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Research priority setting in health professions education: a systematic review

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Background: Research priority-setting exercises can guide resource allocation, strengthen methodological rigor, and align research efforts with educational and clinical needs in health professions education (HPE). However, existing exercises have not been appraised against recognized reporting standards, and no synthesis of their identified priorities has been attempted, limiting the ability to identify common threads across the HPE community.

Aim: To synthesize existing research priority-setting studies conducted in HPE by identifying, critically appraising, and mapping the current body of literature.

Methods: This systematic review followed the PRISMA 2020 guidelines and the STORIES statement. PubMed, Scopus, and the Web of Science were searched for peer-reviewed studies reporting research priority-setting exercises in HPE published between January 2000 and February 2026. Two reviewers independently screened titles, abstracts, and full texts for eligibility. Data extraction was guided by the REPRISSE guidelines. Studies were critically appraised using the checklist of nine common themes of good practice for research priority-setting exercises (9CTGP). A thematic analysis classified research priorities using the Medical Education Research Library framework. Protocol registration: PROSPERO CRD42023400999.

Results: Twenty-four studies met the inclusion criteria, most published in the last decade and predominantly focused on medical education within national or regional settings. No study used an existing framework for research priority setting, and none included plans for evaluating or updating their priorities. Fewer than one-third reported using a comprehensive approach (29.2%), and only 16.7% planned for implementation. Patients and trainees were underrepresented. The thematic analysis identified 14 themes and 46 subthemes. The most prevalent priorities across studies were curriculum and program evaluation (45.8%), development and evaluation of technology in HPE (45.8%), interprofessional education (41.7%), and faculty recruitment, motivation, and retention (37.5%).

Conclusion: Research priority-setting exercises in HPE are growing but show methodological inconsistencies, limited stakeholder diversity, and absence of evaluation plans. These findings highlight the need for specific guidance on conducting research prioritization in HPE and support efforts to develop a set of global research priorities built on common threads while respecting disciplinary and contextual specificities.

Systematic review registration: <https://www.crd.york.ac.uk/PROSPERO/view/CRD42023400999>, CRD42023400999.

KEYWORDS

consensus development, health professions education, knowledge gap analysis, medical education, research agenda, research priority setting, systematic review

Introduction

Health professions education (HPE) research is key to advancing the field. It plays a crucial role in improving the quality of education, which later translates to outcomes for patients, the community, healthcare professionals and organizations (Cooper et al., 2023; Emery et al., 2022; Kerth et al., 2026). Its recognized importance has led to several initiatives, such as Best Evidence Medical Education (BEME) (Harden et al., 2000), the WHO guidelines on transforming and scaling up health professionals' education and training (WHO, 2013), the Foundation for Advancement of International Medical Education and Research (FAIMER) Institute (Vyas et al., 2023), and the Interprofessional Education Collaborative (IPEC) (Zorek et al., 2021).

However, despite these efforts and the growth in HPE over the last decades, the field faces several challenges. These include selecting trainees, developing teachers, implementing new technologies, and addressing workforce shortages exacerbated by the COVID-19 pandemic (Harden, 2024; Majumder et al., 2023; Mennin, 2021). In addition, HPE researchers face different shortcomings, such as limited funding opportunities (Gruppen and Durning, 2016) and lack of institutional support (Gruppen et al., 2011), which are reflected in low-quality educational research (Emery et al., 2022). Therefore, the scarcity of resources impedes rapid advancement in the field.

To allocate resources more efficiently and surpass these barriers, research priority-setting exercises have been proposed and used in other fields (Crilly et al., 2022; Iqbal et al., 2021). These exercises aim to gather opinions from various stakeholders and reach a consensus on the most important research questions or topics in a particular field (Tong et al., 2019). HPE is no stranger to these exercises. Previous researchers have conducted them for medical (Palermo et al., 2019), dental (Ajjawi et al., 2017), and nursing education (Harper et al., 2012). Moreover, in the last decade, research priority-setting exercises have been increasingly conducted in the simulation field, covering emergency (Chaplin et al., 2020), nursing (Wong et al., 2021), and surgical simulation (Stefanidis et al., 2015).

While the growth of research priority-setting exercises in HPE represents an advancement, there are still major gaps in the current body of knowledge. First, none of these studies have been appraised against recognized reporting standards for research priority-setting (Viergever et al., 2010), such as the nine common themes of good practice, limiting our understanding of their methodological alignment with established benchmarks. Second, there has been no effort to synthesize the research priority setting exercises identified across different studies. Without such synthesis, it is difficult to identify common threads and shared values across the HPE community while respecting disciplinary and contextual specificities. To our knowledge, there is no effort to map and synthesize the available literature on these exercises. Hence, addressing these gaps remains a major priority for the HPE community.

Therefore, in this study we aimed to synthesize existing research priority-setting studies conducted in HPE by identifying, critically appraising, and mapping the current body of literature.

Methods

Study design and research questions

We conducted a systematic review of research priority-setting exercises in HPE. While there is no specific guidance on how to conduct reviews on research priority-setting studies, this systematic review adhered to the Preferred Reporting Items for Systematic Reviews and Meta-Analysis (PRISMA) guidelines (Page et al., 2021), and the STructured apprOach to the Reporting In healthcare education of Evidence Synthesis (STORIES) statement (Gordon and Gibbs, 2014) to enhance the transparency and quality of reporting. The following research questions guided this review:

- 1 Do research priority-setting studies in HPE adhere to good practices as defined by the nine common themes of the good practice checklist (Viergever et al., 2010)?
- 2 What are similar themes among research priorities from identified studies based on the Medical Education Research Library (Eady and Moreau, 2024)?

The protocol for this review was registered in the PROSPERO database (ID: CRD42023400999).

Eligibility criteria

This review aimed to include any peer-reviewed study that reported a research priority-setting exercise on HPE. Studies were included if they fulfilled the following criteria: (1) the main objective was to develop research priorities; (2) were conducted in the field of health professions education; (3) were conducted in any setting including local, national, regional, or international studies; (4) outline their process for research prioritization; (5) were published after January 2000; and (6) were written in English or Spanish. The year 2000 was selected as the starting date because it coincides with the emergence of key initiatives that formalized HPE research, such as the Best Evidence Medical Education (BEME) collaboration (Harden et al., 2000), and because research priority setting gained traction due to several reports (Global Forum for Health Research, 2000).

Studies were excluded if: (1) they proposed a research agenda or research priority as a secondary objective; we also excluded systematic reviews, guidelines, or opinions; (2) were published in non-peer-reviewed sources; and (3) failed to include the prioritization process.

Protocol modifications

While the protocol was pre-registered, five modifications were made. These were as follows:

- 1 First, the secondary research questions were rearranged. The protocol's research questions mainly focused on key characteristics of studies, the methodology used, and the stakeholders involved. However, after reconsidering these, all research questions fell under "key characteristics of studies." Hence, as

we did plan to assess the quality of studies and to arrange priorities based on themes, a change in the secondary research questions was feasible and would add value to this review.

