Living Evidence Brief

Addressing the Politics of the Health Human Resource Crisis in Canada: Appendices

22 & 23 November 2022

Version 1

McMaster University | HEALTH FORUM

EVIDENCE >> INSIGHT >> ACTION

Living Evidence Brief:
Addressing the Politics of the Health Human Resource Crisis in Canada

Appendices

22 & 23 November 2022

Evidence >> Insight >> Action

APPENDICES

Appendix tables 1-3 provide detailed information about the evidence syntheses identified as 'best' in relation to the policy framework components described in Table 1, which were drawn from the key components and sub-components of the Canadian Academy of Health Sciences framework underpinning their ongoing assessment of health human resources (see: https://cahs-acss.ca/assessment-on-health-human-resources-hhr/, which are also covered in a recent analysis undertaken by KPMG on behalf of Health Canada (available upon request)). The approach to identifying and labelling each synthesis 'best' is described in Box 3 on page 17 of this brief. Appendix table 4 provides detailed information about the evidence syntheses identified that relate to each of the approach elements. Each row in appendix tables 1-3 corresponds to a particular evidence synthesis and the reviews are organized by framework component. In the first column of the table we list the framework component sub-element, hyperlink to the search strategy used to find potential 'best' syntheses within the sub-element, and the total count of syntheses deemed 'best', broken down by whether they are high or medium quality. In the second column, we list the hyperlinked titles of identified syntheses, and columns 3-6 list data related to the criteria used to determine 'best' for a single category (i.e., living status, quality, last year literature searched and availability of a GRADE profile, which provides insights about the strength of the evidence included in a particular synthesis).

In appendix table 4, we list syntheses by approach element (first column). The focus of the review is described in the second column. Key findings from the review that relate to the option are listed in the third column, while the fourth, fifth, sixth and seventh columns record information about the synthesis that can help inform assessments about which syntheses are 'best' for a given element – namely whether the review is 'living' (i.e., updated at regular intervals with the latest studies on the topic), the quality of the review (see description below regarding AMSTAR), the last year the literature was searched as part of the review, and whether there is a GRADE profile provided about the strength of the evidence included in the synthesis. The last two columns convey information about the utility of the review in terms of local applicability, applicability concerning prioritized groups, and issue applicability. The second-from-last column notes the proportion of studies that were conducted in Canada, while the second-to-last column shows the proportion of studies included in the review that deal explicitly with one of the prioritized groups. The last column notes the proportion of studies that were included and focused specifically on HHR planning.

As noted above, the fifth column presents a rating of the overall quality of the review. The quality of each review has been assessed using AMSTAR (A MeaSurement Tool to Assess Reviews), which rates overall quality on a scale of 0 to 11, where 11/11 represents a review of the highest quality. It is important to note that the AMSTAR tool was developed to assess reviews focused on clinical interventions, so not all criteria apply to evidence syntheses pertaining to delivery, financial, or governance arrangements within health systems. Where the denominator is not 11, an aspect of the tool was considered not relevant by the raters. In comparing ratings, it is therefore important to keep both parts of the score (i.e., the numerator and denominator) in mind. For example, a review that scores 8/8 is generally of comparable quality to a review scoring 11/11; both ratings are considered "high scores." A high score signals that readers of the review can have a high level of confidence in its findings. A low score, on the other hand, does not mean that the review should be discarded, merely that less confidence can be placed in its findings and that the review needs to be examined closely to identify its limitations. (Lewin S, Oxman AD, Lavis JN, Fretheim A. SUPPORT Tools for evidence-informed health Policymaking (STP): 8. Deciding how much confidence to place in a systematic review. *Health Research Policy and Systems* 2009; 7 (Suppl1):S8.

Appendix 1: 'Best' available evidence syntheses identified for the HHR policy framework component focused on planning and development

Policy framework sub-element (and search strategy used)	'Best'* available evidence syntheses to inform decision-making about the components	Living status	Quality	Last year literature searched	Availability of GRADE profile
Population trends (Search 1) *Total syntheses: one (medium quality)*	• [Rapid synthesis: Exploring models for health workforce planning](#) (1)	No	4/9	2019	No
Diversity of health workforce (Search 1)	• *No evidence syntheses that were of high or medium quality, had searches updated within the last five years, and that were not too specific in focus were identified for this component*	n/a	n/a	n/a	n/a
Data requirements and infrastructure (Search 1, Search 2)	• *No evidence syntheses that were of high or medium quality, had searches updated within the last five years, and that were not too specific in focus were identified for this component*	n/a	n/a	n/a	n/a
Current health workforce supply (Search 1) *Total syntheses: three (of which one is high and two are medium quality)*	• [Indicators of intensive care unit capacity strain: A systematic review](#) (2)	No	8/9	2020	No
	• [Competence-based human resource management in nursing: A literature review](#) (3)	No	5/10	2018	No
	• [Rapid synthesis: Exploring models for health workforce planning](#) (1)	No	4/9	2019	No
Shortages (by profession/geography/care setting) (Search 1) *Total syntheses: two (medium quality)*	• [Characteristics of successful interventions to reduce turnover and increase retention of early career nurses: A systematic review](#) (4)	No	7/10	2020	No
	• [Curriculum design and attrition among undergraduate nursing students: A systematic review](#) (5)	No	5/9	2019	No
Education and training pipelines (Search 1, Search 2, Search 3, Search 4, Search 5, Search 6) *Total syntheses: 11 (of which two are high and nine are medium quality)*	• [Effectiveness of flipped classroom vs traditional lectures in radiology education: A meta-analysis](#) (6)	No	8/11	2020	No
	• [Video-based coaching in surgical education: A systematic review and meta-analysis](#) (7)	No	8/11	2018	No
	• [Clinical medical education in rural and underserved areas and eventual practice outcomes: A systematic review and meta-analysis](#) (8)	No	7/11	2018	No
	• [Prelicensure simulation-enhanced interprofessional education: A critical review of the research literature](#) (9)	No	6/10	2018	No
	• [Big data for biomedical education with a focus on the COVID-19 era: An integrative review of the literature](#) (10)	No	5/9	2021	No
	• [Consumer involvement in university education programs in the nursing, midwifery, and allied health professions: A systematic scoping review](#) (11)	No	5/9	2019	No
	• [How does virtual reality simulation compare to simulated practice in the acquisition of clinical psychomotor skills for pre-registration student nurses? A systematic review](#) (12)	No	5/9	2018	No

