DALHOUSIE UNIVERSITY

Strategies and indicators to address health equity in health service and delivery systems: a scoping review protocol

Abstract

Objective: The purpose of this review is to describe how health service and delivery systems support health equity and to identify strategies and indicators being used to measure health equity.

Introduction: It is widely acknowledged that a population health and equity approach is needed to improve the overall health of the population. The health service and delivery system plays an important role in this approach. Despite this, system transformation to address health inequities has been slow. This is due, in part, to the lack of evidence-based guidance on how health service and delivery systems can address and measure health equity integration. Most studies focus on health equity integration in the public health sector at a provincial or national level, but less is known about integration within the health service and delivery system. More information is needed to understand how that transformation is occurring, or could occur, to make a meaningful contribution toward improving population health outcomes.

Inclusion criteria: This scoping review will identify studies that describe the strategies and indicators that health service and delivery systems are using to integrate health equity and how progress is measured. Evidence from qualitative, quantitative, mixed method studies, and gray literature will be included.

Methods: This review will be conducted in accordance with JBI methodology for scoping reviews. A comprehensive search strategy, developed with a librarian scientist, will be used to identify relevant sources. Titles, abstracts, and full texts will be evaluated against inclusion criteria. Information will be extracted by two independent reviewers. Data will be synthesized and presented narratively, with tables and figures where appropriate.

Keywords: health care; health system; inequity; measures; population health

Abstract word count: 263

Total manuscript word count: 2000

Introduction

Conditions of modern life affect the health of communities, families, and people in ways that are complex, inter-related, and in many cases, unjust. Population health, defined as "the health outcomes of a group of individuals, including the distribution of such outcomes within the group,"[1(p.381)] is deeply connected to the social and societal conditions in which people are born, work, live, and age. These are known as the social determinants of health (SDOH).[2–4] There are myriad ways that SDOH have been described; however, they are commonly linked with health equity.[5] Health equity occurs when individuals have the opportunity to achieve their full health potential[6], whereas health inequity occurs when unnecessary or unjust conditions cause differences in people's health status or outcomes.[7] While many of the issues that affect the health and well-being of populations fall outside the health service and delivery system,[2] such as poverty, they have direct and indirect implications for health system performance, such as cost to access care or patient experience.[8] Health service and delivery systems are a component of the health system, with a specific remit to provide care, defined as the "organization of people, institutions, and resources to deliver health care services to meet the health needs of a target population, whether a single-provider practice or a large health care system."[9(p.671)] These systems need to consider their role beyond delivering health care to ensure that they also achieve the goal of improving population health by measuring and integrating health equity in their practices. Health inequities that arise because of SDOH are recognized as a global killer,[10] which can only be address by intersectoral, whole-of-government action.

The need to integrate a population health and health equity approach within health service and delivery systems has long been recognized. In 1974, the Lalonde Report in Canada suggested that health systems move beyond a biomedical view of health (free of illness and disease) toward a health promotion approach.[11] This was expanded in 1986 with the Ottawa Charter, a framework that identified the need to reorient health services to a population health approach that includes SDOH, rather than an individual health approach.[12] In 2011, the Rio Declaration on the Social Determinants of Health stated that the health sector should address SDOH and prioritize health equity to achieve social prosperity.[13] Despite persistent global inequities[8,9,14] and the documented importance of integrating health equity into health service and delivery systems, transformation has been slow.

In Canada, significant progress toward health equity integration has been made in the public health sector. For example, the National Collaborating Centre for Determinants of Health has produced frameworks to guide public health roles and tools for action since 2005.[15] Organizational frameworks to

guide capacity for health equity action have also been developed for public health agencies,[16] including the identification and development of indicators.[17,18] Health Quality Ontario developed a Health Equity Plan[21] that embeds equity into the provincial health system based on a review of provincial and national health equity strategies; however, examples of health equity integration within the health service and delivery system (beyond public health) are hard to find. Among the few studies that exist, Shahzad et al.[19] examined cross-sectoral collaboration between public health and clinical care to integrate a population health approach to health care delivery to address inequities. Shankardass et al.[20] explored international, intersectoral, governmental approaches to health equity action, noting a need to improve the description of these complex, multi-actor processes in the literature. In a recent overview of reviews that identified and synthesized strategies to reduce health inequities, the authors highlighted that most strategies have targeted health care delivery, and more work is needed to understand how health systems can integrate equity within the entire system to address the health and well-being of the population. A review to examine health equity strategies and indicators that focuses on the entire health service and delivery system is still lacking. Such a review is needed to guide system transformation by clarifying the role of the health service and delivery system in addressing health inequities and identifying possible strategies and gaps.

