Research Protocol

Organizational and Institutional Initiatives for the Recruitment, Retention, and Advancement of Black Nurses in the Canadian Health Care System: A Rapid Review Protocol

Keisha Jefferies, RN, PhD; Andrea Carson, PhD; Meaghan Sim, PhD, RD; Leah Boulos, MLIS; Tara Sampalli, PhD; and Gail Tomblin Murphy, PhD, RN, FAAN, FCAN, FCAHS

Research, Innovation & Discovery, Nova Scotia Health, Halifax, Nova Scotia, Canada

Abstract

Introduction: In response to protests for racial justice, several organizations and institutions have made public declarations denouncing anti-Black racism. One prominent sector emphasizing their commitment to addressing anti-Black racism is health care—more specifically, nursing. To address anti-Black racism, many Canadian organizations and institutions have announced initiatives to recruit, retain, and support the advancement of Black nurses. Our team is interested in charting these initiatives to inform future policy and program decisions related to the recruitment, retention, and advancement of Black nurses. **Objective:** The objective of this review is to identify and chart evidence of organizational and institutional initiatives related to the recruitment, retention, and advancement of Black nurses in Canada. **Inclusion criteria:** This rapid review will include sources focused on Black nurses in Canada. Further, this review is focused on the organizational or institutional initiatives that support or facilitate aspects of recruitment, retention, or advancement of Black nurses in the workforce in Canada. **Methods:** A comprehensive search, developed in collaboration with a library scientist, will be used to locate peer-reviewed and grey literature from select databases and repositories. Databases will be searched from time of inception, and language will be restricted to English and French sources. Title and abstract screening as well as full-text review will each be completed by two independent reviewers. Sources will be included if they meet the inclusion criteria for the population, concept, and context. Data will be extracted by two reviewers using an extraction tool. Data will be reviewed and consolidated before being presented narratively and visually.

Protocol Registration: The protocol has been registered with Open Science Framework (OSF) on March 1st, 2023.

Keywords: African descent, Black, Canada, nursing, health care, workforce

Introduction

Over the past three years, there has been a notable increase in anti-racism programs and initiatives to address anti-Black racism and other forms of racial discrimination in Canada (Patrick, 2022). Many of these programs and initiatives focus on increasing the representation of people of African descent in institutions and organizations (Egbedeyi et al., 2022). With evidence showing how racism has direct health implications (Salami et al., 2022; Williams et al., 2019), it is no surprise that the health sector is one area of focus for increasing representation (Canadian Nurses Association, 2009). In Canada, the nursing profession is one practitioner group that is working to address historical discriminatory practices that continue to impact the workforce and health care in Canada (Canadian Nurses Association, 2009). Examples of discriminatory practices include restrictions to nursing training programs and a lack of culturally appropriate content in curricula (Flynn, 2011; Jefferies, Martin-Misener, et al., 2022). Several of these practices continue today. Addressing the under-representation of Black nurses requires attending to important considerations related to the recruitment, retention, and advancement of Black nurses. Understanding existing mechanisms that facilitate recruitment, retention, and advancement will help address issues identified as exacerbating the nursing shortage resulting from burnout and moral injury (Tomblin Murphy et al., 2022).

Institutional and Organizational Commitments to Addressing Anti-Black Racism

During the height of the widespread 2020 protests for racial justice and the protection of Black lives, numerous organizations and institutions in Canada pledged their commitment to address anti-Black racism within their entities. The pledges spanned sectors including education, labour, and health care, with commitments including hiring considerations, internal/organizational reviews, and specific mechanisms to increase representation of Black professionals in these sectors. For example, several universities launched Black faculty cohort hires and designated seats in baccalaureate programs; provincial and federal funding has been designated for Black-led (and focused) research; organizations denounced anti-Black racism through public statements; and agencies have launched deployment initiatives. Notably, many nursing organizations and institutions made commitments to addressing anti-Black racism throughout the profession.

