Schwartz Rounds in Higher Education Settings: A Systematic Review of the Research with Recommendations

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ABSTRACT

BACKGROUND: Higher education institutions (HEIs) have recently integrated Schwartz Rounds (Rounds) as innovative ways of supporting health professional students' reflective practice, interprofessional learning and compassionate care. Emerging evidence suggests that Rounds benefit students' shared sense of belonging and insight into emotional aspects of training and care, providing safe places to share experiences and reflect. Our review examines the current literature regarding health students' evaluation of Rounds in HEIs, exploring experiences and perceived benefits of participating. We consider methodological issues with the existing literature and propose ways of addressing these in future research.

METHODS: Systematic searches were conducted on EBSCO, PsycINFO, PubMed and ASSIA to identify available literature relating to Schwartz Rounds in higher education. Eight studies – six with a mixed method design and two qualitative – were included in the review. Study quality and risk of bias were assessed. Evaluation survey data and themes generated from qualitative responses were considered together and a narrative synthesis was constructed.

RESULTS: Despite challenges with differing measurements and scale usage, five themes were identified reflecting the experience and perceived benefits for students attending Rounds. Students highlighted the value of peer connection and communication; normalisation of emotions; collaborative reflection and self-awareness; and the relevance of Rounds in their daily work and patient care. Students also commented on barriers to participation including Rounds' multidisciplinary nature, their group size, and the presence of staff. The majority of students rated Rounds as excellent or exceptional and agreed they should be integrated into the curriculum.

CONCLUSIONS: Our findings on Schwartz Rounds in higher education suggest they support student reflective practice and confidence in providing compassionate, high-quality patient care. However, the quality of research in this area is mixed, reflecting the relatively recent integration of Rounds in Higher education, and the challenges of implementing and evaluating new interventions in educational settings.

KEYWORDS: Schwartz Rounds, higher education, reflective practice, health and social care students, compassionate care, wellbeing

Introduction

Throughout their training, healthcare professional (HCP) students are exposed to a range of stressors including high academic workloads and expectations,[1] emotionally challenging clinical work,[2] and situations that sometimes challenge the values that brought them into the role.[3] HCP students often experience negative psychological effects of delivering care, with exposure to serious injury, death, and a range of emotions from patients and families. Burnout and other forms of distress have been found to be more prevalent during training than in other career stages.[4,5] Evidence also indicates that the challenge of holding dual roles as healthcare professionals and university students concurrently creates additional stress.[6]

With increasing recognition of the association between poor practitioner well-being and important outcomes such as clinical effectiveness,[7] professional and ethical conduct,[8] attrition during training, and intention to remain in role post-qualification,[9] efforts to support HCP trainee well-being, and establish career sustaining behaviours during training appear critical. It is also recognised that the well-being of health professionals impacts the well-being of – and quality of care provided to – patients and service users.

In light of such findings, one focus of the curricula and professional registration requirements of several professions has been reflective practice and how it can improve practitioners' well-being. Reflective practice is often a mandatory part of continued professional development and registration (GMC Reflective Practitioner Guide, Social Work England, Nursing and Midwifery Council) and is often posited as central to the personal and professional development of clinicians.[10] Schwartz Rounds (to be referred to as Rounds in this paper) are multidisciplinary reflective forums led by trained facilitators.

Rounds represent part of the legacy of health-attorney Ken Schwartz. After being diagnosed with terminal lung cancer at a relatively young age, Schwartz observed how the small acts of kindness and compassion shown to him by the healthcare staff involved in his care, were often experienced as more powerful than the medicalised treatments he was receiving. Schwartz's experience led him to the realisation that in order to deliver compassionate care, staff themselves need to feel supported by the organisations they work for. Before his death, Schwartz left a legacy that led to the development of the Schwartz Centre, an organisation dedicated to the promotion of compassionate care. In the UK, Rounds are licensed and supported by the Point of Care Foundation (PoCF), a charity that focusses on humanising health care. Rounds provide an opportunity to participate in reflective practice in a confidential safe space and to witness colleagues model how to acknowledge and normalise emotional responses to their work and training. They rely on the power of storytelling and group reflection to enable participants to freely express and discuss the emotional challenges of their clinical work and training. Each Round is based on a theme such as 'A patient I'll never forget' or 'The day I made a difference'. A panel of storytellers recount a story on this theme that is told from their own perspective and based on personal experience. Two trained facilitators guide the subsequent group discussion away from problem solving, and towards a reflection on the emotional and human side of the stories that have been shared. Rounds are interdisciplinary and open to all health and social care professionals in any given organisation. They have been shown to increase participant confidence in dealing with sensitive aspects of their roles and can improve staff well-being, empathy, and patient care.[11]

In recent years, an increasing number of Higher Education Institutions (HEIs) have adopted Rounds, and a growing body of research has reported on their evaluation.[11] Most of the published work reports on participants' evaluation of Rounds through the completion of a standard questionnaire, developed by the PoCF and used by all participating organisations offering Rounds to their employees or trainees. Reflecting this increasing interest, in 2023, a realist review of Rounds in HE was published, addressing the questions of how Rounds work in HE, in what ways, and for whom.[12] This review suggested that Rounds provide a reflective space for students to discuss emotional challenges linked with their work and training, promote a humanised professional culture, role model vulnerability through the stories shared, and are most powerful when participants focus on the emotional and relational elements of the stories discussed. Further, it was reported that Rounds offer insights from many different perspectives, increase interpersonal connectedness, and enhance a sense of well-being.[12]

The use by Hamilton and colleagues of a realist review method that combined opinion pieces, editorials, and realist interviews with empirical research to inform its conclusions worked effectively to shine an important light on the core features and contextual mechanisms driving outcomes in Rounds. However, it left important questions, regarding the quality of published literature on Rounds in HE, unanswered. With the ability to highlight potential issues regarding the quality of an existing evidence-base as an important function of high-quality Systematic Reviews,[13] a pressing need remains for a more deliberate assessment of the methodology of the existing literature on Rounds in HE; one in which the quality of the existing literature is central to the conclusions drawn and used to inform recommendations for advancing research in this area for the future.

Additionally, while the realist review method adopted by Hamilton and colleagues was well-suited to generate a programme theory on how Rounds work in HE, the focus on generating contextual mechanisms of change, and the data selected for doing so (including editorial pieces and interviews with staff experienced in delivering Rounds), meant that the voice of student participants was not explored in depth. To supplement the important findings of Hamilton and colleagues, further work is needed to synthesise findings from the evaluation of Rounds, and attendees' reflections on the experience of taking part.

In this context, the current review addressed the following questions:

1. What is the current state of the literature regarding health and social care students' evaluation of Rounds in HE?
2. How do health and social care students experience taking part in Rounds during their training?
3. What are the perceived benefits of attending Rounds for health and social care students?
4. What are the methodological considerations with the literature, and how can these be addressed in future research?

