

Practitioner experiences of developing and implementing two UK ED-based hospital violence intervention programmes: a process evaluation

Simon Moore , ^{1,2} Jordan Van Godwin , ³ Graham Moore, ^{3,4} Megan Hamilton David O'Reilly 5,6

Handling editor Christopher Humphries

► Additional supplemental material is published online only. To view, please visit the journal online (https://doi. org/10.1136/emermed-2024-214333)

¹School of Dentistry, Cardiff University, Cardiff, UK ²Security, Crime & Intelligence Innovation Institute, Cardiff University, Cardiff, UK ³DECIPHer, Cardiff University, Cardiff, UK ⁴Cardiff University, Cardiff, UK ⁵Cardiff Liver Unit, Cardiff and Vale NHS Trust, Cardiff, UK ⁶Academic Department of Military Surgery and Trauma, Defence Medical Services, Birmingham, UK

Correspondence to Professor Simon Moore; mooresc2@cardiff.ac.uk

Received 21 June 2024 Accepted 21 January 2025

Check for updates

@ Author(s) (or their employer(s)) 2025. Re-use permitted under CC BY-NC. No commercial re-use. See rights and permissions. Published by BMJ Group.

To cite: Moore S. Van Godwin J, Moore G, et al. Emerg Med J Epub ahead of print: [please include Day Month Year]. doi:10.1136/ emermed-2024-214333

BMJ Group

ABSTRACT

Background EDs can address modifiable risks of patients attending due to violence. Hospital-based violence intervention programmes (HVIPs) can reduce patients' exposure to violence but can place additional burdens on staff. We explored practitioners' views on two nurse-led HVIPs' design and delivery, response to patient need, engagement with ED health professionals, adaptation to local context and analysed documents relevant to these objectives.

Methods This was a qualitative process evaluation, from January to September 2023, of two nurse-led HVIPs implemented in a major trauma centre and a large urban hospital in the UK. Interview participants (N=49) were involved with the commission and implementation of the HVIPs, or worked within the broader violence-prevention ecology. We gathered perspectives on intervention implementation and undertook documentary analysis on local and national policies, and guidance relating to HVIPs development, implementation and delivery (N=46). Documentary data were subject to thematic and content analyses, interview data to thematic analysis. **Results** HVIPs were developed in response to a perceived under-provision of services for patients attending EDs due to violence. The HVIP nurses had access to clinical records facilitating the identification of eligible patients. They provided patient-centred care, addressing needs through referrals into health and community-based services. Over 60% of eligible patients engaged. The nurses were seen as credible champions working towards a minimally burdensome service that supported and trained ED staff. Embedding HVIPs into usual care took time and was limited by the perceived short-term nature of the intervention.

Conclusion The implementation of nurse-led HVIPs enables access to clinical records, facilitating patient engagement, and can provide an additional service aligned to usual emergency care, supporting both patients and ED staff.

Pre-Registration The protocol was pre-registered (ISRCTN 15286575; March 13, 2023) and published before data collection was complete.

INTRODUCTION

Violence is a global public health concern. It has an enduring impact on individuals and communities, and increases the risk of behavioural, mental and physical health problems.² Hospital-based violence intervention programmes (HVIPs), typically based in EDs, have emerged to support patients attending

WHAT IS ALREADY KNOWN ON THIS TOPIC

- ⇒ EDs are uniquely placed to identify and address modifiable risks of patients attending with violence-related injury.
- ⇒ Hospital-based violence intervention programmes (HVIPs) are aimed at this problem but can face barriers by burdening staff with additional responsibilities and poor patient engagement.
- ⇒ No study has yet considered what is required for HVIPs successful implementation.

WHAT THIS STUDY ADDS

- ⇒ This qualitative study of two nurse-led HVIPs found they engaged with and trained ED staff, facilitating referral of patients into the intervention.
- ⇒ HVIP nurses also identified patients through hospital and community records.
- ⇒ Patients were referred into services within healthcare or to third sector providers according to need.
- ⇒ The HVIP nurses were described as credible champions and further apprised staff of their patients progress after their engagement in the intervention.

HOW THIS STUDY MIGHT AFFECT RESEARCH, **PRACTICE OR POLICY**

- ⇒ These findings inform efforts to successfully embed violence prevention into emergency care
- ⇒ Subsequent research should consider patient experiences and perceptions of violence prevention in ED, as well as HVIP effectiveness and cost-effectiveness.