The aim of this review is to identify strategies and indicators that health service and delivery systems are using to promote and measure health equity in the population to improve health outcomes. Our overarching aim is to describe the role that health service and delivery systems play in promoting and supporting health equity across all populations. This is to understand how health equity is defined and measured within these systems, and to learn how these translate into better outcomes and system improvements.

A preliminary search of PROSPERO, MEDLINE, the Cochrane Database of Systematic Reviews, and the *JBI Evidence Synthesis* was conducted and no current or in-progress systematic reviews on the topic were identified. The overview of reviews by Garzon-Orjuela et al. (2020) summarized strategies or interventions aiming to reduce health inequalities[22]; however, that work differs from our proposed review. We will examine both strategies and indicators for health equity and will include literature older than the past five years as well as both academic and gray literature.

The aim of this review is to identify the role that health service and delivery systems have in addressing and measuring health equity.

Review question

What health equity strategies and indicators are health service and delivery systems using to address health equity?

i. How is health equity defined and operationalized within health service and delivery systems?
ii. What frameworks are commonly used to guide the integration of health equity indicators within health service and delivery systems?
iii. How are health service and delivery systems measuring health equity integration (eg, indicators, accountability frameworks)?
iv. What strategies exist to address health equity and for what populations (eg, patients, families, communities, health care workers)?
v. What are the levels of integration of health equity indicators within health service and delivery systems (eg, delivery arrangements, financial arrangements, governance arrangements, and implementation strategies)?

Inclusion criteria

Participants

Participant details will not be used for the selection of studies for this scoping review. Instead, this review will consider primary studies and other literature reflecting: i) the integration of actions to address health equity within health service and delivery systems, and ii) the clinical and operational services that comprise these systems. Only studies from high-income, developed economies (see Appendix IV) will be included in this review. The results will be stratified by country and/or by type of health system used in that country (see Appendix III for health system classifications).

Concept

The main concept of interest for this scoping review is to identify what health equity strategies (and related indicators) have been developed and/or used by health service and delivery systems. We define strategies as any efforts or measures put in place with the purpose of enhancing health equity for patients or broader populations served by such systems. Examples include policies that aim to provide equitable access to health services through transportation services to and from medical appointments or providing translation services to those who may not understand the local language. Such strategies

can be reflected in frameworks (policy, quality, organizational, governance), models of care, programs, policies, workforce, and financing management that are integrated within the health service and delivery systems. We define indicators as ways to measure health equity integration within the health service and delivery system, such as a tool to measure diversity among health care workers.

Context

The context of this study will be health service and delivery systems.[9] We define health systems as all organizations, people, and actions whose primary intent is to promote, restore, or maintain health.[9] See Appendix III for relevant health system definitions and country classifications for health system types.

To identify the levels at which health equity strategies and related indicators within the health service and delivery system are being addressed and where gaps exist, we will use the Cochrane Effective Practice and Organization of Care (EPOC) taxonomy of health system interventions.[23] There are four main domains in the EPOC taxonomy: i) delivery arrangements, ii) financial arrangements, iii) governance arrangements, and iv) implementation strategies.[24]

Types of studies

This scoping review will consider studies employing quantitative, qualitative, and mixed methods methodologies. It will also consider reviews and both published and unpublished studies (eg, gray literature, dissertations, white papers, policy reports, quality reports). Text and opinion papers will also be considered for inclusion in this review.

To capture evidence globally, the scoping review will not limit the search to the English language. Studies published (or available) in all languages will be included in the search, provided that an English abstract is available; however, data extraction will occur only if an English translation is available. All efforts will be made to locate English versions of articles, including contacting authors of relevant studies. Studies published from 1986 to 2021 will be included because 1986 marks the publication of the Ottawa Charter for Health Promotion.[11]

Exclusion Criteria

Articles will be excluded if: they are not available in English (or a translation is not available), published before 1986, they do not describe implementation of strategies or indicators in the health service or

delivery system, or they are implemented outside the health service or delivery system (i.e., community-based strategies).

