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REVIEW ARTICLE

Review article: A primer for clinical researchers in the emergency department: Part XIII. Strategies to engage staff and enhance participant recruitment in emergency department research

Sharon O'BRIEN,[1,2] Catherine WILSON,[3] Megan DUCK,[4] Gaby NIEVA,[5] Medhawani P RAO[6] and Libby HASKELL[6,7]

[1]Emergency Department, Perth Children's Hospital, Perth, Western Australia, Australia, [2]Division of Emergency Medicine, Anesthesia and Pain Medicine, University of Western Australia, Perth, Western Australia, Australia, [3]Emergency Research, Murdoch Children's Research Institute, Melbourne, Victoria, Australia, [4]Emergency Department, Royal Darwin and Palmerston Hospital, Darwin, Northern Territory, Australia, [5]Paediatric Emergency Department, Women's and Children's Hospital, Adelaide, South Australia, Australia, [6]Children's Emergency Department, Starship Children's Hospital, Auckland, New Zealand, and [7]Department of Paediatrics, Child and Youth Health, University of Auckland, Auckland, New Zealand

Abstract

Conducting research in ED is important and necessary to improve emergency care. Effective recruitment is an essential ingredient for the success of a research project and must be carefully monitored. Research coordinators are focused on optimising recruitment to research studies while also ensuring that the needs of participants and their families are met, and the research is acceptable to ED staff. In this paper, a group of experienced research coordinators from Australia and New Zealand have shared their strategies to engage staff and enhance recruitment of participants in emergency research. Although this paper is from a paediatric research network, the findings are applicable for EDs in general, both in Australasia and elsewhere.

Key words: *clinical research recruitment, emergency, paediatric.*

Introduction

ED can be a challenging environment with long waiting times, critically unwell and injured patients, tired and anxious parents and stressed staff. These conditions are not conducive to conducting research; however, for emergency medicine research networks, including the Paediatric Research in Emergency Departments International Collaborative (PREDICT) network, this is our core business environment.

PREDICT's vision is to undertake studies to establish an evidence base and improve emergency care for children and adolescents through rigorous research.[1] The network formed in 2004 and undertakes multicentre paediatric research across Australia and New Zealand, in varied settings of tertiary, regional and rural hospitals. It also provides a research infrastructure to support and mentor researchers in EDs to improve the power, capacity and sustainability of paediatric emergency medicine research.[2] PREDICT membership has grown year-on-year and becomes increasingly multidisciplinary with many research nurses taking on research co-ordination, investigator roles and playing a fundamental part in successful study completion.

A key aspect of the research co-ordination role is to manage recruitment of participants. Adequate recruitment is critical for the success of research to determine valid study outcomes and generate new knowledge. However,

Key findings

- The emergency department is a challenging environment to conduct research with clinician education and positive research promotion likely improving study success.
- Families receiving clear, timely and culturally sensitive communication about participating in research are factors likely to optimise study recruitment and retention.
- This article provides practical, real world strategies to enhance research in emergency departments.

Correspondence: Ms Catherine Wilson, Emergency Research, Murdoch Children's Research Institute, Parkville, VIC 3052, Australia. Email: catherine.wilson@mcri.edu.au

Sharon O'Brien, BN, PhD, Research Coordinator; Catherine Wilson, MPH, Ms, Assess. & Eval, PREDICT Network; Megan Duck, BN, GDipHlthRes, Clinical Nurse Consultant - Research; Gaby Nieva, BNurs, GradDipNurs, Nurse Consultant – Clinical Research; Medhawani P Rao, BHSc (Nsg) and PGDip AdvNsg, Children's Emergency Department Research Nurse Coordinator; Libby Haskell, NP, PhD, Paediatric Emergency Nurse Practitioner / Research Fellow.

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Telephone Follow Up Script for Consent

(Consent **NOT** obtained at time of presentation)

Script:

Hello, my name is <your name>.

I am calling from the emergency department research office at the <research organisation/hospital>.

I am calling to see how <child's name> is after their presentation to the <your hospital> with fever that was treated with IV antibiotics on <date>.

On the day <child's name> presented to the Emergency Department, the treating doctor suggested to our research team that he/she would be appropriate for involvement in a research project looking at children who present to hospital with severe infections.