ED due to violence.³⁻⁵ They determine patients' modifiable risks and vulnerabilities and either support patients directly or refer into services able to provide support with the aim of preventing re-attendance. The evidence for HVIP effectiveness is variable.^{6 7} What evidence is available is mainly from North America, suggesting that HVIPs may reduce revictimisation and patient involvement in the criminal justice system.⁶ However, little is known about the acceptability and feasibility





Original research

of generalising HVIPs to other jurisdictions and healthcare systems. $^{6\,7}$

The UK Government has placed requirements on the police, local government and the NHS to collaborate on joint violence prevention strategies.^{8 9} In response, a nurse-led HVIP, the Violence Prevention Team (VPT), was established in Cardiff ED, an urban hospital and major trauma centre, and later replicated in Swansea ED, an urban emergency hospital. However, broader research into the introduction of additional health promotion activities in ED suggested that the VPTs may face notable barriers to implementation. A review of effective health promotion in urgent and emergency care found time constraints, lack of training and that health promotion was not the priority for emergency care. 10 The implementation of alcohol screening and brief intervention in ED was hampered by low participation rates of ED staff. ¹¹ Moreover, a qualitative study of a health intervention in ED for adolescents suggested that successful implementation is more likely when interventions work with the grain of usual practice to overcome constraints on capacity. 12 The novelty of the VPTs' implementation in two different hospitals therefore provided a unique opportunity to investigate the ways in which they adapted to local needs within and across the two contexts, and address gaps in what is known about HVIP implementation in ED. We therefore conducted a process evaluation to explore the implementation, mechanisms and contextual influences associated with these HVIPs' development. 13 The aim was to contribute an understanding on how these VPTs function, and the wider contextual factors associated with their design, delivery and fit within the ED, learnings that would benefit other locations seeking to implement similar services.

METHODS

We undertook semistructured interviews between January and September 2023 with 49 representatives of organisations professionally associated with the interventions or situated within the broader violence-prevention ecologies (Cardiff n=22, Swansea n=19 and regional or national groups that had perspectives relevant to both sites n=8). We analysed 46 documents associated with the interventions. NVivo V.12 was used throughout for qualitative analyses. 14 Descriptive analysis of routine ED data 15 and VPT data was also undertaken. A core set of initial questions was co-produced with stakeholders (online supplemental 1, table 1), public and patient involvement and engagement (PPIE) groups and initial reading of transcripts and wider literature. This provided the initial codes. JVG and MH then analysed five transcripts separately, adding new codes as required. Results were then compared to create a coding system for the remaining transcripts and documents. JVG reviewed all coding. JVG and MH met regularly throughout the analysis process to discuss coding and theme generation. All participants provided written informed consent before interview. The protocol was preregistered (ISRCTN 15286575; 13 March 2023) and published before data collection was complete (see online supplemental 2, table 2 and supplemental 3 for further details). 16

Setting and design

Both VPTs were delivered by nurses, the Cardiff VPT began in November 2019 and January 2022 in Swansea. The programmes were originally commissioned to identify and support patients 11–25 years of age; the upper age limit was dropped, aligning the VPTs with the NHS ethos for inclusive healthcare. Patients who were victims of domestic or sexual assault or abuse were managed by existing Independent Domestic Violence Advocates

(IDVAs), Independent Sexual Violence Advocates (ISVAs) or referred into the Sexual Assault Referral Clinics (SARCs) and were ineligible for VPT support, as were patients under 11 years of age whose management would be initially undertaken by paediatric emergency care physicians. The VPTs assessed patients for any modifiable risks or vulnerabilities, provided advice and support, signposted and supported patients' referral into other services (the intervention is described in online supplemental 3).

Patients would be initially identified as eligible for the intervention, typically by the ED clinical team or through intervention nurses investigating patient records. Eligible patients who agreed to engage with the VPT would be asked about their circumstances and consent (initially a consent form would be signed, this became verbal consent later). Depending on patient circumstances, they would receive ongoing support, referral into other services or provided with advice.