- 2 Second, the databases searched were PubMed, Scopus, and Web of Science. This was done due to the lack of access to EMBASE, PsycINFO, and CINAHL. Although CINAHL and PsycINFO were not searched, their incremental contribution to systematic reviews that already include PubMed and Scopus has been shown to be limited in several methodological studies (Hartling et al., 2016). Nevertheless, we acknowledge that these databases index education and nursing journals that may not be fully covered by our selected databases, and this represents a limitation of this review. Regarding EMBASE, a previous methodological study suggested that adding EMBASE to PubMed increases the coverage of studies by 6.85% (Frandsen et al., 2021). Hence, the changes in databases may not substantially impact our findings.
- 3 Third, although initially we intended to focus only on research priority-setting exercises published since the COVID-19 pandemic declaration in March 2020, we later extended the searches to cover studies published since January 2000 for broader and more generalizable findings.
- 4 Fourth, the thematic analysis changed. The one reported in the protocol did not include the “Medical Education Research Library” and was planned to be inductive. However, after the study was published (Eady and Moreau, 2024), a deductive analysis classifying research priorities under their proposed topics was a more parsimonious approach.
- 5 Fifth, although the registered protocol included a search of the first ten pages of Google Scholar, this was not conducted due to feasibility constraints. This deviation from the protocol is acknowledged.

Data collection

The initial search was conducted on 30th April 2024 in the following databases: PubMed, Scopus, and Web of Science. An updated search was conducted on February 5th, 2026 using the same databases and an expanded search strategy to capture studies published after the original search. The search strategy was initially developed in PubMed and then adapted to other databases using Polyglot.¹

The search strategy for the PubMed database was: (“education, medical”[MeSH Terms] OR “education, dental”[MeSH Terms] OR “education, nursing”[MeSH Terms] OR “education, pharmacy”[MeSH Terms] OR “Health professions education”[Title/Abstract] OR “Healthcare professions education”[Title/Abstract]) AND (“research priorit*”[Title/Abstract] OR “research agenda”[Title/Abstract] OR “research opportunit*”[Title/Abstract] OR “priority setting”[Title/Abstract] OR “priorities setting”[Title/Abstract]). A professional librarian was not involved in the design of the search strategy, which is acknowledged as a limitation of this review.

Retrieved studies were imported into Deduplicator.² Prior to formal appraisal, both reviewers independently appraised a subset of three studies as a calibration exercise to ensure consistent application of the checklist criteria. After duplicate deletion, studies were imported into RayyanAI (Ouzzani et al., 2016), where two of us (FV

and JF) independently screened the title and abstract. Then, potentially eligible studies were examined in full text by the main author (JF) and corroborated by one of us (FV). In case of discrepancies in these phases, these were solved through discussion until a consensus was reached.

Data extraction

Three data extraction forms in Google Spreadsheets were developed to extract relevant information. These were designed to fulfill each research question.

The first was for overall data extraction, based on the REPRISSE guidelines for research priority-setting studies (Tong et al., 2019). Here, the main author (JF) extracted relevant information such as: author, year, country, objective, context and scope (i.e., geographic scope, area of focus), governance and leadership team, framework employed, characteristics and methods to involve stakeholders, the process to identify and collect research priorities, methods for prioritization of research priorities, the themes and each research priority as well as the numbers, evaluation and feedback, implementation, funding, and conflict of interest. Two of us (BMC and CCC) audited the entirety of the extracted data to ensure accuracy and completeness.

The second data extraction form was for critical appraisal, based on the checklist of nine good common themes for research priority-setting exercises (Viergever et al., 2010). This checklist has been used in previous reviews (Iqbal et al., 2021). This checklist comprises three major domains (preparatory work, deciding on priorities, and after priorities have been set), with nine subdomains (context, use of a comprehensive approach, inclusiveness, information gathering, planning for implementation, criteria, methods for deciding on priorities, evaluation, and transparency), and a total of 20 items. Two of us (CC and JF) independently appraised all studies using this checklist. Prior to formal appraisal, both reviewers independently appraised a subset of three studies as a calibration exercise to ensure consistent application of the checklist criteria. Then, we met to reach a final consensus on the quality of the included studies.

The third data extraction form was used to identify major themes among research priorities (Eady and Moreau, 2024). Here, each research priority for all studies was extracted verbatim. If the study did not report research priorities, the minimum reporting unit was extracted (i.e., if the study did not report research priorities but reported themes, then themes were extracted). The extraction was conducted by the main author (JF) and the entirety of the extraction was audited by one of us (MPS) for accuracy.

Data synthesis

As meta-analysis was not feasible for this kind of study, the data were summarized using a narrative synthesis. Key characteristics and quality appraisals of included studies were presented in tabular and narrative formats as described in the protocol.

To summarize research priorities, a thematic analysis was conducted following the methodology recommended by Popay et al. (2006), using a three-step process. First, each research priority was extracted verbatim from the included studies. If a study did not report individual research priorities, the minimum reporting unit was extracted (e.g., themes or topics). Second, each extracted priority was deductively coded against the thirteen core topics of the Medical Education Research Library (Eady and Moreau, 2024),

1 <https://sr-accelerator.com/#/polyglot>

2 <https://sr-accelerator.com/#/deduplicator>

which served as the analytical framework for categorization. This is a list of thirteen core topics of medical education research proposed by editorial board members from the top 10 medical education journals. Examples of topics include assessment, clinical reasoning, curriculum, and continuous professional development. When a priority did not fit an existing topic, it was assigned to an ‘Others’ category. Third, within each topic, subthemes were inductively developed when multiple priorities addressed distinct aspects of the same topic. This process was iterative: the main author (JF) conducted the initial coding, which was reviewed and discussed with the rest of us. Discrepancies in the categorization were resolved through discussion. Subthemes were then quantified by counting the number of studies contributing to each and were presented in tabular format with their number and frequency of appearance.

Results

The initial search conducted in April 2024 across PubMed ($n = 663$), Scopus ($n = 1,106$), and Web of Science ($n = 589$) yielded 2,358 records. After removing 1,325 duplicates, 1,033 records were screened by title and abstract, of which 27 were sought for full-text retrieval. After full-text assessment, 18 studies met the eligibility criteria. The updated search conducted in January 2026 across PubMed ($n = 86$), Scopus ($n = 206$), and Web of Science ($n = 106$) yielded 398 additional records. After removing 170 duplicates, 228 records were screened, and nine were sought for full-text retrieval. Three were excluded (two were not focused on HPE; one was a literature review), resulting in six new studies. In total, 24 studies were included in this review, as shown in Figure 1.

Characteristics of included studies

Table 1 describes the 24 included studies and their key characteristics. Studies were published between 2001 and 2025. Only one study was published before 2010 (Wolf et al., 2001), and the majority ($n = 18$, 75.0%) were published in the last decade (2016–2025). The years with the most publications were 2020 and 2025, each contributing three studies (12.5%). The country contributing the most studies was the United States ($n = 5$, Anton et al., 2020; Harper et al., 2012; Huang et al., 2010; Stefanidis et al., 2015, 2022), followed by Iran ($n = 2$, 8.3%; Nabeiei et al., 2016; Tootoonchi et al., 2012). Notably, six studies (25.0%) were conducted in international or multi-country settings (Ball et al., 2016; Bollela et al., 2025; Chan et al., 2024; Keller et al., 2024; Mullen et al., 2025; Wolf et al., 2001).

All included studies were conducted within the broader field of health professions education. The most common subdiscipline was medical education ($n = 12$, 50.0%), which encompassed general medical education ($n = 8$), medical nutrition education (Ball et al., 2016), general practice education (de Groot et al., 2024), precision medicine education (Chan et al., 2024), and medical education regulation (Bollela et al., 2025). Simulation-based education was the focus in five studies (20.8%), spanning surgical (Anton et al., 2020; Stefanidis et al., 2022), emergency medicine (Chaplin et al., 2020), and nursing simulation (Wong et al., 2021). The remaining studies addressed health professions education broadly ($n = 2$, 8.3%; Palermo et al., 2019; Van Schalkwyk et al., 2020), clinical education (Burford et al., 2025), behavioral sciences in acute care (Keller et al., 2024), prosthetics and orthotics education (Mullen et al., 2025), surgical education (Stefanidis et al., 2015), dental education (Ajjawi et al., 2017), and nursing professional development (Harper et al., 2012).