The project is part of a national study on children who are admitted to hospital with fever and severe infections. This study includes more than 10 major hospitals in Australia and New Zealand and is funded by a government grant……

Figure 1. *Script example.*

recruitment is influenced by factors both upstream in the study design period and downstream when the recruitment phase is actively occurring in the ED. A multifaceted approach is needed for optimal results.

A 2018 Cochrane review determined that despite there being some literature on interventions to improve clinical trial recruitment, it lacks any depth and that the solutions to problems are often trial-specific and difficult to generalise.[3] Strong leadership by a committed principal investigator (PI) and a positive staff culture towards undertaking research in their daily activities are important. Selecting patient-centred recruitment methods

TABLE 1. *Education strategies for ED research*

Strategy	Implementation
Research promotion	• Research project notice board with updates on study progress and recruitment numbers • Departmental flyers and posters (Fig. 2) within the department • Newsletters • Research presence on departmental websites
Establishing a research-supportive culture	• Site PI has a visible ongoing presence and engagement with clinicians and the research team throughout the study • Research nurse presence and provision of support – attend handovers and staff huddles, offer one-to-one education, in-person support to clinical staff for study recruitment • Research staff being easily recognisable for clinicians, patients and their family by wearing a specific 'research uniform' or identifier (Fig. 3) • Engage study champions who act as a knowledge resource for a study
Research support	• 24/7 contact point with the research team for questions and study support • Dedicated research team mobile phone number and email
Effective teaching and creation of learning opportunities	• Use of PowerPoint presentations, hard copy booklets, lanyard cards (Fig. 4), information sheets and specific study information for both self-directed learning and reminders • Email reminders to clinicians and messaging on daily rosters and task sheets • Step-by-step guides available on relevant study trolleys (Fig. 5) and medication cupboards to guide study recruitment • Dedicated research education sessions for all craft groups including senior clinicians, specialist groups and new ED staff (as part of orientation)
Optimising data collection materials and research tools	• Identify potential or real barriers and challenges before commencement of the study • Ensure that data collection tools (such as surveys, and data collection forms) are user-friendly • Develop flow charts (Fig. 6) for ease of understanding study process • Consider the urgency and time constraints of ED visits when designing data collection methods – determine what needs to be collected at the time or can potentially be obtained later from patient notes. Hard copy versus soft copy for staff ease of use.

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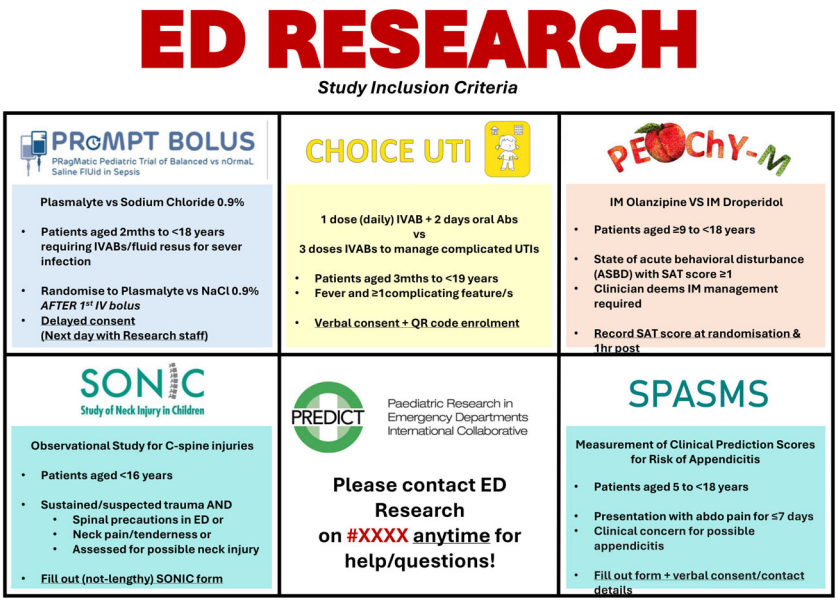

Figure 2. *Departmental posters promote studies.*

to identify and attract potential participants, and simplifying the informed consent process are also essential.[4,5]

Involvement of consumer advisors with lived experience of a condition early in the study design may also encourage recruitment and retention. Working with consumers helps to ensure that research is relevant to participant needs, and that the research design and methods are optimised and palatable.[6,7]

At the annual PREDICT members meeting in 2023, a group of seasoned research coordinators from Australia and New Zealand shared their experience of strategies to engage staff in research and enhance recruitment of participants in paediatric ED-based research. This paper will summarise key concepts from their presentations which are applicable to research in the ED context.