Nursing in Crisis

Nurses are one of the most trusted health care provider groups and make up a significant proportion of the health care workforce (Almost, 2021). Delivering care across a broad range of practice areas and settings, nurses are leaders in community and clinical care, education, research, administration, and policy. However, recent events and societal trends, including an aging population, prevalence of chronic conditions, and antiquated systems-level operations, as well as the COVID-19 pandemic, have put increased stress and strain on the nursing workforce (Tomblin Murphy et al., 2022). For decades, there has been concern related to the retention of nurses in the Canadian workforce (Tomblin Murphy et al., 2012). However, due to a combination of human resource issues as well as the deployment and distribution of nurses, this concern has reached crisis level (Tomblin Murphy et al., 2022).

Black Nurses in Canada

Evidence shows that existing literature related to Black nurses in Canada focuses on five main areas: historical situatedness of Black nurses, racism and discrimination, immigration, leadership and career progression, and diversity in the workforce (Jefferies, States, et al., 2022). Notably, racism in the nursing profession—and health care—is a reoccurring issue. Further, evidence suggests that Black nurses are under-represented in advanced practice nursing roles,

leadership positions, and specialty care areas, while being overrepresented in entry-level positions, non-specialty care areas, and non-licensed clinical care roles such as continuing care assistants or personal support workers (Jefferies, Martin-Misener, et al., 2022; Premji & Etowa, 2014). Additionally, the issues for Black internationally educated nurses include barriers to licensing and registration as well as integration into the nursing workforce (Covell & Rolle Sands, 2020). Finally, regional differences highlight the necessity of context-specific evidence. For instance, in Nova Scotia, Black nurses report challenges with integration into the nursing profession due to various factors such as racism and institutional barriers (Etowa et al., 2009; Jefferies, Martin-Misener, et al., 2022).

Mobilization of Black Nurses

Activism and mobilization have always been central pillars among Black communities. However, the murder of George Floyd in 2020 ignited a movement among Black nurses in multiple jurisdictions across Canada. Canada saw the emergence of several provincial and national organizations with a mandate to address anti-Black racism in the nursing profession. Some of these include the Canadian Black Nurses Network (CBNN), Black Nurses' Task Force (Registered Nurses' Association of Ontario [RNAO]), Pan-Canadian Association of Nurses of African Descent (PCANAD), the Canadian Black Nurses Alliance (CBNA), Ontario Black Nurses Network (OBNN), Black Nurses Association of Nova Scotia (BNANS), and the Coalition of African, Caribbean and Black Nurses in British Columbia (CACBN). Each of these organizations have unique mandates to address various aspects of anti-Black racism in nursing. Examples include the promotion of leadership among Black nurses (OBNN & CBNN) and a national voice and community of support (PCANAD & CBNA), as well as more local initiatives of lobbying at the provincial and institutional levels (CACBN, BNANS) and addressing issues in education (CBNA, BNANS, RNAO), research, and public forums (RNAO,

PCANAD, CBNA).

Operational Definitions

For this review, there are two operational terms that require defining.
The population of interest for this review is *Black nurses*. There are two components to the population. The first is defining "Black," which encompasses people identified as being of African descent from various countries or regions such as continental Africa and the Caribbean, as well as the United States, Canada, and South America. It is important to note that the Black population (in Canada and elsewhere) is not a monolith. As a result, there are specific and important differences that constitute the mosaic that is the Black population (Cénat, 2022). The second component, "nurses," includes licensed and regulated nurses who completed an accredited nursing program. In Canada, there are four nursing designations that are recognized: licensed practical nurse (LPN), registered nurse (RN), registered psychiatric nurse (RPN), and nurse practitioner (NP; Almost, 2021). Lastly, this definition for Black nurses includes Black-identified nurses who may be referred to as immigrant nurses, visible minorities, or internationally educated nurses (IENs).