The Delphi technique was the most common method used ($n = 10$, 41.7%), either alone or combined with the nominal group

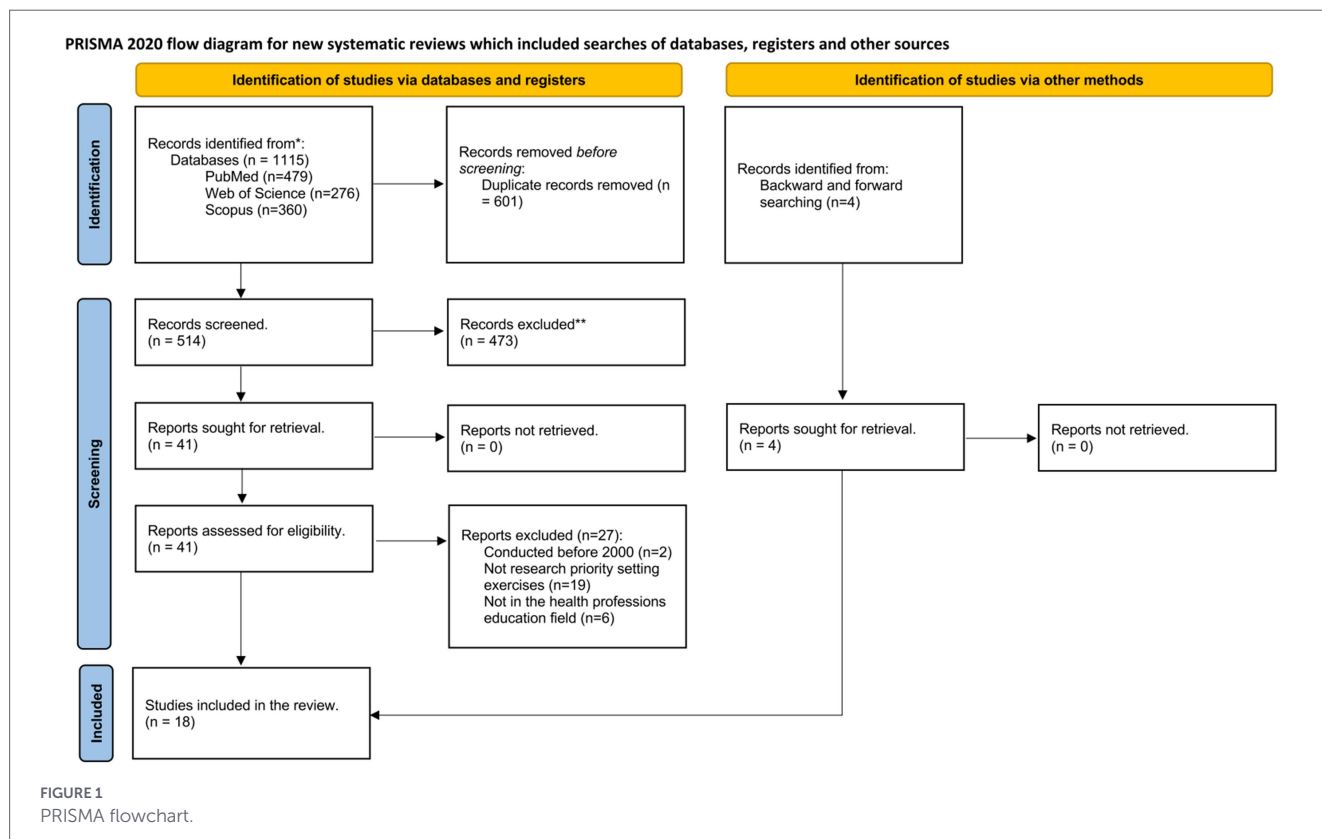


TABLE 1 Key characteristics of included studies.

References	Topic—country	Aim	Leadership	Method	Stakeholder group (n)	Main outcomes	Funding
Mullen et al. (2025)	Prosthetics and Orthotics Education—International	To collaboratively identify and prioritize areas in which education research in prosthetics and orthotics (P&O) is needed, and evaluate resources needed	Academic	Participatory action research (Mixed methods: Focus groups, Online Survey, In-person Ranking)	P&O educators, clinicians, and researchers. Survey respondents (n = 76); World Congress participants (n = 27)	Priorities: Providing feedback to students, program evaluation, clinical education/internship (survey); Academic vs. clinical practice, program resources (World Congress). Needs: Protected time, funding, faculty development.	Unfunded
Burford et al. (2025)	Clinical education research—UK	To identify the research priorities of stakeholders including funders, regulators, educators and public representatives, and how they are determined	Academic	Two-stage process (Online surveys and Hybrid Workshop)	Funders, regulators, educators, researchers, and public representatives (Round 1 n = 256; Round 2 n = 199; Workshop n = 70)	Forty-six priority statements. The four most important were: (1) Research to understand how working conditions and workplace cultures contribute to under-recruitment, (2) Research into the future sustainability of the clinical workforce, (3) Research to support a workplace culture which promotes patient safety, and (4) Research to ensure that clinicians are trained to effectively treat a diverse and evolving patient population	Unfunded
Bollela et al. (2025)	Medical education regulation—International (11 countries)	To present a framework of priority research topics that need to be addressed in the field of medical education accreditation	Academic	Nominal Group Technique (NGT)	Global scholars and thought leaders in medical education regulation from 11 countries (n = 18)	Seven research domains. These were: (1) Purpose, (2) Quality and Sustainability, (3) Economics, (4) Governance, (5) Colonialism Effects, (6) Process (legitimacy, accountability and power), and (7) Outcomes (e.g., quality improvement, social responsibility, brain drain)	Unfunded
Keller et al. (2024)	Behavioral sciences in acute care—International (European network)	To define important knowledge gaps and establish a research agenda for the years ahead of prioritized research questions in this field of applied health research	Academic	Systematic prioritization method with expert focus groups	Experts in behavioral sciences and acute care (n = 29 initially, n = 19 for prioritization)	Six research topics. The three most important were: (1) Interventions to improve team process, (2) Dealing with and implementing new technologies, and (3) Understanding and measuring team processes	Unfunded
de Groot et al. (2024)	General Practice education—Netherlands	To foster collaboration between universities within the GP-HPE research domain by developing a national research agenda	Academic	Q-methodology	Teachers, supervisors, students, researchers, developers, and management from postgraduate training institutes (n = 73)	Five distinct research perspectives/areas: (1) The clinician scientist, (2) The socially engaged GP, (3) The specific GP identity, (4) The GP as an entrepreneur, and (5) The GP engaged in lifelong learning	Funded

(Continued)

TABLE 1 (Continued)