		No	4/9	2021	No
	• The road to rural primary care: A narrative review of factors that help develop, recruit, and retain rural primary care physicians (13)	No	4/9	2021	No
	• Barriers and facilitators to success in undergraduate nursing education among minority students: A systematic review (14)	No	4/9	2020	No
	• Models of interprofessional education for healthcare students: A scoping review (15)	No	4/9	2019	No
	• High fidelity simulation evaluation studies in nursing education: A review of the literature (16)	No	4/9	2018	No
Integration and licensure of internationally educated health professionals (Search 1, Search 2) *Total syntheses: two (of which one is high and one is medium quality)*	• A systematic review of strategies to recruit and retain primary care doctors (17)	No	9/10	2021	No
	• Experiences of healthcare worker returnees in their home countries: A scoping review (18)	No	5/9	2019	No

Evidence >> Insight >> Action

Appendix 2: 'Best' available evidence syntheses identified for the HHR policy framework component focused on deployment and service delivery

Policy framework sub-element (and search strategy used)	'Best'* available evidence syntheses to inform decision-making about the components	Living status	Quality	Last year literature searched	Availability of GRADE profile
Efficient deployment (scope of practice; interprofessional participation) (Search 1, Search 2)

Total syntheses: 7 (of which seven are medium quality) | • Barriers and facilitators to the implementation of doctor-nurse substitution strategies in primary care: A qualitative evidence synthesis (19) | No | 7/9 | 2018 | Yes |
	• Physician extenders on surgical services: A systematic review (20)	No	7/10	2017	No
	• Delegation of medication administration from registered nurses to non-registered support workers in community care settings: A systematic review with critical interpretive synthesis (21)	No	6/9	2020	No
	• Transitioning into new clinical areas of practice: An integrative review of the literature (22)	No	6/10	2018	No
	• Emergency department nurses' role transition towards emergency nurse practitioner: A realist-informed review (23)	No	5/9	2020	No
	• A scoping review of alternative methods of delivering ethics education in nursing (24)	No	4/9	2020	No
	• Developing and sustaining specialist and advanced practice roles in nursing and midwifery: A discourse on enablers and barriers (25)	No	4/9	2016	No
Team-based models of care (Search 1)

Total syntheses: 4 (of which four are medium quality) | • Evaluating collaborative practice within community-based integrated health and social care teams: A systematic review of outcome measurement instruments (26) | No | 5/9 | 2020 | Yes |
	• Instruments measuring interprofessional collaboration in healthcare: A scoping review (27)	No	5/9	2018	No
	• Interprofessional shared decision-making in the ICU: A systematic review and recommendations from an expert panel (28)	No	5/10	2017	No
	• Working on working together: A systematic review on how healthcare professionals contribute to interprofessional collaboration (29)	No	4/9	2019	No
Fee models and wage structures (Search 1)

Total syntheses: 3 (of which one is high and two are medium quality) | • Payment methods for healthcare providers working in outpatient healthcare settings (30) | No | 11/11 | 2020 | Yes |
	• Impact of payment model on the behaviour of specialist physicians: A systematic review (31)	No	7/10	2018	No
	• What characteristics of provider payment mechanisms influence health care providers' behaviour? A literature review (32)	No	5/9	2018	No
Private care delivery (Search 1,	• Government regulation of private health insurance (33)	No	9/9	2019	Yes

Search 2) *Total syntheses: 1 (high quality)*					
Virtual care (Search 1) *Total syntheses: 13 (of which one are high and 12 are medium quality)*	• The efficacy of telehealth delivered educational approaches for patients with chronic diseases: A systematic review (34)	No	9/10	2017	No
	• Telemedicine experiences and perspectives of healthcare providers in long-term care: A scoping review (35)	No	7/9	2021	No
	• Systematic review of patient and caregivers' satisfaction with telehealth videoconferencing as a mode of service delivery in managing patients' health (36)	No	7/9	2017	No
	• Telehealth for acute and chronic care consultations. Comparative effectiveness review no. 216 (37)	No	7/11	2018	No
	• Effect of post-discharge virtual wards on improving outcomes in heart failure and non-heart failure populations: A systematic review and meta-analysis (38)	No	7/11	2017	No
	• Using telehealth consultations for healthcare provision to patients from non-Indigenous racial/ethnic minorities: A systematic review (39)	No	6/10	2020	No
	• Use of telehealth in the management of non-critical emergencies in rural or remote emergency departments: A systematic review (40)	No	6/10	2017	No
	• Evaluation of patient motivation and satisfaction during technology-assisted rehabilitation: An experiential review (41)	No	5/9	2019	No
	• Electronic, mobile and telehealth tools for vulnerable patients with chronic disease: A systematic review and realist synthesis (42)	No	5/9	2018	No
	• Videoconference compared to telephone in healthcare delivery: A systematic review (43)	No	5/9	2018	No
	• Telehealth services designed for women: An evidence map (44)	No	4/9	2018	No
	• A systematic review of prehospital telehealth utilization (45)	No	4/9	2017	No
	• Identifying alternative models of healthcare service delivery to inform health system improvement: Scoping review of systematic reviews (46)	No	4/9	2017	No
Culturally safe and unbiased care (Search 1) *Total syntheses: 1 (medium quality)*	• Cultural competency interventions during medical school: A scoping review and narrative synthesis (47)	No	4/10	2017	No
Workforce mobility (Search 1) *Total syntheses: 1 (high quality)*	• Interventions for enhancing the distribution of dental professionals: A concise systematic review (48)	No	8/9	2018	No

Rural/remote (Search 1) *Total syntheses: 7 (of which seven are medium quality)*	• Factors contributing to the recruitment and retention of rural pharmacist workforce: A systematic review (49)	No	7/10	2021	No
	• The impact of rural-exposure strategies on the intention of dental students and dental graduates to practise in rural areas: A systematic review and meta-analysis (50)	No	7/10	2017	No
	• Clinical medical education in rural and underserved areas and eventual practice outcomes: A systematic review and meta-analysis (8)	No	7/11	2018	No
	• International approaches to rural generalist medicine: A scoping review (51)	No	5/9	2020	No
	• Strategies to facilitate improved recruitment, development, and retention of the rural and remote medical workforce: A scoping review (52)	No	4/9	2022	No
	• Building a rural workforce through identifying supports for rural, mature-aged nursing and allied health students: A systematic scoping review (53)	No	4/9	2021	No
	• Social determinants of rural health workforce retention: A scoping review (54)	No	4/9	2019	No
Licensure and regulation (Search 1) *Total syntheses: 1 (medium quality)*	• Trade agreements and the risks for the nursing workforce, nursing practice and public health: A scoping review (55)	No	4/9	2019	No