Figure 3. *Research uniform makes the team easily identified.*

Working with your study team

Many ED research teams have evolved, adapted and transformed to facilitate research in their departments. Membership is varied, and includes doctors, nurses, allied health staff, research assistants and students, all with varying qualifications, experience and funding support. Achieving the right balance of experience and staffing with the available funding can be challenging. There is no simple solution to this perennial problem, but we suggest taking the following perspective and planning accordingly.

It is common to have multiple research studies underway at any one time in an ED, which can be both a challenge and an advantage to the ED research team. Potential eligible patients for any study will vary due to the nature of ED presentations. Having more than one study underway can enable research nurses to be shared across studies, allowing for greater research nurse cover in the department and increasing potential recruitment opportunities. Careful oversight of research funds is required. Development of clearly defined responsibilities, including 'ownership' of studies, enhance efficiency and help generate enthusiasm and a stimulating environment for the team.

Developing clear and concise research pathways will ensure team members understand their responsibilities for a study and how this contributes to achieving the study's overall aims. Recognition of individual and the team's strengths and experience is vital to ensure these are utilised when providing education, skill enhancement and mentorship. One size does not fit all as flexibility and adaptation to meet different study requirements is needed.

Prior to commencement of a new study, it is essential to ensure all research team members are fully versed in the study protocol and can confidently answer questions related to the study. This can be supported by the Research Coordinator or PI identifying the key points that need to

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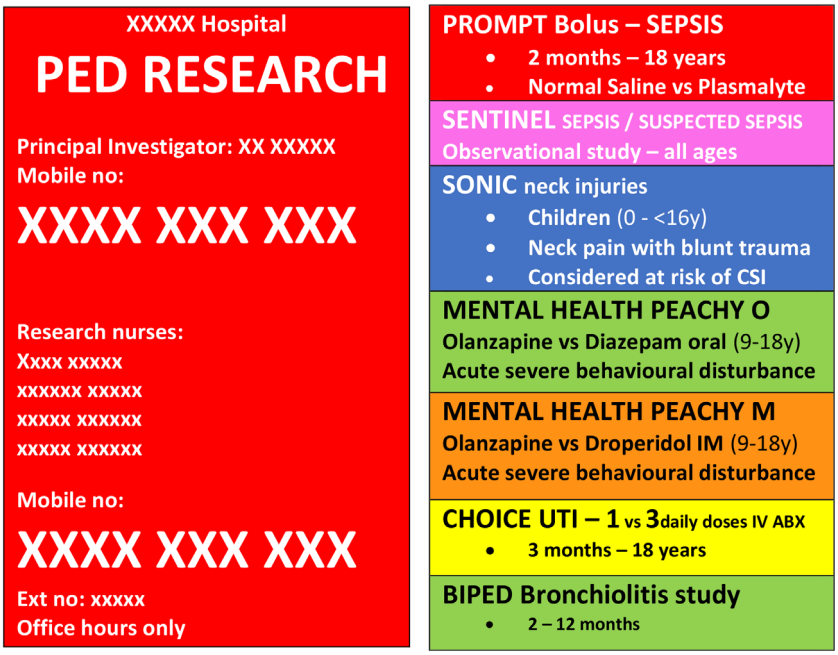