References	Topic—country	Aim	Leadership	Method	Stakeholder group (n)	Main outcomes	Funding
Chan et al. (2024)	Precision medicine education—International (Canada/USA)	To create a future-facing 10-year research agenda in precision emergency medicine for health professions educators	Academic	Foresight and Strategy Technique (FaST)	Emergency medicine experts, educators, and technology leaders (n = 10) and consensus conference attendees (Not reported)	Eight high-value education research questions. The three most important were: (1) How will you teach trainees to be able to still act, reason, or think in the absence of precision medicine tools?, (2) How do we incorporate the patient voice in how we train physicians around precision medicine?, and (3) What techniques are best for teaching so-called “fusion skills” in undergraduate and graduate medical education settings?	Funded
Burhan (2022)	Medical education—Sudan	To identify the priorities for ME research to be conducted by master’s and PhD students in Sudan	Academic	Not reported	Faculty, researchers, students from Masters/PhD of HPE from University of Khartoum (Not reported)	Ten themes with 50 research questions. The major themes were: (1) Curriculum Content Design & Delivery, (2) Faculty Development, (3) Assessment Methods, (4) Research in Medicine & ME, (5) Technology in Education, (6) Accreditation, Evaluation & Quality Education, (7) Professionalism, (8) Students Selection Support & Behavior, (9) Simulation and Technology in Education, and (10) Social Accountability	Unfunded
Stefanidis et al. (2022)	Simulation-based surgical education—US	To define the top priorities in simulation-based surgical education	ACS staff	Delphi	Experienced researchers in surgical simulation (n = 10)	Three themes with 10 research questions. The three themes were: (1) impact of simulation on patient safety and outcomes, (2) value proposition of simulation, and (3) simulation use for physician certification and credentialing.	Not reported
Ali and Sethi (2021)	Medical education—Pakistan	To identify multiple stakeholders’ views of medical education research priorities in Pakistan for the next 5 years	Academic	Two stage exploratory mixed-method study	Medical trainees, MHPE graduates, policymakers (n = 250)	Eight themes with 20 research questions. The eight themes were: (1) Curriculum organization, (2) curriculum content, (3) curriculum delivery, (4) assessment and feedback, (5) workplace, (6) students, (7) faculty and (8) educational management	Not reported
Wong et al. (2021)	Simulation-based Nursing education—Hong Kong	To define research priorities for a school in healthcare simulation-based nursing education	Academic	Delphi	Nursing faculty (n = 11)	Ten major research questions. The three most important were: (1) What frameworks inform curriculum design using simulation?, (2) How can simulation be incorporated into clinical placements to enhance students’ learning?, and (3) Can simulation be used for the certification of Registered Nurse?	Funded

(Continued)

TABLE 1 (Continued)

References	Topic—country	Aim	Leadership	Method	Stakeholder group (n)	Main outcomes	Funding
Anton et al. (2020)	Simulation-based surgical education—USA	To establish contemporary research priorities in the field of surgical simulation	Academic	Delphi	Experts in surgical simulation both physician and non-physician (n = 18)	Ten major research questions. The three most important were: (1) Does demonstrated competency in the sim lab translate to clinical competency (OR etc.)?, (2) Does training using simulation improve patient outcomes (vs no training)?, and (3) Does having a simulation center for training result in improved patient outcomes, resource utilization, and staff engagement compared to not having a simulation center and what is the return on investment?	Unfunded
Chaplin et al. (2020)	Simulation-based emergency medicine education—Canada	To establish consensus for future simulation-based research priorities.	Academic	Not reported	Emergency medicine simulation leads and seniors (n = 20)	Eight themes. These were: (1) Simulation in CBME, (2) Simulation for interdisciplinary and interprofessional learning, (3) Simulation for summative assessment, (4) Simulation for continuing professional development, (5) National curricular development, (6) Best practices in simulation-based education, (7) Simulation-based education outcomes, and (8) Simulation as an investigative methodology.	Not reported
Van Schalkwyk et al. (2020)	Health professions education—sub-Saharan Africa	To generate and prioritize a list of research topics for Health Professions Education Research (HPER) in sub-Saharan Africa	AFREhealth technical group	Delphi	Health profession educators from the AFREhealth network (n = 90)	Ten topics. These were: (1) Addressing the human resources for health challenges in rural and remote areas, (2) Interprofessional collaboration and practices in SSA, (3) Teaching a holistic and person-centered care approach, (4) The role of information communications technology in HPE, (5) Faculty development for clinical teaching, (6) Quality assurance processes and procedures in health professions education, (7) Resources, political commitment, and funding for HPE in SSA, (8) Responsive curricula to the health needs of SSA, (9) Potential of rural communities as platforms for training health care professionals, and (10) Relevance of communication skills training in culturally diverse contexts	Not reported
Palermo et al. (2019)	Health professions education—Australia	To identify health education research priorities over the next 3–5 years	Academic	Sequential mixed method	Health profession educators, researchers, students, and patients (n = 796)	Six themes with 30 research questions. The themes were: (1) Culture of learning together in the workplace; (2) Preparation for work; (3) Meeting future Australian healthcare needs; (4) Pedagogical effectiveness; (5) Workforce issues; and (6) Curriculum integration	Funded

(Continued)

TABLE 1 (Continued)

References	Topic—country	Aim	Leadership	Method	Stakeholder group (n)	Main outcomes	Funding
Ajjawi et al. (2017)	Dental education—Scotland	To identify national dental education research priorities for the next 3–5 years	Dental Education Research Group	Two-stage online questionnaire study approach	Dental professionals, educators, students, and patients (n = 734)	Twenty-four priority areas. The most important were: (1) role of assessments in identifying competence, (2) undergraduate curriculum prepares for practice, and (3) promote teamwork within the dental team	Funded
Ball et al. (2016)	Medical nutrition education—International	To identify the research priorities for medical nutrition education worldwide	Academic	Five-step approach	Medical educators, students, doctors, patients, and researchers in medical education (n = 270)	Twenty-five research questions. The most important were: (1) How confident are medical students and doctors in providing nutrition care to patients?, (2) What are the essential nutrition skills for physicians and physicians-to-be to obtain?, and (3) How effective are doctors at influencing nutritional health of patients?	Not reported
Nabeiei et al. (2016)	Medical education—Iran	To determine research priorities in medical education, considering their details and functions for the Master and PhD of Medical Education in Shiraz, Iran	Academic	Qualitative two-step approach (NGT and Delphi)	Medical education experts (n = 46)	Five themes with 35 research questions. The themes were: (1) Teaching approaches, (2) Educational management, (3) Mentorship and educational guidance, (4) Medical ethics and professionalism, and (5) Educational evaluation	Funded
Stefanidis et al. (2015)	Surgical education—US	To generate a list of priority topics where multi-institutional collaborative research is needed to advance surgical education	Academic	Delphi	Members of ASE (n = 103)	Six themes with 40 research questions. The themes were: (1) Teaching methods and curriculum development, (2) Assessment and competency, (3) Simulation, (4) Faculty development, (5) Impact of work hour restrictions, (6) Medical student preparation and selection	Unfunded
Amini et al. (2012)	Medical education—Eastern Mediterranean Region	To determine the principal themes and to draw up a list of priorities in medical education research in the Eastern Mediterranean Region	Academic	Qualitative two-step approach (NGT and Delphi)	Medical education experts (n = 77)	Twenty research questions. The most important were: (1) Training physicians to be effective teachers, (2) Community-driven models for curriculum development, and (3) Clinical teaching models	Funded
Harper et al. (2012)	Nursing CPD—US	To delineate research priorities for nursing professional development for the next five years	NNSDO Research Committee	Delphi	NPD experts (n = 14)	Ten themes with 24 research questions. The themes were: (1) Effect of educational programs, (2) Educational strategies to promote competency/skill development, (3) Measurement of competency/skill development, (4) Evaluation of competency/skills development, (5) Effect of innovative orientation methods, (6) Evaluation of strategies for transitioning to practice, (7) Effective teaching strategies, (8) NPD metrics related to staff, patient and organizational outcomes, (9) NPD practice issues related to academic education, and (10) Other research topics	Unfunded

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TABLE 1 (Continued)