Methods

The review followed the PRISMA guidelines for reporting systematic reviews.[14] The method followed six stages: defining the research questions (described above) and inclusion criteria, searches and study selection, quality appraisal, extraction and presentation of findings, and synthesis of data. Inclusion criteria were specified in advance and documented in a published protocol registered as CRD42023460477 and available at https://www.crd.york.ac.uk/prospero/.

Search strategy and inclusion criteria

A systematic search was conducted on 02.11.2023 on EBSCO, PsycINFO, PubMed and ASSIA to identify all available literature relating to Schwartz Rounds in higher education settings. These were selected because they represent key databases in

Table 1. Inclusion and exclusion criteria for papers.

INCLUSION CRITERIA	EXCLUSION CRITERIA
Population of interest is student health and social care trainees	Population of interest was non-university students, or non-health and social care trainees
Study focusses on Schwartz Rounds that took place within a university setting	Study focusses on Schwartz Rounds that took place outside the university setting and/or were not solely for students
Report available in English	Report not available in English
Original research	Commentary, opinion, or editorial pieces

both the fields of education and medicine, enabling a thorough search. Searches were conducted to identify work published in English between 1995 and 2023. This covered the literature from when Schwartz Rounds were introduced into clinical settings, to the present day. The search terms were determined in consultation with an institutional librarian and were set up utilising MeSH and truncation to capture all available evidence. Searches were not geographically limited to ensure full capture of the literature. Keywords (e.g., Schwartz Round, training, higher education, pre-clinical) were combined using Boolean operators ('AND', and 'OR') and wildcards (the '*' symbol) where appropriate. The full search strategy is included in Supplementary file A. Google Scholar results were also screened up to page 50 of search results in line with Haddaway et al[15] recommendations, and reference lists were hand searched for relevant studies. Table 1 summarises the inclusion and exclusion criteria.

Screening

Identified articles were screened by title and abstract, and then by full text. All screening was completed at both stages by two independent team members blinded to each other's decisions. Papers were screened against all eligibility criteria established from the research questions of the review. Agreement was high at both stages (80%), with discrepancies resolved through discussion and reference to the inclusion criteria.

Data extraction

Included studies were carefully read, and data extraction was performed by three team members (AZ, HG, AO). Data was extracted independently by the three team members then results compared and checked to ensure accuracy against the original papers. Data regarding aims or objectives, design and methodology, sample characteristics, key findings, recommendations, and funding sources was extracted from individual studies and placed into tables to support the identification of key findings, commonalities across studies, and areas of divergence.

Quality assessment

For the survey-based studies, the Appraisal for Cross-Sectional Studies (AXIS) quality appraisal tool[16] was used by two reviewers independently. For qualitative studies, the Joanna Briggs Institute Critical Appraisal Tool for Qualitative Studies[17] was used by two reviewers independently to rate biases for qualitative studies. Conflicts between reviewers were resolved through discussion with the project team. No study was excluded based on the quality appraisal.

Data analysis

The analysis included careful reading of the included papers by three reviewers. In keeping with established guidance on the use of narrative synthesis in systematic reviews,[18] the synthesis of results was informed by a systematic and structured process of extracting and examining the data of included studies. Open-text questions included in the PoCF evaluation and qualitative interviews or focus groups were considered together, by combining and contrasting prominent themes and findings regarding participants' experience of Rounds, and their perception of benefits. The themes generated from qualitative interviews, focus groups, participants' free-text responses to open questions and evaluation survey data, were then considered together, and a narrative synthesis was constructed that captured and described salient findings in relation to the second and third research question of this review.

Reported findings from iterations of PoCF's post-Round evaluation surveys were also used to inform a synthesis of the quantitative data. Two reviewers (AZ, GP) then independently examined the themes identified in both the qualitative and quantitative data of the included studies (Supplemental Material C). Agreement between reviewers was excellent, with reviewers independently developing five analogous thematic categories (84% agreement).

Throughout the results section that follows and keeping with SWiM guidance,[19] efforts have been made to establish the link between the findings presented, and the data from which they are drawn. Issues of study quality have also been considered explicitly, to inform the synthesis. The robustness and trustworthiness of the synthesis developed was both tested and promoted by discussion across the research team.

Results

The electronic databases searches yielded 180 results in total, and registers elicited a further 19. After duplicates were removed, the title and abstracts of 143 papers were screened. Grey literature searches resulted in the identification of 11 papers, all of which were included in the database searches. Following this, 14 full texts were read through and assessed
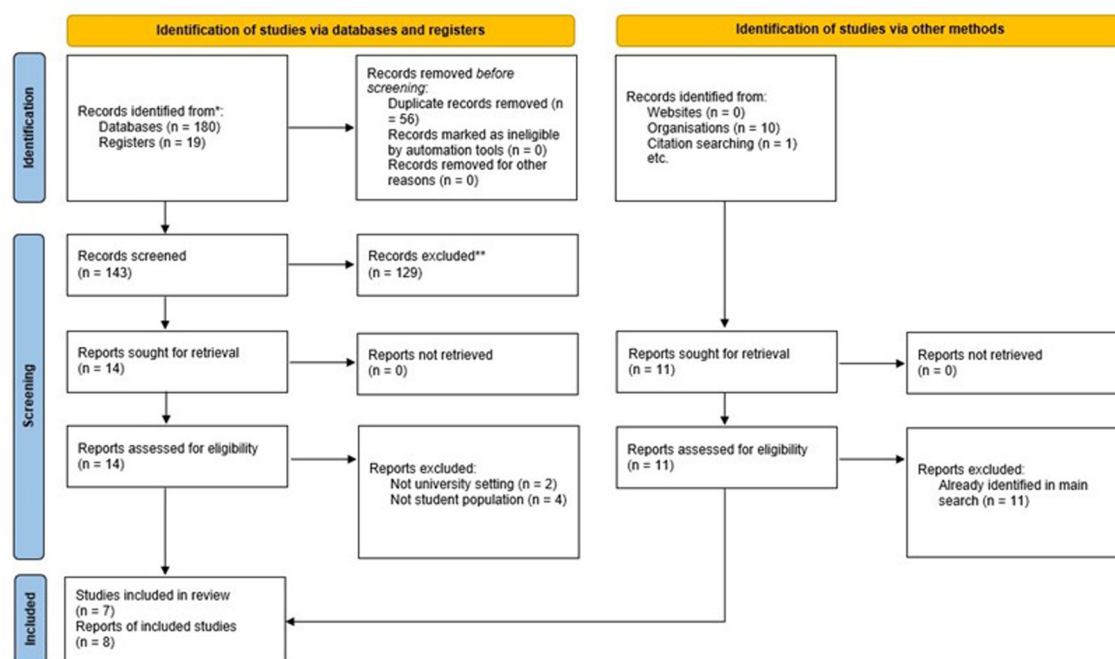
Figure 1. PRISMA flow diagram for identification and screening of studies.[20]

for eligibility, with six not meeting inclusion criteria. Eight peer-reviewed papers met the inclusion criteria and were included in the final review (Figure 1).