Figure 4. *Lanyard cards provide a quick reminder.*

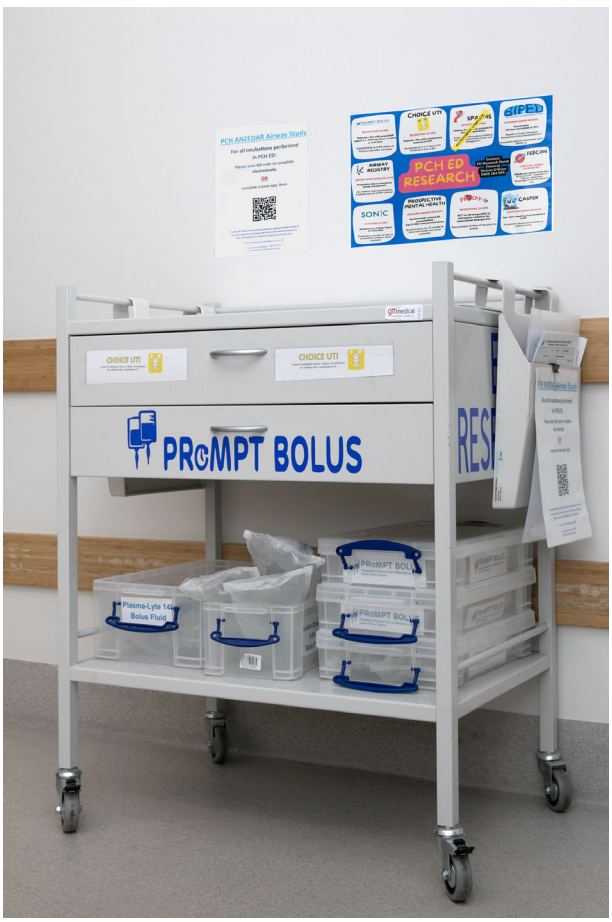

Figure 5. *Research study trolley has everything prepared and ready.*

be shared and emphasised when recruiting, using succinct and accurate study terms for the participants and ED clinicians. Use of scripts to support telephone follow-up to obtain consent can also be helpful (Fig. 1).

Regular communication with other sites participating in a research project is also critical. A collaborative environment that has regular team meetings, sharing of study progress, ideas and promotional materials, tricks and tips can contribute to team members feeling valued, supported and appreciated by the central research team.

Engaging and supporting staff

Engagement of senior clinicians and departmental heads to champion research initiatives and foster a research culture will create awareness and buy-in within departments. Appointment of study champions among regular staff was identified as one method to increase awareness of a study[8] and facilitate recruitment, particularly when the research team are not able to be present at all times. Incentives for recruitment and acknowledgement of contributions, even if just small appreciations like coffee vouchers, are well received and promote uptake and involvement in a fun and rewarding way. Team collaboration and opportunistic, short, interactive education sessions to improve the understanding of research objectives, methodology and outcomes will contribute to efficient recruitment and collection of high-quality data. Linking research involvement as both a learning platform and career advancement opportunity can lead to volunteers assisting with champion roles and data entry opportunities. In Australia and New Zealand, having Aboriginal/Torres Strait Islanders or Māori personnel to support staff culturally is advantageous.

The development, planning and implementation of key education strategies for ED research is crucial (see Table 1). This ensures informed decision-making for recruitment eligibility, risk mitigation and adherence to study protocols, and promotes team efficiency and high-quality data collection.