References	Topic—country	Aim	Leadership	Method	Stakeholder group (n)	Main outcomes	Funding
Tootoonchi et al. (2012)	Medical education—Iran	To determine the research priorities of medical education in Iran.	Academic	Delphi	Faculty, researchers, students, and administrators (n = 451)	Twelve major themes. These were: (1) The methods for promoting faculty members capabilities, (2) Motivation, satisfaction, and welfare of faculty members, (3) The process and criteria for faculty members' promotion, (4) Teaching and learning methods in medical education, (5) Task description and professional skills of graduates in responding to the needs of the society and health system, (6) Quality management in medical education, (7) Second language and medical education, (8) Clinical education, (9) Scientific productivity in clinical medicine, (10) Teacher evaluation, (11) Information technology in medical education, and (12) Selecting and evaluating university administrators in different levels	Funded
Huang et al. (2010)	Medical Education—US	Not clear	Academic	Workshops	Faculty, researchers, and medical education experts (Not reported)	Three research priorities. These were: (1) Describe the characteristics of the ideal physician, (2) To develop educational measures analogues to quality of life, and (3) to study return of investment in medical education	Not reported
Wilkinson et al. (2010)	Medical Education—New Zealand	To identify areas that are a high priority for medical education research in New Zealand	ANZAME research group	Delphi	ANZAME medical educators (n = 28)	Seven themes. These were: (1) Engaging in community and clinical learning environments, (2) Improving recruitment and retention, (3) Improving phases of transition, (4) Assessing professional behaviors, (5) Promoting quality feedback, (6) Engaging clinical teachers and (7) Educational and clinical leadership	Not reported
Wolf et al. (2001)	Medical Education—International	To provide an update on, and a preliminary research agenda for, best evidence medical education (BEME).	Academic	Workshops	Medical educators at the SDRME annual meeting (n = 35)	Four themes. These were: (1) Curricular design, (2) Learning and instructional methods, (3) Testing and assessment, and (4) Outcomes	Funded

CPD, Continuous Professional Development; AFREhealth, African Forum for Research and Education in Health; NGT, Nominal group technique.

technique. Other methods included mixed-methods approaches ($n = 3$), workshops ($n = 2$), online surveys ($n = 2$), the nominal group technique alone (Bollela et al., 2025), Q-methodology (de Groot et al., 2024), the Foresight and Strategy Technique (Chan et al., 2024), systematic prioritization with expert focus groups (Keller et al., 2024), and participatory action research (Mullen et al., 2025). Two studies did not report their method in detail (Burhan, 2022; Chaplin et al., 2020).

Most studies were led by academics ($n = 19$, 79.2%), while the remaining five were led by professional associations or institutional groups. The number of stakeholders varied considerably: some studies involved small expert panels of 10 to 20 participants (e.g., Stefanidis et al., 2022, $n = 10$; Wong et al., 2021, $n = 11$), while others involved larger samples (e.g., Palermo et al., 2019, $n = 796$; Ajjawi et al., 2017, $n = 734$; Tootoonchi et al., 2012, $n = 451$). Two studies did not report the specific number of different stakeholders involved (Burhan, 2022; Huang et al., 2010). The most common participants were health professions educators and researchers. Trainees were involved in seven studies (29.2%; Ali and Sethi, 2021; Ajjawi et al., 2017; Ball et al., 2016; de Groot et al., 2024; Mullen et al., 2025; Palermo et al., 2019; Tootoonchi et al., 2012), and only four studies

(16.7%) involved patients or public representatives (Ajjawi et al., 2017; Ball et al., 2016; Burford et al., 2025; Palermo et al., 2019). Only four studies (16.7%) reported the timeframe for their research priorities. Nine studies (37.5%) were funded, eight (33.3%) were unfunded, and seven (29.2%) did not report funding sources.

Quality appraisal of included studies

Table 2 presents the quality appraisal of the 24 included studies according to the nine common themes of good practice for research priority-setting exercises (Viergever et al., 2010), organized under three domains: preparatory work, deciding on priorities, and after priorities have been set.

Preparatory work

Almost all studies ($n = 23$, 95.8%) reported contextual factors, specifically the focus and scope of their research priorities; the exception was Chan et al. (2024), which did not clearly delineate the context. Regarding the use of a comprehensive approach, only seven studies (29.2%) employed an existing framework or systematic approach to

TABLE 2 Quality appraisal of included studies.

References	Preparatory work		Deciding on priorities			After priority set			
	Criteria 1	Criteria 2	Criteria 3	Criteria 4	Criteria 5	Criteria 6	Criteria 7	Criteria 8	Criteria 9
Mullen et al. (2025)	Yes	Yes	Yes	Yes	No	Yes	Yes	No	Yes
Burford et al. (2025)	Yes	Yes	Yes	Yes	Yes	Yes	Yes	No	Yes
Bollela et al. (2025)	Yes	Yes	Yes	Yes	No	Yes	Yes	No	Yes
Keller et al. (2024)	Yes	Yes	Yes	Yes	No	Yes	Yes	No	Yes
de Groot et al. (2024)	Yes	Yes	Yes	Yes	Yes	Yes	Yes	No	Yes
Chan et al. (2024)	No	Yes	Yes	Yes	Yes	Yes	Yes	No	Yes
Burhan (2022)	Yes	No	No	Yes	No	No	Yes	No	Yes
Stefanidis et al. (2022)	Yes	No	No	Yes	No	No	Yes	No	Yes
Ali and Sethi (2021)	Yes	No	Yes	Yes	No	No	Yes	No	Yes
Wong et al. (2021)	Yes	No	No	Yes	No	No	Yes	No	Yes
Anton et al. (2020)	Yes	No	No	Yes	No	No	Yes	No	Yes
Chaplin et al. (2020)	Yes	No	Yes	Yes	No	No	Yes	No	Yes
Van Schalkwyk et al. (2020)	Yes	No	Yes	Yes	No	No	Yes	No	Yes
Palermo et al. (2019)	Yes	No	Yes	Yes	No	No	Yes	No	Yes
Ajjawi et al. (2017)	Yes	No	Yes	Yes	Yes	No	Yes	No	Yes
Ball et al. (2016)	Yes	Yes	Yes	Yes	No	Yes	Yes	No	Yes
Nabeiei et al. (2016)	Yes	No	No	Yes	No	No	Yes	No	No
Stefanidis et al. (2015)	Yes	No	No	Yes	No	No	Yes	No	Yes
Amini et al. (2012)	Yes	No	No	No	No	No	Yes	No	No
Harper et al. (2012)	Yes	No	No	Yes	No	No	Yes	No	Yes
Tootoonchi et al. (2012)	Yes	No	No	Yes	No	No	Yes	No	Yes
Huang et al. (2010)	Yes	No	No	Yes	No	No	Yes	No	Yes
Wilkinson et al. (2010)	Yes	No	No	Yes	No	No	Yes	No	No
Wolf et al. (2001)	Yes	No	No	Yes	No	No	Yes	No	No

Criteria 1—Context, Criteria 2—Use of a comprehensive approach, Criteria 3—Inclusiveness, Criteria 4—Information gathering, Criteria 5—Planning for implementation, Criteria 6—Criteria, Criteria 7—Methods for deciding on priorities, Criteria 8—Evaluation and Criteria 9—Transparency.

guide their priority-setting process (Ball et al., 2016; Bollela et al., 2025; Burford et al., 2025; Chan et al., 2024; de Groot et al., 2024; Keller et al., 2024; Mullen et al., 2025). Notably, all six newly identified studies used a comprehensive approach, contrasting with the original 18 studies, among which only Ball et al. (2016) met this criterion. Regarding inclusiveness, 12 studies (50.0%) reported the characteristics of their stakeholders and demonstrated efforts to include diverse perspectives.