Documents

Documents included awareness raising and training materials, referral forms, job descriptions, monitoring reports, patient assessment forms, and ED and hospital standard operation procedures (online supplemental 4, table 3). Documents were identified through consultation with commissioners and intervention staff, and during interviews with participants. Documents were subjected to thematic and content analysis, with repeated reading of the data to construct codes and categories. An initial framework was drafted by the research team, developed from the initial engagement with the interview transcripts, the research literature and the core concepts of process evaluation. ^{17 18}

Interviews

Participants (N=49) were purposively recruited from the VPTs, the hospitals in which they were situated and the broader violenceprevention ecologies across both locations (online supplemental 5, table 4). We stratified by sector: Law Enforcement (LF), Healthcare Professionals (HPs), Regional and National Organisations (RNOs) and practitioners working to ensure patients are safe and receive the support required typically as IDVA, ISVA or in the SARC. The latter are typically nurses and referred to as safeguarding practitioners (SPs) in the UK. Bespoke semistructured interview guides that sought to situate VPTs within the broader violence-prevention ecology and describe the interrelationship between organisations were iteratively developed in response to the analysis of interview data and the initial research questions. Questions were adjusted and tailored depending on the group the participant represented. Each interview was led by IVG, an experienced qualitative researcher and interviewer. Interviews were supported by a less experienced researcher, MH. Consistency across interviews was ensured by using semistructured topic guides.

Analysis

Thematic analysis ¹⁹ was conducted to identify, analyse and report patterns to enable both the structured and the unstructured aspects of the evaluation while building on the formative VPT programme model and theory of change. ²⁰ An iterative coding framework was drafted by the research team, built on initial reading of the transcripts, the literature and the core concepts of process evaluation, as outlined in the Medical Research Council guidance, as well as the emerging frameworks for adapting interventions in new contexts. ^{17 18} Two researchers analysed five interview transcripts that covered different participant groups using

these initial codes, comparing and contrasting the applicability of the codes and subsequently making additions to the coding framework based on their own perspectives. Documentary analysis was led by JVG with support from MH, JVG and MH initially coded a sample of documents (n=5). Documents were subjected to a thematic and content analysis, an initial framework was drafted by the research team and developed from the initial engagement with the interview transcripts, the research literature and the core concepts of process evaluation. New insights from the documentation were developed through repeated reading of the data to construct further codes and categories. IVG and MH met regularly throughout the analysis process to discuss and refine of codes and thematic areas. The subsequent coding framework was shared with the wider research team, and consensus was reached on its use for the remaining coding process. Reflecting the nature of thematic analysis, ¹⁹ throughout the data collection and coding phase, ideas, insights and themes were also generated within and between the codes. Following coding, two researchers discussed their perspectives on overarching and underpinning themes within the coding framework. One researcher brought this together into a document alongside illustrative quotes of these themes. The themes and exemplars were shared with the wider research team (SCM, GM, DO'R) and consensus was reached. One researcher (IVG) brought this together into a document with illustrative quotes. The themes and exemplars were again shared with the wider team to confirm applicability.

Research team

The research team consisted of four researchers and one general surgeon (DO'R). JVG led the data collection and analysis, supported by MH, neither of whom were familiar with the participants before the start of data collection. JVG has expertise in several public health and health research areas including public health teams, schools and workplaces. He has conducted process and service evaluations, developed theories of change and logic models, and employed qualitative research methods with adults, adolescents and children.

Public and patient involvement and engagement

The programme of work, of which this study is a part of, engaged with a number of PPIE groups, including those with lived and living experience, and young people aged 14–25 years, who fed into the study design (online supplemental 6). Ongoing engagement will enable dissemination of results to them.

RESULTS

Since implementation and until February 2024, the VPTs have contacted 4698 patients; 3437 (2649 male) in Cardiff and 1261 (649 male) in Swansea, of which 66.3% engaged with the interventions. Of these, 97.0% were referred onwards, including 23.1% who received ongoing support from the VPTs. Referrals were made to numerous agencies, including the police, multiagency teams, specialties with healthcare (eg, mental health services, general practitioners), third sector organisations (eg, homelessness support, trauma-informed victim support). The mean age of all patients was 28.7 years (min 11.1 years, max 89.2 years). The vulnerabilities identified in patients included alcohol and substance misuse, and conditions including mental health, homelessness, neurodevelopmental conditions, involvement with the criminal justice system, risk of radicalisation or gang involvement, and child criminal and sexual exploitation.

Setup and implementation

The design and commission of both VPTs was in response to an identified under-provision of services addressing serious violence. Nurses were preferred by intervention developers over third sector volunteers, as the latter:

Don't know your patients and I think it's always looking at your patients first and not at service criteria. (VPT HP, nurse)

However, in reviewing documentation, we noted the funders' narrow framing of VPT purpose: they should work with stab victims aged under 25 years of age, and reduce re-attendance rates and violence-related homicides through exploiting teachable moments— times when patients, in their time of crisis, are receptive to unplanned interventions. Following implementation, the nurses, with the approval of commissioners, broadened their remit to include patients not otherwise engaged with services, including those who were exposed to trafficking, criminal and sexual exploitation, knife crime, and involved with drug gangs. The rationale within the documents was that patients with more complex needs would be unlikely to benefit from a brief intervention but could be identified in ED and referred into other services. An approach described as exploiting a 'reachable moment.'

