EVALUATION REPORT

Hospital Navigators: multisite evaluation of practices

Feasibility study

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About the Youth Endowment Fund

The Youth Endowment Fund (YEF) is a charity with a mission that matters. We exist to prevent children and young people becoming involved in violence. We do this by finding out what works and building a movement to put this knowledge into practice.

Children and young people at risk of becoming involved in violence deserve services that give them the best chance of a positive future. To make sure that happens, we'll fund promising projects and then use the very best evaluation to find out what works. Just as we benefit from robust trials in medicine, young people deserve support grounded in the evidence. We'll build that knowledge through our various grant rounds and funding activity.

Just as important is understanding children and young people's lives. Through our Youth Advisory Board and national network of peer researchers, we'll ensure they influence our work and we understand and are addressing their needs. But none of this will make a difference if all we do is produce reports that stay on a shelf.

Together, we need to look at the evidence, agree what works and then build a movement to make sure that young people get the very best support possible. Our strategy sets out how we'll do this. At its heart, it says that we will fund good work, find what works and work for change. You can read it <u>here</u>.

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Contents

Executive Summary	4
Introduction	6
Methods	16
Theory of Change workshops and development	20
Workshops on applying behavioural insights and an introduction to evaluation	20
Interviews with Navigators	21
On-site observations	22
Support to establish data collection processes	23
Review of programme-level data and exploration of administrative datasets	23
Findings	26
Objective 1: Develop a Theory of Change within and across sites	26
Objective 2: Examine implementation relative to the Theory of Change and refinements	support 34
Objective 3: Assess the feasibility of evaluating the impact of (i) variations in p and (ii) the overall programme	oractice, 39
Conclusion	46
Evaluator judgement of evaluation feasibility	46
Interpretation	50
Future research	51
References	54
Appendices	56

About the Evaluator

This project was evaluated by a team from the Behavioural Insights Team (BIT).

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Executive Summary

The project



Hospital Navigators are trained individuals, based in A&E departments, who talk to at-risk patients and provide support that aims to prevent their involvement in future violence. Using a short conversation, they aim to build rapport with patients and signpost to services that could support them after they leave hospital. If the patient consents, Navigators will then follow up with them via phone calls or in-person meetings to encourage take-up of support services. In this project, they targeted patients primarily aged between 11 and 25 who entered A&E with injuries resulting from interpersonal violence, self-harm or substance abuse, as well as those identified as having wider vulnerabilities, such as homelessness. The model recognises that admission to hospital may provide a 'teachable moment' to reach people at risk of involvement in violence. In this project, the Thames Valley Violence Reduction Unit (VRU) commissioned voluntary sector organisations to deliver Navigators (supported by paid coordinators), compared to previous Navigator interventions that used only paid staff.

The YEF and Thames Valley VRU funded a feasibility study of the five Hospital Navigator programmes, and the study had three objectives: to develop a Theory of Change (ToC) describing the programme's intended activities and pathways to intended outcomes, both within each site and across all five hospitals; to examine the implementation of the programmes and suggest refinement where necessary; and to assess the feasibility of evaluating the impact of variations used in the programme and of the overall programme itself. These objectives were pursued using ToC workshops, interviews with six volunteer Navigators, three site observations, a review of programme data and workshops with delivery partners. The study started in July 2021 and finished in April 2022.

Key conclusions

All five sites were able to articulate a Theory of Change. While there were some differences in the site-specific details of each ToC, the overall principles, target patients, activities, mechanisms and outputs had enough consistency to develop a coherent ToC for the overall Hospital Navigators programme.

The evaluator did not find significant deviations from the Theories of Change in the implementation of the programme in each site. They also observed a willingness from young people to engage in conversations. The initial engagement of young people was, therefore, not identified as a key barrier to implementation; a greater challenge was building and maintaining the adoption of the programme by all NHS staff involved in referral.

The length and intensity of Hospital Navigators' support is short and light-touch compared to other interventions that tackle the complex challenges these patients face. In isolation, Hospital Navigator conversations are unlikely to be enough to improve outcomes. A key component of the programme is signposting to other services and groups that provide deeper support, which could drive long-term impact. The evaluator found mixed evidence regarding the take-up of this longer-term support, and the data to examine this were not available.