Deciding on priorities

Nearly all studies ($n = 23$, 95.8%) described their information-gathering process, with the exception of Amini et al. (2012). However, only four studies (16.7%) included a plan for implementing the identified research priorities (Ajjawi et al., 2017; Burford et al., 2025; Chan et al., 2024; de Groot et al., 2024). Seven studies (29.2%) made explicit the criteria used for scoring or ranking research priorities (Ball et al., 2016; Bollela et al., 2025; Burford et al., 2025; Chan et al., 2024; de Groot et al., 2024; Keller et al., 2024; Mullen et al., 2025), and all 24 studies described their methods for deciding on priorities.

After priorities have been set

No study reported a plan for evaluating or updating their research priorities. Most studies ($n = 20$, 83.3%) met the transparency criterion by clearly defining who developed the research priorities and disclosing relevant information. However, four studies did not meet this criterion (Amini et al., 2012; Nabeiei et al., 2016; Wilkinson et al., 2010; Wolf et al., 2001).

Key research priorities

Table 3, shows how the research priorities were distributed across 14 themes and 46 subthemes. The four most prevalent themes were curriculum (13 subthemes), simulation and technology-enhanced learning (8 subthemes), continuous professional development (4 subthemes), and assessment (4 subthemes).

Curriculum was the most frequently represented theme. The three most common subthemes were curriculum and program evaluation ($n = 11$, 45.8%), effectiveness of teaching and learning strategies ($n = 8$, 33.3%), and curriculum to improve communication skills ($n = 8$, 33.3%). The second most common theme was simulation and technology-enhanced learning comprising eight subthemes. The three most frequent were development and evaluation of technology in health professions education ($n = 11$, 45.8%), including studies addressing emerging technologies such as precision medicine (Chan et al., 2024) and behavioral sciences applications (Keller et al., 2024); role and frameworks of simulation education ($n = 7$, 29.2%); and cost-effectiveness of simulation ($n = 5$, 20.8%). Continuous professional development comprised four subthemes centered on the faculty workforce. The three most frequent were faculty recruitment, motivation, and retention ($n = 9$, 37.5%), faculty training ($n = 8$, 33.3%), and faculty evaluation and promotion ($n = 7$, 29.2%). Assessment comprised four subthemes. The three most common were assessment of competencies and performance assessment ($n = 7$, 29.2%), effective and useful feedback ($n = 6$, 25.0%), and assessment validity ($n = 4$, 16.7%).

Beyond these four major themes, interprofessional and teamwork education was the most frequently reported single subtheme across the review ($n = 10$, 41.7%). Student admission in undergraduate and graduate education was reported in eight studies (33.3%). Equity,

inclusion, and diversity was identified in six studies (25.0%), encompassing perspectives from medical education regulation (Bollela et al., 2025), clinical education (Burford et al., 2025), and precision medicine education (Chan et al., 2024). Workplace-based learning ($n = 6$, 25.0%), social accountability ($n = 5$, 20.8%), accreditation, evaluation, and quality education ($n = 5$, 20.8%), and management and education policy ($n = 5$, 20.8%) were also represented.

Lastly, we found distinct temporal trends among research priorities. Certain subthemes remained persistent across all periods, including curriculum and program evaluation ($n = 11$, 45.8%), development and evaluation of technology in health professions education ($n = 11$, 45.8%), faculty recruitment, motivation, and retention ($n = 9$, 37.5%), and assessment of competencies and performance assessment ($n = 7$, 29.2%). Simulation-related subthemes such as cost-effectiveness, translation to workplace settings, and certification were largely absent before 2015 and concentrated in the most recent decade, driven by the surgical and emergency medicine simulation literature (Anton et al., 2020; Chaplin et al., 2020; Stefanidis et al., 2015, 2022; Wong et al., 2021). The most notable trend was the emergence of priorities reflecting broader societal concerns in the 2020–2025 period: equity, inclusion, and diversity grew from a single study before 2020 (Amini et al., 2012) to six studies overall (25.0%); wellbeing and safety culture appeared as an entirely new subtheme (Burford et al., 2025; Keller et al., 2024); and social accountability re-emerged after being absent in the 2015–2019 period (Bollela et al., 2025; de Groot et al., 2024).

Discussion

Summary of findings

This systematic review identified 24 research priority-setting exercises in health professions education conducted between 2001 and 2025. Our major findings were as follows: (1) most studies were conducted in the last decade within the field of medical education and in regional to national settings, with an underrepresentation of patients and trainees as stakeholders; (2) studies published before 2024 showed limited adherence to good practices in research priority setting, whereas more recent studies demonstrated consistently higher methodological quality; and (3) common threads among research priorities were identified across studies, with curriculum, simulation and technology-enhanced learning, continuous professional development, and assessment emerging as the most prevalent themes, while recent studies reflected a growing emphasis on equity, wellbeing, and social accountability.

Interpretation of findings

Our findings show a growing research output in priority-setting exercises in HPE, with three-quarters of included studies published in the last decade. This growth, however, differs between regions. Studies from the Global North primarily focused on healthcare simulation (Anton et al., 2020; Chaplin et al., 2020; Stefanidis et al., 2022; Wong et al., 2021), while those from the Global South addressed general medical education (Ali and Sethi, 2021; Burhan, 2022; Van Schalkwyk et al., 2020). Notably, the updated search identified a higher proportion of international or multi-country studies (Bollela et al., 2025; Chan et al., 2024; Keller et al., 2024; Mullen et al., 2025), which may suggest a shift toward

TABLE 3 Major themes and subthemes in research priority setting exercises in health professions education.