Facilitation by nurse-led violence prevention champions and a physical presence in ED

Interviewees described the VPT staff as violence prevention champions, and as influential and credible advocates for, and essential in, establishing the VPTs.

[Y]ou've got somebody who was an [ED] nurse [from the ED] she was working in, who obviously had some credibility amongst her colleagues. (ED HP, physician)

The VPTs were physically located in ED, enabling formal and informal consultations, and engagement:

[T]hey're everywhere, they support the staff nurses, you see people [...] and medics come in and out. (Community HP, nurse)

Identifying eligible patients

A local government policy, Ask and Act,²¹ aimed to improve patient-facing clinical staff's willingness to investigate patients' reason for injury and to ensure patients were safe and receive the support they need should violence or abuse be suspected, and particularly for violence against women, domestic abuse and sexual violence. The VPT nurses had access to patient management systems, including ED, hospital and community clinical records. In addition to encouraging referrals from HPs, VPTs walked the floor, investigating patient management systems (including attendance data and patient notes), and sought to contact all patients suspected of an assault-related attendance as not all patients disclosed exposure to violence under usual care. The perception being that the VPTs increased ascertainment.

[T]hey had 23 assaults on young people over the bank holiday weekend and they wouldn't have been picked up at all. There were a couple of [...] under 18s [...], that were quite serious assaults, and nothing was done about it until the [VPT] went in on Tuesday morning and [had a] good look. (SP)

The demanding ED environment was widely perceived as a barrier

A challenge faced in embedding VPTs into ED concerned demands on emergency care:

Original research

[ED] is horrendously busy, it is constantly packed, we are constantly sending out public information adverts saying stay away. (SP)

This reduced HPs' capacity to complete the VPT referral forms. In response, VPTs sought to minimise the burden on ED staff:

I think there is violence prevention team form to fill out, I tend to just send an email, send a text or something, [or] I'll go and find her. (ED HP, nurse)

Activities to embed VPTs in ED

Initially, there was limited engagement by some HPs, coupled with a general lack of awareness of the newly implemented VPTs. This was exacerbated by the time-limited funding for VPTs.

[They] have short term funding [...], they're not funded as part of an NHS budget, [...] it's just very precarious. (RNO)

The limited funding prevented VPTs from becoming formally embedded in ED standard operating policies. VPTs responded by giving positive feedback to ED staff.

"[VPT staff member] came and spoke and told us about some of the cases that she's had. [H]ow they help support them and then the outcome of that and reiterated about the importance of 'Ask and Act. (ED HP, nurse)

They provided training on how to identify and support patients to staff in ED continuously due to new staff, agency and trainees, rotating through ED. This was perceived as having the unintended consequence of improving activity generally.

'I think one of the by-products of this service is the awareness of staff to issues such as this, so it has a knock-on effect of improving their [...] knowledge for all areas [relevant to vulnerable patients], not just violence prevention. (SP)

However, the implementation of the VPT occurred as collaboration across the VPT, ISVA and IDVAs was improving, and in Cardiff this included these teams' co-location in a single hub situated in ED.

Patient engagement

VPTs sought to engage patients face-to-face, reasoning that doing so increased the likelihood patients would accept support.

Face-to-face is much better, because [...] they're at their vulnerable state, and they're more open to referral to other services for support [...] they can see you, and they can see that you're genuinely listening [...] over the phone, you can't do that. (VPT HP, nurse)

VPT documentation identified the numerous modifiable risks and vulnerabilities they considered.

We do a patient centred approach, so we talk to them about their home lives, their education, what they do in their days, their friendships and then we [...] build a support package from there. (VPT HP, nurse)

For as long as needed,

I know that the VPT health team will continue to engage with the young person [...] for as long as they can, [and] until [a service they have been referred into] is able to pick them up. (SP)

And, if necessary, support the patient's family.

It impacts on all the family. [...] we've had one where a young male had got really nasty facial injuries, and the siblings were upset by it. So, we can refer for them as well, but also the parents. Some of the parents have asked for some support because they're struggling. (VPT HP, nurse)

Not all patients accepted VPT support,

There's certain males who don't like speaking to women and do not regard me as someone who can help them at all. (HP)

If they're homeless or they've been [robbed], they haven't got a mobile phone, you can't get through to them. (VPT HP, nurse)

and other reasons included those who did not want their activities scrutinised. For frequent attenders who did not initially engage, the VPTs repeatedly contacted them to build rapport and gain their trust.

