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PROTOCOL

Exploring the potential for simulation in the development of future foresight leadership skills for healthcare professionals: a scoping review protocol

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https://johs.org.uk/article/doi/10.54531/MNHD5617

ABSTRACT

Objective
This scoping review will explore the potential for simulation as a tool in the development of future foresight leadership skills for healthcare professionals (HCPs).

Introduction
Health care is a complex system dealing with uncertainty and challenge, necessitating innovative planning, leadership models and skills such as future foresight. As future foresight methods are increasingly being integrated into healthcare systems, understanding and addressing the training needs of HCPs to adopt these methods will require research and development. Healthcare simulation is effective in training learners in clinical skills, but its application to healthcare leadership, management and policy-making is poorly understood.

Inclusion criteria
This review will include published and grey literature describing the potential for simulation in the training of HCPs in future foresight leadership skills. The search will be limited to studies reported in English but will not be limited by the year of publication.

Methods
This scoping review will adopt JBI guidance. The following databases will be searched: CINAHL (EBSCOhost), PubMed, EMBASE (Ovid), PsycINFO (Ovid), Business Source Complete, Scopus and Web of Science. The literature search will be documented using PRISMA-ScR extension. Two reviewers will screen titles, abstracts and full-text articles selected for screening. A data extraction table will collate data from included articles to facilitate data analysis.

Introduction

Health care is a complex system operating with a high degree of uncertainty due to interactions between multiple internal and external systems. Examples of interdependent internal systems include clinical practice, research, education and management, incorporating various internal actors including people and organizations [1,2]. In addition, external systems such as technology and economy may affect the efficiency and enhancement of healthcare systems. Integration

Submission Date: 11 February 2025
Accepted Date: 18 July 2025
Published Date: 07 August 2025

of innovative leadership models may help in addressing complex challenges and issues in health [3–5]. Healthcare professionals (HCPs) need adaptive and innovative future planning skills in order to address emerging challenges and to navigate the complexities arising from rapid, transformative changes within systems. These changes are exemplified by significant global events, such as the coronavirus disease 2019 (COVID-19) pandemic, and ongoing technological revolutions, like the integration of Artificial Intelligence.

Future foresight

Future foresight is a leadership and strategic planning practice which aims to imagine different futures in an innovative way, for example, enabling organizations and individuals to sense, design and prepare for the future [6–8]. Future foresight incorporates a mixture of skills such as analytical thinking, strategic planning, communication and coaching, which promotes adaptability and awareness of the opportunities within the wider technological and socio-economic landscape [9]. Table 1 explores the competences associated with future foresight, as defined by The Association of Professional Futurists [10,11]. Future foresight methods are used to explore, generate and examine possible and desirable futures to improve decision-making processes in a systematic way. These methods include, but are not limited to, trend analysis, horizon scanning, back casting, future wheel and scenario analysis [8,12].

A recent study by Mesko et al. highlighted an absence of structured approaches and principles in using future foresight in health care and suggested the integration of foresight methods such as scenario analysis and horizon scanning into medical curricula, research, development and innovation [8]. A nursing foresight summit conducted in 2017 recommended the incorporation of future foresight methods into nursing curricula to promote innovation, enhance practice and contribute to the enhancement of health care [10]. Moreover, Rogayan suggested that future foresight skills are essential for next-generation HCPs as they address the challenges and demands of the 'volatile, uncertain, complex, ambiguous, diverse, and disruptive (VUCADD2) world' [13] (p. 2309). Therefore, this scoping review intends to look at the potential for simulation as a tool for training HCPs in future foresight leadership skills.

Table 1: Description of the APF foresight competency model

Competency area	Description of related skills
Personal effectiveness	Includes interpersonal skills like integrity, flexibility, initiative, openness to learning and communication
Academic	Relates to the specialized knowledge, intellectual/analytic skills and applied learning
Workplace	Incorporates creativity, planning, systems thinking, decision making and problem-solving skills
Core foresight	Includes framing, scanning, futuring, visioning, designing, and adapting.
Occupational and sector	Relates to the leader's contributions through research, academic work, consulting and institutional development