The second operational term is *initiative,* used to describe institutional or organizational strategies, guidelines, mechanisms, frameworks, practices, pathways, or channels, which are developed (or implemented) by entities that address the recruitment, retention, and/or advancement of Black nurses. Examples may include policies such as equitable admissions policies or workplace promotional channels.
With the launch of these programs and initiatives, there is an opportunity to learn from existing practices to inform the development of future strategies that are context specific. To this end, this review is not an effectiveness study, a systematic review, or an evaluation of programs. Rather, this review is intended to serve as an initial step in evidence synthesis by charting evidence on the recruitment, retention, and advancement for Black nurses in Canada. As

described by Tricco et al. (2017), rapid reviews are a useful and desirable approach to knowledge synthesis, as they address several of the challenges in the research-to-policy/practice channel. For example, rapid reviews are useful in supporting policy decisions and practice changes that are time sensitive.

The objective of this rapid review is to explore and identify the type of available evidence that outlines organizational and institutional initiatives for strengthening the nursing workforce through the recruitment, retention, and advancement of Black nurses in Canada. Additionally, this review will chart the existing provincial and national Black nursing organizations focused on supporting Black nurses within health care systems. The findings from this review will inform a context-specific strategic initiative to address the recruitment, retention, and advancement of Black nurses in the nursing workforce within a health system in a region of Canada.

A preliminary search of MEDLINE, the Cochrane Database of Systematic Reviews, and *JBI Evidence Synthesis* was conducted, and no current or underway systematic reviews or scoping reviews on the topic were identified. This highlights an opportunity to chart the existing evidence on this issue to continue to inform policy decisions and initiative development. Importantly, this rapid review expands a recently published scoping review that charted evidence pertaining to Black nurses in Canada (Jefferies, States, et al., 2022).

Review Question

This rapid review is guided by one broad question and two sub-questions. The main review question is as follows: What is the current available evidence regarding the organizational and institutional initiatives for the recruitment, retention, and advancement of Black nurses in the health care system in Canada?

The review sub-questions include the following:
1. What organizational or institutional practices, frameworks, and mechanisms

exist for the recruitment, retention, and advancement of Black nurses in Canada?
2. In what ways are Black nurses organizing and mobilizing in Canada?

Eligibility criteria

Population

The population of interest for this rapid review include nurses identified as Black or of African descent. Examples include nurses described as African Canadian, Caribbean Canadian, Black Canadian, African Nova Scotian, or Black, as well as nurses described as migrants, immigrants, or newcomers and as Black or of African descent. Finally, sources that involve multiple ethnic or racial groups will be considered for inclusion if they include data that are disaggregated by race or ethnicity.

Concept

The concept of interest for this review is organizational and institutional initiatives used to recruit, retain, and promote Black nurses in the nursing workforce and health care system in Canada. Specifically, the concept encompasses initiatives such as practices, strategies, mechanisms, frameworks, and programs. Examples of such initiatives may include but are not limited to equitable admissions policies, designated hiring procedures or affirmative action policies, and deployment initiatives, as well as professional development or promotional pathways or channels.

Context

Due to the stated objective of informing the development of initiatives for a specific jurisdiction in Canada, the context for this review is restricted to Canada. However, as will be described in more detail below, the search of sources will span two regions. Importantly, the search of grey literature will be limited exclusively to Canada, while the peer-reviewed search will include Canada, the rest of North America, and the United Kingdom. The expansion of the peer-reviewed literature search is based on the authors' knowledge of existing topic-specific peer-reviewed and grey

literature in Canada.

Sources will be excluded from this review if they do not meet the a priori inclusion criteria put forth in this protocol. Particularly, sources that do not focus on organizational or institutional practices that support the recruitment, retention, or advancement of Black-identified nurses will be excluded.

Types of Sources

The types of sources for this review include two broad categories: peer-reviewed and grey literature. In terms of published peer-reviewed literature, all quantitative study designs including experimental, quasi-experimental, analytical observational studies, and descriptive observational will be considered. Additionally, qualitative studies such as phenomenology, grounded theory, ethnography, qualitative description, action research, and feminist research will be considered for inclusion. Further, systematic and scoping reviews will be considered. Finally, as noted, the search of peer-reviewed literature will include sources from North America and the United Kingdom.