By the second week we were [...] engaging, and by the third week we couldn't shut him up, [...] he was great. But he only trusted me, and it took time then to transition him to the youth worker. (VPT HP, nurse)

Patient referral

Establishing patient referral pathways to agencies outside of the NHS was driven by the knowledge and awareness of VPT staff, mainly built on pre-existing relationships with ED. When there was no pre-existing relationship, VPTs would consult with colleagues, personnel in partner agencies, and community caseworkers, to expand their knowledge and therefore broaden referral opportunities.

We also had to expand [...] our knowledge of the community and [available] resources. [W]e get patients from West Wales, we get them from North Wales, [...] we've had patients from London. [W] e can't just send them back with nothing. (VPT HP, nurse)

VPTs described avoiding repeatedly asking patients for information, as this risked retraumatising them.

[T]he patient is emotional at that point, we don't go in to speak to them but we get the information and we wait until the patient is stable enough to speak to us. We want them to be at their full capacity, we're trying to avoid retraumatising them. (VPT HP, nurse)

With the consent of patients, information would be curated and shared according to agencies' documented requirements, further reducing the risk of retraumatising them.

Data and intelligence

VPTs sought to build a rapport with patients and therefore had opportunities to collect unique data and intelligence, including the location of violence (eg, neighbourhoods, licensed premises, schools), and the conditions contributing to violence (eg, drug gangs, modern day slavery, child criminal and sexual exploitation), which, when anonymised, was of value across the violence-prevention ecology.

I started to get [...] an understanding, of how [VPTs] could drive activity that was a bit more preventative, but also provided an intelligence opportunity and a violence surveillance opportunity, that we couldn't really get elsewhere; [patients] talked to the VPT, they don't talk to police, nursing generally. (LF)

Adaptations

Few differences were observed across the two sites, with Swansea replicating the original model in Cardiff.²⁰ The differences that did emerge were pragmatic and driven by documented variability in ED and hospital processes, and the availability of external services into which their patients could be referred. In this respect, both VPTs demonstrated agility, they were able to respond to changes in healthcare and changes in the nature of violence in their localities.

DISCUSSION

VPTs are situated in complex emergency healthcare systems where change is hard to achieve, they interact with healthcare systems and external organisations. The extent that they become embedded in this broader violence-prevention ecology is driven by the willingness of the VPT nurses to engage with the ED clinical team, having a physical location in ED, by providing support and training to ED staff on an ongoing basis, and having access to ED and community patient records. The VPTs were welcome contributors to the ED response to serious violence.

As part of the clinical team, VPT nurses had access to patients and their clinical records and therefore enhanced the ascertainment of violence-related attendances for patients not willing to disclose under usual care. The VPTs further encouraged HPs to refer into the intervention, building rapport through offering training, informal support and consultations to ED staff. However, like other HVIPs, the VPTs were not a 24 hours and 7 days a week service, 22 limiting opportunities for face-to-face contact with patients. Embedding the VPTs into ED usual care took time and was limited by the perceived short-term nature of the intervention. This was mitigated by the nurse-led VPTs through engagement and the ongoing provision of training to existing and new staff, overcoming previously noted barriers to health promotion interventions in ED. 10-12

Despite being originally designed to focus on 11–25 year olds, the VPTs developed a more inclusive stance and engaged with all patients over 11 years of age. This contrasts with some other HVIPs that restrict patient eligibility, for example, focussing only on young patients. The inclusive and holistic patient-centred care was tailored according to the needs of each patient and further included elements of family engagement and support. Support to patients could be ongoing and involve sharing patient details with other services, potentially reducing the confusion and depersonalisation patients can experience as they transition across services. Moreover, they could also connect with patients on multiple occasions, which likely improved trust between patients and nurses and may increase the likelihood of positive patient outcomes.

Patients' modifiable risks and vulnerabilities went beyond what could be addressed with opportunistic unplanned interventions in teachable moments^{23–25 30}: some patients required long-term support for mental health, alcohol and drug use, homelessness and other vulnerabilities. In consequence, HVIPs held unique intelligence on the circumstances of violence, notable given that over half of all ED violence-related attendances are unknown to law enforcement.³¹ They could therefore contribute to violence prevention activities more broadly offering an understanding of violence though identifying conditions including child criminal and sexual exploitation, and patients at risk of radicalisation. Although not envisioned as a multidisciplinary team,^{25 26 28} the VPTs developed multidisciplinary collaborations.