Appendix 3: 'Best' available evidence syntheses identified for the HHR policy framework component focused on support and retention

Policy framework sub-element (and search strategy used)	'Best'* available evidence syntheses to inform decision-making about the components	Living status	Quality	Last year literature searched	Availability of GRADE profile
Systemic issues (workplace, violence, racism) (Search 1, Search 2) Total syntheses: 6 (of which three are high and three are medium quality)	• Organizational interventions for preventing and minimizing aggression directed towards healthcare workers by patients and patient advocates (56)	No	10/10	2019	Yes
	• Education and training for preventing and minimizing workplace aggression directed toward healthcare workers (57)	No	10/11	2020	Yes
	• Effect of Safewards on reducing conflict and containment and the experiences of staff and consumers: A mixed-methods systematic review (58)	No	9/10	2020	Yes
	• Leadership styles and outcome patterns for the nursing workforce and work environment: A systematic review (59)	No	7/9	2017	No
	• Management of nursing workplace incivility in the healthcare settings: A systematic review (60)	No	6/9	2017	No
	• Systematic review of the prevalence, impact and mitigating strategies for bullying, undermining behaviour and harassment in the surgical workplace (61)	No	4/10	2017	No
Supportive policies and regulations (Search 1)	*No evidence syntheses that were of high or medium quality, had searches updated within the last five years, and that were not too specific in focus were identified for this component*				
Training, education and support (Search 1) Total syntheses: 13 (of which two are high and 11 are medium quality)	• Impact of interprofessional education on the teaching and learning of higher education students: A systematic review (62)	No	8/10	2020	No
	• Relationship between nurse psychological empowerment and job satisfaction: A systematic review and meta-analysis (63)	No	8/11	2020	No
	• Effectiveness of capacity-building interventions relevant to public-health practice: A systematic review (64)	No	7/10	2018	No
	• Practitioner training for use of evidence-based practice in occupational therapy (65)	No	6/9	2019	No
	• A literature review of the training offered to qualified prescribers to use electronic prescribing systems: Why is it so important? (66)	No	6/9	2018	No
	• Short duration clinically based interprofessional shadowing and patient review activities may have a role in preparing health professional students to practise collaboratively: A systematic literature review (67)	No	6/9	2017	No
	• Training medical students and residents in the use of electronic health records: A systematic review of the literature (68)	No	6/10	2019	No
	• Evaluation of technology-enhanced learning programs for healthcare professionals: Systematic review (69)	No	6/10	2017	No
	• A systematic review of models used and preferences for continuing education and continuing professional development of pharmacists (70)	No	5/9	2018	No
	• Competence-based human resource management in nursing: A literature review (3)	No	5/10	2018	No

		No	5/10	2018	No
	• Factors affecting resident satisfaction in continuity clinic: A systematic review (71)	No	5/10	2018	No
	• Educational needs of medical practitioners about medical billing: A scoping review of the literature (72)	No	4/9	2020	No
	• A systematic review of advocacy curricula in graduate medical education (73)	No	4/9	2017	No
Sustainable and safe health workforce staffing (Search 1) *Total syntheses: 1 (medium quality)*	• A systematic review of factors that enable psychological safety in healthcare teams (74)	No	6/9	2019	No
Staff retention (Search 1) *Total syntheses: 9 (of which two are high and seven are medium quality)*	• A systematic review of strategies to recruit and retain primary care doctors (17)	No	9/10	2021	No
	• Relationship between nurse psychological empowerment and job satisfaction: A systematic review and meta-analysis (63)	No	8/11	2017	No
	• Factors contributing to the recruitment and retention of rural pharmacist workforce: A systematic review (49)	No	7/10	2021	No
	• The impact of huddles on a multidisciplinary healthcare teams' work engagement, teamwork and job satisfaction: A systematic review (75)	No	7/10	2020	No
	• Characteristics of successful interventions to reduce turnover and increase retention of early career nurses: A systematic review (4)	No	7/10	2018	No
	• Missed nursing care and nurses' intention to leave: An integrative review (76)	No	5/11	2019	No
	• Strategies to facilitate improved recruitment, development, and retention of the rural and remote medical workforce: A scoping review (52)	No	4/9	2020	No
	• Social determinants of rural health workforce retention: A scoping review (54)	No	4/9	2018	No
	• Relationships among factors affecting advanced practice registered nurses' job satisfaction and intent to leave: A systematic review (77)	No	4/9	2017	No
State of mental health and resiliency of the health workforce (Search 1, plus scan of the following rapid evidence profile) *Total syntheses: 21 (of which three are high and 18 are medium quality)*	• Mindfulness-based psychological interventions for improving mental well-being in medical students and junior doctors (78)	No	11/11	2021	Yes
	• Psychological interventions to foster resilience in healthcare professionals (79)	No	11/11	2019	Yes
	• Interventions to support the resilience and mental health of frontline health and social care professionals during and after a disease outbreak, epidemic or pandemic: A mixed methods systematic review (80)	No	10/10	2020	Yes
	• Contribution of a positive psychology-based conceptual framework in reducing physician burnout and improving well-being: a systematic review (81)	No	7/10	2020	No
	• Evaluating wellness interventions for resident physicians: A systematic review (82)	No	6/9	2019	Yes
	• Work-related stress risk and preventive measures of mental disorders in the medical environment: an umbrella review (83)	No	5/9	2020	No
	• Stress and ways of coping among nurse managers: An integrative review (84)	No	5/9	2018	No
	• Intensive care nurses' well-being: A systematic review (85)	No	5/9	2017	No

