



A collective agenda: A qualitative study on Exercise is Medicine® On Campus gold-level institutions

Cayla R. McAvoy^{a,*}, Alicia A. Dahl^a, Jae Hoon Lim^b, Patricia Bauer^c, Larissa R. Brunner Huber^a

^a College of Health and Human Services, Department of Public Health Sciences, University of North Carolina at Charlotte, 9201 University City Blvd, Charlotte, NC 28223, USA

^b Cato College of Education, Department of Educational Leadership, University of North Carolina at Charlotte, 9201 University City Blvd, Charlotte, NC 28223, USA

^c Marieb College of Health and Human Services, Department of Rehabilitation Sciences, Florida Gulf Coast University, 10501 FGCU Blvd. S., Fort Myers, FL 33965, USA

ARTICLE INFO

Keywords:

Exercise
Physical activity
Chronic disease
Health promotion
College
University
Student health
EIM
EIM-OC

ABSTRACT

Objective: The Exercise is Medicine® On Campus (EIM-OC) international campaign leverages university resources (e.g., health centers, recreation, and kinesiology departments) to encourage students, faculty, and staff to integrate physical activity into campus culture. This involves evaluating student physical activity levels during health visits and establishing referral systems for exercise prescriptions. EIM-OC allows universities to earn tiered recognition (Gold, Silver, or Bronze) based on their on-campus physical activity promotion and integration. For Gold recognition, schools must incorporate routine physical activity assessments into their health system, ultimately connecting healthcare providers with health/fitness professionals (HFPs, e.g., campus recreation professionals, kinesiology professors). This research worked to uncover pivotal factors driving EIM-OC on-campus collaborations through HFPs' perspectives.

Methods: HFPs ($n = 11$) working full-time at a Gold-level institution ($n = 10$ in United States) participated. Semi-structured, Zoom-recorded interviews with a generic qualitative research design were completed between June and September 2022.

Results: Major thematic findings included the importance of tangible support (e.g., personnel), encounters with both trust and tension cross-campus, positive student development opportunities, and variations in outcome reporting and program evaluation. Faculty and staff emphasized the need for methods to obtain and sustain program funding. Participants also expressed the importance of interdisciplinary collaboration to increase the collective impact of EIM-OC on student health and overall collegiate success.

Conclusion: HFPs expanded on their EIM-OC experiences and program sustainment or growth requirements. With increased interdisciplinary collaboration, rigor in outcome reporting, and tangible resources, the collective impact of EIM-OC on student health outcomes and overall collegiate success could be greatly perpetuated.

1. Introduction

Exercise recommendations from healthcare providers typically refer patients to federal physical activity guidelines (United States Department of Health and Human Services, 2018). While useful for widespread public health messaging, this generalization can miss individual physiological differences. Healthcare providers recognize the positive impacts of physical activity (Berra et al., 2015) but find challenges with

counseling patients on it during time-limited appointments (Lobelo and de Quevedo, 2016). The American College of Sports Medicine (ACSM) advocates for collaboration between healthcare providers and health/fitness professionals (HFPs) (e.g., kinesiology educators, certified fitness trainers, exercise physiologists), asserting that HFPs have the “education and certification...to provide exercise guidance as an extended member of the healthcare team” (American College of Sports Medicine, 2021c). In 2007, ACSM and the American Medical Association launched the ‘Exercise is

Abbreviations: ACSM, American College of Sports Medicine; HER, Electronic Health Records; EIM, Exercise is Medicine®; EIM-OC, Exercise is Medicine® On Campus; FERPA, Family Educational Rights and Privacy Act; HFP, Health/fitness Professional; HIPAA, Health Insurance Portability and Accountability Act.

* Corresponding author.

E-mail addresses: cmcavoy1@charlotte.edu (C.R. McAvoy), adah13@charlotte.edu (A.A. Dahl), jhl1m@charlotte.edu (J. Hoon Lim), pbauer@fgcu.edu (P. Bauer), lhuber@charlotte.edu (L.R. Brunner Huber).

<https://doi.org/10.1016/j.pmedr.2024.102785>

Received 30 January 2024; Received in revised form 31 May 2024; Accepted 3 June 2024

Available online 9 June 2024

2211-3355/© 2024 Published by Elsevier Inc. This is an open access article under the CC BY-NC-ND license (<http://creativecommons.org/licenses/by-nc-nd/4.0/>).