Study characteristics

Table 2 summarises the key characteristics of the eight studies included in this review. Seven of the studies were based in the UK[21–27] and one in the USA.[28] A total of 944 participants, all studying in a health professional course, were involved. Four studies recruited undergraduate medical students only ($N=$ 600) and three a mix of healthcare trainees, including nurses, clinical psychologists, midwifes and allied health professionals. Only one study[23] reported a breakdown of the non-medical student attendees, with three adult nursing students, three mental health nursing students, and one clinical psychology student. The other papers featured a total of 336 non-medical students. All eight studies used convenience sampling (i.e., students who attended one or more Rounds in their HEI). The number of Rounds participants were sourced from ranged from 1 to 11. Three of the peer-reviewed works reported their funding sources, and the university[23,26] or governmental department[24] the research was conducted at. Six of the studies utilised a quantitative methodology[21,24–28] and reported data from responses to a standard post-Round evaluation survey developed by PoCF. Five of these studies also included thematic analysis of free text comments to open questions about participants' views and experience of attending Rounds.[21,24–27] Two studies utilised qualitative methods of interviews[23] or focus groups.[22] Four studies[21,24,25,27] reported completion rates of their post-Round evaluation that ranged from 86% to 97%.

Research question 1: What is the current state of the literature regarding health and social care students' evaluation of Rounds in HE?

The six quantitative studies included in this review were conducted between 2009 and 2022. During this period, the post-Round evaluation survey developed by the PoCF – and used by all organisations delivering Rounds – has undergone several changes. Participants who complete their evaluation after each Round, are asked to rate their agreement with questions on a 5-point Likert scale where 'one' reflects complete disagreement and 'five' complete agreement. Although some of the items being evaluated have remained the same over time (e.g., 'Please rate today's Round') others have been modified or made redundant. More recently, new questions have been introduced to measure additional outcomes.

Table 3 compares the outcome domains of the 2023 PoCF evaluation questionnaire – the most up to date at the time of writing – with the domains measured in the included studies of this review. A full breakdown of specific wording for each domain can be found in Supplemental Material (B).

As Table 3 shows, there is variation in the focus and wording of the evaluation questions across the quantitative studies included in this review, limiting the scope for analysis of quantitative outcomes across studies, and the extent to which existing studies can be compared with each other. Results from these six studies have been incorporated into the narrative synthesis below.

Table 2. Study characteristics.

AUTHOR INFORMATION	AIMS/OBJECTIVES	PARTICIPANTS	NUMBER OF ROUNDS	METHODOLOGY; ANALYTIC METHOD	MAIN FINDINGS
Quantitative and mixed methods studies					
Abnett et al. (2022) *Funding source: None listed. Country: UK*	Compare medical student experience of single discipline and multi-discipline Round and the impact of varying the range of disciplines in attendance.	Round 1 Medical students $N = 19$ Round 2 Multidisciplinary $N = 8$ Focus group 1 $N = 10$ Focus group 2 $N = 5$	2	*Data sources:* 8 item PoCF scale. *Analysis:* Median averages calculated for scale data. *Qualitative element: Data sources:* Focus group data. *Analysis.* Staged thematic analysis for focus group data.	• Median averages showed uniform agreement with each PoCF statement suggesting that student attendees found Rounds useful and a positive experience. • Round 1 elicited equal or stronger agreement with each PoCF statement than Round 2. Themes from focus group data: • Normalising negativity and moving forward Concerns with current reflective curriculum • Current exposure to the multi-disciplinary team • Anxiety about contributing to discussion
Corless et al. (2009) *Funding source: None listed. Country: USA*	Evaluate interprofessional healthcare student Rounds	Nursing, physical therapy, communication disorders, clinical investigation students $N = 329$	11	*Data sources:* Likert scale statements *Analysis:* Percentages of agreement with statements for all Rounds Qualitative element: *Data sources:* Comments from evaluation *Analysis:* NR, based on committee members' interpretation of evaluation comments	• 86% ($N = 329$) rated Rounds excellent or exceptional. Comments raised the organisers' awareness of: • Need to learn and practice communication skills in situations where conflict is present. • Medical jargon when used by students or panellists were sometimes not clear to students from other disciplines. • Students appreciated the Rounds which they could apply to their own disciplines (based on willingness to attend again varying by topic of Round)
Gishen et al. (2016) *Funding source: Health Education England Country: UK*	Examine the potential of Rounds within the undergraduate curriculum	Y5/Y6 medical students $N = 373$	2 One with Y5, one with Y6 cohorts	*Data sources:* Likert scale statements based on PoCF scale *Analysis:* Mean rating scores for each statement, stratified by year. Qualitative element: *Data sources:* Free text from comments from the evaluation, separated by year of study Analysis: Thematic analysis	• Overall rating (1 = poor) Year 5's score was 3.5 ($n = 247$) and Year 6's score was 3.3 ($n = 126$). • Combining students from both years who responded to the questionnaire, 80% (292/365) said they would attend a future SCR and 64% (235/366) thought that SCRs should be integrated into the medical school curriculum. • Regarding storytelling as an educational approach, 92% (340/370) either agreed or strongly agreed that they appreciated hearing stories demonstrating the human side of medicine. • 82% (301/366) of students either agreed or strongly

Table 2. Continued.