Healthcare simulation for future foresight training

Healthcare simulation is effective for training learners in clinical skills, but its application to healthcare leadership, management and policy-making is poorly understood [14,15]. Healthcare simulation modalities such as Table-Top Exercise (TTX) Simulation provide a structured framework for replicating real-world scenarios, enabling participants to enhance their skills and make critical decisions within an immersive environment. TTX is effective in disaster preparedness and non-emergency implementations where it strengthens non-technical skills such as communication, leadership and teamwork through an engaging and collaborative approach [16]. Given simulations' potential to foster dynamic decision-making, critical thinking and strategic responses, it could serve as a valuable tool for future foresight training, helping participants navigate uncertainties, explore potential scenarios, test reactions and improve their capabilities to work effectively within a team-driven environment [16]. In addition, healthcare simulation may bridge the gap between theoretical foresight methods and practical application by allowing participants to experience future scenarios and move from abstract foresight discussions into actionable insights. A preliminary search of PubMed and JBI Evidence Synthesis conducted by the researchers confirmed that there are studies looking at the implementation of future methods and foresight in health care in areas like strategic healthcare foresight and pandemic preparedness and response [8]. However, to date, there are no existing scoping or systematic reviews describing the training of HCPs in foresight leadership skills using healthcare simulation.

In this scoping review, the research team aims to map and understand the breadth and type of evidence available in relation to the potential for simulation as a tool for training HCPs in future foresight leadership skills. As future methods are integrated into the healthcare systems, the healthcare research field will continue to evolve and expand, which mandates parallel development addressing the training of HCPs about future foresight. This scoping review may provide a platform for future researchers to build on and bridge the knowledge gaps identified.

Review question

This scoping review will ask the question:

- What is known about the potential for simulation as a tool in the training of HCPs in future foresight leadership skills?

The review will aim to answer the following sub-questions:

- What underlying simulation pedagogical approaches are being or can be used to train HCPs about future foresight leadership skills?
- What simulation modalities are being or can be used in healthcare to teach future foresight leadership skills?

Inclusion and exclusion criteria

Participants

Leadership opportunities emerge from individuals through their leadership skills and competencies at various levels, roles and grades within an organization, rather than being confined to formal positions or hierarchical levels [17]. All articles related to the potential for simulation as a tool to develop foresight leadership skills in HCPs will be included. This includes all healthcare professions, both clinical (e.g. doctors, nurses, allied health) and non-clinical (e.g. administrators, managers), and healthcare individuals at various stages of their careers, from learners to established leaders. The exclusion criteria based on participant characteristics incorporate the patients and/or professionals from entirely unrelated fields where the context is not health care.

Concept

The concept under exploration in this review is the potential for simulation as a tool for training HCPs in future foresight leadership skills. Studies that describe this concept will be included in the review. The terms 'future foresight', 'foresight leadership', 'scenario planning', 'strategic foresight', 'future studies' and 'future thinking' may be used interchangeably within the literature. Therefore, evidence sources that include any of these terms and address the same concept will be considered. Furthermore, recognizing simulation as an important component of the concept, terms including 'simulation', 'simulation-based', 'simulation training', 'simulation-enhanced' and 'table-top simulation' will be incorporated into the search strategy. The exclusion criteria include simulation modalities irrelevant to foresight training, such as procedural and surgical skills simulation.

Context

The review will consider all publications where HCPs are provided with training about future foresight leadership skills using healthcare simulation within the context of education and training. There will be no exclusion criteria.

Types of sources

This scoping review will consider published and grey or non-peer-reviewed literature, and sources of all methodologies will be included. All publications in English will be included, and there will be no limitation based on the year of publication. These sources may include research studies published in journals, theses and dissertations, and conference abstracts. Commentary, debate and opinion articles will also be considered for inclusion in this scoping review.

Methods

This scoping review will be conducted in accordance with the JBI methodology for scoping reviews and the Preferred Reporting Items for Systematic Reviews and Meta-Analyses extension for Scoping Reviews [18,19]. The protocol was registered with Open Science Framework (https://osf.io/smp9y/?view_only=d4495fb943bd41b6ab369c2f605cff56).

Search strategy

The authors developed a detailed search strategy to ensure the comprehensive and systematic identification of relevant literature. To identify a thorough set of keywords and subject headings relevant to our research question, an initial limited search was first conducted in PubMed and Web of Science. The titles and abstracts of relevant articles identified during this initial phase, along with their associated index terms, were meticulously analysed to inform and develop the full search strategy.