Medicine®' (EIM®) campaign, calling for physical activity to become a regularly assessed vital sign through collaboration between healthcare providers and HFPs (American College of Sports Medicine, 2021c). Since its inauguration, EIM® has expanded globally to create partnerships between healthcare providers and HFPs, aiming to address the diverse exercise needs of individuals of all abilities (American College of Sports Medicine, 2019).

Many college campuses include the major components of EIM®, such as health centers and multiple recreation facilities (e.g., gyms, aquatic centers). When effectively connected, these resources create an opportunity to develop EIM® referral systems. Accordingly, ACSM developed EIM®-On Campus (EIM-OC) to adapt EIM® to on-campus resources. EIM-OC encourages students, faculty, and staff to make physical activity integral to daily campus culture. This culture shift involves assessing physical activity levels at health-related appointments and implementing a structured system for EIM-OC referrals (American College of Sports Medicine, 2021a). However, despite the potential benefits, implementing EIM-OC referral systems on college campuses can introduce challenges, including navigating complex federal regulations such as the Health Insurance Portability and Accountability Act of 1996 (HIPAA) (Centers for Disease Control and Prevention, 2022). These regulations were designed to safeguard patient confidentiality but can inadvertently create barriers to exchanging health information. Similarly, transmitting identifiable student data could breach Family Educational Rights and Privacy Act (FERPA) laws (United States Department of Education, 2023), which shield the privacy of student records. Despite the potential benefits, implementing EIM-OC referral systems requires careful consideration, collaboration, and strategic solutions.

ACSM's tiered EIM-OC recognition program, detailed in Appendix A, acknowledges universities' commitment to fostering a healthy academic environment through physical activity programming. The Bronze, Silver, and Gold levels of recognition each reflect varying degrees of commitment to EIM-OC. Bronze-level recognition centers on physical activity promotion, while Silver-level recognition focuses on physical activity education. Gold-level recognition signifies the implementation of regular assessment and promotion of physical activity within campus health systems. As of 2023, approximately 35 % of the > 200 registered universities earned Gold-level recognition (American College of Sports Medicine, 2021a). Since attaining this status necessitates a structured EIM-OC referral system, it's inferred that Gold-level universities have navigated through campus-specific obstacles, such as HIPAA and FERPA.

To register with ACSM, EIM-OC Campus Leadership Teams need two student representatives, a program advisor, a healthcare provider, and an HFP. These HFPs, often leaders in campus recreation centers or exercise departments, must hold a terminal degree in exercise physiology and/or relevant accredited fitness certification(s) (American College of Sports Medicine, 2021a). HFPs play a crucial role within EIM-OC teams, equipped with the expertise and credentials to provide tailored exercise prescriptions in line with the program's core objectives. However, although HFPs are required for EIM-OC referral systems to exist and can offer authentic information about EIM-OC, EIM-OC has not been explored from their perspective. Considering the current gaps in EIM-OC literature, "descriptive, generic qualitative" (Caelli et al., 2003, Merriam and Tisdell, 2015) interviews with HFPs at Gold-level campuses could open opportunities for understanding EIM-OC intricacies. Herein, discussions focused on pivotal factors for the practical function of EIM-OC referral systems (e.g., tangible/intangible resources, information sharing, data collection) and characteristics of HFPs' experiences (e.g., successes and challenges). Our findings aimed to evaluate:

What factors are pivotal for effective EIM-OC programming at Gold-level campuses from the HFP's perspective?

What major characteristics illustrate HFPs' experiences and challenges with EIM-OC at Gold-level institutions?

2. Methods

2.1. Study design and participants

Approved by the Institutional Review Board at the University of North Carolina at Charlotte (IRB-22-1061), this study, conducted in 2022, used a generic qualitative research design with semi-structured, open-ended interviews. Recruitment was done in collaboration with ACSM's EIM-OC Program Manager, who emailed the study description and an eligibility screener to university contacts who received Gold-level recognition in 2022 ($n = 74$). Twenty-four contacts completed the screening. Two were found to be ineligible ($n = 1$ was not an HFP; $n = 1$ was not a full-time employee). Eleven did not complete their interview once contacted. Accordingly, this study included 11 English-speaking HFPs working full-time at a Gold-level institution for at least six months, a sufficient sample size based on Hennink and Kaiser's recommendation for data saturation (Hennink and Kaiser, 2022). All participants signed an electronic informed consent. Interviews lasted 30–45 min (mean = 35.0 ± 10.1 min), and participants received compensation via an electronic gift card.