• Extent of compassion satisfaction, compassion fatigue and burnout in nursing: A meta-analysis (86)	No	6/11	2021	No
• Resilience interventions in physicians: A systematic review and meta-analysis (87)	No	6/11	2020	No
• The impact and experience of debriefing for clinical staff following traumatic events in clinical settings: A systematic review (88)	No	5/10	2021	No
• Effect of interventions for the well-being, satisfaction and flourishing of general practitioners-a systematic review (89)	No	5/10	2020	No
• Paving the path to wellness: A systematic review of wellness programs for neurosurgery trainees (90)	No	5/10	2020	No
• The impact of psychological interventions with elements of mindfulness (PIM) on empathy, well-being, and reduction of burnout in physicians: A systematic review (91)	No	5/10	2019	No
• Interventions to improve mental health, well-being, physical health, and lifestyle behaviours in physicians and nurses: A systematic review (92)	No	5/10	2018	No
• The effectiveness of interventions to improve resilience among health professionals: A systematic review (93)	No	5/10	2018	No
• The impact of mindfulness-based interventions on doctors' well-being and performance: A systematic review (94)	No	5/10	2018	No
• Organizational strategies to reduce physician burnout: a systematic review and meta-analysis (95)	No	5/11	2018	No
• Pandemics and the impact on physician mental health: A systematic review (96)	No	4/9	2020	No
• Quality of care and health professional burnout: Narrative literature review (97)	No	4/9	2019	No
• Skills-based programs used to reduce physician burnout in graduate medical education: A systematic review (98)	No	4/9	2019	No

Appendix 4:   Evidence syntheses relevant to Element 1 – Develop the norms and values that need to underpin collective action to manage the 'HHR commons'

Sub-element	Focus of systematic review	Key findings	Living status	Quality (AMSTAR) rating	Last year literature searched	Availability of GRADE profile	Proportion of studies that were conducted in Canada	Proportion of studies that deal explicitly with one of the prioritized groups	Proportion of studies that focus on HHR planning
Developing norms and values	Developing framework for healthcare priorities at the macro and meso levels Setting healthcare priorities at the macro and meso levels: A framework for evaluation (99)	The development of a framework to evaluate priority setting in healthcare can help to improve health system performance. The study found that although there is no widely accepted framework for priority settings in place, consequentialism and proceduralism stand as the most dominant schools of thought. Consequential frameworks focus on outcomes, whereas procedural frameworks focus on procedural aspects. Twenty-four papers encouraged the use of procedural conditions, one proposed the use of consequential frameworks, and six recommended the use of both. Furthermore, allocative efficiency (when resources are allocated in a manner to maximize community welfare) was deemed to be relevant in the distribution of healthcare resources. Cost-effective analysis (CEA) as well as Programmed Budgeting and Marginal Analysis (PBMA) were the primary tools used to allocate resources efficiently. Although focusing on allocative efficiency and equity was found to be important, the study found that only considering these factors was not enough. The authors propose a framework that is successful if efficiency and equity are	No	2/9	Not available	No	17/33	TBD	0/33

Sub-element	Focus of systematic review	Key findings	Living status	Quality (AMSTAR) rating	Last year literature searched	Availability of GRADE profile	Proportion of studies that were conducted in Canada	Proportion of studies that deal explicitly with one of the prioritized groups	Proportion of studies that focus on HHR planning
		considered along with the following: satisfaction, stakeholder engagement, stakeholder empowerment, transparency, use of evidence, revisions, enforcement, and community values. The authors note that existing literature poorly incorporates evaluation theory, which is reflected in their study as well. They suggest that future studies should consider this, as well as the practical applicability of these situations in priority-setting processes.							
	Health and care guidance in regard to social values Social values related to the development of health and care guidance: Literature review for NICE by its research support unit (100)	Social values act as an important consideration in the allocation of resources for clinical, public health, and social-care services. The National Institute for Health and Care Excellence (NICE) aims to produce evidence-based guidance and advice with this consideration to ultimately improve health and social-care outcomes. The authors conducted a semi-iterative search for information relevant to health and care guidance, and found that the literature raised issues that fell under eight major social-value categories: utility and efficiency (effectiveness and cost effectiveness), justice and equity, autonomy, solidarity, participation, sustainability, transparency and accountability, and appropriate methods of guidance development. From these categories, the study outlines the following overarching issues about the	No	3/9	2011	No	Not reported	Not reported	Not reported

Sub-element	Focus of systematic review	Key findings	Living status	Quality (AMSTAR) rating	Last year literature searched	Availability of GRADE profile	Proportion of studies that were conducted in Canada	Proportion of studies that deal explicitly with one of the prioritized groups	Proportion of studies that focus on HHR planning
		nature of social values that can be implemented in guidance development: the need for increased sophistication; boundaries of evidence; the feasibility of including all social values; the balance between utility and equity; considering both corporate/societal values; presence of hidden social values; lack of research evidence; differences in social care; and the guidance development process itself.							
Establishing appropriate processes	Interprofessional and interorganizational collaboration and their effects on healthcare Comparing interprofessional and interorganizational collaboration in healthcare: A systematic review of the qualitative research (101)	Interprofessional and interorganizational collaboration serve as key components of an effective healthcare system. Collaboration within an organization can lead to increased satisfaction for professionals, improve team building and sustainability, improve the work atmosphere, and also reinforce practitioner commitment to the group. Eight of the studies addressed professional collaboration, seven addressed frameworks of interorganizational collaboration, and one study addressed both, serving as a model to illustrate similarities between groups. The authors found some components similar between frameworks for both interprofessional and interorganizational collaboration, including the following: communication, trust, respect, mutual acquaintanceship, power, shared goals and consensus, patient-centredness, task characteristics and environmental factors. However, some differences in the two frameworks	No	6/9	2014	No	5/15	TBD	0/15

Sub-element	Focus of systematic review	Key findings	Living status	Quality (AMSTAR) rating	Last year literature searched	Availability of GRADE profile	Proportion of studies that were conducted in Canada	Proportion of studies that deal explicitly with one of the prioritized groups	Proportion of studies that focus on HHR planning
		stemmed from formalization playing a greater role in interorganizational collaboration, the need for proper role clarification, and differences in leadership and assessment of outcomes.

Furthermore, the study mentions that interprofessional collaboration requires a motivational leader to increase commitment to the values of the organization. The authors recommend that nurses are in the best position to assume this role due to their professional status and close relationship with patients. However, few organizations provide the training needed to adopt this approach.

The authors also found that both frameworks had more aspects in similar than different. However, promoting interorganizational collaboration was found to be a greater challenge, including struggles in achieving a sense of belonging among professionals, considerations of geographical distance, the variety of processes, and the available formal lines of communication.