Themes	Subtheme	Studies
Assessment	Assessment of competencies and performance assessment*	Ajjawi et al. (2017); Amini et al. (2012); Burhan (2022); Harper et al. (2012); Palermo et al. (2019); Stefanidis et al. (2015); Wolf et al. (2001)
	Effective and useful feedback	Ajjawi et al. (2017); Ali and Sethi (2021); Palermo et al. (2019); Wilkinson et al. (2010); Keller et al. (2024); Mullen et al. (2025)
	Assessment validity	Burhan (2022); Nabeiei et al. (2016); Palermo et al. (2019); Stefanidis et al. (2015)
	Assessment for remediation	Ajjawi et al. (2017); Stefanidis et al. (2015)
Continuous professional development	Faculty recruitment, motivation and retention*	Ajjawi et al. (2017); Ali and Sethi (2021); Burhan (2022); Palermo et al. (2019); Stefanidis et al. (2015); Tootoonchi et al. (2012); Wilkinson et al. (2010); Wolf et al. (2001); Burford et al. (2025)
	Faculty training	Amini et al. (2012); Nabeiei et al. (2016); Palermo et al. (2019); Stefanidis et al. (2015); Tootoonchi et al. (2012); Van Schalkwyk et al. (2020); Wilkinson et al. (2010); Mullen et al. (2025)
	Faculty evaluation and promotion	Ajjawi et al. (2017); Ali and Sethi (2021); Burhan (2022); Nabeiei et al. (2016); Palermo et al. (2019); Stefanidis et al. (2015); Tootoonchi et al. (2012)
	CPD programs development and evaluation	Ajjawi et al. (2017); Ali and Sethi (2021); Ball et al. (2016); Nabeiei et al. (2016); de Groot et al. (2024)
Simulation and technology enhance learning	Development and evaluation of technology in health professions education *	Ajjawi et al. (2017); Ali and Sethi (2021); Amini et al. (2012); Burhan (2022); Nabeiei et al. (2016); Palermo et al. (2019); Stefanidis et al. (2015); Tootoonchi et al. (2012); Wolf et al. (2001); Chan et al. (2024); Keller et al. (2024)
	Role and frameworks of simulation education	Ajjawi et al. (2017); Burhan (2022); Chaplin et al. (2020); Palermo et al. (2019); Stefanidis et al. (2022); Wong et al. (2021); Keller et al. (2024)
	Cost-effectiveness of simulation	Anton et al. (2020); Chaplin et al. (2020); Stefanidis et al. (2015, 2022); Wong et al. (2021)
	Simulation for certification and credentialing	Anton et al. (2020); Chaplin et al. (2020); Stefanidis et al. (2022); Wong et al. (2021)
	Translation of simulation learning to workplace setting	Anton et al. (2020); Chaplin et al. (2020); Stefanidis et al. (2015, 2022)
	Patient outcomes in simulation	Anton et al. (2020); Chaplin et al. (2020); Stefanidis et al. (2015, 2022)
	Simulation for remediation	Anton et al. (2020); Stefanidis et al. (2015, 2022)
	Optimizing debriefing for simulation	Chaplin et al. (2020); Wong et al. (2021)
Curriculum	Curriculum and programs evaluation*	Ajjawi et al. (2017); Amini et al. (2012); Ball et al. (2016); Burhan (2022); Harper et al. (2012); Nabeiei et al. (2016); Palermo et al. (2019); Stefanidis et al. (2015); Tootoonchi et al. (2012); Wolf et al. (2001); Mullen et al. (2025)
	Curriculum to improve communication skills	Ajjawi et al. (2017); Ali and Sethi (2021); Amini et al. (2012); Nabeiei et al. (2016); Palermo et al. (2019); Stefanidis et al. (2015); Van Schalkwyk et al. (2020); Burford et al. (2025)
	Effectiveness of teaching and learning strategies (i.e., Team based learning, problem based learning)	Burhan (2022); Harper et al. (2012); Nabeiei et al. (2016); Palermo et al. (2019); Stefanidis et al. (2015); Tootoonchi et al. (2012); Wilkinson et al. (2010); Wolf et al. (2001)
	Integration of basic and clinical sciences	Ajjawi et al. (2017); Ali and Sethi (2021); Amini et al. (2012); Burhan (2022); Nabeiei et al. (2016); Palermo et al. (2019); de Groot et al. (2024)
	Curriculum to develop leadership and management competencies	Ajjawi et al. (2017); Ali and Sethi (2021); Amini et al. (2012); Palermo et al. (2019); Wilkinson et al. (2010); de Groot et al. (2024)
	Patient-centered curriculum	Nabeiei et al. (2016); Tootoonchi et al. (2012); Van Schalkwyk et al. (2020); Burford et al. (2025); Chan et al. (2024)
	Community based curriculum	Ali and Sethi (2021); Amini et al. (2012); Burhan (2022); Van Schalkwyk et al. (2020); Wilkinson et al. (2010)
	Curriculum for evidence based practice	Ajjawi et al. (2017); Amini et al. (2012); Nabeiei et al. (2016); Palermo et al. (2019)
	Targeted needs assessment	Ajjawi et al. (2017); Ball et al. (2016); Burhan (2022); Tootoonchi et al. (2012)
	Core curriculum	Ali and Sethi (2021); Stefanidis et al. (2015); Van Schalkwyk et al. (2020)
	Peer assisted learning	Ali and Sethi (2021); Burhan (2022)
Cost-effectiveness of curriculum delivery	Harper et al. (2012); Palermo et al. (2019)	

(Continued)

TABLE 3 (Continued)

Themes	Subtheme	Studies
CBME	Essential competencies and the ideal physician	Ball et al. (2016); Huang et al. (2010); Tootoonchi et al. (2012); Wilkinson et al. (2010); Wolf et al. (2001)
Interprofessional education	Interprofessional and teamwork education	Ajjawi et al. (2017); Ali and Sethi (2021); Amini et al. (2012); Ball et al. (2016); Chaplin et al. (2020); Palermo et al. (2019); Van Schalkwyk et al. (2020); Wilkinson et al. (2010); Keller et al. (2024); de Groot et al. (2024)
Physician well being	Resilience	Ajjawi et al. (2017); Palermo et al. (2019)
	Wellbeing & Safety Culture	Burford et al. (2025); Keller et al. (2024)
Equity, inclusion and diversity	Equity, inclusion and diversity	Ali and Sethi (2021); Amini et al. (2012); Palermo et al. (2019); Bollela et al. (2025); Burford et al. (2025); Chan et al. (2024)
Medical school selection	Students admission in undergraduate and graduate education*	Ajjawi et al. (2017); Ali and Sethi (2021); Burhan (2022); Nabeiei et al. (2016); Palermo et al. (2019); Stefanidis et al. (2015); Wilkinson et al. (2010); Burford et al. (2025)
	Career choices	Ajjawi et al. (2017); Palermo et al. (2019)
Clinical reasoning	Clinical reasoning	Amini et al. (2012); Harper et al. (2012)
Professional identity formation	Ethics and professionalism curricula*	Amini et al. (2012); Burhan (2022); Nabeiei et al. (2016); Wilkinson et al. (2010); de Groot et al. (2024)
	Hidden curriculum*	Ajjawi et al. (2017); Burhan (2022); Palermo et al. (2019); Wilkinson et al. (2010)
	Development and assessment of professionalism*	Ajjawi et al. (2017); Burhan (2022); Palermo et al. (2019); Wilkinson et al. (2010)
	Role modeling	Ali and Sethi (2021); Burhan (2022)
Workplace based learning	Clinical education	Ali and Sethi (2021); Amini et al. (2012); Palermo et al. (2019); Tootoonchi et al. (2012); Wilkinson et al. (2010); Mullen et al. (2025)
Social accountability	Training in response to societal needs	Nabeiei et al. (2016); Tootoonchi et al. (2012); Wilkinson et al. (2010); Bollela et al. (2025); de Groot et al. (2024)
Others	Accreditation, Evaluation & Quality Education	Ali and Sethi (2021); Burhan (2022); Tootoonchi et al. (2012); Van Schalkwyk et al. (2020); Bollela et al. (2025)
	Balance education/service conflicts	Ajjawi et al. (2017); Palermo et al. (2019)
	Management and education policy	Amini et al. (2012); Ball et al. (2016); Nabeiei et al. (2016); Stefanidis et al. (2015); Mullen et al. (2025)
	Medical education and clinical research (Ethics, resource allocation and fostering research)	Amini et al. (2012); Burhan (2022); Tootoonchi et al. (2012)

*Most frequent subtheme in their category.

broader collaborative efforts in the field. Despite these regional differences in focus, the thematic analysis revealed shared values across studies, as discussed below.

The identified research priorities aligned with the topics proposed in the Medical Education Research Library (Eady and Moreau, 2024). Curriculum, assessment, faculty development, and simulation and technology-enhanced learning were the most prevalent themes. However, other topics such as clinical reasoning, interprofessional education, and workplace-based learning were less frequently proposed as priorities. A plausible explanation is that these topics may function as cross-cutting themes rather than discrete priority areas. Their lower frequency as standalone priorities may not reflect lesser importance but rather their trans-topical nature, they are implicitly embedded across multiple priority domains simultaneously, and may suggest that fixed taxonomies may underestimate the prominence of inherently cross-cutting themes when used to categorize interconnected research priorities.