Hospital readmission data could be used as an outcome measure when evaluating Navigator programmes. These data can be collected for programme participants and those not involved, while it is also relevant to all recipients of Navigator support, regardless of their reasons for referral. Young people admitted to hospital when Navigators are not on site could provide a relatively strong comparison group that would allow for the comparison of an in-person, in-hospital Navigators intervention with an out-of-hours Navigators service.

The sample size used in this project is insufficient to conduct a fully powered trial. However, it could be sufficient to provide evidence of promise.

Interpretation

All sites delivering the Hospital Navigators programme articulated a ToC. While there were some differences in the site-specific details of each ToC, the overall principles, target patients, activities, mechanisms and outputs had enough consistency to develop a coherent ToC for the overall programme. This ToC differed from previous Navigator programmes in that it aimed to provide support to a wider range of patients, such as those admitted with self-harm- or drug and alcohol-related admissions, rather than only violence. This broader group of

programme recipients meant that across all sites, rather than violence reduction, a more useful overall outcome was reducing readmissions to A&E. Other common features of the ToC included a consistent process employed by Navigators. In each site, Navigators would wait for referral by NHS staff before checking whether patients met programme eligibility, making an initial engagement to build rapport, signposting to other services and then leaving contact details for follow-up. All sites also used the same approach to data management and the collection of outcome and demographic data and signposted young people to similar services (such as housing help, extracurricular programmes, addiction support and careers guidance). In addition, each site would offer tailored signposting to suit their patients (e.g. directing students to university support offerings), and all sites attempted to follow up after the initial engagement. These consistent programme activities aimed to achieve impact via consistent mechanisms, such as increasing patients' knowledge of support services and offering practical and moral support, while the moderating factors (such as the support of NHS staff) were also largely consistent.

The evaluator did not find significant deviations from the Theories of Change in the implementation of the programme in each site. The target group, referral process, engagement between the patient and Navigator, and follow-up were all perceived to be delivered in line with the initial Theories of Change developed at each hospital. The evaluator also observed a willingness on the part of young people to engage with Navigators; in observations, all patients flagged by NHS staff agreed to speak to the Navigators, and in some cases this may have been encouraged by the presence of parents who seemed particularly supportive of the intervention. A greater challenge to the intervention was the consistent adoption of the programme by NHS staff responsible for referring young people. This varied by site, with some sites demonstrating good relationships with hospitals, which converted into higher referral rates. These relationships required maintenance, and hospital staff engagement and awareness was particularly challenging when Navigators were off site and out-of-hours referrals took place; without a visible Navigator present, these referrals may be less likely.

The evaluator found that the length and intensity of Hospital Navigators' support is short and light-touch compared to other interventions that aim to tackle the complex challenges these patients face. In isolation, these could be insufficient to improve outcomes. A key component of the programme is signposting to other services and groups that provide deeper support, which could support in driving long-term impact. Evaluator conversations with Navigators suggested that some patients received this longer-term support; however, sites also noted the difficulty in engaging some patients after discharge, even for a single follow-up phone call.

Hospital readmission data could be used as an outcome measure when evaluating Navigator programmes. Not only is this a desirable outcome (as it reduces burden on the NHS), but such data can also be collected for programme participants and those not involved, allowing for the measurement of a control group (although the feasibility of this was not tested in the present study).

The evaluator does not believe that evaluating variations in practice between Navigator programmes could produce a robust evaluation; rather, they recommend evaluating the in-hospital Navigators programme compared to an out-of-hours service. Providing that the target group is precisely defined, young people admitted to hospital when Navigators are not on site provide a relatively strong comparison group that would allow for the comparison of an in-person, in-hospital Navigators intervention with an out-of-hours service. Given that the in-hospital service is most costly (particularly in terms of volunteers' time), this comparison would provide a useful evaluation of the programme.

The sample size used in this project is insufficient to conduct a fully powered trial. However, it could be sufficient to provide evidence of promise.

The YEF has opted not to currently fund a further evaluation of Hospital Navigators. In part, this is due to the lighttouch nature of the initial intervention, which is unlikely to impact outcomes, and the limited evidence on how engaged young people were after being discharged.