In terms of grey literature, text and opinion papers as well as organizational and institutional policies or reports will also be considered for inclusion in this rapid review. The search of grey literature will be limited to Canada.

Methods

This rapid review will be conducted by a team of scientists with expertise in systematic and rapid review methodology. The review team will draw on rapid review methodology guidelines (Ganann et al., 2010; Tricco et al., 2017).

Search Strategy

The search strategy (Appendix A), developed in collaboration with a librarian scientist, aims to locate published and unpublished studies. The search for this review was influenced by three key sources (Ayiku et al., 2017; Cheung et al., 2020; Jefferies, States, et al., 2022). Importantly, this search builds on a comprehensive review, created for this population, developed by a library scientist (Jefferies, States, et al., 2022). The 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. Ancestry tracing, which involves scanning the reference list of all included sources of evidence, will be used to screen for additional studies. Additionally, forward citation tracing will be performed. Sources published in English and French will be included and databases will be searched from inception. The databases to be searched include PubMed, Embase (Elsevier), CINAHL with Full Text (EBSCO), APA PsycInfo (EBSCO), and Scopus (Elsevier).

Sources of grey literature include online repositories and organizational and institutional websites such as nursing organizations, health agencies, and schools of nursing, which have described practices for the recruitment, retention, and/or advancement of Black nurses. The grey literature search will be limited to Canada only. Examples of organizational websites include those of the Registered Nurses' Association of Ontario, Canadian Nurses Association, Canadian Black Nurses Alliance, Pan-Canadian Association of Nurses of African Descent, Coalition of African, Caribbean and Black Nurses in British Columbia, and the Ontario Black Nurses' Network. Examples of institutional websites include those of Toronto Metropolitan University, York University, University of Toronto, Dalhousie University, University of Regina, McGill University, and the University of Alberta.

Source of Evidence Selection

Following the search, all identified citations will be collated and uploaded into Covidence and duplicates removed. Following a pilot test of approximately 5% of the included sources using the extraction tool, titles and abstracts will be screened by two independent

reviewers against the inclusion criteria. Potentially relevant sources will be retrieved in full and their citation details imported into Covidence. The full text of selected citations will be assessed in detail against the inclusion criteria by two independent reviewers. Any disagreements between reviewers at the title and abstract screening or the full-text review will be resolved by a third reviewer. Reasons for exclusion of sources at the full text stage will be recorded and appended in the final report. The results of the search and the study inclusion process will be reported in full in the final review report and presented in a Preferred Reporting Items for Systematic Reviews and Meta-Analyses extension for Scoping Review (PRISMA-ScR) flow diagram (Page et al., 2021). Sources meeting the inclusion criteria at the full text stage will advance to the extraction stage of the review.

Data Extraction

Covidence will be used to organize and complete data extraction. Data will be extracted from included sources by two independent reviewers using the data extraction tool (Appendix B). Consensus of extracted data points will be performed by a third reviewer. Data items to be extracted will include specific details about the participants, concept, and context. The data extraction tool, and thus the data points of interest, may be modified and revised as extraction progresses. Any deviations from the protocol will be detailed in the review report.

Data Charting and Presentation

Data charting will involve a framework that will be used in combination with an iterative approach to evidence synthesis and charting. Importantly, data charting will not include a critical appraisal of sources, as this is not the intention of this review. Rather, this review will chart the existing evidence on the organizational and institutional practices for the recruitment, retention, and advancement of Black nurses in the workforce in Canada.

The presentation of data will be framed by the review objective and questions. Data will be presented narratively and visually, using tables and figures where appropriate. Data presentation will include a description of the type of sources, the location or setting of sources, and the identified organizational or institutional practice. Particularly, the review will disaggregate the identified practices according to recruitment, retention, or advancement mechanisms.