2.2. Data collection

Interviews took place between June and September 2022. An interview guide (Appendix B, list of essential and supplementary questions) ensured that key subjects were discussed, but additional prompts were allowed as needed. Interviews focused on domains derived from the research questions: factors supporting successful EIM-OC referral systems and HFPs' experiences with EIM-OC.

2.3. Data analysis

Interviews were audio-recorded using Zoom. Zoom provided transcripts that were reviewed against the audio files to ensure accuracy. The first author removed identifiable personal information (e.g., job titles and university names), but university size and region were recorded for descriptive analysis. Using NVivo software (version 1.6.1, QSR International 2022, Massachusetts, United States), the analysis began with open reading (Wertz, 2011). Once the main ideas were recognized, data organization started with categorizing sentences or paragraphs into the research domains. A single coder (supervised by two faculty researchers) conducted a thematic analysis, locating patterns within the coded domains. Repeated patterns were sorted into subthemes. Multiple steps were taken to ensure the quality and trustworthiness of the findings. These strategies can be found in Appendix C, which contains the primary researcher's reflexivity statement.

3. Results

3.1. Demographic information

Most participants ($n = 6$; 54.5 %) worked at a university in the southeastern United States, and most were employed at public universities ($n = 8$; 72.7 %, Table 1). Participants' universities varied in enrollment counts, with 27.3 % ($n = 3$) reporting < 5,000 students and 36.4 % ($n = 4$) $\geq 15,000$ students enrolled at the time of the interviews. Participant employment was split between full-time faculty in Kinesiology (or related) departments ($n = 6$; 54.5 %) and staff working in Campus Recreation 45.5 % ($n = 5$; 45.5 %).

3.2. Thematic findings

The primary research domains included factors supporting successful EIM-OC referral systems and HFPs' experiences with EIM-OC (Table 2). Each domain is divided into emergent sub-themes: tangible support, trust or tensions on campus, student development opportunities,

Table 1
Descriptive Characteristics of the Institutions and Participants, Electronically Collected 2022–2023.

University Characteristic	N	%
University Location		
United States – Midwest	2	18.2
United States – Northeast	1	9.1
United States – Southeast	6	54.5
United States – Southwest	1	9.1
Outside of the United States	1	9.1
University Size		
Small (<5,000 students)	3	27.3
Medium (5,000 – 14,999 students)	4	36.4
Large (≥15,000 students)	4	36.4
University Categorization		
Public	8	72.7
Private	3	27.3
Participant Characteristic	N	%
Self-Reported Gender		
Female	9	81.8
Other/preferred not to respond	2	18.2
Self-Reported Race		
White	9	81.8
Other/preferred not to respond	2	18.2
Employment		
Faculty (Kinesiology or related department)	6	54.5
Staff (Campus Recreation)	5	45.5

United States geographical regions adopted from National Geographic (National Geographic, 2023).

program evaluation, and outcome reporting.

3.2.1. Pivotal factors for effective EIM-OC programming

Participants emphasized the need for concrete, tangible support, including personnel and program funding, to ensure the proper functioning and long-term continuation of EIM-OC. Participants also valued intangible factors, such as building trust among and receiving support from institutions’ leadership, especially when other important matters are competing for priority and attention on campus.

3.2.1.1. *Tangible Support: Personnel.* Participants repeatedly mentioned that to function, EIM-OC programs require dedicated employees to be adequately compensated for their time. They stressed the challenges of tracking referred students, gathering data, and promoting programs without staff. Participants referred to EIM-OC as a “*passion project*” and “*labor of love*” but acknowledged that it could not grow without more help. Participants also expressed that their program is sensitive to changes within their EIM-OC leadership team. Some recognized that the number of students referred to the program varies due to the natural turnover of full-time employees. One participant even worried that if a member of their EIM-OC leadership team left the university, nobody would take their spot, and their Gold-level status would be relinquished

Nearly half of the participants hoped to expand program awareness but were concerned about managing additional EIM-OC referrals. An emerging trend was that some faculty-participants ($n = 3$; 27.3 %) creatively developed an EIM-OC academic course to fill staffing needs. The creation of this course allowed them to adapt to natural shifts in personnel while keeping students at the forefront of the program. For staff-administered EIM-OC programs, developing a for-credit course is rarely, if ever, possible. Staff-participants also conveyed challenges with hiring students holding proper credentials to prescribe exercise, e.g., personal training certifications from an accredited organization. Without the ability to create an academic course and no funding source to help certify students, one staff-participant said EIM-OC has “...*growth potential. The problem is the resources to actualize that growth.*”.