Methods

The proposed systematic review will be conducted in accordance with JBI methodology for scoping reviews.[25]

Search strategy

A JBI three-step search strategy will be implemented in this review. The search strategy, developed in cooperation with a librarian scientist, will aim to locate both published and unpublished studies. The search strategy underwent a Peer Review of Electronic Search Strategy (PRESS) by a qualified health sciences librarian (MH) and adjustments were made accordingly.[26] An initial limited search of MEDLINE and CINAHL was undertaken to identify articles on the topic. The text words contained in the titles and abstracts of relevant articles, and the index terms used to describe the articles were used to develop a full search strategy (see Appendix I). The search strategy, including all identified keywords and index terms, will be adapted for each included information source. The reference list of all studies selected for critical appraisal will be screened for additional studies.

The databases to be searched include MEDLINE (Ovid), CINAHL (EBSCO), Embase (Elsevier), Scopus (Elsevier), Academic Search Premier (EBSCO), and PAIS (ProQuest). Sources of unpublished studies and gray literature to be searched include databases such as ProQuest Dissertations and Theses; internet search engines such as Google and DuckDuckGo; the relevant organizations specified in CADTH's Grey Matters Tool; and the websites of other pertinent organizations, such as the Institute of Health Equity, Institute for Health Improvement, and the National Collaboration Centre for Determinants of Health, among others.

Study selection

Following the search, all identified citations will be collated and uploaded into Covidence (Veritas Health Innovation, Melbourne, Australia) and duplicates removed. Titles and abstracts will then be screened by two independent reviewers for assessment against the inclusion criteria for the review. The full text of selected citations will be assessed in detail against the inclusion criteria by two independent reviewers. Reasons for exclusion of full-text studies that do not meet the inclusion criteria

will be recorded and reported in the systematic review. If any systematic reviews are identified in the search, relevant studies will be extracted individually and analyzed separately from the review. They will be used to identify individual research papers for inclusion. Any disagreements that arise between the reviewers at each stage of the study selection process will be resolved through discussion or with a third reviewer. The results of the search will be reported in full in the final systematic review and presented in a Preferred Reporting Items for Systematic Reviews and Meta-analyses (PRISMA) flow diagram.[27]

Data extraction

Data will be extracted from papers included in the scoping review by two independent reviewers using a data extraction tool developed by the reviewers. The data extracted will include specific details about the population, concept, context, study methods, and key findings relevant to the review objective. A draft data extraction tool has been piloted (see Appendix II). This tool will be modified and revised as necessary during the process of extracting data from each study. Modifications will be detailed in the full scoping review report. Any disagreements that arise between the reviewers will be resolved through discussion or with a third reviewer. Authors of papers will be contacted to request missing or additional data, where required.

Data analysis and presentation

The extracted data will be presented in tables, charts, and conceptual presentation styles to best reflect the objective of this scoping review (eg, a table will be used to summarize the identified strategies to address health equity and their frequency in the included studies).[28] In addition, a visual representation (honeycomb heatmap) of topics covered will be used to display the topics (definitions, measures/indicators, strategies) and their frequencies in the literature. Color codes will be used in this figure to visually separate data for the various contexts and participant groups in the included studies.[28] If appropriate, bubble plots, word clouds, and pie charts will also be used.[29] A narrative summary will accompany the tabulated and/or charted results, describing how these relate to the review objective and questions.

Funding

Funding is provided by a Canadian Institutes of Health Research Catalyst Grant (FRN 170322). Funding for this project from the Canadian Institutes of Health Research provides salary support for SB, HC, CC, and EC. MS and ME each hold a Health System Impact Fellowship that is partially funded by Nova Scotia Health.

Conflicts of interest

The authors declare no conflicts of interest.

References

1. Kindig D, Stoddart G. What is population health? *Am J Public Health*. 2003;93(3):380-3.

2. Raphael D. *Social determinants of health: Canadian perspectives*. Canadian Scholars' Press; 2009.

3. Donkin A, Goldblatt P, Allen J, Nathanson V, Marmot M. Global action on the social determinants of health. *BMJ Glob Health*. 2018;3:1-8.

4. Bourgeault IL. Introduction. In: Bourgeault IL, Labonté R, Packer C, Runnels V, eds. *Population health in Canada: issues, research, and action*. 1st ed. Canadian Scholars' Press; 2017:298.