Conflicts of Interest

There is no conflict of interest in this project.

References

Almost, J. (2021, February). *Regulated nursing in Canada: The landscape in 2021*. Canadian Nurses Association. https://hl-prod-ca-oc-download.s3-ca-central-1.amazonaws.com/CNA/2f975e7e-4a40-45ca-863c-5ebf0a138d5e/UploadedImages/documents/Regulated-Nursing-in-Canada_e_Copy.pdf

Ayiku, L., Levay, P., Hudson, T., Craven, J., Barrett, E., Finnegan, A., & Adams, R. (2017). The MEDLINE UK filter: Development and validation of a geographic search filter to retrieve research about the UK from OVID MEDLINE. *Health Information and Libraries Journal, 34*(3), 200–216. https://doi.org/10.1111/hir.12187

Canadian Nurses Association. (2009, January). *Sustaining the workforce by embracing diversity* [Policy brief].

Cénat, J. M. (2022). Who is Black? The urgency of accurately defining the Black population when conducting health research in Canada. *CMAJ, 194*(27), E948–E949. https://doi.org/10.1503/cmaj.220274

Cheung, A., Popoff, E., & Szabo, S. (2020). Using text-mining to develop a US-specific geographic search filter to facilitate systematic reviews in Ovid MEDLINE. *Cochrane Database of Systematic Reviews, 2020*(9, Suppl 1), 319. https://doi.org/10.1002/14651858.CD202001

Covell, C. L., & Rolle Sands, S. (2020). Does being a visible minority matter? Predictors of internationally educated nurses' workplace integration. *Canadian Journal of Nursing Research, 53*(4), 366–375. https://doi.org/10.1177/0844562120939795

Egbedeyi, O., El-Hadi, H., Madzima, T. R., Semalulu, T., Tunde-Byass, M., & Swaleh, R. (2022). Assessing the need for Black mentorship within residency training in Canada. *CMAJ, 194*(42), E1455–E1459. https://doi.org/10.1503/cmaj.212124

Etowa, J. B., Sethi, S., & Thompson-Isherwood, R. (2009). The substantive theory of surviving on the margin of a profession. *Nursing Science Quarterly, 22*(2), 174–181. https://doi.org/10.1177/0894318409332781

Flynn, K. (2011). *Moving beyond borders: A history of Black Canadian and Caribbean women in the diaspora*. University of Toronto Press.

Ganann, R., Ciliska, D, & Thomas, H. (2010). Expediting systematic reviews: Methods and implications of rapid reviews. *Implementation Science, 5*, Article 56. https://doi.org/10.1186/1748-5908-5-56

Jefferies, K., Martin-Misener, R., Tomblin Murphy, G., Gahagan, J., & Thomas Bernard, W. (2022). African Nova Scotian nurses' perception and experiences of leadership: A qualitative study informed by Black feminist theory. *CMAJ, 194*(42), 1437–1447. https://doi.org/10.1503/cmaj.220019

Jefferies, K., States, C., MacLennan, V., Helwig, M., Gahagan, J., Thomas Bernard, W., Macdonald, M., Tomblin Murphy, G., & Martin-Misener, R. (2022). Black nurses in the nursing profession in Canada: A scoping review. *International Journal for Equity in Health, 21*, Article 102. https://doi.org/10.1186/s12939-022-01673-w

Page, M. J., McKenzie, J. E., Bossuyt, P. M., Boutron, I., Hoffmann, T. C., Mulrow, C. D., Shamseer, L., Tetzlaff, J. M., Akl, E. A., Brennan, S. E., Chou, R., Glanville, J., Grimshaw, J. M., Hróbjartsson, A., Lalu, M. M., Li, T., Loder, E. W., Mayo-Wilson, E., McDonald, S., … Moher, D. (2021). The PRISMA 2020 statement: An updated guideline for reporting systematic reviews. *BMJ, 372*, n71. https://doi.org/10.1136/bmj.n71