3.2.1.2. *Tangible Resources: Funding.* Collectively, participants struggled to find money to support their EIM-OC events, such as offering

Table 2
Representative Quotes of Thematic Findings from Participant Zoom Interviews, 2022.

Research Domain	Sub-theme	Staff Quotes	Faculty Quotes
1. Pivotal Factors for Effective EIM-OC Programming	1.1 Tangible Support: Personnel	“[Hiring] a sole, part-time staff member who can follow up with people...so I can focus on advocating for EIM and doing some of the bigger events. That would be success to me.”	“Cross-campus relationships can diminish with personnel turnover, affecting program awareness and referrals.”
	1.2 Tangible Resources: Funding	“We desperately apply for grants every year, but we never get them.”	“Top-down support from campus leaders is crucial for program financing and success.”
	1.3 Cross-campus Collaboration and Support	“It was very hard to get the buy-in. Faculty] have to trust the individuals that are in positions like mine. This whole idea of collective impact... Every person understanding that we have a common goal, we just may have a different part of the puzzle in order to reach that common goal. But we’re all vital, so how do we all work together to figure that out?”	“The champion, having that one person in each department that’s really on board that can be the inside person...I think is key. The challenge on that other end was buy-in from all of the staff members so that [EIM-OC] was consistent.”
2. Characteristics of HFPs’ Experiences with EIM-OC	2.1 Successes with Student Development	“When you’re in the recreation field, we look at the opportunities... to try to really train the students up...”	“One student had a strong aversion to physical activity... we were able to help facilitate this student’s joy in movement and find activities they could perform. It really changed their life. They were able to reframe that aversion to something that was pleasant, and they made a lot of progress.”
	2.2 Program Evaluation: Important but Needs to be Revised	“[Assessment] is not working, we have to do something different.”	“Data can be used to quantify the program’s impact and provide direction for the future.”
	2.3 Information Sharing: Great Variability and Continual Challenges	“I am blown away at how all those entities don’t even talk to each other, or they feel like HIPAA is being	“[Referred students] were provided a flyer... There was nothing on the other end

(continued on next page)

Table 2 (continued)

Research Domain	Sub-theme	Staff Quotes	Faculty Quotes
		violated. To me, they use that as an excuse. It's like, I don't know... I just think that there's so much more we could do if we would just all work together."	from the physician's standpoint like them providing us... the names of the people that are suggested to come see you, so you can reach out to them."

HFP = health/fitness professional. EIM-OC = Exercise is Medicine®–On Campus (American College of Sports Medicine, 2021a).

physical activity educational seminars. Most participants were actively searching for different sources of revenue at the time of the interviews. One faculty-participant stated, "...if I could make anything better about EIM... number one, I need a budget." some participants applied for an EIM-OC microgrant (American College of Sports Medicine, 2021b) from ACSM. Most faculty-participants (n = 5; 45.5 %) managed to secure a small grant or a course buy-out from their university to fund their programs. However, all five staff-participants (45.5 %) had no specific funding source for EIM-OC and relied on scarce departmental funds, volunteers, or unpaid interns

Participants expressed how important the support of their full-time colleagues continues to be for the success of EIM-OC. They believed that backing from the people who make important decisions about funding on the campus is a critical EIM-OC component. Participants employed creative approaches to get the attention of decision-making leaders amidst competing priorities across campus that are also working for program financing. For instance, one faculty-participant tried to involve the city's mayor in an event to kick off their program. This participant hoped to make an impression on the university's leadership, bringing attention to the program and its need for funding. Some participants were worried about the broad lack of a culture encouraging physical activity on their campus, and they felt that top-down support could change that. Luckily, a few participants appreciated helpful department chairs and college deans who recognized EIM-OC's value and provided funds accordingly.