The full search strategy will be executed across a range of electronic databases, including PubMed, Web of Science, Scopus, EMBASE (Ovid), PsycINFO (Ovid), CINAHL (EBSCOhost) and Business Source Complete. Search terms will be applied as both keywords in the title and/or abstract, and as subject headings (e.g. MeSH, EMTREE) unique to each database where appropriate. The specific search strategy will be tailored for each database to optimize results. See Appendix I for the full draft search strategy for PubMed and all other databases.

A search of the MedNar database, Web of Science Conference Proceedings, and ProQuest Dissertations and Theses will be executed to identify grey literature.

Finally, the reference lists of all included studies will be systematically screened for additional relevant articles to ensure maximum coverage and mitigate potential omissions from database searches.

Study/source of evidence selection

From the initial search, all identified citations from each database will be uploaded into Covidence review software (Veritas Health Innovation, Melbourne, Australia), and duplicate records will be removed.

Before full-scale screening, a pilot test of the screening process will be conducted by two independent reviewers on a random sample of 25 titles and abstracts as per JBI recommendations [19]. The purpose of this pilot test is to ensure clarity and consistency in the application of the eligibility criteria, to identify any ambiguities in the criteria and to calibrate the reviewers' understanding. The results of this pilot will inform any necessary modifications to ensure a reliable screening process.

Subsequently, the titles and abstracts will be screened by a minimum of two (MA, SS or SM) independent reviewers for assessment against the eligibility criteria for the review. The full text of selected citations will be screened against the inclusion criteria by two independent reviewers. Sources excluded after the full-text review will be recorded. Justification for their exclusion will be reported. Any disagreements that arise between the reviewers at each

stage of the selection process will be resolved through discussion, or with an additional reviewer (MM or NH). The results of the search and the study inclusion process will be reported in full in the final scoping review and presented in a Preferred Reporting Items for Systematic Reviews and Meta-analyses extension for Scoping Reviews (PRISMA-ScR) flow diagram [20].

Data extraction

Data will be extracted from publications included in the scoping review by two independent reviewers using an approach consistent with the JBI methodology for scoping reviews. A customized data extraction form will be developed and implemented within the Covidence review software.

The data extraction form will include study description, study method, population and HCP category, pedagogical theories, simulation modality, debriefing process, healthcare setting, foresight leadership methods and foresight leadership skills, author-defined outcomes, and conclusions. A draft extraction form is provided (see Appendix II). This draft form will undergo a pilot test of full-text articles prior to full data extraction commencing to ensure the clarity and comprehensiveness of the form. Details of any modifications made during the pilot will be documented and reported in the final scoping review. Any disagreements that arise between the reviewers will be resolved through discussion or a third reviewer. If appropriate, authors of articles will be contacted to request missing or additional data, where required.

Data analysis and presentation

Since the aim of scoping review is to provide a map and summarize the available evidence, both quantitative and qualitative descriptive approaches for data analysis will be used [21]. The evidence will be presented according to the review objective and questions. The extracted data will be presented in diagrammatic and tabular form. Following the presentation of descriptive data, the results will be synthesized through a comprehensive narrative summary. This will integrate both quantitative findings, such as trends in publication, and the qualitative findings.

The gaps in the knowledge or applications of the potential for simulation to develop foresight leadership skills will be discussed. The discussion section will interpret the findings considering existing knowledge, identify implications for practice and research, and highlight areas for future investigation.

Declarations

Authors' contributions

None declared.

Funding

None declared.

Availability of data and materials

None declared.

Ethics approval and consent to participate

None declared.

Competing interests

There are no conflicts of interest in this project.

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APPENDIX I: SEARCH STRATEGY

The following search strategies are drafted:

PubMed:

(((Healthcare[Title/Abstract] OR "Health care"[Title/Abstract] OR "Delivery of health care"[MeSH Terms]) AND (Professional*[Title/Abstract] OR Leader*[Title/Abstract] OR Educator*[Title/Abstract] OR Learner*[Title/Abstract] OR Decision-maker*[Title/Abstract] OR Policy-maker*[Title/Abstract])) AND (((Simulation training[MeSH Terms]) OR (simulation*[Title/Abstract] OR simulated[Title/Abstract] OR scenario*[Title/Abstract] OR simulation-based[Title/Abstract] OR simulation-enhanced[Title/Abstract] OR transformational[Title/Abstract] OR translational simulation[Title/Abstract] OR table-top simulation*[Title/Abstract] OR table-top exercise*[Title/Abstract] OR table-top gam*[Title/Abstract] OR immersive[Title/Abstract])) AND ("futures and foresight"[Title/Abstract] OR future foresight[Title/Abstract] OR trend*[Title/Abstract] OR future*[Title/Abstract] OR foresight[Title/Abstract] OR futuring[Title/Abstract] OR preparedness[Title/Abstract] OR predict*[Title/Abstract] OR short-term[Title/Abstract] OR long-term[Title/Abstract] OR "trend analysis"[Title/Abstract] OR "horizon scanning"[Title/Abstract] OR "scenario analysis"[Title/Abstract])))) AND ("Health system*"[Title/Abstract] OR "Healthcare system*"[Title/Abstract] OR "Health care system*"[Title/Abstract] OR "Health management"[Title/Abstract] OR Systems-level[Title/Abstract] OR Organization*[Title/Abstract] OR Organisation*[Title/Abstract] OR "Public Health"[Title/Abstract] OR "Simulation Center*"[Title/Abstract] OR "Simulation Centre*"[Title/Abstract] OR "medical education"[Title/Abstract] OR "medical resource*"[Title/Abstract] OR "healthcare capacity"[Title/Abstract] OR "health care capacity"[Title/Abstract])

Business Source Complete

((((TI Healthcare OR AB Healthcare) OR (TI "Health care" OR AB "Health care") OR (MH "Delivery of health care+")) AND ((TI Professional* OR AB Professional*) OR (TI Leader* OR AB Leader*) OR (TI Educator* OR AB Educator*) OR (TI Learner* OR AB Learner*) OR (TI Decision-maker* OR AB Decision-maker*) OR (TI Policy-maker* OR AB Policy-maker*))) AND ((((MH "Simulation training+")) OR ((TI simulation* OR AB simulation*) OR (TI simulated OR AB simulated) OR (TI scenario* OR AB scenario*) OR (TI simulation-based OR AB simulation-based) OR (TI simulation-enhanced OR AB simulation-enhanced) OR (TI transformational OR AB transformational) OR (TI "translational simulation" OR AB "translational simulation") OR (TI "table-top simulation*" OR AB "table-top simulation*") OR (TI "table-top exercise*" OR AB "table-top exercise*") OR (TI "table-top gam*" OR AB "table-top gam*") OR (TI immersive OR AB immersive))) AND ((TI "futures and foresight" OR AB "futures and foresight") OR (TI "future foresight" OR AB "future foresight") OR (TI trend* OR AB trend*) OR (TI future* OR AB future*) OR (TI foresight OR AB foresight) OR (TI futuring OR AB futuring) OR (TI preparedness OR AB preparedness) OR (TI predict* OR AB predict*) OR (TI short-term OR AB short-term) OR (TI long-term OR AB long-term) OR (TI "trend analysis" OR AB "trend analysis") OR (TI "horizon scanning" OR AB "horizon scanning") OR (TI "scenario analysis" OR AB "scenario analysis")))) AND ((TI "Health system*" OR AB "Health system*") OR (TI "Healthcare system*" OR AB "Healthcare system*") OR (TI "Health care system*" OR AB "Health care system*") OR (TI "Health management" OR AB "Health management") OR (TI Systems-level OR AB Systems-level) OR (TI Organization* OR AB Organization*) OR (TI Organisation* OR AB Organisation*) OR (TI "Public Health" OR AB "Public Health") OR (TI "Simulation Center*" OR AB "Simulation Center*") OR (TI "Simulation Centre*" OR AB "Simulation Centre*") OR (TI "medical education" OR AB "medical education") OR (TI "medical resource*" OR AB "medical resource*") OR (TI "healthcare capacity" OR AB "healthcare capacity") OR (TI "health care capacity" OR AB "health care capacity"))

CINAHL

((((TI Healthcare OR AB Healthcare) OR (TI "Health care" OR AB "Health care") OR (MH "Delivery of health care+")) AND ((TI Professional* OR AB Professional*) OR (TI Leader* OR AB Leader*) OR (TI Educator* OR AB Educator*) OR (TI Learner* OR AB Learner*) OR (TI Decision-maker* OR AB Decision-maker*) OR (TI Policy-maker* OR AB Policy-maker*))) AND ((((MH "Simulation training+")) OR ((TI simulation* OR AB simulation*) OR (TI simulated OR AB simulated) OR (TI scenario* OR AB scenario*) OR (TI simulation-based OR AB simulation-based) OR (TI simulation-enhanced OR AB simulation-enhanced) OR (TI transformational OR AB transformational) OR (TI "translational simulation" OR AB "translational simulation") OR (TI "table-top simulation*" OR AB "table-top simulation*") OR (TI "table-top exercise*" OR AB "table-top exercise*") OR (TI "table-top gam*" OR AB "table-top gam*") OR (TI immersive OR AB immersive))) AND ((TI "futures and foresight" OR AB