AUTHOR INFORMATION	AIMS/OBJECTIVES	PARTICIPANTS	NUMBER OF ROUNDS	METHODOLOGY; ANALYTIC METHOD	MAIN FINDINGS
					agreed that attending the SCR (296/366) gave them insight into how others feel/think about caring for patients. • Eighty-one per cent (296/366) of students either agreed or strongly agreed that the presentation of cases was helpful. Themes from free text comments: • Value of raising emotive issues (Y5) • Benefits of reflection (Y5, Y6) • Emotional experience of attending (Y5) • Concerns about starting foundation training (Y6) • Holding round at different time (Y6) • Inhibition with large group (Y5, Y6)
Gleeson et al. (2020) *Funding source: None listed.* *Country: UK*	Explore whether there is a role for Rounds tailored to medical students	Y3 medical students $N = 42$	1	*Data sources:* PoCF scale, utility rating of the Round out of 10 and preference selection between SR and written reflective work *Analysis:* Percentage agreement with statements Qualitative element: *Data sources:* Free text comment from the evaluation including commentary on selected preferred type of reflection *Analysis:* Thematic analysis	• Completely agree or agree to 'stories relevant 98%, gained insights 80%, work better with colleagues 80%, group discussion helpful 93%, group discussion well facilitated 98%, better understanding of how colleagues feel 100%, better understanding of how I feel 80% added to insight and self-awareness 93%, connected to colleagues 88%, • Plan to attend again 90%, would recommend 90%, overall rating of excellent or exceptional 90%. • 90% of students selected SR as their preferred method of reflective practice Themes from free text comments: • Interactive reflection more profound • Shared experiences facilitate a sense of belonging • Size of audience can be intimidating
Smith et al. (2020) *Funding source: University of Buckingham* *Country: UK*	Investigate whether the guidance of Rounds in second year medical students provides the same benefits as to healthcare professionals	Y2 medical students $N = 83$ 36 M, 47 F Age range = 18–40 years	1	*Data sources:* 10 item PoCF scale *Analysis:* Descriptive analyses (mode, median and frequency) and Spearman's rank correlation analysis for the quantitative data. Qualitative element: *Data sources:* Free text comments on how the Round may have impacted	• Participants were more likely to agree than disagree that SR were beneficial. • SR effectiveness in enhancing students' working relationship awareness and skills was strongly correlated with understanding the purpose of, and engagement with, the SR ($P < .001$). • Similarly, engagement with

Table 2. Continued.

AUTHOR INFORMATION	AIMS/OBJECTIVES	PARTICIPANTS	NUMBER OF ROUNDS	METHODOLOGY; ANALYTIC METHOD	MAIN FINDINGS
				their professional identity *Analysis:* Thematic analysis	the SR was strongly correlated with self-reporting of enhanced patient-centredness ($P < .001$). Themes from free text comments: • Sharing and empathising in a safe space • Learning from others' experiences • Professionalism as a binary entity • Unable to relate to Round's themes • Attention-seeking and an opportunity to complain in Rounds
Stocker et al. (2018) *Funding source: None listed. Country: UK*	Examine whether a) Rounds in early years of UG med. education can develop students' awareness of their reflective practice, and b) more detailed study of the Rounds' benefits in med education is needed.	Y2 medical students $N = 83$	1	*Data sources:* Five-point scale *Analysis:* Used completion rate for each question, positivity of response and Pearson's chi squared Qualitative element: *Data sources:* Free text comments *Analysis:* NR	• Round positively impacted on each outcome for at least 90% of respondents • Feedback suggested the Round positively impacted on scale outcomes for at least 90% of learners • At least 50% of respondents identified learning needs because of the Schwartz Round.
Qualitative studies					
Barker, Cornwell and Gishen (2016) *Funding source: None listed. Country: UK*	Explore how Rounds may be incorporated into the curriculum to help students engage in more compassionate, open patterns of communication and care.	Medicine, nursing, midwifery, psychology, and other allied health professional students $N = 7$ No other demographics reported.	2	*Data sources:* Qualitative focus groups *Sampling:* Convenience *Analysis:* Thematic analysis of transcripts	Themes • A welcome opportunity to learn and reflect that is not graded • Creating a culture of openness • Normalising emotions • Role modelling • Building resilience to protect students from disengagement/ compassion fatigue • Promoting connectedness
Clancy, Mitchell and Smart (2020) *Funding source: University of Plymouth Country: UK*	Understand how healthcare students experience participation at Rounds in university context.	Mental health nursing, adult nursing, clinical psychology, and medicine $N = 8$; 1 M, 7 F Age range = 23–41 years Mean age = 30.5 years	1 or more	*Data sources:* Qualitative semi-structured interviews *Analysis:* Interpretative Phenomenological Analysis	Themes • Would it reflect badly on me? • You are not alone in feeling that • There's not normally space given to that

Abbreviation: NR, not reported.

Research Questions 2 and 3: How do health and social care students experience taking part in Schwartz Rounds, and what are their perceived benefits?

Across all data, five key themes were identified and are described below. They offer insight into how health and social care students experience participation in HEIs

Rounds and what they perceive the benefits of this participation to be.

Student Schwartz Rounds promote teamwork, peer connection and improved communication. Participants across the included studies described how Rounds helped them connect with

Table 3. Outcome domains (from the 2023 PoCF evaluation questionnaire) measured in the included studies of this review.

	ABNETT ET AL. (2022)	CORLESS ET AL. (2009)	GISHEN ET AL. (2016)	GLEESON ET AL. (2020)	SMITH ET AL. (2020)
Relevant to me or my daily work	X	X		X	
Helps me meet the needs of patients	X	X		X	X
Helps me work with colleagues better	X	X		X	X
Offers insight into patients					
Offers insight into colleagues	X		X	X	
Well-facilitated Round	X	X		X	
Useful discussion during Round	X	X	X	X	
Self-awareness				X	X
Recommend Round to colleagues	X			X	
Attend Rounds again	X	X	X	X	

Table 4. Key themes identified across included studies.

	ABNETT ET AL. (2022)	BARKER ET AL. (2016)	CLANCY ET AL. (2020)	CORLESS ET AL. (2009)	GISHEN ET AL. (2016)	GLEESON ET AL. (2020)	SMITH ET AL. (2020)	STOCKER ET AL. (2018)
Connection and communication	X	X	X		X	X	X	X
Normalisation of emotions	X	X			X	X	X	X
Collaborative reflection	X	X	X		X	X	X	
Relevance to care and work	X	X	X		X	X	X	X
Participation barriers	X	X	X	X	X	X	X	X

each other, promote teamwork, and encourage open communication with colleagues. Combined data from PoCF evaluation feedback forms and in-depth qualitative designs indicated that participants value this aspect of attendance and consider it a key benefit of Rounds.

Students in several studies reported feeling separated from other healthcare disciplines during their training.[21,27] Notably, Rounds appeared to help counter this, by supporting participants to come together and understand different professional roles; an idea evident in evaluation feedback[21,24–27] and spoken about in depth during qualitative interviews.[22] Across studies, high levels of agreement were reported with statements relating to the extent to which Rounds helped participants work better with colleagues[25,26] and understand how colleagues feel about their work.[21,24,25] Participants taking part in interviews also described how they perceived Rounds to promote connection, breaking down interprofessional barriers and creating a culture of openness.[22] Similarly, students from multiple disciplines (eg, medicine, nursing, clinical psychology, mental health nursing) in focus groups explained how Rounds

address unhelpful assumptions that can otherwise be perpetuated when students are not exposed to other trainees or professions.[23] In summary, data from across multiple sources indicated that Rounds are perceived by student attendees to offer a valued and effective forum for enhancing connection, promoting interprofessional understanding, and improving teamwork.