3.2.1.3. Cross-campus collaboration and Support: Trust or Tension?. The appreciation for peer-level buy-in was highlighted in every interview. One staff-participant emphasized that leadership's backing for EIM-OC must go beyond funding to gain support from collaborating departments. These support efforts must communicate that student health (including physical activity) is a campus priority. One faculty-participant said they were "lucky" to have a doctor on the team who understands the collective impact university departments can have on overall student wellness. However, over half of the participants expressed a divide between departments outside their own but essential to the program. One staff-participant asserted that collaboration can be plagued with interdepartmental tension and disagreements, stating that "...there's quite a disconnect" between faculty and staff. A faculty-participant also struggled with this perceived divide, expressing that they "would love to work together [with staff] somehow; we just haven't figured out a way."

3.2.2. HFPs' experiences with EIM-OC

While HFPs play a vital role in the impact of EIM-OC on their campus, their experiences are unique to each university's context. Still, participants voiced commonalities when describing successes for student development through EIM-OC programming and some collective barriers they faced along the way.

3.2.2.1. Successes with student development. Participants recalled the progress referred students made through EIM-OC and celebrated the small ways students tried to get healthier. For example, participants noticed students overcoming various perceived barriers to exercise, creating plans to be more active, using physical activity to feel better mentally, walking more, and building a healthy relationship with exercise. Faculty and staff participants enthusiastically remembered these stories, especially concerning the niche of novice exercisers overwhelmed by gym environments

Participants also recounted numerous opportunities for students' professional development through EIM-OC. When able to, participants employed a graduate assistant to manage EIM-OC referrals or hired undergraduates to serve as mentors to referred students. They also provided opportunities for academic credit, internship hours, job shadowing, and post-graduation employment. Campus Recreation professionals emphasized how significant student involvement and development are in their field. Faculty-participants also spoke about providing kinesiology students with hands-on professional experience through EIM-OC.

3.2.2.2. Program Evaluation: Important but needs to be revised. Both faculty and staff participants discussed the importance of collecting data for their EIM-OC programs. Participants believed these data could be used to quantify the program's impact and provide direction for the program's future. One staff-participant said they used EIM-OC data to illuminate the program's impact on the different referring departments, thank collaborators for their efforts, and ultimately boost collaborator morale to keep the program going. One faculty-participant detailed how they distributed a program survey to referred students "...to help get resources" and hoped the student voice would resonate with collaborators and leadership. This same participant mentioned that while HFPs understand EIM-OC's impact on student health, "we just need to document it" so others can realize this value

Table 3
Data Collection Methods for EIM-OC Programs as Reported During Health/Fitness Professional (HFP) Zoom Interviews, 2022.

Method for Receiving EIM-OC Referrals n (%)	
Passive	5 (45.5)
Specialized Software or Mobile App	2 (18.2)
Electronic Health Records	2 (18.2)
Secure Folder	1 (9.1)
Unknown	1 (9.1)
Type of Data Collected from Referred Students n (%)	
Number of EIM-OC referrals	6 (54.5)
Number of referred students who completed the program	5 (45.5)
Self-report physical activity data	5 (45.5)
Demographics	4 (36.4)
Event attendance	4 (36.4)
Mental health outcomes (e.g., self-efficacy, percent success)	4 (36.4)
Fitness assessment data	3 (27.3)
Number of repeat EIM-OC referrals (e.g., when a student is referred multiple times)	2 (18.2)
What happened after a student completed the program (e.g., did they stay active)	2 (18.2)
None/unknown	5 (45.5)

EIM-OC = Exercise is Medicine®–On Campus (American College of Sports Medicine, 2021a).

Interviewee-reported data collection methods are described in Table 3. The number of referred students was the most common ($n = 6$, 54.5 %) type of data collected, followed by the number of referred students who completed the program ($n = 5$, 45.5 %). However, despite participants' perception of the value of data collection, almost half ($n = 5$, 45.5 %) were unaware of any data collection in their department and what (if any) information collaborating departments collected for EIM-OC. Only two participants (18.2 %; both faculty) mentioned using EIM-OC data for peer-reviewed publication. One faculty-participant emphasized the importance of documenting the *"impact on the health parameters because that's critical...that's a huge, huge, huge incentive for the university"* and was creating plans to start a data collection process.