Limitations

This evaluation was wholly concerned with professionals' views on the development and implementation of the VPTs. Patient perspectives and outcomes were not considered but could have offered additional insights on acceptability. Furthermore, the wider determinants of poor health and violence include unemployment, ²⁵ ²⁸ lack of education, ²⁸ alcohol use, ²² ²⁹ ³² ⁻³⁴ substance abuse, ²² ³⁴ ³⁵ mental health, ²⁹ ³⁶ ³⁷ post traumatic stress disorder ²⁹ and others. Data concerning patients' involvement with other services were not considered, which may have provided insights into the extent that VPT activity met patient need and whether

upstream provision might have curtailed ED attendance. We invited participants to be collaboratively involved with the analysis of their transcripts, but none took up the offer.

CONCLUSIONS

The significant workload on ED suggests environments in which there is an increased dissonance between pressure to meet performance targets and awareness of opportunities to provide care for patients who are psychosocially vulnerable and likely to reattend. These nurse-led HVIPs improved the ascertainment, engagement and referral for eligible patients, while providing welcome feedback to ED HPs on patient outcomes. Coupled with the continual support and engagement with HPs, it appears HVIPs benefit both patients and ED staff. Their patient-centred and inclusive approach means a diversity of patient vulnerabilities and modifiable risks can be identified and supported. Nurse-led HVIPs are therefore fledgling services that offer the prospect of tangible improvements to patient care. Attending to the core components necessary to embed effective HVIPs, and the adjustments needed to adapt to local circumstances, will enable implementation and therefore improve opportunities for emergency healthcare to contribute to violence prevention.

Acknowledgements We would like to thank the young people (decipher.uk. net/public-health-improvement-research-networks-phirns/alpha/ and https://peeractioncollective.com/) who engaged with this project to provide their thoughts and experiences, their involvement improved researchers understanding. We further acknowledge the insights through broader engagement, including those with lived experience from the Wallich and Welsh Women's Aid.

Contributors SM, GM, JVG and MH had full access to the study data, take responsibility for the integrity of the data and the accuracy of the data analysis. SM was guarantor. Concept and design: SM, GM, JVG. Acquisition, analysis or interpretation of data: SM, GM, JVG, MH, DO'R. Drafting of the manuscript: All authors. Critical review of the manuscript for important intellectual content: All authors. Statistical analysis: SM. Obtained funding: SM, GM, JVG, DO'R. Administrative, technical or material support: JVG, MH. Supervision: SM, GM, DO'R. The Youth Endowment Fund was initially involved in work defining study research questions, thereafter they had no role in the design and conduct of the study; collection, management, analysis, and interpretation of the data; preparation, review, or approval of the manuscript; and decision to submit the manuscript for publication.

Funding Funded by the Youth Endowment Fund (LGR1-EVAL-032211). The authors further acknowledge support from the Emergency Department Violence Intervention Programme Evaluation (EDVIPE), funded by the National Institute for Health Research, Public Health Research Board (NIHR134055). The views expressed are those of the authors and not necessarily those of the Youth Endowment Fund, National Institute for Health Research, or the Department of Health and Social Care. The work was also supported by DECIPHer, which is funded by Welsh Government through Health and Care Research Wales.

Disclaimer The views expressed are those of the authors and not necessarily those of the Youth Endowment Fund, National Institute for Health Research or the Department of Health and Social Care.

Competing interests SM reported receiving grants from the Medical Research Council, National Institute for Health Research, Office of the South Wales Police and Crime Commissioners Office, outside the submitted work. JVG reported receiving a grant from the Office of the South Wales Police and Crime Commissioners Office, outside the submitted work. GM is the Chair of the National Institute for Health and Care Research Public Health Research funding committee, and reported receiving grants from the Healthcare Research Wales, National Institute for Health Research, Office of the South Wales Police and Crime Commissioners Office, Economic and Social Research Council, outside the submitted work.

Patient and public involvement Patients and/or the public were involved in the design, or conduct, or reporting or dissemination plans of this research. Refer to the Methods section for further details.

Patient consent for publication Not applicable.

Ethics approval This study involves human participants and was approved by Cardiff University School of Dentistry Research Ethics Committee (DSREC/2213a). Participants gave informed consent to participate in the study before taking part.

Provenance and peer review Not commissioned; externally peer reviewed.