The authors note that the components mentioned are not a complete list, but serve as the essentials instead. Additionally, broad keywords were used and there also some inconsistencies as to what interprofessional collaboration entails in the field. | | | | | | | |

Sub-element	Focus of systematic review	Key findings	Living status	Quality (AMSTAR) rating	Last year literature searched	Availability of GRADE profile	Proportion of studies that were conducted in Canada	Proportion of studies that deal explicitly with one of the prioritized groups	Proportion of studies that focus on HHR planning
	Developing guidelines for nursing stakeholder identification in HHR Nursing stakeholder identification guidelines for human resources for health and health workforce development: A scoping review (102)	The effective involvement of nursing stakeholders through appropriate guidelines could aid in human resources for health planning processes. Involvement of nursing stakeholders in planning human health resources (HHR) is advocated by many global bodies, including the WHO and the International Council of Nurses. The authors found certain recommendations for stakeholder identification. The Country Coordination and Facilitation Framework (CCFF) approach encourages the establishment and support of governance structures, aimed planning, and monitoring of HHR through a unified strategy. They recommend that a cohesive plan must reflect the following: training, retention, performance, remuneration, equitable distribution, responsiveness and migration of the workforce. However, the CCFF focuses on all areas of the professional HHR workforce, and considerations on nursing stakeholders specifically are limited. In addition, the authors found that guidelines regarding nursing stakeholder identification are sparse and not very current. Information found was not explicit and recommended for further studies in the field. When nursing stakeholders were referred to, there was	No	6/9	2020	No	0/2	TBD	0/2

Sub-element	Focus of systematic review	Key findings	Living status	Quality (AMSTAR) rating	Last year literature searched	Availability of GRADE profile	Proportion of studies that were conducted in Canada	Proportion of studies that deal explicitly with one of the prioritized groups	Proportion of studies that focus on HHR planning
		often a lack of detail, and they were usually considered as part of a wider project or endeavour. The authors were unable to find any consistency in methods or outcomes related to nursing stakeholder identification in regard to the HHR functional domain. Additionally, no guidelines or detailed procedures were found. The authors suggest that there is a strong need for systematic identification of nursing stakeholders to effectively integrate HHR planning processes.							
	How political skill affects health services change The contribution of political skill to the implementation of health services change: a systematic review and narrative synthesis (103)	Political skills can serve as a means to manage the politics of healthcare organizations and may contribute to health-services change. The authors found four distinct categories that structured health-services research literature: nurse leaders' use of political skills to influence formal policy; political skills used by health service administrators/leaders; political skills used by other areas of the healthcare workforce; and the political skills used in "system leadership" (to manage the competing interests of many stakeholders). Furthermore, the authors highlight that political skill was strongly associated with enhanced personal performance/career development, an understanding of the prevailing political dynamics, and the involvement of inter-personal influence. The authors also suggested that political	No	5/9	2018	No	Not reported	Not reported	Not reported

Sub-element	Focus of systematic review	Key findings	Living status	Quality (AMSTAR) rating	Last year literature searched	Availability of GRADE profile	Proportion of studies that were conducted in Canada	Proportion of studies that deal explicitly with one of the prioritized groups	Proportion of studies that focus on HHR planning
		skills acted as a broader form of stakeholder engagement and network building that can facilitate improvements in formal policy, as well as management processes. The authors state that changes in definitional/conceptual understanding of political skills, variable levels of evidence, and the lack of literature that explores interconnections between different aspects of political skills may have had an impact on the literature reviewed in the paper. However, there is weak evidence on explanatory processes. The researchers suggest that future research should aim to better understand the factors highlighted in the study.							

Evidence >> Insight >> Action

REFERENCES

1. Waddell K, Wilson MG. Rapid synthesis: Exploring models for health workforce planning. Hamilton; 2019.

2. Rewa OG, Stelfox HT, Ingolfsson A, et al. Indicators of intensive care unit capacity strain: A systematic review. *Critical Care* 2018;22(1): 86.

3. Gunawan J, Aungsuroch Y, Fisher ML. Competence-based human resource management in nursing: A literature review. *Nursing Forum* 2019;54(1): 91-101.

4. Brook J, Aitken L, Webb R, MacLaren J, Salmon D. Characteristics of successful interventions to reduce turnover and increase retention of early career nurses: A systematic review. *International Journal of Nursing Studies* 2019;91: 47-59.

5. Chan ZCY, Cheng WY, Fong MK, et al. Curriculum design and attrition among undergraduate nursing students: A systematic review. *Nurse Education Today* 2019;74: 41-53.

6. Ge L, Chen Y, Yan C, Chen Z, Liu J. Effectiveness of flipped classroom vs traditional lectures in radiology education: A meta-analysis. *Medicine (Baltimore)* 2020;99(40): e22430.

7. Augestad KM, Butt K, Ignjatovic D, Keller DS, Kiran R. Video-based coaching in surgical education: A systematic review and meta-analysis. *Surgical Endoscopy* 2020;34(2): 521-535.

8. Raymond Guilbault RW, Vinson JA. Clinical medical education in rural and underserved areas and eventual practice outcomes: A systematic review and meta-analysis. *Educ Health (Abingdon)* 2017;30(2): 146-155.

9. Palaganas JC, Brunette V, Winslow B. Prelicensure simulation-enhanced interprofessional education: A critical review of the research literature. *Simulation in Healthcare* 2016;11(6): 404-418.

10. Khamisy-Farah R, Gilbey P, Furstenau LB, et al. Big data for biomedical education with a focus on the COVID-19 era: An integrative review of the literature. *International Journal of Environmental Research in Public Health* 2021;18(17).

11. Soon YE, Murray CM, Aguilar A, Boshoff K. Consumer involvement in university education programs in the nursing, midwifery, and allied health professions: A systematic scoping review. *International Journal of Nursing Studies* 2020;109: 103619.

12. Rourke S. How does virtual reality simulation compare to simulated practice in the acquisition of clinical psychomotor skills for pre-registration student nurses? A systematic review. *International Journal of Nursing Studies* 2020;102: 103466.

13. Parlier AB, Galvin SL, Thach S, Kruidenier D, Fagan EB. The road to rural primary care: A narrative review of factors that help develop, recruit, and retain rural primary care physicians. *Academic Medicine* 2018;93(1): 130-140.

14. Osakwe ZT, Obioha CU, Minuti A, Atairu M, Osborne JC. Barriers and facilitators to success in undergraduate nursing education among minority students: A systematic review. *Nurse Education Today* 2022;47(2): E18-E23.

15. Grace S. Models of interprofessional education for healthcare students: A scoping review. *Journal of Interprofessional Care* 2021;35(5): 771-783.