Student Schwartz Rounds normalise emotions and promote attentiveness to the human side of care. Evidence from included studies indicated that Rounds help to normalise emotions in training and promote emotional well-being in students. Evaluation feedback across multiple studies revealed that Rounds were experienced as a safe space for reflection, emotional expression, and compassion.[25–27] While participants in the focus groups of Abnett, Tuckwell and Evans[21] highlighted how reflection in Rounds often focussed on negative and challenging aspects of work in this field, this was experienced as an important and positive feature of Rounds for the way that it normalised difficult feelings in relation to ones' training, and

Table 5. Risk of bias by aims, design and methods, results and interpretation as assessed by the AXIS tool for cross-sectional studies.

| AUTHOR | AIMS | DESIGN AND METHOD | | | RESULTS | INTERPRETATION | |
	AIMS AND OBJECTIVES CLEARLY STATED?	SAMPLE SIZE JUSTIFIED; SAMPLING APPROPRIATE, REPRESENTATIVE?	MEASURES VARIABLES APPROPRIATE TO AIMS, MEASURED APPROPRIATELY AND PREVIOUSLY TRIALLED?	CLARITY CLEAR INFORMATION ON STATISTICAL SIGNIFICANCE, METHODS DESCRIBED TO ENABLE REPETITION?	RESULTS DATA DESCRIBED ADEQUATELY, INTERNALLY CONSISTENT RESULTS THAT WERE PRESENTED FOR ALL ANALYSES?	DISCUSSION DISCUSSIONS AND CONCLUSIONS JUSTIFIED, WITH LIMITATIONS DISCUSSED?	CONFLICTS FUNDING SOURCES OR CONFLICT OF INTEREST REPORTED, ETHICAL APPROVAL GIVEN?
Abnett (2022)	Low	Low	Medium	Medium	Low	Low	Low
Corless (2009)	Medium	Medium	Medium	Medium	Medium	Medium	Medium
Gishen (2016)	Low	Low	Medium	Medium	Medium	Low	Low
Gleeson (2020)	Low	Low	Medium	Medium	Low	Low	Low
Smith (2020)	Low	Low	Medium	Low	Low	Low	Low
Stocker (2018)	Low	Low	Medium	Medium	Medium	Medium	Low

Table 6. Risk of bias as assessed by the JBI critical appraisal tool for qualitative studies.

Author (date)	RISK OF BIAS IN DESIGN CONGRUITY BETWEEN PHILOSOPHICAL PERSPECTIVE AND METHOD, METHODOLOGY AND RESEARCH QUESTIONS, METHODOLOGY AND METHODS USED?	RISK OF BIAS IN ANALYSIS CONGRUITY BETWEEN RESEARCH METHODOLOGY AND REPRESENTATION OF DATA, RESEARCH METHODOLOGY AND INTERPRETATION OF RESULTS, CONCLUSIONS FLOW FROM THE ANALYSIS.	RISK OF BIAS IN CONDUCT STATEMENT LOCATING RESEARCHER CULTURALLY OR THEORETICALLY, INFLUENCE OF THE RESEARCHER ON THE RESEARCH ACKNOWLEDGED, ETHICAL APPROVAL, REPRESENTATION OF PARTICIPANT VOICES
Abnett et al. (2022)	Low	Low	Medium
Barker et al. (2016)	Low	Low	Medium
Clancy et al. (2020)	Low	Low	Low

reassured participants that peers felt similarly to them. Focus group participants in the study of Barker, Cornwell and Gishen[22] reported valuing the way that Rounds provided a freedom that they were not afforded elsewhere to express vulnerability and negativity. Participants considered that embedding this approach into their training would help them develop attitudes towards their work that promote positive mental health and longevity in their roles.

Evaluation feedback identified that many students reported feeling concerned about compassion fatigue and burnout during training.[24] Rounds were experienced as protective from this, by promoting resilience[22] and facilitating the processing of emotions in the role.[24] Participants also reported high levels of agreement with evaluation questions regarding the extent to which Rounds helped facilitate awareness regarding the handling of emotionally sensitive information.[26,27] Notably, Rounds were reported to 'humanise' work in the field.[24] There was uniformly high agreement with statements about the extent to which Rounds had helped attendees become more aware of the emotional and human side of care.[24,26,27] In summary,

Rounds were reported to promote well-being, resilience and emotional awareness in students, while emphasising the emotional and deeply human nature of work in this field.

Student Schwartz Rounds promote self-awareness and provide a valued, collaborative forum for reflection. Participants in several studies noted how the requirement for reflection and reflective practice during training can be challenging.[21,24] However, Rounds appeared to provide a valued space for reflection, with evidence from evaluation questionnaires[25] and focus groups[22] – to suggest that Rounds were preferred to other forms of reflective practice. Free-text comments gathered across two studies indicated that participants valued the framework for reflection that Rounds offer, with a sense that Rounds provided a degree of necessary structure to reflection, while also allowing for flexibility, open discussion, and the possibility of exploring ideas generated by others.[21,25] Participants across multiple studies reported high levels of agreement with the idea that Rounds helped promote self-awareness, through better understanding of how they feel about their work,[25] and supporting them to think through and express their feelings and questions.[26,27]

The shared reflective space, and the opportunity to listen, reflect and discuss together appeared important in terms of the way that Rounds were valued. For example, results generated from the free-text responses of participants in two studies emphasised how interactive reflection was perceived to be more profound due to its collaborative nature,[25,26] extending beyond the benefits that can be reached from individual reflective practice ideas such as reflective writing. Notably, participants also commented on how this shared reflective practice had the potential to positively influence the future workforce by breaking down hierarchies and promoting more effective communication.[21] Taken together, data from across several sources indicated that students experienced Rounds as a positive, collaborative and welcoming forum for reflection, and an activity which helped to promote self-awareness.

Student Schwartz Rounds are relevant to students' daily work and patient care. Data across multiple studies indicated that students perceived Rounds to be relevant to their clinical work and training, and beneficial to their developing skills. High levels of endorsement were given to statements indicating that stories shared during Rounds are relevant to students' daily work.[21,25] A large majority of participants across multiple studies agreed that Rounds provide knowledge and insight that would help students meet the needs of their patients.[21,25,26] Notably, Rounds were perceived to support patient-centred and compassionate care, with most participants agreeing that Rounds raised belief in the importance of empathy, and the actual practice of empathy with patients as people.[27] Rounds were also reported to increase feelings of compassion and empathy.[26]

While this topic was not explored in depth in any of the qualitative data, survey data across multiple studies indicated that when asked directly, a strong majority of participants reported that Rounds increased feelings and behaviours associated with empathy, compassion, and person-centred care.