Original research

Data availability statement No data are available. Due to the sensitive nature of the study topic and risk of disclosure, transcripts will not be shared. Codebooks and topic quides will be shared on request.

Supplemental material This content has been supplied by the author(s). It has not been vetted by BMJ Publishing Group Limited (BMJ) and may not have been peer-reviewed. Any opinions or recommendations discussed are solely those of the author(s) and are not endorsed by BMJ. BMJ disclaims all liability and responsibility arising from any reliance placed on the content. Where the content includes any translated material, BMJ does not warrant the accuracy and reliability of the translations (including but not limited to local regulations, clinical guidelines, terminology, drug names and drug dosages), and is not responsible for any error and/or omissions arising from translation and adaptation or otherwise.

Open access This is an open access article distributed in accordance with the Creative Commons Attribution Non Commercial (CC BY-NC 4.0) license, which permits others to distribute, remix, adapt, build upon this work non-commercially, and license their derivative works on different terms, provided the original work is properly cited, appropriate credit is given, any changes made indicated, and the use is non-commercial. See: http://creativecommons.org/licenses/by-nc/4.0/.

ORCID iDs

Simon Moore http://orcid.org/0000-0001-5495-4705 Jordan Van Godwin http://orcid.org/0000-0001-5288-6614 Megan Hamilton http://orcid.org/0009-0002-0850-8231 David O'Reilly http://orcid.org/0000-0001-9816-8765

REFERENCES

- 1 Krug EG, Dahlberg LL, Mercy JA. World report on violence and health, 2002. Available: https://iris.who.int/bitstream/handle/10665/42495/9241545615_eng.pdf
- 2 Mock CN, Nugent R, Kobusingye O. Injury prevention and environmental health: key messages from disease control priorities. In: The International Bank for Reconstruction and Development / The World Bank. 2017. Available: https://hdl.handle.net/10986/ 28576
- 3 Purtle J, Dicker R, Cooper C, et al. Hospital-based violence intervention programs save lives and money. *J Trauma Acute Care Surg* 2013;75:331–3.
- 4 Cunningham R, Knox L, Fein J, et al. Before and after the trauma bay: the prevention of violent injury among youth. Ann Emerg Med 2009;53:490–500.
- 5 Kaufman E, Rising K, Wiebe DJ, et al. Recurrent violent injury: magnitude, risk factors, and opportunities for intervention from a statewide analysis. Am J Emerg Med 2016;34:1823–30.
- 6 Brice JM, Boyle AA. Are ED-based violence intervention programmes effective in reducing revictimisation and perpetration in victims of violence? A systematic review. *Emerg Med J* 2020;37:489–95.
- 7 Webster DW, Richardson J, Meyerson N, et al. Research on the Effects of Hospital-Based Violence Intervention Programs: Observations and Recommendations. Ann Am Acad Pol Soc Sci 2022;704:137–57.
- 8 Bath R. A whole-system multi-agency approach to serious violence prevention: a resource for local system leaders in england. Public Health England. Available: https:// assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_ data/file/862794/multi-agency_approach_to_serious_violence_prevention.pdf [Accessed 5 Jun 2024].
- 9 Serious violence strategy. HM Government, 2024. Available: https://assets.publishing.service.gov.uk/media/5acb21d140f0b64fed0afd55/serious-violence-strategy.pdf
- 10 Schofield B, Rolfe U, McClean S, et al. What are the barriers and facilitators to effective health promotion in urgent and emergency care? A systematic review. BMC Emerg Med 2022;22:95.
- 11 Drummond C, Deluca P, Coulton S, et al. The effectiveness of alcohol screening and brief intervention in emergency departments: a multicentre pragmatic cluster randomized controlled trial. PLoS ONE 2014;9:e99463.
- 12 Rutland E, Bugaighis M, Cruz AT, et al. Facilitators to implementing preventive health interventions for adolescents in the emergency department: A multicenter qualitative analysis. Acad Emerg Med 2024.
- 13 Moore GF, Audrey S, Barker M, et al. Process evaluation of complex interventions: Medical Research Council guidance. BMJ 2015;350:h1258.
- 14 Jackson K, Bazeley P. Qualitative data analysis with nvivo. 2019.