16. Hanshaw SL, Dickerson SS. High fidelity simulation evaluation studies in nursing education: A review of the literature. *Nurse Education in Practice* 2020;46: 102818.

17. Verma P, Ford JA, Stuart A, Howe A, Everington S, Steel N. A systematic review of strategies to recruit and retain primary care doctors. *BMC Health Services Research* 2016;16: 126.

18.   Efendi F, McKenna L, Reisenhofer S, Kurniati A, Has EMM. Experiences of healthcare worker returnees in their home countries: A scoping review. *Journal of Multidisciplinary Healthcare* 2021;14: 2217-2227.

19.   Karimi-Shahanjarini A, Shakibazadeh E, Rashidian A, et al. Barriers and facilitators to the implementation of doctor-nurse substitution strategies in primary care: a qualitative evidence synthesis. *Cochrane Database Syst Rev* 2019;4: CD010412.

20.   Johal J, Dodd A. Physician extenders on surgical services: A systematic review. *Canadian Journal of Surgery* 2017;60(3): 172-178.

21.   Shore CB, Maben J, Mold F, Winkley K, Cook A, Stenner K. Delegation of medication administration from registered nurses to non-registered support workers in community care settings: A systematic review with critical interpretive synthesis. *International Journal of Nursing Studies* 2022;126: 104121.

22.   Kinghorn GR, Halcomb EJ, Froggatt T, Thomas SD. Transitioning into new clinical areas of practice: An integrative review of the literature. *Journal of Clinical Nursing* 2017;26(23-24): 4223-4233.

23.   Putri AF, Tocher J, Chandler C. Emergency department nurses' role transition towards emergency nurse practitioner: A realist-informed review. *Internal and Emergency Nursing* 2022;60: 101081.

24.   Tanaka M, Tezuka S. A scoping review of alternative methods of delivering ethics education in nursing. *Nursing Open* 2022;9(6): 2572-2585.

25.   Fealy GM, Casey M, O'Leary DF, et al. Developing and sustaining specialist and advanced practice roles in nursing and midwifery: A discourse on enablers and barriers. *J Clin Nurs* 2018;27(19-20): 3797-3809.

26.   Glover PD, Gray H, Shanmugam S, McFadyen AK. Evaluating collaborative practice within community-based integrated health and social care teams: A systematic review of outcome measurement instruments. *Journal of Interprofessional Care* 2022;36(3): 458-472.

27.   Peltonen J, Leino-Kilpi H, Heikkila H, et al. Instruments measuring interprofessional collaboration in healthcare: A scoping review. *Journal of Interprofessional Care* 2020;34(2): 147-161.

28.   Michalsen A, Long AC, DeKeyser Ganz F, et al. Interprofessional shared decision-making in the ICU: A systematic review and recommendations from an expert panel. *Critical Care Medicine* 2019;47(9): 1258-1266.

29.   Schot E, Tummers L, Noordegraaf M. Working on working together: A systematic review on how healthcare professionals contribute to interprofessional collaboration. *Journal of Interprofessional Care* 2020;34(3): 332-342.

30.   Jia L, Meng Q, Scott A, Yuan B, Zhang L. Payment methods for healthcare providers working in outpatient healthcare settings. *Cochrane Database of Systematic Reviews* 2021;1: CD011865.

31.   Quinn AE, Trachtenberg AJ, McBrien KA, et al. Impact of payment model on the behaviour of specialist physicians: A systematic review. *Health Policy* 2020;124(4): 345-358.

32.   Kazungu JS, Barasa EW, Obadha M, Chuma J. What characteristics of provider payment mechanisms influence health care providers' behaviour? A literature review. *International Journal of Health Planning and Management* 2018;33(4): e892-e905.

33.   Motaze NV, Chi PC, Ongolo-Zogo P, Ndongo JS, Wiysonge CS. Government regulation of private health insurance. *Cochrane Database Systematic Reviews* 2021;2: CD011512.

34.   Rush KL, Hatt L, Janke R, Burton L, Ferrier M, Tetrault M. The efficacy of telehealth delivered educational approaches for patients with chronic diseases: A systematic review. *Patient Education and Counselling* 2018;101(8): 1310-1321.

35.	Tan AJ, Rusli KD, McKenna L, Tan LL, Liaw SY. Telemedicine experiences and perspectives of healthcare providers in long-term care: A scoping review. *Journal of Telemedicine and Telecare* 2021: 1357633X211049206.

36.	Orlando JF, Beard M, Kumar S. Systematic review of patient and caregivers' satisfaction with telehealth videoconferencing as a mode of service delivery in managing patients' health. *PLoS One* 2019;14(8): e0221848.

37.	Totten AM, Hansen RN, Wagner J, et al. AHRQ comparative effectiveness reviews: Telehealth for acute and chronic care consultations. Rockville (MD); 2019.

38.	Uminski K, Komenda P, Whitlock R, et al. Effect of post-discharge virtual wards on improving outcomes in heart failure and non-heart failure populations: A systematic review and meta-analysis. *PLoS One* 2018;13(4): e0196114.

39.	Truong M, Yeganeh L, Cook O, Crawford K, Wong P, Allen J. Using telehealth consultations for healthcare provision to patients from non-Indigenous racial/ethnic minorities: A systematic review. *Journal of the American Medical Informatics Association* 2022;29(5): 970-982.

40.	du Toit M, Malau-Aduli B, Vangaveti V, Sabesan S, Ray RA. Use of telehealth in the management of non-critical emergencies in rural or remote emergency departments: A systematic review. *Journal of Telemedicine and Telecare* 2019;25(1): 3-16.

41.	Monardo G, Pavese C, Giorgi I, Godi M, Colombo R. Evaluation of patient motivation and satisfaction during technology-assisted rehabilitation: An experiential review. *Games for Health Journal* 2021;10(1): 13-27.

42.	Parker S, Prince A, Thomas L, et al. Electronic, mobile and telehealth tools for vulnerable patients with chronic disease: A systematic review and realist synthesis. *British Medical Journal Open* 2018;8(8): e019192.

43.	Rush KL, Howlett L, Munro A, Burton L. Videoconference compared to telephone in healthcare delivery: A systematic review. *Int J Med Inform* 2018;118: 44-53.

44.	Goldstein KM, Zullig LL, Dedert EA, et al. Telehealth services designed for women: An evidence map. *Journal of General Internal Medicine* 2018;33(12): 2191-2200.