3.2.2.3. Information Sharing: Great Variability and Continual challenges.

Participants discussed the challenge of creating EIM-OC referral systems with seamless information-sharing between healthcare providers and HFPs. Participants did not consistently describe how they received information about referred students, whether that information was health-related or a way to contact referred students. Information-sharing methods ranged from a specific mobile app to password-encrypted folders, specialized software, or hardcopy paper (Table 3). Five participants (45.4 %, including both faculty and staff) described their EIM-OC referral systems as passive; i.e., if a student told their on-campus healthcare providers that they were inactive, they would receive an EIM-OC pamphlet or a flyer. In that case, all information (name of referred student, contact information, health information) is kept private from the HFP. Thus, the onus goes to the referred student to contact the HFP for information.

Interestingly, two participants (18.2 %; both faculty) directly accessed electronic health records (EHR) from their health centers as a two-way communication method. In this method, healthcare providers communicated when a student was referred. HFPs denoted the student's status and progress with EIM-OC (e.g., if the student came to the recreation center for a personal training session or another program offering). However, opinions on whether HFPs should have access to these records varied across interviews. When asked if they had access to EHR, one faculty-participant rapidly referred to HIPAA/FERPA regulations. In contrast, when another staff-participant was asked about EIM-OC communication policies, they asserted that they were *"blown away at how all those [campus] entities don't even talk to each other, or they feel like HIPAA is being violated."* While some participants viewed EHR two-way communication as the next crucial step in EIM-OC advancement, others were apprehensive and had no plans to work towards this information-sharing method.

4. Discussion

The three-tiered EIM-OC recognition program underscores the commitment needed to assess physical activity effectively on college campuses. Gold-level recognition indicates a successful implementation of EIM-OC and programs overcoming barriers such as HIPAA and FERPA. HFPs are vital members of this accomplishment. This research aimed to understand the inner workings of EIM-OC referral systems from the HFP's perspective. Significant findings included a collective optimism for the student development (health-related and professional) that EIM-OC provides and the importance of interdisciplinary collaboration. Participants spoke passionately about EIM-OC, and their perseverance in moving these programs forward was evident. However, the need for more resources emerged as a recurring theme, with challenges related to tracking EIM-OC referrals, data collection, and program promotion without adequate staff or funding. While the broader goal of the EIM-OC recognition program is to enhance the institution's image as a healthy environment (American College of Sports Medicine, 2021a), there remains a call for increased resources and commitment to rigorous annual reporting to achieve this objective. Such enhancements could transform

the Gold-level label into a valuable resource for campus members seeking exercise assistance while supporting the institution's commitment to fostering a culture of wellness.

Two common topics across interviews, the desire to increase EIM-OC awareness and the persistent challenge of inadequate funding, converge interestingly. Resonating among participants from various university environments was the unanimous belief that expanding the reach of EIM-OC is contingent upon securing the necessary resources. While it's plausible that enhancing awareness may not directly translate to an immediate increase in EIM-OC referrals, interview participants underscored the need for resources to catalyze any meaningful program growth. The plea for support aligns with previous EIM-OC research, which also revealed that most funding originates from Kinesiology or related departments (Lagally et al., 2019). Beyond an immediate goal of generating EIM-OC referrals, the emphasis on program awareness of EIM-OC could serve a broader purpose – fostering a new perspective across the campus community. A 2023 EIM-OC commentary described the importance of collaborative efforts with on-campus health-related programs (e.g., occupational therapy, nursing) to gain diverse perspectives and knowledge, exposing students to the concept of exercise as a form of medicine early in their careers (Voss, 2023). In essence, the call for heightened awareness is not solely a means to gain traction for EIM-OC referrals but a strategic way to weave EIM-OC into the campus culture, leveraging collaborations to amplify its long-term impact.

Another common challenge presented was that EIM-OC programs are greatly affected by personnel changes. Some expressed gratitude for their cross-campus EIM-OC champions, i.e., colleagues who support and believe in the program, ultimately generating EIM-OC referrals. However, concern emerged regarding the potential consequences should the champion depart the university, exposing the vulnerability of program continuity. Our findings align with EIM-OC implementation research that emphasizes the importance of buy-in from university leadership (Bopp et al., 2015). Further, HFPs emphasized the need for their credentials to be recognized, urging leaders to appreciate the significance of their role in sustaining these cross-campus, interdisciplinary relationships. For continued success, EIM-OC programs need to be flexible and robust beyond their personnel, and HFPs are calling for assistance from institutional leadership and ACSM for this to be possible.