Student Schwartz Rounds require consideration of barriers and facilitators to participation. As reported above, participants frequently described a range of perceived benefits associated with attending Rounds. However, a range of factors were described as either facilitators or barriers to participation in, and benefit from Rounds. Written evaluation data indicated that participants had experienced Rounds as a safe, non-judgemental, and empathetic space, something described as an important facilitator of success.[26,27] There was a sense across multiple studies that this contributed towards shifting the culture experienced in training towards one of greater openness, critical thinking, and humanity.[21–24] Such a shift was reported to be experienced as an important facilitator of engagement, through the way it encouraged students to engage fully with the ideas and practices at the heart of Rounds. An additional facilitator of success related to the way in which Rounds were delivered, with high levels of agreement with the statement that Rounds had been well facilitated and ran.[21,25]

However, written reflections from participants indicated that stories seen as highly discipline-specific or told by senior figures were experienced as less relevant and harder to relate to.[26] While the multi-disciplinary nature of Rounds offered perceived benefits, it was also described as an occasional barrier to comfortable participation. Focus group data revealed that students experienced contribution anxiety and fear of judgement from students they did not know or those studying on other courses.[21] Free-text responses also identified how subject-specific jargon during Rounds created a barrier to engagement for those from other professions.[28] Similarly, the perceived power imbalances relating to the presence of academic staff was experienced by some as a potential barrier to participation. Individual interviews highlighted how participants experienced a feeling of uncertainty about the safety of sharing openly in the presence of academic staff.[23] Further to this, the group size appeared to significantly influence the experience of attending Rounds, with students from multiple studies describing a reluctance to share in the context of large groups that were often perceived to be intimidating.[21,24,25] Finally, focus group data revealed how the perception of needing to reflect spontaneously as a participant led some students to feel exposed, and less comfortable with active participation in the Round.[21] Findings from across studies then identified a range of perceived barriers and facilitators to engaging with and benefitting from Rounds, offering potentially important information for those involved in delivering Rounds elsewhere. Table 4 summarises the five themes identified across the included studies.

Research question 4: What are the methodological considerations with the literature, and how can these be addressed in future research?

As detailed above, the JBI[17] and AXIS[16] tools were used by two reviewers (AZ, HG) independently to rate biases. Across all the included studies, objectives and aims were clearly presented, and study designs were appropriate for the defined research purpose. However, the studies varied in methodological quality. We first describe the six quantitative and mixed-method studies and then the qualitative ones with the risk of bias assessment presented in Tables 5 and 6.

Quality appraisal of quantitative literature. For the quantitative studies, bias was assessed independently by two reviewers using the Appraisal for Cross-Sectional Studies (AXIS) tool,[16] which examines risk of bias within study aims, design, methodology, findings, and reporting. Agreement between reviewers was 80% and disagreements were resolved through discussion with the team.

The majority of studies presented aims and objectives clearly, and used appropriate study designs for the research aims. No studies gave information on non-responders, and only two[21,27] provided a rationale for their sample sizes. As the studies focused on student Schwartz Rounds, target populations were consistently defined, and all appeared to use convenience sampling of students who had attended one or more Rounds. As discussed in Section Research question 1: What is the current state of the literature regarding health and social care students' evaluation of Rounds in HE?, the ongoing changes to the PoCF evaluation questions meant that not all variables were previously trialled. Studies varied in their approach to analysis, with percentages and mean scores for items routinely reported. Where appropriate, studies grouped participants into nominal categories to conduct further analyses of chi-square,[24,27] paired *t*-tests,[25] and correlations.[26]

Limitations acknowledged by the authors of the included papers mostly focused on challenges with the delivery of Rounds, such as lack of student understanding of the function of Rounds and the timing of Rounds. Some studies explored methodological limitations; potential sampling or selection biases,[26] amount of data gathered [24]and potential challenges with Likert scale data.[21,26] Recommendations for future work were also split between logistical issues such as ways to increase attendance at Rounds,[25,28] and conceptual issues such as the impact of attending Rounds on reflective practice,[21] interactions with patients,[24] future attendance at Rounds [25]and empathy development.[26] Table 5 summarises the risk of bias appraisal of the quantitative studies included in the review.

Quality appraisal of qualitative literature. For the three qualitative studies included in this review, the Joanna Briggs Institute Critical Appraisal Tool for Qualitative Studies[17] was used. Two reviewers (AZ, HG) independently assessed the papers. Agreement between reviewers was 100%.

All three qualitative studies, and most of the studies that included qualitative analysis of participants' free text responses to the PoCF open questions, had clear congruity between their research question and their methodology. The only incongruity came from the descriptions of the methodology such as 'comments from evaluations', where it was unclear whether a specific question was posed to participants.[28] Descriptions of analytic processes and overall article length varied between studies, with two studies using thematic analysis[21,22] and one using Interpretative Phenomenological Analysis.[23] All studies described how themes or phenomena were developed, with varying detail based on analytic process, and it was clear how the authors had developed their findings. Participant voices were adequately represented, with all studies providing direct participant quotations throughout the interpretation of their findings. Only one study[23] explicitly discussed the positionality of the researcher and how this may have influenced the analysis, and one[21] commented on the subjectivity of thematic analysis and their use of independent coding to address this. Two studies explicitly referenced ethical approval within the manuscript[23] or declarations,[21] with the other manuscripts'[22] partner paper[24] outlining their ethical processes.

Limitations acknowledged by the authors of the qualitative studies reflected on sample size,[22] homogeneity of participants and potential biases in self-selection for interviews[23] or focus groups.[21,22] Recommendations for future research into student experience of attending Rounds included enabling and hindering factors for active participation in Rounds,[22,23] the topic and location of Rounds,[21,23] and the role of multidisciplinary Rounds within or outside of the curriculum.[22] Table 6 summarises the risk of bias appraisal of the qualitative studies included in the review.

Overall, the quality of the existing literature on student Schwartz Rounds is mixed. This important finding suggests that caution needs to be applied when drawing conclusions based on the included studies.

Limitations identified within studies. Six of the eight studies reported limitations, however these included limitations of the *research* conducted as well as limitations of the *delivery* of the Rounds offered. In terms of limitations of research these included small sample sizes, data collected from pilot Rounds, poor response rates and lack of demographic details. Limitations of the Rounds included the timing of Rounds, the year of study invited to attend, the level of understanding of Rounds, and the number of attendees (not participants in the research).

As can be seen in Table 2, the research aims of the literature vary, thus affecting how the authors approached data collection and analysis in the included studies. This presents challenges

for synthesis of the overall research landscape. Authors focused on different aspects of attending Rounds, such as how they may fit into the curriculum,[22,24] reflective practice,[27] if the benefits noted in professionals translate to trainees,[26] and the different experiences depending on disciplinarity.[21] While over half of the studies included multi-Round data, ranging from two Rounds[21–24] to eleven Rounds,[28] the examination of these was often limited. The aims of the included studies were to compare single discipline and multi-discipline Rounds[21] or to explore their potential in the curriculum,[24] and as such, little longitudinal evidence exists. In addition, the included studies have not provided any insight into how the frequency or intensity of Rounds influence their effectiveness. Consequently, the current literature and its reporting does not allow understanding of the benefits of attending Rounds over time, or reflection on their longer-term impact throughout the trainees' journey.