Clinical reasoning, for instance, has a well-established and specialized research community that may pursue its agenda outside of

formal priority-setting exercises (Yazdani and Hoseini Abardeh, 2019). Interprofessional education, while reported in over 40% of the included studies, may be underrepresented as a standalone priority because it is frequently embedded within curriculum or simulation subthemes. Workplace-based learning may be underreported as a distinct priority because it intersects with clinical education and assessment subthemes, making its boundaries as a category less distinct. Additionally, we identified research topics not included in the Medical Education Research Library, such as quality assurance, management, education policy, and accreditation. Some of these relate to the “wicked problems” proposed in by Mennin (2021), and which reflects current priorities for the scholarly community.

The thematic analysis revealed common threads and shared values across studies conducted in different countries, disciplines, and settings. Despite the diversity of contexts, the recurring identification of priorities such as curriculum evaluation, faculty development, and assessment of competencies suggests that the HPE community shares fundamental concerns about the quality of education and its

workforce. At the same time, the emphasis on specific subthemes varied across contexts: simulation-related priorities were concentrated in studies from higher-resource settings, while studies from sub-Saharan Africa and the Eastern Mediterranean Region emphasized community-based curricula and social accountability. These findings suggest that while a core set of shared values exists, their expression and prioritization are shaped by disciplinary, cultural, and resource contexts. Therefore, efforts to develop global research priorities should build on these common threads while remaining responsive to local needs and specificities.

The temporal analysis further revealed how priorities evolve. Persistent themes such as curriculum evaluation and faculty development reflect enduring structural challenges in HPE. The emergence of equity, inclusion, and diversity; wellbeing and safety culture; and social accountability in the most recent period (2020–2025) mirrors broader societal shifts, including the impact of the COVID-19 pandemic and growing attention to health workforce sustainability (Burford et al., 2025; Keller et al., 2024). Conversely, the decline in subthemes such as the effectiveness of teaching and learning strategies and community-based curriculum may reflect either a perceived saturation of evidence in these areas or a shift in research attention toward newer concerns.

Regarding methodological quality, our review found that studies published before 2024 showed limited adherence to good practices. Among the original 18 studies, only one (Ball et al., 2016) reported using a comprehensive approach, and none planned for evaluating or updating their priorities. This pattern is consistent with findings from a scoping review of 416 research priority-setting exercises, in which only 10% of studies reported using a framework (Lund et al., 2022). However, the six studies identified in the updated search (2024–2025) demonstrated markedly higher quality across all domains, particularly in the use of comprehensive approaches and explicit scoring criteria. This improvement may reflect the increasing availability of reporting guidelines such as REPRIS (Tong et al., 2019) and a growing awareness of methodological standards in the field (Cole, 2025; Kitto et al., 2025). Nevertheless, no study, regardless of publication date, reported a plan for evaluating or updating their priorities, which remains a critical gap.

The underrepresentation of trainees and patients in these exercises warrants attention. Only seven studies (29.2%) involved trainees, and four (16.7%) involved patients or public representatives. This is consistent with findings in other areas of HPE, where patients are frequently underrepresented in competency framework development (Lepre et al., 2021) and medical education research (Emery et al., 2022). In that global survey, the primary reason for involving patients was to improve the relevance of research, a rationale that applies directly to priority-setting exercises. The inclusion of patients and trainees could enrich the identification of priorities that are more aligned with the needs of end-users and beneficiaries of health professions education.

Implications and recommendations

Three main implications emerge from this review, each grounded in specific findings. First, the limited adherence to good practices in research priority setting, particularly the absence of comprehensive approaches, explicit criteria, and evaluation plans, highlights the need for specific guidance for conducting these exercises in HPE. This could take the form of an AMEE guide or a consensus statement that

adapts existing frameworks such as REPRIS and the nine common themes checklist (Tong et al., 2019; Viergever et al., 2010) to the HPE context, addressing the unique challenges of involving diverse health professions, multiple educational settings, and both educators and learners as stakeholders.

Second, the identification of common threads and shared values across studies conducted in diverse contexts supports the development of a set of global research priorities for HPE. Rather than imposing a single agenda, such an effort would aim to establish a core list of research priorities that can be adapted to regional, national, or institutional contexts. The persistent themes identified in this review, curriculum evaluation, faculty development, assessment of competencies, and technology in education, could serve as a foundation for this endeavor, complemented by the emerging priorities that reflect contemporary societal concerns.

Third, the underrepresentation of patients and trainees as stakeholders calls for deliberate strategies to include these groups in future exercises. Guidance on how to meaningfully involve patients, trainees, and other underrepresented stakeholders in research priority-setting would strengthen both the process and the relevance of the resulting priorities.

Strengths and limitations

This review has several strengths. It follows a registered protocol (PROSPERO: CRD42023400999), uses established reporting guidelines (PRISMA and STORIES), and employs a validated checklist for critical appraisal (Viergever et al., 2010). Data extraction was guided by the REPRIS guidelines (Tong et al., 2019). The updated search extended the coverage to January 2026, incorporating six additional studies. Forward and backward citation searching was used to identify further studies.

However, several limitations should be acknowledged, including deviations from the original protocol. First, the search was limited to three databases (PubMed, Scopus, and Web of Science), and PsycINFO, CINAHL, and EMBASE were not searched. While previous evidence suggests that the contribution of PsycINFO and CINAHL to systematic review yield may be limited (Hartling et al., 2016), PsycINFO has expanded its indexing of education-related content in recent years, and the exclusion of these databases may have resulted in missed studies. Similarly, adding EMBASE to PubMed has been estimated to increase coverage by approximately 6.85% (Frandsen et al., 2021). Second, no professional librarian was involved in the development of the search strategy, and key terms such as “clinical education,” “allied health education,” “Delphi technique,” “consensus statement,” and relevant MeSH terms were not included. This may have reduced the sensitivity of the search. Third, the search was limited to studies published in English or Spanish and to peer-reviewed sources, potentially excluding priority-setting exercises published in other languages or in grey literature. Fourth, while the protocol was pre-registered, deviations were made regarding the databases searched, the timeframe, the research questions, and the approach to thematic analysis, as documented in the Methods section. Lastly, the thematic analysis was conducted primarily by a single author, and while reviewed by a second author, the alignment of priorities with the Medical Education Research Library topics involved subjective judgment that may have influenced the categorization.

Conclusion

This systematic review identified 24 research priority-setting exercises in HPE conducted over two decades. Common threads among priorities, curriculum evaluation, faculty development, assessment of competencies, and technology in education, emerged consistently across diverse disciplines, regions, and settings, while recent studies reflected a growing emphasis on equity, wellbeing, and social accountability. However, methodological inconsistencies persist, particularly in studies published before 2024, alongside gaps in stakeholder involvement and the absence of plans for evaluating or updating priorities. These findings underscore the need for specific guidance on conducting research priority-setting in HPE and support the development of a set of global research priorities that builds on shared values while remaining adaptable to local contexts.

Data availability statement

The datasets presented in this study can be found in online repositories. The names of the repository/repositories and accession number(s) can be found in the article/[Supplementary material](#).

Author contributions

JF-C: Writing – review & editing, Software, Project administration, Conceptualization, Writing – original draft, Supervision, Funding acquisition, Methodology, Data curation, Visualization, Resources, Formal analysis, Validation, Investigation. FV-R: Data curation, Project administration, Writing – review & editing, Writing – original draft, Formal analysis, Investigation, Resources. BM-C: Formal analysis, Writing – original draft, Conceptualization, Project administration, Methodology, Writing – review & editing. MP-S: Resources, Conceptualization, Formal analysis, Methodology, Writing – review & editing, Writing – original draft, Investigation. JH-V: Formal analysis, Writing – review & editing, Project administration, Writing – original draft, Investigation, Data curation. CC-C: Methodology, Conceptualization, Validation, Writing – review & editing, Supervision, Software, Funding acquisition, Writing – original draft.

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Supplementary material

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