5. Lucyk K, McLaren L. Taking stock of the social determinants of health: a scoping review. *PLoS One*. 2017;12(5):1-24.

6. Canadian Medical Association. Health equity and the social determinants of health: a role for the medical profession [internet]. 2013;1-10 [cited 2020, Dec, 18]. Available from: https://www.cma.ca/health-equity-and-social-determinants-health-role-medical-profession

7. Dahlgren G, Whitehead M. Policies and strategies to promote social equity in health. *Inst Futur Stud*. 1991;1-67.

8. Agency for Healthcare Research and Quality. National healthcare quality and disparities report: introduction and methods [internet]. 2018 [cited 2020, Dec, 18]. Available from: https://www.ahrq.gov/sites/default/files/wysiwyg/research/findings/nhqrdr/2018qdr-intro-methods.pdf.

9. Pina IL, Cohen PD, Larson DB, Marion LN, Sills MR, Solberg LI, Zerzan J. A framework for describing health care delivery organizations and systems. *AM J Public Health.* 2015;105(4):670-679.

10. World Health Organization. Closing the gap in a generation: health equity through action on the social determinants of health. 2008 [cited 2020, Dec, 18]. Available from: https://www.who.int/publications/i/item/WHO-IER-CSDH-08.1

11. Lalonde M. A new perspective on the health of Canadians [internet]. Ottawa, ON; 1974 [cited 2020, Dec, 18]. Available from: https://www.phac-aspc.gc.ca/ph-sp/pdf/perspect-eng.pdf

12. World Health Organization. Ottawa Charter for Health Promotion First: first international conference on health promotion [internet]. Ottawa: 1986 [cited 2021, Jul, 5]. Available from: https://www.who.int/teams/health-promotion/enhanced-wellbeing/first-global-conference

13. World Health Organization. Rio political declaration on social determinants of health. World Conference on Social Determinants of Health. Rio de Janeiro [internet]. 2011 [cited 2020, Dec, 18]. Available from:

http://www.who.int/sdhconference/declaration/Rio_political_declaration.pdf.

14. Public Health Agency of Canada. Key health inequalities in Canada: a national portrait [internet]. Public Health Agency of Canada. 2018 [cited 2020, Dec, 18]. Available from: https://www.canada.ca/en/public-health/services/publications/science-research-data/key-health-inequalities-canada-national-portrait-executive-summary.html.

15. National Collaborating Centre for Determinants of Health. A guide to assessment tools for organizational health equity capacity [internet]. Antigonish, NS: NCCDH, St. Francis Xavier University. 2020 [cited 2020, Dec, 18]. Available from: https://nccdh.ca/resources/entry/OCI-KP-8-Guide-to-assessment-tools.

16. Cohen BE, Schultz A, McGibbon E, VanderPlaat M, Bassett R, Germann K, et al. A conceptual framework of organizational capacity for public health equity action (OC-PHEA). *Can J Public Heal*. 2013;104(3):262-6.

17. Salter K, Salvaterra R, Antonello D, Cohen BE, Kothari A, Leber MJ, et al. Organizational level indicators to address health equity work in local public health agencies: a scoping review. *Can J Public Health*. 2017;108(3):e306-13.

18. Cohen B, Salter K, Kothari A, Le Ber M, Lemieux S, Moran K, et al. Indicators to guide health equity work in local public health agencies: a locally driven collaborative project in Ontario. *Health Promot Chronic Dis Prev Can*. 2016;38:277-85.

19. Shahzad M, Upshur R, Donnelly P, Bharmal A, Wei X, Feng P, et al. A population-based approach to integrated healthcare delivery: a scoping review of clinical care and public health collaboration. *BMC Public Health*. 2019;19(1):1-15.

20. Shankardass K, Solar O, Murphy K, Greaves L, O'Campo P. A scoping review of intersectoral action for health equity involving governments. *Int J Public Health*. 2012;57(1):25-33.

21. Health Quality Ontario. Health Quality Ontario's health equity plan [internet]. 2016 [cited DATE]. Available from: http://www.hqontario.ca/Portals/0/documents/pe/recruiting-diversity-en.pdf.

22. Garozon-Orjuela N, Samaca-Samaca DF, Luque Angulo SC, Mendes Abdala CV, Reveiz L, Eslava-Schmalbach J.. An overview of reviews on strategies to reduce health inequities. *Int J Equity Health.* 2020. 19,192:1-11.

23. Effective Practice and Organisation of Care. EPOC taxonomy [internet]. 2015 [cited 2020, Dec, 18]. Available from: https://epoc.cochrane.org/sites/epoc.cochrane.org/files/public/uploads/taxonomy/epoc_taxonomy.pdf.