EIM-OC programs also need support with reporting program outcomes consistently. In a 2022 review, several EIM-OC researchers advocated for strengthened reporting of EIM-OC outcomes and dissemination of scholarly articles (Peterson et al., 2022). Throughout our interviews, participants discussed how they *"need to get a little more formal"* about data collection. Participants spoke about their work to nurture cross-campus relationships, handle EIM-OC referrals, and oversee students involved with programs. However, they recognized that the day-to-day management of the program significantly limits the time available for publication or comprehensive data collection. Approximately half of the participants were faculty members, and integrating data collection into their responsibilities could be a viable solution if adjustments were made to their teaching duties. This was the case for three participants (27.2 %, all faculty). Nonetheless, the overarching consensus across most interviews remained consistent: achieving rigorous reporting hinges on securing additional funding, allocating more time, establishing specific reporting criteria, and enhancing resources.

The limitations of this research must be acknowledged. First, interviews were susceptible to social desirability bias. Participants were currently employed at the campuses they were reporting on. Although their institutions' names would not be reported, participants may have favored professionalism over candor in their responses. Also, findings are subject to volunteerism and self-selection bias. Acknowledging that these findings may not represent all EIM-OC programs is essential. The recruitment strategy aimed to be inclusive by sending invitations to all Gold-level institutions, but those confident about their programs may have been more likely to interview. Finally, results also depend on the

extent of HFPs' involvement with the program, and study participants had varying levels of involvement with the EIM-OC program on their campus.

Despite these limitations, the strength of this research is its novelty as the first report on EIM-OC from the HFP's perspective. The first author had a unique positionality, with experience as the staff and faculty for EIM-OC. This positionality allowed for a special connection with participants and enhanced background knowledge to delve into responses, albeit research- or practice-related. Furthermore, with their evident passion, professionalism, and understanding of dissertation work, participants were active in the research process. Member checks were high in response rate, in-depth, and meaningful.

5. Conclusion

Universities are unique hubs that unite professionals, resources, and programs to promote health through EIM-OC. Herein, both faculty and staff members provided in-depth feedback on EIM-OC programs for the first time, and major findings included the need for increased funding and more support both on campus and from ACSM. Participants also emphasized the importance of interdisciplinary teamwork and the value of collecting EIM-OC data. Ultimately, EIM-OC highlights the collective influence campus departments can have to enhance student success and the campus community's health.

CRediT authorship contribution statement

Cayla R. McAvoy: Writing – original draft, Visualization, Validation, Project administration, Methodology, Investigation, Funding acquisition, Formal analysis, Data curation, Conceptualization. **Alicia A. Dahl:** Writing – review & editing, Supervision, Methodology, Conceptualization. **Jae Hoon Lim:** Writing – review & editing, Project administration, Methodology, Formal analysis. **Patricia Bauer:** Writing – review & editing, Validation, Project administration, Methodology, Data curation, Conceptualization. **Larissa R. Brunner Huber:** Writing – review & editing, Project administration, Conceptualization.

Declaration of competing interest

The authors declare that they have no known competing financial interests or personal relationships that could have appeared to influence the work reported in this paper.

Data availability

The data that has been used is confidential.

Acknowledgments

We want to thank the ACSM for assisting in disseminating this study's recruitment materials. The results of the current study do not constitute an endorsement by ACSM.

Disclosure of Funding

This study was funded by the graduate school at the University of North Carolina at Charlotte.

Data statement

Participants in this study were assured that interviews would remain confidential and that raw transcripts would not be shared. De-identified transcripts may be available from the corresponding author upon reasonable request.

Appendix A. Supplementary data

Supplementary data to this article can be found online at <https://doi.org/10.1016/j.pmedr.2024.102785>.