Patrick, K. (2022). A focus on the health of Black people and anti-Black racism in health care in Canada. *CMAJ, 194*(41), E1420–E1421. https://doi.org/10.1503/cmaj.221501

Premji, S., & Etowa, J. B. (2014). Workforce utilization of visible and linguistic minorities in Canadian nursing. *Journal of Nursing Management, 22*(1), 80–88. https://doi.org/10.1111/j.1365-2834.2012.01442.x

Salami, B., Idi, Y., Anyieth, Y., Cyuzuzo, L., Denga, B., Alaazi, D., & Okeke-Ihejirika, P. (2022). Factors that contribute to the mental health of Black youth. *CMAJ, 194*(41), E1404–E1410. https://doi.org/10.1503/cmaj.212142

Tomblin Murphy, G., Birch, S., MacKenzie, A., Alder, R., Lethbridge, L., & Little, L. (2012). Eliminating the shortage of registered nurses in Canada: An exercise in applied needs-based planning. *Health Policy, 105*(2–3), 192–202. https://doi.org/10.1016

/j.healthpol.2011.11.009

Tomblin Murphy, G., Sampalli, T., Bourque Bearskin, L., Chasen, N., Cummings, G., Rose, A. E., Etowa, J., Grinspun, D., Jones, E. W., Lavoie-Tremblay, M., MacMillan, K., MacQuarrie, C., Martin-Misener, R., Oulton, J., Ricciardelli, R., Silas, L., Thorne, S., & Villeneuve, M. (2022, May). *Investing in Canada's nursing workforce post-pandemic: A call to action* [Policy brief]. Royal Society of Canada. https://rsc-src.ca/sites/default/files /Nursing%20PB_EN.pdf

Tricco, A. C., Langlois, E. V., & Straus, S. E. (Eds.). (2017). *Rapid reviews to strengthen health policy and systems: A practical guide.* World Health Organization. https://apps.who.int/iris/bitstream/ha ndle/10665/258698/9789241512763- eng.pdf?sequence=1&isAllowed=y

Williams, D. R., Lawrence, J. A., & Davis, B. A. (2019). Racism and health: Evidence and needed research. *Annual Review of Public Health, 40,* 105–125. https://doi.org/10.1146/annurev- publhealth-040218-043750

Appendix A

Search Strategy

Database: Ovid MEDLINE All
Date: January 30, 2023

1	exp African Continental Ancestry Group/ or African Americans/	95,158
2	Minority Groups/	17,367
3	1 or 2	109,812
4	exp Nurses/	97,093
5	3 and 4	522
6	((Black or African or Afro* or Coloured or Colored or Caribbean or West Indian or West Indies or "of colour" or "of color" or minority or bipoc or bame) and (nurse or nursing or nurses)).ti,ab,kw,kf.	9,060
7	5 or 6	9,364
8	exp North America/	1,665,073
9	(Canad* or "British Columbia" or "British Colombian" or Alberta or Albertan or Saskatchewan or Saskatchewanian or Manitoba or Manitoban or Ontario or Ontarian or Quebec or Quebecer or Quebecois or "New Brunswick" or "New Brunswicker" or "Nova Scotia" or "Nova Scotian" or "Prince Edward Island" or "Prince Edward Islander" or Newfoundland or Newfoundlander or Labrador or "Northwest Territories" or "Northwest Territorian" or Yukon or Yukoner or Nunavut or Nunavummiut).ti,ab,kw,kf.	198,550
10	(america* or united states or usa or "u.s.a." or "u.s." or alabama* or montgomery or birmingham or alaska* or juneau or anchorage or arizona* or phoenix or arkansa* or little rock or california* or sacramento or los angeles or colorad* or denver or connecticut* or hartford or bridgeport or delaware* or dover or wilmington or florid* or tallahassee or jacksonville or miami or georgia* or atlanta or hawai?i* or honolulu or idaho* or boise or illinois* or springfield or chicago or indiana* or iowa* or des moines or kansas or kansan or topeka or wichita or kentuck* or frankfort or louisville or louisian* or baton rouge or new orleans or maine? or augusta or portland or maryland* or annapolis or baltimore or massachusetts* or boston or michigan or lansing or detroit or minnesota* or st paul or minneapolis or mississippi* or jackson or missouri* or jefferson city or montana* or billings or nebraska* or omaha or nevada* or carson city or las vegas or new hampshir* or concord or new jersey* or trenton or newark or new mexic* or santa fe or albuquerque or new york* or albany or north carolin* or raleigh or north dakota* or bismarck or fargo or ohio* or columbus or oklahoma* or oregon* or salem or portland or pennsylvania* or harrisburg or philadelphia or puerto ric* or rhode island* or providence or south carolin* or columbia or charleston or south dakota* or sioux falls or tennessee* or nashville or texas or texan or austin or houston or utah* or salt lake city or vermont* or montpelier or burlington or virginia* or richmond or washington* or olympia or seattle or west virginia* or wisconsin* or madison or milwaukee or wyoming* or cheyenne or district of columbia).ti,ab,kw,kf.	1,873,175