Description of participants' demographics within the current literature is also extremely limited. Three studies described the gender of their participants,[21,23,26] and two gave age ranges.[23,26] Given the evidence[29] regarding how demographic characteristics can affect student experience and success, the limited reporting of who the students engaging with Rounds constrains our understanding of the interaction between certain characteristics and the experience of attending Rounds.

Four of the quantitative studies allowed participants to expand on their thoughts about Rounds, however, the line of questioning as reported by authors varied. Some space for commentary was broad, asking students to provide written comments[26] or comments including how the Round made them feel.[24] Other were more specific with their free-text spaces, and asked whether Rounds had impacted on aspects of professional identity,[27] how Rounds compared to written reflective practice,[25] and whether students worried about compassion fatigue or burnout.[24]

The variable nature of study quality, as well as the small number and heterogeneous nature of studies, means a degree of caution must be applied when interpreting these results.

Discussion

This systematic review explored how health and social care students experience taking part in Rounds and what they perceive the benefits of this participation to be. Eight studies – six with a survey focused mixed-method design, and two employing a qualitative methodology – met our inclusion criteria, and data from qualitative interviews, focus groups, participants' free-text responses to open questions and evaluation survey data, were considered together to construct a narrative synthesis of findings.

Taken together, our findings suggest that Rounds may provide an important and valued opportunity for participants to increase interprofessional connection and shared understanding during training. Participants agreed that attending Rounds can help them work better with colleagues and gain

unique insight into how other health care professionals feel about their own work, and care for their patients. The key role that Rounds were reported to have in facilitating a sense of connection between students and across professions suggests they can support student well-being. Connection with others is a central component of widely cited and well-established models of well-being,[30,31] and is conceptualised in Self-Determination Theory (SDT) as a basic psychological need.[32] The finding that Rounds facilitate connection and support students to feel closer to those around them suggests that they can play an important role in helping address the significant well-being issues that many healthcare students experience.[33–35] Relatedly, the notion that Rounds normalise emotions in the context of students' work and emphasise the human side of caring, encourages a culture of open-ness that promotes good clinical practice and practitioner well-being.[36] Participants viewed Rounds as a valued avenue for normalising the range of emotions commonly experienced during training. Rounds allowed participants a greater insight into the social and emotional aspects of patient care and increased their confidence in handling sensitive issues during their work and training. As such, students also suggested that Rounds may contribute to the development of emotional well-being and resilience during training and post-graduation.

Rounds also appear to provide a valued forum for reflection during training, one that is preferred to existing forms of reflective practice such as written reflective reports. This finding indicates that Rounds may offer significant benefits to healthcare students not only in terms of personal well-being, but in developing the types of reflective competencies seen to be central to the development of clinical skills and procedural know-how.[10,37] Notably, Rounds were perceived to draw some of their benefit from the collaborative nature of their reflection, the vulnerability expressed through storytelling, and the normalisation of difficult emotions around clinical work and patient care. Most of these are unique ingredients that may offer something over and above existing forms of reflective practice commonly embedded in educational curricula.

The available evidence indicates that factors relating to how Rounds are delivered, who attends them and what themes are discussed, significantly influence the extent to which participants feel able to participate, and the extent to which they perceive participation as beneficial. Although most participants agreed that Rounds were relevant to their daily work, some talked about feeling anxious and intimidated by large groups, and commented on the power imbalance between academic staff and students during Rounds. For some participants, not being familiar with students from other courses and disciplines was also described as a barrier to participation. The concepts of 'barriers' and 'facilitators' have recently been challenged on the grounds of oversimplifying the complex and interdependent nature of factors that might influence the success, uptake, or failure of an intervention.[38] However, research regarding

barriers and facilitators remains for many an important and useful avenue for research, and the notions of barriers and facilitators continue to be considered useful sources of information from which policy makers, researchers and organisations can make decisions regarding the implementation of interventions.[39,40] In this context, attention is warranted to the findings reported here that features of Rounds such as who shared stories, the size of the audience, the range of professions represented, or the presence of academic staff appeared to function as barriers or facilitators of engagement for many students. While a great many questions on this topic remain unanswered, educators and researchers interested in implementing or evaluating Rounds in their own institutions may helpfully use the results reported here to consider how best to design and implement Rounds in ways that will foster student engagement in their specific context.

The focus of this review on the quality of the existing literature regarding Rounds in HE settings makes an important contribution to the field. The mixed quality of identified studies may reflect the relatively recent growth in implementation of Rounds in the higher education context, the challenges of implementing and evaluating new innovations in educational settings, and the fact that how Rounds are evaluated by the PoCF has shifted during that period. As the number of institutions offering Rounds increases, and the PoCF evaluation continues to expand and be refined, attention to study quality seems paramount. It appears that there are clear avenues to improve the quality of our knowledge base around the student experience of attending Rounds, and it is critical that future work aspires towards this. With evidence and widespread agreement in the field to suggest that considering the quality of evidence is essential when carrying out systematic reviews or making recommendations for future development of services and interventions,[41,42] the findings of our review regarding the mixed quality of the current literature point towards a need to consider these issues in depth before increasing work in this area. Importantly, they also sound a note of caution to hold in mind when considering the findings reported both in this review, and that of Hamilton, Taylor and Maben.[12]

Strengths and limitations of this review

This systematic review and narrative synthesis draw on best practice guidelines for the conduct[13,18] and reporting[19] of systematic reviews, meaning that despite the heterogeneous nature and mixed quality of the included studies, a clear narrative regarding Rounds in higher education settings has been constructed. The review benefits from a rigorous methodology following an established framework, with independent and blinded cross-checking of decisions at each stage.

A further strength of this work is the emphasis that has been placed on assessing study quality, and the central place that study quality has been given to informing our results.

Recommendations drawn from this research can therefore support the development of future work in this area.

This review does present with some limitations. While the search strategy was comprehensive, there may be research that discussed similar reflective practice but did not use the Schwartz Rounds name, meaning this would not have been captured. Although the focus of this review was specifically on Schwartz Rounds, the licenced initiative from the PoCF, other institutions who have not purchased a licence may have run and reported on similar initiatives and their findings could have contributed. Searches may have been affected by the regional focus of search engines, and the criteria excluding papers published in a non-English language. However, due to the current licencing of Rounds being in the UK, USA, Australia and Canada, the likelihood that studies were excluded due to this restriction is low.

The primary limitation of this review was the challenge of completing a rigorous synthesis of the data. As explored earlier, the lack of consistent measurement and reporting meant that conducting a meta-analysis was not possible. Efforts were made to ensure best practice was followed, and multiple reviewers agreed on the findings, however, the quality of the data and studies potentially limits the review.