References

- American College of Sports Medicine. 2019. *Exercise is Medicine® fact sheet* [Online]. Indianapolis, IN: American College of Sports Medicine. Available: <https://www.exerciseismedicine.org/eim-research0/physical-activity-health-impact/> [Accessed April 2024].
- American College of Sports Medicine. 2021a. *Exercise is Medicine® On Campus* [Online]. Indianapolis, IN: American College of Sports Medicine. Available: <https://www.exerciseismedicine.org/eim-in-action/eim-on-campus/> [Accessed April 2024].
- American College of Sports Medicine. 2021b. *Exercise is Medicine® On Campus: Franklin Microgrant* [Online]. Indianapolis, IN: American College of Sports Medicine. Available: <https://www.exerciseismedicine.org/eim-in-action/eim-on-campus/franklin-micro-grant/> [Accessed December 2023].
- American College of Sports Medicine. 2021c. *Exercise is Medicine®: Exercise professionals* [Online]. Indianapolis, IN: American College of Sports Medicine. Available: <https://www.exerciseismedicine.org/eim-in-action/exercise-professionals/> [Accessed January 2023].
- American College of Sports Medicine. 2021d. *Exercise is Medicine® On Campus: EIM-OC recognition levels* [Online]. Indianapolis, IN: American College of Sports Medicine. Available: <https://www.exerciseismedicine.org/wp-content/uploads/2021/02/EIM-OC-Recognition-Levels.pdf> [Accessed May 2024].
- Berra, K., Rippe, J., Manson, J.E., 2015. Making physical activity counseling a priority in clinical practice: The time for action is now. *J. Am. Med. Assoc.* 314, 2617–2618.
- Bopp, M., Bopp, C.M., Duffey, M.L., Ganim, R., Proctor, D.N., 2015. Implementation and evaluation of an Exercise is Medicine® On Campus week. *Eval. Program Plann.* 52, 176–181.
- Caelli, K., Ray, L., Mill, J., 2003. 'Clear as mud': Toward greater clarity in generic qualitative research. *Int. J. Qual. Methods* 2, 1–13.
- Centers for Disease Control and Prevention. 2022. *Health Insurance Portability and Accountability Act of 1996 (HIPAA)* [Online]. Available: <https://www.cdc.gov/php/publications/topic/hipaa.html> [Accessed July 2023].
- National Geographic. 2023. *United States regions* [Online]. National Geographic Society. Available: <https://education.nationalgeographic.org/resource/united-states-regions/> [Accessed December 2023].
- Hennink, M., Kaiser, B.N., 2022. Sample sizes for saturation in qualitative research: A systematic review of empirical tests. *Soc. Sci. Med.* 292, 114523.
- Lagally, K.M., Sherman, J., Amorose, A.J., Rinaldi-Miles, A., Winters, C.S., 2019. *Exercise is Medicine® On Campus programs: A descriptive study.* *RSJ* 43, 106–116.
- Lobelo, F., De Quevedo, I.G., 2016. The evidence in support of physicians and health care providers as physical activity role models. *Am. J. Lifestyle Med.* 10, 36–52.
- riam, S. B. & Tisdell, E. J. 2015. *Qualitative research: A guide to design and implementation*, Newark, NJ, John Wiley & Sons, Incorporated.
- Peterson, N.E., Zera, J.N., Tompkins, C.L., Rothermel, M.A., Davidson, C., Mandla, S., Jeffreys-Heil, R., Shirazi, Z., Stuh, R.M., Winters, C.S., 2022. *Exercise is Medicine® On Campus: A scoping review of evidence 2009 to 2021 and call to action.* *Curr. Sports Med. Rep.* 21, 289–302.
- United States Department of Education. 2023. *FERPA protections for student health records* [Online]. Student Privacy Policy Office. Available: <https://studentprivacy.ed.gov/resources/family-educational-rights-and-privacy-act-guidance-school-officials-student-health-records> [Accessed July 2023].
- United States Department of Health and Human Services 2018. *Physical activity guidelines for Americans*, Washington, DC, United States Department of Health and Human Services.
- Voss, M. L., O'Brien, M., Furlano, J. A., Wong, M. Y. S., Bray, N. W., Fowles, J. R., & Nagpal, T. S. 2023. Leveraging Exercise is Medicine® On Campus programs to promote activity to equity-deserving groups. *HPJ*, 3.
- Wertz, F.J., 2011. *Five ways of doing qualitative analysis: Phenomenological psychology, grounded theory, discourse analysis, narrative research, and intuitive inquiry.* The Guilford Press.