"futures and foresight") OR (TI "future foresight" OR AB "future foresight") OR (TI trend* OR AB trend*) OR (TI future* OR AB future*) OR (TI foresight OR AB foresight) OR (TI futuring OR AB futuring) OR (TI preparedness OR AB preparedness) OR (TI predict* OR AB predict*) OR (TI short-term OR AB short-term) OR (TI long-term OR AB long-term) OR (TI "trend analysis" OR AB "trend analysis") OR (TI "horizon scanning" OR AB "horizon scanning") OR (TI "scenario analysis" OR AB "scenario analysis"))))) AND ((TI "Health system*" OR AB "Health system*") OR (TI "Healthcare system*" OR AB "Healthcare system*") OR (TI "Health care system*" OR AB "Health care system*") OR (TI "Health management" OR AB "Health management") OR (TI Systems-level OR AB Systems-level) OR (TI Organization* OR AB Organization*) OR (TI Organisation* OR AB Organisation*) OR (TI "Public Health" OR AB "Public Health") OR (TI "Simulation Center*" OR AB "Simulation Center*") OR (TI "Simulation Centre*" OR AB "Simulation Centre*") OR (TI "medical education" OR AB "medical education") OR (TI "medical resource*" OR AB "medical resource*") OR (TI "healthcare capacity" OR AB "healthcare capacity") OR (TI "health care capacity" OR AB "health care capacity"))

EMBASE

(((Healthcare.tw. OR "Health care".tw. OR exp "Delivery of health care"/) AND (Professional*.tw. OR Leader*.tw. OR Educator*.tw. OR Learner*.tw. OR Decision-maker*.tw. OR Policy-maker*.tw.)) AND (((exp "Simulation training"/) OR (simulation*.tw. OR simulated.tw. OR scenario*.tw. OR simulation-based.tw. OR simulation-enhanced.tw. OR transformational.tw. OR "translational simulation".tw. OR "table-top simulation*".tw. OR "table-top exercise*".tw. OR "table-top gam*".tw. OR immersive.tw.)) AND ("futures and foresight".tw. OR "future foresight".tw. OR trend*.tw. OR future*.tw. OR foresight.tw. OR futuring.tw. OR preparedness.tw. OR predict*.tw. OR short-term.tw. OR long-term.tw. OR "trend analysis".tw. OR "horizon scanning".tw. OR "scenario analysis".tw.))) AND ("Health system*".tw. OR "Healthcare system*".tw. OR "Health care system*".tw. OR "Health management".tw. OR Systems-level.tw. OR Organization*.tw. OR Organisation*.tw. OR "Public Health".tw. OR "Simulation Center*".tw. OR "Simulation Centre*".tw. OR "medical education".tw. OR "medical resource*".tw. OR "healthcare capacity".tw. OR "health care capacity".tw.)

PsycINFO

(((TITLE-ABS(Healthcare) OR TITLE-ABS("Health care") OR INDEXTERMS("Delivery of health care")) AND (TITLE-ABS(Professional*) OR TITLE-ABS(Leader*) OR TITLE-ABS(Educator*) OR TITLE-ABS(Learner*) OR TITLE-ABS(Decision-maker*) OR TITLE-ABS(Policy-maker*))) AND (((INDEXTERMS("Simulation training")) OR (TITLE-ABS(simulation*) OR TITLE-ABS(simulated) OR TITLE-ABS(scenario*) OR TITLE-ABS(simulation-based) OR TITLE-ABS(simulation-enhanced) OR TITLE-ABS(transformational) OR TITLE-ABS("translational simulation") OR TITLE-ABS("table-top simulation*") OR TITLE-ABS("table-top exercise*") OR TITLE-ABS("table-top gam*") OR TITLE-ABS(immersive))) AND (TITLE-ABS("futures and foresight") OR TITLE-ABS("future foresight") OR TITLE-ABS(trend*) OR TITLE-ABS(future*) OR TITLE-ABS(foresight) OR TITLE-ABS(futuring) OR TITLE-ABS(preparedness) OR TITLE-ABS(predict*) OR TITLE-ABS(short-term) OR TITLE-ABS(long-term) OR TITLE-ABS("trend analysis") OR TITLE-ABS("horizon scanning") OR TITLE-ABS("scenario analysis")))) AND (TITLE-ABS("Health system*") OR TITLE-ABS("Healthcare system*") OR TITLE-ABS("Health care system*") OR TITLE-ABS("Health management") OR TITLE-ABS(Systems-level) OR TITLE-ABS(Organization*) OR TITLE-ABS(Organisation*) OR TITLE-ABS("Public Health") OR TITLE-ABS("Simulation Center*") OR TITLE-ABS("Simulation Centre*") OR TITLE-ABS("medical education") OR TITLE-ABS("medical resource*") OR TITLE-ABS("healthcare capacity") OR TITLE-ABS("health care capacity"))