24. Levesque J-F, Harris MF, Russell G. Patient-centred access to health care: conceptualising access at the interface of health systems and populations. *Int J Equity Health*. 2013;12(18):1-9.

25. Peters MDJ, Godfrey C, McInerney P, Munn Z, Tricco AC, Khalil, H. Chapter 11: Scoping Reviews. In: Aromataris E, Munn Z, editors. JBI Manual for Evidence Synthesis [internet]. JBI, 2020 [cited 2020, Dec, 18]. Available from https://synthesismanual.jbi.global

26. Sampson M, McGowan J, Cogo E, Grimshaw J, Moher D, Lefebvre C. An evidence-based practice guideline for the peer review of electronic search strategies. *J Clin Epidemiol*. 2009;62(9):944-52.

27. Tricco AC, Lillie E, Zarin W, O'Brien KK, Colquhoun H, Levac D, et al. PRISMA Extension for Scoping Reviews (PRISMA-ScR): checklist and explanation. The PRISMA-ScR Statement. *Ann Intern Med*. 2018;169(7):467-73.

28. Lockwood C, Borgess dos Santos, Pap R. Practical guidance for knowledge synthesis: scoping review methods. *Asian Nurs Res*. 2019;13(5):287-94.

29. Pollock D, Davies EL, Peters MD, Tricco AC, Alexander L, McInerney P, et al. Undertaking a scoping review: a practical guide for nursing and midwifery students, clinicians, researchers, and academics. *J Adv Nurs*. 2021;77(4):2102-13.

278 # Appendix I: search strategy

Medline (Ovid) Date searched: January 8, 2021		
No.	Query	Results
1	"Delivery of Health Care"/	93480
2	Health Services Administration/	4501
3	Public Health/	83514
4	Health Policy/	67519
5	(health* adj2 delivery).ti,ab.	23113
6	(financ* adj2 (healthcare system or health system)).ti,ab.	227
7	(investment? adj2 health*).ti,ab.	1426
8	(health* adj2 (organization or administ* or policy or delivery or public or authorit*)).ti,ab.	382230
9	Health Care Sector/	6417
10	Healthcare Disparities/	17925
11	Health Equity/	1530
12	(health* adj2 (equit* or determinant*)).ti,ab.	14588
13	(health* adj2 (inequit* or inequalit*)).ti,ab.	11000
14	(health* adj2 (fair or unfair or just or unjust or equal or unequal or differen* or disparit*)).ti,ab.	16915
15	((indicator? or measur* or assess* or evaluat* or success* or "KPI" or reporting or dashboard).ti,ab.	8969718
16	exp Quality Indicators, Health Care/	22094
17	exp "outcome and process assessment, health care"/ or exp program evaluation/ or exp quality indicators, health care/	1275345
18	1 or 2 or 3 or 4 or 5 or 6 or 7 or 8 or 9	555364
19	10 or 11 or 12 or 13 or 14	52616
20	15 or 16 or 17	9527287
21	18 and 19 and 20	6536

279

280

281 # Appendix II: Draft data extraction instrument

Evidence source details and characteristics	
Citation details (eg, author/s date, title, journal, volume, issue, pages):	
Type of evidence source:	
Methodology/approach/design:	
Country:	
Context (health service/delivery system):	
Participant details (eg, age/sex and number; indigenous peoples; ethno-racial communities; low income; disability; religious; rural/remote; sex/gender; sexual orientation; other)	
Research question or study purpose:	
Key findings:	
Details/results extracted from source of evidence (in relation to the concept of the scoping review)	
How is health equity defined?	
What is/are the strategy/strategies used?	
Are frameworks used? If so, which one(s)?	
How is health equity operationalized and/or integrated within the health service delivery system?	
How is health equity measured in any way (indicators)?	
What are the levels of integration of health equity indicators within health service and delivery systems (delivery arrangements, financial arrangements, governance arrangements, and implementation strategies)?	