45.	Winburn AS, Brixey JJ, Langabeer J, 2nd, Champagne-Langabeer T. A systematic review of prehospital telehealth utilization. *Journal of Telemedicine and Telecare* 2018;24(7): 473-481.

46.	Jessup R, Putrik P, Buchbinder R, et al. Identifying alternative models of healthcare service delivery to inform health system improvement: Scoping review of systematic reviews. *British Medical Journal Open* 2020;10(3): e036112.

47.	Deliz JR, Fears FF, Jones KE, Tobat J, Char D, Ross WR. Cultural competency interventions during medical school: A scoping review and narrative synthesis. *Journal of General Internal Medicine* 2020;35(2): 568-577.

48.	Jager R, van den Berg N, Schwendicke F. Interventions for enhancing the distribution of dental professionals: A concise systematic review. *International Dental Journal* 2017;67(5): 263-271.

49.	Terry D, Phan H, Peck B, et al. Factors contributing to the recruitment and retention of rural pharmacist workforce: A systematic review. *BMC Health Services Research* 2021;21(1): 1052.

50.	Suphanchaimat R, Cetthakrikul N, Dalliston A, Putthasri W. The impact of rural-exposure strategies on the intention of dental students and dental graduates to practice in rural areas: a systematic review and meta-analysis. *Adv Med Educ Pract* 2016;7: 623-633.

51.	Schubert N, Evans R, Battye K, Gupta TS, Larkins S, McIver L. International approaches to rural generalist medicine: a scoping review. *Hum Resour Health* 2018;16(1): 62.

52.   Noya F, Carr S, Freeman K, Thompson S, Clifford R, Playford D. Strategies to facilitate improved recruitment, development, and retention of the rural and remote medical workforce: A scoping review. *International Journal of Health Policy and Management* 2021.

53.   Quilliam C, Crawford N, McKinstry C, et al. Building a rural workforce through identifying supports for rural, mature-aged nursing and allied health students: A systematic scoping review. *Australian Journal of Rural Health* 2021;29(5): 643-655.

54.   Cosgrave C, Malatzky C, Gillespie J. Social determinants of rural health workforce retention: A scoping review. *International Journal of Environmental Research in Public Health* 2019;16(3).

55.   Kidgell D, Hills D, Griffiths D, Endacott R. Trade agreements and the risks for the nursing workforce, nursing practice and public health: A scoping review. *Int J Nurs Stud* 2020;109: 103676.

56.   Spelten E, Thomas B, O'Meara PF, Maguire BJ, FitzGerald D, Begg SJ. Organisational interventions for preventing and minimising aggression directed towards healthcare workers by patients and patient advocates. *Cochrane Database of Systematic Reviews* 2020;4: CD012662.

57.   Geoffrion S, Hills DJ, Ross HM, et al. Education and training for preventing and minimizing workplace aggression directed toward healthcare workers. *Cochrane Database of Systematic Reviews* 2020;9: CD011860.

58.   Ward-Stockham K, Kapp S, Jarden R, Gerdtz M, Daniel C. Effect of Safewards on reducing conflict and containment and the experiences of staff and consumers: A mixed-methods systematic review. *International Journal of Mental Health in Nursing* 2022;31(1): 199-221.

59.   Cummings GG, Tate K, Lee S, et al. Leadership styles and outcome patterns for the nursing workforce and work environment: A systematic review. *International Journal of Nursing Studies* 2018;85: 19-60.

60.   Armstrong N. Management of nursing workplace incivility in the health care settings: A systematic review. *Workplace Health and Safety* 2018;66(8): 403-410.

61.   Halim UA, Riding DM. Systematic review of the prevalence, impact and mitigating strategies for bullying, undermining behaviour and harassment in the surgical workplace. *Br J Surg* 2018;105(11): 1390-1397.

62.   Rodrigues da Silva Noll Goncalves J, Noll Goncalves R, da Rosa SV, Schaia Rocha Orsi J, Moyses SJ, Iani Werneck R. Impact of interprofessional education on the teaching and learning of higher education students: A systematic review. *Nurse Education in Practice* 2021;56: 103212.

63.   Li H, Shi Y, Li Y, et al. Relationship between nurse psychological empowerment and job satisfaction: A systematic review and meta-analysis. *Journal of Advanced Nursing* 2018;74(6): 1264-1277.

64.   DeCorby-Watson K, Mensah G, Bergeron K, Abdi S, Rempel B, Manson H. Effectiveness of capacity building interventions relevant to public health practice: A systematic review. *BMC Public Health* 2018;18(1): 684.

65.   Myers CT, Lotz J. Practitioner training for use of evidence-based practice in occupational therapy. *Occupational Therapy and Health Care* 2017;31(3): 214-237.

66.   Brown CL, Reygate K, Slee A, et al. A literature review of the training offered to qualified prescribers to use electronic prescribing systems: why is it so important? *Int J Pharm Pract* 2017;25(3): 195-202.

67.   Brack P, Shields N. Short duration clinically-based interprofessional shadowing and patient review activities may have a role in preparing health professional students to practice collaboratively: A systematic literature review. *Journal of Interprofessional Care* 2019;33(5): 446-455.

68.   Rajaram A, Hickey Z, Patel N, Newbigging J, Wolfrom B. Training medical students and residents in the use of electronic health records: A systematic review of the literature. *Journal of the American Medical Informatics Association* 2020;27(1): 175-180.

69. Nicoll P, MacRury S, van Woerden HC, Smyth K. Evaluation of technology-enhanced learning programs for health care professionals: Systematic review. *Journal of Medical Internet Research* 2018;20(4): e131.

70. Micallef R, Kayyali R. A systematic review of models used and preferences for continuing education and continuing professional development of pharmacists. *Pharmacy* 2019;7(4).

71. Stepczynski J, Holt SR, Ellman MS, Tobin D, Doolittle BR. Factors affecting resident satisfaction in continuity clinic: A systematic review. *Journal of General Internal Medicine* 2018;33(8): 1386-1393.

72. Faux M, Adams J, Wardle J. Educational needs of medical practitioners about medical billing: A scoping review of the literature. *Human Resources for Health* 2021;19(1): 84.

73. Howell BA, Kristal RB, Whitmire LR, Gentry M, Rabin TL, Rosenbaum J. A systematic review of advocacy curricula in graduate medical education. *Journal of General Internal Medicine* 2019;34(11): 2592-2601.