SCOPUS

(((TITLE-ABS(Healthcare) OR TITLE-ABS("Health care") OR INDEXTERMS("Delivery of health care")) AND (TITLE-ABS(Professional*) OR TITLE-ABS(Leader*) OR TITLE-ABS(Educator*) OR TITLE-ABS(Learner*) OR TITLE-ABS(Decision-maker*) OR TITLE-ABS(Policy-maker*))) AND (((INDEXTERMS("Simulation training")) OR (TITLE-ABS(simulation*) OR TITLE-ABS(simulated) OR TITLE-ABS(scenario*) OR TITLE-ABS(simulation-based) OR TITLE-ABS(simulation-enhanced) OR TITLE-ABS(transformational) OR TITLE-ABS("translational simulation") OR TITLE-ABS("table-top simulation*") OR TITLE-ABS("table-top exercise*") OR TITLE-ABS("table-top gam*") OR TITLE-ABS(immersive))) AND (TITLE-ABS("futures and foresight") OR TITLE-ABS("future foresight") OR TITLE-ABS(trend*) OR TITLE-ABS(future*) OR TITLE-ABS(foresight) OR TITLE-ABS(futuring) OR TITLE-ABS(preparedness) OR TITLE-ABS(predict*) OR TITLE-ABS(short-term) OR TITLE-ABS(long-term) OR TITLE-ABS("trend analysis") OR TITLE-ABS("horizon scanning") OR TITLE-ABS("scenario analysis")))) AND (TITLE-ABS("Health system*") OR TITLE-ABS("Healthcare system*") OR TITLE-ABS("Health care system*") OR TITLE-ABS("Health management") OR TITLE-ABS(Systems-level) OR TITLE-ABS(Organization*) OR TITLE-ABS(Organisation*) OR TITLE-ABS("Public Health") OR TITLE-ABS("Simulation Center*") OR TITLE-ABS("Simulation Centre*") OR TITLE-ABS("medical education") OR TITLE-ABS("medical resource*") OR TITLE-ABS("healthcare capacity") OR TITLE-ABS("health care capacity"))

WEB OF SCIENCE

(((Healthcare OR "Health care" OR "Delivery of health care") AND (Professional* OR Leader* OR Educator* OR Learner* OR Decision-maker* OR Policy-maker*)) AND (((("Simulation training") OR (simulation* OR simulated OR scenario* OR simulation-based OR simulation-enhanced OR transformational OR "translational simulation" OR "table-top simulation*" OR "table-top exercise*" OR "table-top gam*" OR immersive)) AND ("futures and foresight" OR "future foresight" OR trend* OR future* OR foresight OR futuring OR preparedness OR predict* OR short-term OR long-term OR "trend analysis" OR "horizon scanning" OR "scenario analysis"))) AND ("Health system*" OR "Healthcare system*" OR "Health care system*" OR "Health management" OR Systems-level OR Organization* OR Organisation* OR "Public Health" OR "Simulation Center*" OR "Simulation Centre*" OR "medical education" OR "medical resource*" OR "healthcare capacity" OR "health care capacity")

APPENDIX II: DATA EXTRACTION INSTRUMENT

Reviewer:	**Date:**
Author	Year of the publication/ study
Journal	Record number
Study title	
Study description	
Population and HCP category	
Research method	
Pedagogical theories	
Simulation modality/Debriefing process	
Healthcare setting/context	
Future foresight methods	
Foresight leadership skills	
Author defined outcomes	
Authors' conclusions	
Reviewer notes	