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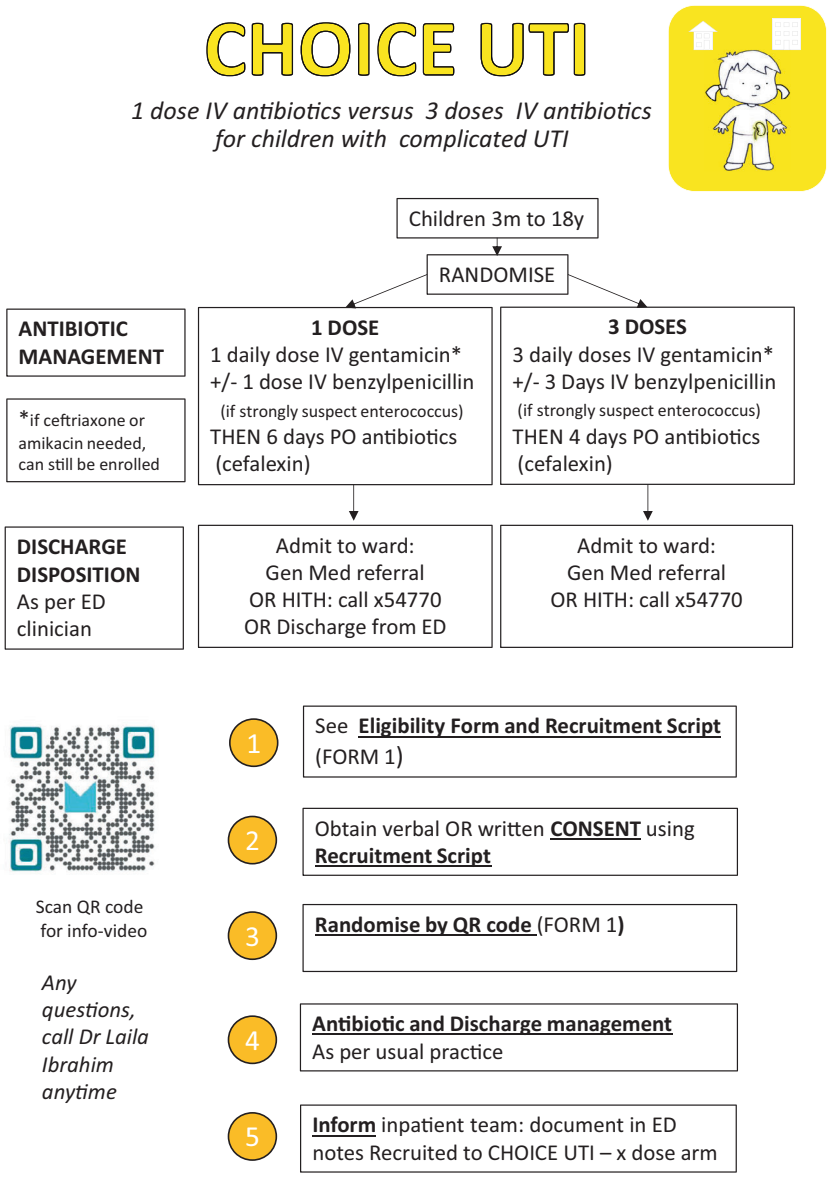

Figure 6. *Flow charts are a quick guide to study process.*

Recruiting participants in research

Recruiting participants is integral to the success of any study. Recruitment can be particularly challenging in the ED setting with distressed children and stressed families. There is no magic bullet to solve the recruitment challenge, but strategies to optimise positive recruitment in the ED setting can include the following:

1. The research team engaging with the child's clinician prior to approaching the family. This ensures appropriateness for inclusion in the study and provides an opportunity to understand the child and family's current situation e.g. shared care custody, other family stressors. Additionally, this clinician–research team interaction will positively influence team relationships and knowledge of current studies being undertaken in the ED.
2. Ensuring the first interaction research staff have with children and families is the best interaction possible. Appropriate timing of the initial interaction, ensuring research staff are knowledgeable and confident in discussing the study and demonstrating a positivity to research in the ED is critical in getting families on board. Making a cup of tea for a tired parent, getting some activities for a child, or completing a set of observations on a child while chatting with a family goes a long way in developing rapport – both with the family and the ED team.
3. Allowing adequate time for families/children to read the participant information sheet, consent and assent forms is important. Having these available in multiple languages ensures complete understanding of the study and what being involved means and entails. This is critical to improve equity in who is taking part in research, reducing study withdrawals or lost to follow-up, while improving generalisability of study findings. Having a short, interactive study video to watch can be a helpful tool or a visual flip chart (see Fig. 7). Different studies will require different strategies, for example, where it is time critical to enrol *versus* a study where the family can enrol and consent later.
4. Ensuring ample opportunity for questions to be asked and discussion to occur is imperative prior to a family consenting to be part of a study. Encouraging a parent to ring their partner or an extended family member to discuss the study, and offering to chat with these people may be beneficial.
5. Being culturally aware and sensitive, and prioritising engagement from Indigenous families to reduce both health inequity and inequality. If Indigenous groups are to be specifically singled out for research recruitment, this will likely require specific ethical and local governance preparation.

Engaging with Indigenous participants

Globally, Indigenous rights are being increasingly recognised. Māori and Aboriginal and Torres Strait Islanders

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Figure 7. *Visual aids such as flip charts can be utilised to assist families understand study concepts.*

are the Indigenous people of Aotearoa New Zealand and Australia, respectively. Ensuring equitable opportunity for Indigenous children and families to engage in research is critical for elimination of health disparities and improving health outcomes.