11	(mexico or mexican or aguascalientes or baja california or campeche or chiapas or chihuahua or coahuila or colima or durango or guanajuato or guerrero or hidalgo or jalisco or michoacan or morelos or nayarit or nuevo leon or oaxaca or puebla or queretaro or quintana roo or san luis potosi or sinaloa or sonora or tabasco or tamaulipas or tlaxcala or veracruz or yucatan or zacatecas).ti,ab,kw,kf.	72,812
12	exp United Kingdom/	387,984
13	(english not ((published or publication* or translat* or written or language* or speak* or literature or citation*) adj5 english)).ti,ab,kw,kf.	47,760
14	("g.b." or britain* or (british* not "british columbia") or uk or "u.k." or united kingdom* or (england* not "new england") or london* or northern ireland* or northern irish* or scotland* or scottish* or ((wales or "south wales") not "new south wales") or welsh*).ti,ab,kw,kf.	332,720
15	or/8–14	3,534,775
16	7 and 15	5,308
17	exp Workforce/	80,359
18	(workforce* or work force* or worker? or staffing or labo?r supply or labo?r supplies or manpower or womanpower or human resource* or hiring or hire? or recruit* or retention or retain* or "entry to practice" or professional development).ti,ab,kw,kf.	1,169,123
19	or/17–18	1,224,605
20	16 and 19	1,225

Appendix B

Data Extraction Instrument

Date:	
Reviewer:	
Extraction Components	**Response (*insert "N/A" if not applicable or "N/R" if not reported).**
Article Title:	
Year of Publication:	
Authors:	
DOI/Web Address:	
Article Citation (Vancouver Style):	
Article Type (i.e., Research, Policy, Commentary):	
Article Aim/Purpose:	
Article Questions/Objectives:	
Theoretical Framework (if presented/applicable):	
Study Design (if presented/applicable):	
Methods (Data Collection and Analysis—if applicable):	
<u>Study Population</u> (including participant description, e.g., African Canadian, Black, African Nova Scotian, immigrant) and <u>Sample Demographics</u> (Size, etc.; if presented/applicable): *Specify terminology used to describe participants	
Context (including setting and location, e.g., region, country, province).	
Concept (practice, mechanism, framework, initiative). *See taxonomy below	
• Organization/Institution (e.g., SON, college)	
• Mechanism Type (Recruitment/Retention)	
• Initiative Name & Description	
• Induction Date	
• Anticipated or Actual Outcome/Impact	
• Continuity Plan	
Study Results/Key Findings (if presented/applicable). Themes/Sub-themes— Level of Significance/Confidence Intervals—	
Recommendations/Implications	

Note. Instrument adapted from Jefferies, States, et al. (2022).