Introduction

Background

'Hospital violence Navigator' ('Navigator') interventions use 'teachable moments' of hospital attendance for violent injury to engage people at risk of further involvement in violence. The nature of support is tailored to the individual, and practice varies between delivery organisations, but fundamentally it is a trauma-informed, community-based approach to support individuals to avoid future involvement in violence. Organisational variation notwithstanding, a Navigator:

- recruits the patient as an intervention client;
- undertakes a brief motivational interview with the client;
- arranges for follow-up contact post-discharge;
- provides pastoral and social support to the client in the community; and
- signposts towards relevant support services where necessary.

Interventions similar in setting (emergency departments [Eds]), delivery model (Navigators), support offered (signposting and mentoring) and based on the same psychological behaviour change gateway (teachable moments) exist. However, variation in interventions, outcomes and effects means there are gaps in understanding whether such programmes are effective, particularly for young people.

The evidence base for hospital-based interventions in the UK is limited, in spite of enthusiastic adoption by the sector and public health advocates. UK analyses to date are primarily descriptions of service uptake with an adult population, and a 2020 report noted no empirical data had been gathered (to date) for violence-related outcomes generated by such interventions (Wortley and Hagell, 2020).¹ Process data from Scotland and England reported that 60–75% of contacted patients engage with Navigators (Goodall et al., 2017; NPC Associates, 2017).

The experience of injury from violence may present a 'teachable moment' in a person's life, during which their amenability to health-based intervention is elevated (Putle et al., 2014; McBride et al., 2003). That said, definitions and effectiveness of teachable moments for youth violence prevention in EDs vary, and most work in EDs relates to drug/alcohol prevention (Wortley and Hagell, 2020). Again, this project would help to better understand teachable moments as a window for behavioural change.

¹ There is general evidence on the effectiveness of hospital-based violence prevention initiatives (HBVPI), but there are methodological limitations in that body of work (see Purtle et al., 2014; Snider and Lee, 2009; Floyd et al., 2021). Economic evaluations suggest that these programs could produce substantial cost savings for health care and criminal justice systems (Sharp et al., 2014).

Mentoring schemes share many common elements with Navigator schemes, and there is evidence they may prevent repeat victimisation, but this depends on the timing, approach and mentor-mentee relationship (Tolan et al., 2013). Mentoring schemes focusing on peer relations have been found to increase youth delinquency (Gottfredson, 1987; McCord, 2003), and some studies note that prevention programmes for young people were not as effective as 'care as usual' (De Vries et al., 2018) or were ineffective (Axford et al., 2021). Framing Navigators as mentors needs further research, as the nature of the relationship is not clear-cut and depends on levels of engagement. Again, this is a unique opportunity to understand that component of Navigator programmes in multiple locations.

Planned intervention

The Thames Valley Violence Reduction Unit (VRU) commissioned voluntary sector organisations to deliver Navigator interventions in five hospitals ('sites'). A unique feature of the Navigator programme in Thames Valley is that it is volunteer-staffed (in all previous Navigator programmes, to our knowledge, the Navigators have been paid staff). Each site will be partnered with a delivery partner (DP), who has a designated Navigator Coordinator. This individual is paid by the DP. However, while the Navigator Coordinator is likely to participate in some Navigator shifts at their partner site, it is not expected they will deliver all (or even most) of these shifts. Instead, the Navigators will be volunteers, recruited locally. DPs (and specifically the Navigator Coordinator) are responsible for recruiting, training and organising volunteers to attend Navigator shifts at the hospital. This shift to using volunteers has two big implications for the Navigator programme. First, and most clearly, it reduces the costs of delivering such a programme, increasing the chance that it can be scaled. Second, there is the potential for it to affect the effectiveness of the programme. This could be a negative effect, as volunteers are likely to do fewer shifts and build up less experience than professional Navigators. Young people may also meet a Navigator in the hospital but be passed to the Navigator Coordinator for follow-up, reducing continuity. However, it could also have a positive effect if the knowledge that someone is volunteering their time makes young people more willing to engage with the Navigators or more trusting of them.

