/health-for-everyone\_3c8385d0-en
- 31 Cylus J, Thomson S, Evetovits T. Catastrophic health spending in Europe: equity and policy implications of different calculation methods. *Bull World Health Organ* 2018;96:599–609.
- 32 Lamont J, Favor C. Distributive justice. In: ZaltaEN, ed. The Stanford Encyclopedia of Philosophy [Internet]. Winter 2017. Metaphysics Research Lab, Stanford University, 2017. Available: https://www. taylorfrancis.com/books/9781351943437
- 33 Colquhoun HL, Levac D, O'Brien KK, et al. Scoping reviews: time for clarity in definition, methods, and reporting. J Clin Epidemiol 2014;67:1291–4.
- 34 Peters MDJ, Marnie C, Colquhoun H, et al. Scoping reviews: reinforcing and advancing the methodology and application. Syst Rev 2021;10:263.
- 35 Booth A, Papaioannou D, Sutton A. Systematic Approaches to a Successful Literature Review. 2nd edn. Los Angeles: Sage, 2016.
- 36 Tricco AC, Lillie E, Zarin W, *et al.* PRISMA Extension for Scoping Reviews (PRISMA-ScR): Checklist and Explanation. *Ann Intern Med* 2018;169:467–73.
- 37 Hosking J, Macmillan A, Jones R, et al. Searching for health equity: validation of a search filter for ethnic and socioeconomic inequalities in transport. Syst Rev 2019;8:94.
- 38 The World Bank. World bank country and lending groups world bank data. 2023. Available: https://datahelpdesk.worldbank.org/ knowledgebase/articles/906519-world-bank-country-and-lendinggroups
- 39 McKeown S, Mir ZM. Considerations for conducting systematic reviews: evaluating the performance of different methods for deduplicating references. Syst Rev 2021;10:38.
- 40 O'Neill J, Tabish H, Welch V, et al. Applying an equity lens to interventions: using PROGRESS ensures consideration of socially stratifying factors to illuminate inequities in health. J Clin Epidemiol 2014;67:56–64.
- 41 Willison DJ, Ondrusek N, Dawson A, et al. What makes public health studies ethical? Dissolving the boundary between research and practice. BMC Med Ethics 2014;15:61.