74. O'Donovan R, McAuliffe E. A systematic review of factors that enable psychological safety in healthcare teams. *Int J Qual Health Care* 2020;32(4): 240-250.

75. Rowan BL, Anjara S, De Brun A, et al. The impact of huddles on a multidisciplinary healthcare teams' work engagement, teamwork and job satisfaction: A systematic review. *Journal of Evaluation and Clinical Practice* 2022;28(3): 382-393.

76. Alsubhi H, Meskell P, Shea DO, Doody O. Missed nursing care and nurses' intention to leave: An integrative review. *Journal of Nursing Management* 2020;28(8): 1830-1840.

77. Han RM, Carter P, Champion JD. Relationships among factors affecting advanced practice registered nurses' job satisfaction and intent to leave: A systematic review. *J Am Assoc Nurse Pract* 2018;30(2): 101-113.

78. Sekhar P, Tee QX, Ashraf G, et al. Mindfulness-based psychological interventions for improving mental well-being in medical students and junior doctors. *Cochrane Database of Systematic Reviews* 2021;12: CD013740.

79. Kunzler AM, Helmreich I, Chmitorz A, et al. Psychological interventions to foster resilience in healthcare professionals. *Cochrane Database of Systematic Reviews* 2020;7: CD012527.

80. Pollock A, Campbell P, Cheyne J, et al. Interventions to support the resilience and mental health of frontline health and social care professionals during and after a disease outbreak, epidemic or pandemic: A mixed methods systematic review. *Cochrane Database of Systematic Reviews* 2020;11: CD013779.

81. Bazargan-Hejazi S, Shirazi A, Wang A, et al. Contribution of a positive psychology-based conceptual framework in reducing physician burnout and improving well-being: A systematic review. *BMC Medical Education* 2021;21(1): 593.

82. Eskander J, Rajaguru PP, Greenberg PB. Evaluating wellness interventions for resident physicians: A systematic review. *Journal of Graduate Medical Education* 2021;13(1): 58-69.

83. De Sio S, Buomprisco G, Perri R, et al. Work-related stress risk and preventive measures of mental disorders in the medical environment: an umbrella review. *Eur Rev Med Pharmacol Sci* 2020;24(2): 821-830.

84. Labrague LJ, McEnroe-Petitte DM, Leocadio MC, Van Bogaert P, Cummings GG. Stress and ways of coping among nurse managers: An integrative review. *J Clin Nurs* 2018;27(7-8): 1346-1359.

85. Jarden RJ, Sandham M, Siegert RJ, Koziol-McLain J. Intensive care nurses' well-being: A systematic review. *Australian Critical Care* 2020;33(1): 106-111.

86.   Zhang YY, Han WL, Qin W, et al. Extent of compassion satisfaction, compassion fatigue and burnout in nursing: A meta-analysis. *J Nurs Manag* 2018;26(7): 810-819.

87.   Angelopoulou P, Panagopoulou E. Resilience interventions in physicians: A systematic review and meta-analysis. *Appl Psychol Health Well Being* 2022;14(1): 3-25.

88.   Scott Z, O'Curry S, Mastroyannopoulou K. The impact and experience of debriefing for clinical staff following traumatic events in clinical settings: A systematic review. *J Trauma Stress* 2022;35(1): 278-287.

89.   Naehrig D, Schokman A, Hughes JK, Epstein R, Hickie IB, Glozier N. Effect of interventions for the well-being, satisfaction and flourishing of general practitioners-a systematic review. *BMJ Open* 2021;11(8): e046599.

90.   Pascual JSG, Ignacio KHD, Khu KJO. Paving the path to wellness: A systematic review of wellness programs for neurosurgery trainees. *World Neurosurgery* 2021;152: 206-213 e5.

91.   Tement S, Ketis ZK, Mirosevic S, Selic-Zupancic P. The impact of psychological interventions with elements of mindfulness (PIM) on empathy, well-being, and reduction of burnout in physicians: A systematic review. *International Journal of Environmental Research in Public Health* 2021;18(21).

92.   Melnyk BM, Kelly SA, Stephens J, et al. Interventions to improve mental health, well-being, physical health, and lifestyle behaviors in physicians and nurses: A systematic review. *Americal Journal of Health Promotion* 2020;34(8): 929-941.

93.   Cleary M, Kornhaber R, Thapa DK, West S, Visentin D. The effectiveness of interventions to improve resilience among health professionals: A systematic review. *Nurse Education Today* 2018;71: 247-263.

94.   Scheepers RA, Emke H, Epstein RM, Lombarts K. The impact of mindfulness-based interventions on doctors' well-being and performance: A systematic review. *Medical Education* 2020;54(2): 138-149.

95.   De Simone S, Vargas M, Servillo G. Organizational strategies to reduce physician burnout: A systematic review and meta-analysis. *Aging Clinical and Experimental Research* 2021;33(4): 883-894.

96.   Peck JAP, Tracy H. Pandemics and the impact on physician mental health: A systematic review. *Medical Care Research and Review* 2022;79(6): 772-788.

97.   Humphries N, Morgan K, Conry MC, McGowan Y, Montgomery A, McGee H. Quality of care and health professional burnout: Narrative literature review. *International Journal of Health Care Quality Assurance* 2014;27(4): 293-307.

98.   Vasquez TS, Close J, Bylund CL. Skills-based programs used to reduce physician burnout in graduate medical education: A systematic review. *Journal of Graduate Medical Education* 2021;13(4): 471-489.

99.   Barasa EW, Molyneux S, English M, Cleary S. Setting healthcare priorities at the macro and meso levels: A framework for evaluation. *International Journal of Health Policy and Management* 2015;4(11): 719-32.

100. Gough D, Kenny C, Vigurs C, Stansfield C, Rosen R, Taylor T. Social values related to the development of health and care guidance: Literature review for NICE by its Research Support Unit. London: EPPI-Centre; 2014.

101. Karam M, Brault I, Van Durme T, Macq J. Comparing interprofessional and interorganizational collaboration in healthcare: A systematic review of the qualitative research. *International Journal of Nursing Studies* 2018;79: 70-83.

102. North N, Brysiewicz P, Coetzee M. Nursing stakeholder identification guidelines for human resources for health and health workforce development: A scoping review. *International Nursing Review* 2022;69(3): 272-284.

103. Clarke JM, Waring J, Bishop S, et al. The contribution of political skill to the implementation of health services change: A systematic review and narrative synthesis. *BMC Health Services Research* 2021;21(1): 260.