Recommendations for implementing and evaluating Rounds in HEIs

Based on this review, recommendations for the effective implementation and robust evaluation of Rounds in HEIs can be made. We discuss these below. Table 7 summarises the factors to consider when planning and evaluating Rounds in HEIs.

The PoCF provides a comprehensive handbook and training to aid stakeholders in implementing Rounds to their organisations. However, the literature reviewed here highlights some further areas for consideration relevant to the implementation of Rounds. Authors commented on the timing of their Rounds, and we also recommend reviewing students' examination and deadline timetables, term times, day of the week and time of day when planning a Round. Efforts to avoid

Table 7. Factors to consider when planning and evaluating Rounds in HEIs.

FACTORS TO CONSIDER WHEN PLANNING ROUNDS	FACTORS TO CONSIDER WHEN EVALUATING ROUNDS
Timing; semester, week, day, time	What scales will be used for evaluation
Who you invite to attend; course, year, role	How will you analyse quantitative data
What do attendees know about Rounds	How will you analyse qualitative data
How might participation be affected	What demographic details will you collect

clashes with other significant dates, placement responsibilities or university deadlines appear likely to facilitate attendance. Repeated Rounds across the year will also likely serve to increase opportunity for students to attend. Four studies were open to students from a specific discipline (eg medicine), while others included students from a variety of courses. As discussed previously, the interprofessional nature of Rounds can benefit participants' understanding of colleagues from different disciplines in a way that enhances connection, collaboration, and communication but, at the same time, can act as a barrier to comfortable participation. This should be considered in planning and facilitating Rounds, as the experience and learning may vary depending on their interdisciplinarity. It is important, for example, to acknowledge and normalise this at the start of each interprofessional Round and, through sensitive facilitation, encourage open sharing that feels psychologically safe in a space where participants may not be familiar with each other. Including storytellers and facilitators who are also from different disciplines can help foster this sense of psychological safety as storytellers and facilitators become role models.

It is also important to consider the cost, logistics and resources required for the successful implementation and long-term sustainability of Rounds in HEIs. Implementing Rounds can present several challenges, including securing consistent funding and allowing time and resources for the engagement of academic, clinical and administrative staff. Scheduling Rounds during a busy academic year to ensure that students are available to participate also requires careful coordination and planning. Recruiting story tellers from different disciplines and with different levels of expertise often proves challenging and requires time commitment and continuous institutional support from leaders. Finally, to ensure that Rounds meet their goals and improve over time, evaluation mechanisms such as surveys and interviews are needed to continuously assess participants' experience and perceived benefits of engaging with the Rounds.

We also recommend reflecting on how facilitators and storytellers may impact Rounds, considering issues of power and seniority and how this may reflect upon student participation. Helping students to understand the purpose of Rounds as not a problem-solving exercise, but a reflective one is important, and we recommend careful reflection from organisers on how this is done. The Rounds in the current literature took different forms including online, and while description on specific settings was limited, there are factors that may affect participation that should be considered, such as room size, layout, the platform used (if online) and where refreshments will be provided.

In terms of Rounds' evaluation, this review highlighted the importance of organisations using comparable evaluation questions, large enough samples and cross-case or cross-Round outcome measures to allow meaningful learning, in agreement with Hamilton, Taylor and Maben.[12] As explored in 3.4, it is important that future evaluation data from Rounds utilises consistent scales and reporting. As research in the field further develops it may also be useful to consider introducing additional measures to the evaluation of student Rounds. This review has tentatively suggested that Rounds may have a beneficial impact on student well-being. Future researchers then may seek to measure this in a more robust way using standardised measures in an attempt to understand the relationship between Round attendance and student perceived well-being.

It should also be a salient concern for researchers evaluating Rounds to collect and analyse demographic details from participants, to better understand how different groups of students participate in and experience Rounds. These include protected characteristics, student characteristics (eg year of study), and previous attendance at Rounds. This may also involve further investigation on the impact of single discipline or interprofessional Rounds for student. This will allow all involved in planning and delivering Rounds to better meet the needs of a diverse body of students and ensure Rounds continue to be a safe and supportive place for all.

Although several studies in this review presented results from participants' free text responses, this data lacked homogeneity. What was asked of participants and how this information was collated and analysed varied among studies. We suggest that alongside consistent scale use and analysis, the same principles are applied to qualitative data. We recommend consideration of how open-ended questions are framed and how the responses are analysed, to allow better synthesis of, and understanding of qualitative data within questionnaires. It is important to note that Rounds in HEIs are a relatively new initiative in the UK and research on their effectiveness is still emerging. Every study included in this review only examined short term impacts of Schwartz Rounds, therefore more longitudinal research, or research focused on longer term efficacy of attending is needed. Such research should also include work designed to explore how and whether the frequency of Rounds in HEIs influences outcomes. This systematic review has revealed that all those involved in implementing and evaluating Rounds are adapting to the changing environment of higher education, the expansion of Rounds and their evaluation in different settings. We propose that this is a journey with a positive direction of travel and hope that this review will help direct this journey in a meaningful way, allowing a robust evidence-base to be created and utilised by anyone involved in Schwartz Rounds.

Conclusion

This systematic review and narrative synthesis have identified and synthesised findings regarding Schwartz Rounds in higher education. The findings of the review suggest that student Schwartz Rounds promote teamwork and connection, normalise emotions and emphasise the human side of care, improve self-awareness and facilitate reflection, and resonate with students' daily work. Findings also indicate that participation in and perceived benefit from Rounds is influenced by

factors relating to how they are run, indicating the way forward for drawing maximum benefit from Rounds in the future. The review also makes an important contribution to the field through its explicit focus on exploring the current state of this emerging literature, considering the methodological quality of studies in the area, and sounding caution about their interpretation in light of findings regarding study quality. Our review suggests that the quality of research in this area to date is mixed. We have posited a number of potential reasons for this while and made recommendations for future work in the area. Our review adds to the growing literature in this field, indicating that Rounds offer a potentially valuable addition to health and social care curricula, and encouraging the continued growth of evaluation of Rounds in higher education settings.

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Authors' contributions

AZ contributed to conceptualisation (supporting), data curation, formal analysis, investigation, methodology, project administration, writing–original draft preparation, and review and editing. JO contributed to conceptualisation (leading), funding acquisition, supervision, writing–original draft preparation and review and editing. HG contributed to data curation, investigation, writing–original draft preparation and review and editing. AO contributed to data curation and writing–review and editing. GP contributed to conceptualisation (leading), formal analysis, funding acquisition, supervision, writing–original draft preparation and review and editing.

Availability of data and materials

All data generated or analysed during this study are included in this published article [and its supplementary information files].

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Supplemental material

Supplemental material for this article is available online.

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