The hospitals, delivery partners and their pre-intervention estimates of eligible populations (including under-18s, as YEF's population of interest) are summarised in Table 1. Note that these figures are for violence-related injuries but do not include other reasons for hospital admission that were subsequently added to the target groups (particularly self-harm, defined as violence by the WHO²).

² Using the WHO <u>definition of violence</u>.

Table 1: Eligible population estimates, by site

Site	Violence-related <i>attendances</i> per year (under 18s) ^A	Violence-related <i>admissions</i> per year (under 18s) ^A	Estimated one-year reattendance (under 18s) ^B
А	1,540 (262)	77 (13)	92 (16)
В	2,660 (452)	133 (23)	160 (27)
С	2,380 (404)	119 (20)	143 (24)
D	5,460 (928)	273 (46)	328 (56)
E	1,400 (238)	70 (12)	84 (14)
Total	13,440 (2,284)	673 (114)	807 (137)

Table notes

A: Based on ONS data on sharp-object related admissions for assault at hospitals in Thames Valley area.

B: Calculations based on 10 years of A&E attendance data (n = 53,536) at a large urban hospital (one-year reattendance for violent injury among children (< 18yrs) was 6%; proportion of attendees < 18 years was 17%).

Research objectives

The feasibility stage has three primary objectives, as set out in the Feasibility Study Plan:³

- 1. **Theory of Change (ToC):** Develop a ToC describing the hospital Navigator programme's intended activities and pathways to target outcomes, within and across sites.
- 2. **Implementation:** Examine implementation relative to the ToC within and across sites, and support refinements based on any gaps identified or opportunities to apply behavioural insights.
- 3. **Evaluation feasibility:** Assess the feasibility of evaluating the impact of i) variations in practices used in the hospital Navigator programme and ii) the overall programme.

The rationale for each objective is presented below:

Objective 1: Develop a Theory of Change within and across sites

A ToC is often the first step in intervention development/evaluation as it sets out steps in the change process and provides the basis for explaining 'how' change will come about through action(s) (De Silva et al., 2014). The ToC for the Thames Valley Navigator programme cannot be inferred from existing literature, and there are several factors to consider in how the

³ Available at: <u>https://youthendowmentfund.org.uk/wp-content/uploads/2021/12/Multi-site-trial-Feasibility-study-plan-Hospital-Navigators.pdf</u>

intervention is framed for clients.⁴ The ToC developed together with the VRU and DPs will serve as the foundation for examining implementation, identifying possible refinements to programme design and delivery, and designing the impact evaluation.

Objective 2: Examine implementation relative to the Theory of Change and recommend refinements

Based on the theoretical model of how the intervention is intended to be delivered captured in the ToC, we will assess implementation in order to identify deviations from the ToC and challenges in programme delivery. The lessons generated will be addressed through recommendations on possible programme refinements to better adhere to the ToC or revisions to the ToC to reflect the realities of implementation.

The research activities will examine multiple dimensions of programme implementation, which may include:

- 1. *Fidelity/adherence*: To what extent do implementers adhere to the intended delivery model?
- 2. Dosage: How much of the intended intervention has been delivered?
- 3. *Quality*: How well are the different components of the intervention being delivered?
- 4. *Responsiveness*: To what extent do targeted young people take up and engage with the intervention?
- 5. Adaptation: Are changes needed to accommodate context and population need?

Objective 3: Assess the feasibility of evaluating the impact of i) variations in practice and ii) the overall programme

The feasibility assessment will consider the potential to evaluate (i) both variations in practice (i.e. do differences in how the Navigator programme is delivered between sites or Navigators or recipients affect outcomes?) and (ii) the overall programme (i.e. does the Navigator programme as a whole affect outcomes?). The assessment will be guided by the 'success criteria' outlined in this feasibility study plan (see next section) and will shape the recommendation on whether and how to proceed with the evaluation in the next phase of the project.