Barriers to Indigenous people engaging in research have previously been linked to lack of access, distrust or unfamiliarity with research, and issues with research materials.[9] Additionally, common facilitators to Indigenous people engaging in research included partnership and relationship building, culturally appropriate study design, employing Indigenous staff, targeted recruitment techniques and appropriate study materials.

The PREDICT research coordinators identified the following strategies for engaging with Indigenous families in both Australia and New Zealand:

- Having a respectful understanding of both your own and others' culture.
- Work alongside Indigenous group advisors during all stages of the research design to enrolment. Ensuring all studies are reviewed by appropriate Indigenous groups prior to commencing (e.g. local Māori approval in New Zealand studies ensures researchers meet requirements of the *Te Tiriti o Waitangi* and Tikanga Best Practice).[10]
- Correct pronunciation of names – check with the family first if uncertain.
- Allowing time for discussion with family members or an elder.
- Ethnic diversity within the research team may make families feel more comfortable in discussing research, asking questions and participating.
- Having information available in appropriate languages such as Te Reo Māori.[10] Where this is not possible (e.g. multiple dialects in Aboriginal communities) having pictorial resources can be helpful (Fig. 7).
- Ensuring resources are made available in the study budget to reduce inequity (e.g. data top-up cards when a study requires families to make contact via phone, vouchers for petrol/food to cover costs).

Australia – Aboriginal and Torres Strait Islander considerations

For research involving Aboriginal and Torres Strait Islander Peoples, some Health Research Ethics Committees have specialist expertise while others may require an additional ethics review of these projects. Dedicated Aboriginal Health Ethics Committees and the National Health and Medical Research Council (NHMRC) play a pivotal role to ensure research involving Aboriginal and Torres Strait Islander communities aligns with cultural sensitivities and community needs. The NHMRC guidelines for Ethical conduct in research with Aboriginal and Torres Strait Islander Peoples and communities provide a set of principles to ensure research is safe, respectful, responsible, high quality and beneficial to Aboriginal and Torres Strait Islander people and communities.[11,12] These guidelines emphasise actions such as empowering Indigenous leadership, employing Indigenous staff, nurturing community partnerships and establishing Indigenous health research ethics committees. Researchers seeking NHMRC funding must adhere to these guidelines as part of their funding agreement.

Aotearoa New Zealand – Māori considerations

In Aotearoa New Zealand, Pae Ora (Healthy Futures Act 2022) provides national policy and guidelines for working with Māori with the vision that healthcare will provide excellent, culturally safe care to Māori, in an environment where Māori patients, whānau (family) and staff feel valued, and where leaders actively seek to eliminate inequities.[13] Additionally, guidelines are available for health researchers undertaking clinical research involving Māori participants on issues relevant to Māori health, whether projects focus solely on Māori or as part of a wider population being studied.[10]

The Aotearoa Manaaki Mana strategy, recently launched by the Australasian College of Emergency Medicine (ACEM), offers guidance at an individual ED level to embed Pae Ora (excellence in emergency care for Māori, whānau and staff).[14] Our aspiration is to include both Pae Ora and Manaaki Mana principles and visions in all clinical research, ensuring we work alongside Māori from study inception to delivery of results. Making sure research is culturally safe and inclusive is critical for optimising Māori as active participants in research across Aotearoa New Zealand EDs.

Conclusion

Conducting research within an ED presents unique challenges due to the urgent care required, resource limitations and the delicate balance between critical patient needs and

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ethical recruitment practices. To address these complexities, fostering a robust research culture among ED teams and broader staff is crucial. Strong leadership, customised research education and tailored tools can effectively support our teams.

Recognising clinician contributions and celebrating shared successes also strengthens relationships and sustains engagement in research. Additionally, addressing the ongoing challenge of high staff turnover requires integration into the broader research plan. Furthermore, adopting a culturally informed and sensitive recruitment approach developed with consumers can enhance patient and family participation.

By ensuring that research staff are well informed and are adequately prepared, we can positively impact the research experience to deliver high-quality research outcomes.

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Author contributions

SO, CW and LH conceptualised the paper. All authors revised the manuscript for important intellectual content and gave final approval of the version to be published. All authors contributed to the article and approved the submitted version.

Competing interests

None declared.

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