- 15 Shepherd JP, Moore SC, Long A, et al. Association Between COVID-19 Lockdown Measures and Emergency Department Visits for Violence-Related Injuries in Cardiff, Wales. JAMA 2021;325:885–7.
- 16 Van Godwin J, Moore G, O'Reilly D, et al. Hospital-based violence prevention programmes in South Wales Emergency Departments: A process evaluation protocol. PLoS ONE 2023;18:e0293086.
- 17 Movsisyan A, Arnold L, Evans R, et al. Adapting evidence-informed complex population health interventions for new contexts: a systematic review of guidance. Implement Sci 2019:14:105.
- 18 Moore G, Campbell M, Copeland L, et al. Adapting interventions to new contexts-the ADAPT guidance. BMJ 2021;374:n1679.
- 19 Braun V, Clarke V. Reflecting on reflexive thematic analysis. Qualitative Research in Sport, Exercise and Health 2019;11:589–97.
- 20 Newbury A. A service evaluation of the delivery and implementation of a hospital-based violence prevention team within the university hospital of wales. Available: https://www.violencepreventionwales.co.uk/cms-assets/research/A-Service-Evaluation-of-the-Delivery-and-Implementation-of-a-Hospital-Based-Violence-Prevention-Team-within-the-University-Ho.pdf [accessed 5 Jun 2024]
- 21 Welsh Government. Delivery of "ask and act". In: The Role of the Frontline Practitioner. 2024. Available: https://www.gov.wales/sites/default/files/publications/ 2019-05/ask-and-act-role-frontline-practitioner.pdf
- 22 Walton MA, Chermack ST, Shope JT, et al. Effects of a brief intervention for reducing violence and alcohol misuse among adolescents: a randomized controlled trial. JAMA 2010;304:527–35.
- 23 Cheng TL, Haynie D, Brenner R, et al. Effectiveness of a mentor-implemented, violence prevention intervention for assault-injured youths presenting to the emergency department: results of a randomized trial. *Pediatrics* 2008;122:938–46.
- 24 Cheng TL, Wright JL, Markakis D, et al. Randomized trial of a case management program for assault-injured youth: impact on service utilization and risk for reinjury. Pediatr Emerg Care 2008;24:130–6.
- 25 Cooper C, Eslinger DM, Stolley PD. Hospital-based violence intervention programs work. J Trauma 2006;61:534–7.
- 26 Lumba-Brown A, Batek M, Choi P, et al. Mentoring Pediatric Victims of Interpersonal Violence Reduces Recidivism. J Interpers Violence 2020;35:4262–75.
- 27 Jones IR, Ahmed N, Catty J, et al. Illness careers and continuity of care in mental health services: A qualitative study of service users and carers. Soc Sci Med 2009:69:632–9.
- 28 Aboutanos MB, Jordan A, Cohen R, et al. Brief violence interventions with community case management services are effective for high-risk trauma patients. J Trauma 2011;71:228–36.
- 29 Zatzick D, Russo J, Lord SP, et al. Collaborative care intervention targeting violence risk behaviors, substance use, and posttraumatic stress and depressive symptoms in injured adolescents: a randomized clinical trial. JAMA Pediatr 2014;168:532–9.
- 30 Johnson SB, Bradshaw CP, Wright JL, et al. Characterizing the teachable moment: is an emergency department visit a teachable moment for intervention among assaultinjured youth and their parents? Pediatr Emerg Care 2007;23:553–9.
- 31 Wu DT, Moore JC, Bowen DA, et al. Proportion of Violent Injuries Unreported to Law Enforcement. *JAMA Intern Med* 2019;179:111–2.
- 32 Cunningham RM, Chermack ST, Zimmerman MA, et al. Brief motivational interviewing intervention for peer violence and alcohol use in teens: one-year follow-up. Pediatrics 2012;129:1083–90
- 33 Cunningham RM, Walton MA, Goldstein A, et al. Three-month follow-up of brief computerized and therapist interventions for alcohol and violence among teens. Acad Emerg Med 2009;16:1193–207.
- 34 Snider CE, Jiang D, Logsetty S, et al. Feasibility and efficacy of a hospital-based violence intervention program on reducing repeat violent injury in youth: a randomized control trial. CJEM 2020;22:313–20.
- 35 Choo EK, Zlotnick C, Strong DR, et al. BSAFER: A Web-based intervention for drug use and intimate partner violence demonstrates feasibility and acceptability among women in the emergency department. Subst Abus 2016;37:441–9.
- 36 Ranney ML, Goldstick J, Eisman A, et al. Effects of a brief ED-based alcohol and violence intervention on depressive symptoms. *Gen Hosp Psychiatry* 2017;46:44–8.
- 37 Ranney ML, Pittman SK, Dunsiger S, et al. Emergency department text messaging for adolescent violence and depression prevention: A pilot randomized controlled trial. Psychol Serv 2018;15:419–28.