282

283

284

Appendix III: Definitions

Table 1: Health system definitions

Term	Definition	Reference
Health service and delivery system	Organization of people, institutions, and resources to deliver health care services to meet the health needs of a target population, whether a single-provider practice or a large health care system.	Pina IL, Cohen PD, Larson DB, Marion LN, Sills MR, Solberg LI, et al. A framework for describing health care delivery organizations and systems. Am J Public Health. 2015;105(4):670-9.
Universal health care	Individuals receive, either through direct public spending or through more indirect means of state-imposed legal mandating of private health insurance, the medically necessary health services they need with as few financial barriers as possible.	Bump JB. The long road to universal health coverage: a century of lessons for development strategy. PATH and the Rockefeller Foundation; 2010 [cited 2020 Dec 18]. Available from: https://brasil.campusvirtualsp.org/sites/default/files/DIM-The-Long-Road-to-UHC.pdf. Kutzin J. Towards universal health coverage: a goal-oriented framework for policy analysis. World Bank; 2000 [cited 2020 Dec 18. Available from: https://documents.worldbank.org/en/publication/documents-reports/documentdetail/260141468779178780/towards-universal-health-care-coverage-goal-oriented-framework-for-policy-analysis.
National health service	An ideal type, where regulation, financing, and provision are governed by the state; universal coverage, funding from general tax revenue, and public ownership of the health infrastructure.	Bohm K, Schmid A, Gotze R, Landwher C. Five types of OECD healthcare systems: empirical results of a destructive classification. Health Policy. 2012;113(3):258-69.
National health insurance	Combines National Health Service (NHS) regulatory structures and tax financing with predominantly private service provision.	Bohm K, Schmid A, Gotze R, Landwher C. Five types of OECD healthcare systems: empirical results of a destructive classification. Health Policy. 2013;113(3):258-69.
Social health insurance	Services delivered by private for-profit providers; combined universal coverage with funding coming mainly from contributions and public or private delivery.	Bohm K, Schmid A, Gotze R, Landwher C. Five types of OECD healthcare systems: empirical results of a destructive classification. Health Policy. 2013;113(3):258-69.
Étatist (state-driven) social health insurance	Only completely mixed health care type; state is responsible for regulating the system, financing is organized by societal actors, and provision has been delegated to private sector.	Bohm K, Schmid A, Gotze R, Landwher C. Five types of OECD healthcare systems: empirical results of a destructive classification. Health Policy. 2013;113(3):258-69.
Private health insurance system	Private insurance only, which is the major funding source; delivery is characterized by private ownership; service provision is in the hands of for-profit providers.	Bohm K, Schmid A, Gotze R, Landwher C. Five types of OECD healthcare systems: empirical results of a destructive classification. Health Policy. 2013;113(3):258-69.

290 **Table 2: Country classification in five health system types found in Europe and North America**

National health service (NHS)	National health insurance (NHI)	Étatist (state-driven) social health insurance (SSHI)	Social health insurance (SHI)	Private health insurance (PHI)
Denmark	Australia	Belgium	Austria	Mexico
Finland	Canada	Czech Republic	Germany	United States of America
Iceland	Ireland	Estonia	Luxembourg	
Portugal	Italy	France	Switzerland	
Spain	New Zealand	Hungary		
Sweden		Netherlands		
United Kingdom		Poland		
		Slovakia		
Source: Böhm K, Schmid S, Götze R, Landewehr C, Rothgang H. Five Types of OECD healthcare systems: empirical results of a deductive classification. Health Policy. 2013;113(3):258-63.				

291

292

Appendix IV: Areas of data collection: High-income countries

Andorra	Denmark	Latvia	Saudi Arabia
Antigua and Barbuda	Estonia	Liechtenstein	Seychelles
Aruba	Faroe Islands	Lithuania	Singapore
Australia	Finland	Luxembourg	Sint Maarten (Dutch)
Austria	France	Macao Sar (China)	Slovak Republic
Bahamas	French Polynesia	Malta	Slovenia
Bahrain	Germany	Monaco	South Korea
Barbados	Gibraltar	Netherlands	Spain
Belgium	Greece	New Caledonia	St. Kitts and Nevis
Bermuda	Greenland	New Zealand	St. Martin (French)
British Virgin Islands	Guam	Northern Mariana Islands	Sweden
Brunei Darussalam	Hong Kong	Norway	Switzerland
Canada	Hungary	Oman	Trinidad and Tobago
Cayman Islands	Iceland	Palau	Turks and Caicos Islands
Channel Islands	Ireland	Panama	United Arab Emirates
Chile	Isle of Man	Poland	United Kingdom
Croatia	Israel	Portugal	United States of America
Curacao	Italy	Puerto Rico	Uruguay
Cyprus	Japan	Qatar	Virgin Islands
Czech Republic	Kuwait	San Marino	

Source: World Bank (2021). High-income economies. Retrieved December 1, 2020 from https://datahelpdesk.worldbank.org/knowledgebase/articles/906519-world-bank-country-and-lending-groups.