⁴ The suitability and consequences of targeting victims of violence as suitable candidates for violence interventions need to be understood because they could play an important role in how the nature of the intervention is communicated, how rapport is established and, directly or indirectly, how responsibility for being a victim is attributed. In the hospital-based brief interventions or motivational interviewing interventions that have demonstrated efficacy and/or effectiveness, the intervention mechanism has been that an individual's health behaviour (e.g. alcohol consumption) has led directly to their hospitalisation, i.e. they caused the harm to themselves. In a hospital-based violence intervention, in provocative language regarded by some as 'victim blaming', the patient's behaviour could be seen to have 'precipitated' their injury. Given, also, that these other brief interventions were, almost exclusively, evaluated with an adult population, extrapolation of the components of effective behaviour change to an adolescent population is not advisable.

Success criteria

Recommendations on the approach for the evaluation phase of the project will be based on the criteria below for each feasibility phase objective. These criteria were jointly agreed as part of the original project proposal.

Objective 1: Develop a Theory of Change within and across sites

Criteria 1.1: Site-level Theory of Change – a Theory of Change can be articulated for each site. A ToC can be articulated for each site based on the VRU and DP's shared vision of the programme, the activities implemented, the outcomes targeted and the mechanisms envisioned to influence these outcomes. There should be a pathway between Navigator action(s) and the stated outcomes that is supported by a priori evidence of behaviour change.

Criteria 1.2: Programme-level Theory of Change – a coherent programme-level (cross-site) Theory of Change can be established.

A coherent overall (cross-site) ToC can be established based on shared features and vision for the programme, including a common target outcome for the programme across sites (e.g. reattendance at an emergency department within 12 months).

Objective 2: Examine implementation relative to the Theory of Change and support refinements

Criteria 2.1: Fidelity and adaptation – the programme is implemented as envisioned in the site-level Theory of Change, or the Theory of Change can be adapted to reflect adjustments in delivery.

The delivery of the programme at each site adheres to the intended model described in the ToC and is adapted based on specific context and adjustment needs identified.

Criteria 2.2: Responsiveness – *take-up is sufficient to enable testing and refinement of implementation.*

There is a sufficient number of young people meeting the target criteria admitted at the hospital sites and/or referred to the programme based on the current recruitment strategy, and a sufficient number among them who take up the services offered as part of the programme, where sufficient is defined as enough to test and refine implementation.

Criteria 2.3: Dosage and quality – *dosage and quality of delivery activities are sufficient to expect a potential impact on target outcomes.*

The services offered and taken up by programme participants are sufficient in terms of quantity and quality to expect a potential impact on target outcomes.

Objective 3: Assess the feasibility of evaluating the impact of i) variations in practice and ii) the overall programme

Criteria 3.1: Data collection – there are processes in place to collect, store and share reliable data for at least one relevant and feasible outcome measure.

There are processes in place to collect, store and share reliable data related to outcome and other indicators of interest for the evaluation. We anticipate these data will fall into three categories:

- a. **Navigator programme monitoring data**: The VRUs Service Level Agreements (SLAs) already ask DPs to collect monitoring data on (a) Navigators (including recruitment, vetting, training and shift assignment) and (b) young people engaged in the programme (including referrals received, signposting to services and young people's engagement with programmes services). Further relevant data could be related to the take-up and continued engagement by young people of services they were referred to by Navigators and are provided by external partners. In addition to monitoring and supporting implementation, the collection of these data can provide relevant process indicators for the evaluation related to reach, participation, completion or dropout.
- b. Administrative data: We are aiming to measure the impact of the Navigators programme primarily on real-world outcomes. These could be accessed through (i) hospital data (e.g. violence-related hospital attendances, admissions and reattendance) and/or (ii) police records and other datasets that the VRU has access to (e.g. appearing in police records as perpetrators, as victims or witnesses to violence or crime or as missing persons).
- c. **Bespoke data collection**: Data for additional indicators relevant to the evaluation may be collected through mechanisms designed specifically for the evaluation in collaboration with DPs.

Criteria 3.2: Practices – at least one practice is identified that can feasibly be varied within each delivery site and for which an effect on the target outcome(s) can be theorised. Among the possible Navigator practices that could be varied and evaluated at each site, at least one practice can feasibly be randomised to enable an evaluation. A theoretical case can be made that this practice could have an impact on the outcome measure(s) selected for the programme.

Criteria 3.3: Comparison group – data are available and accessible, or can be collected, on young people (or other units of analysis) that could provide a comparison group for a QED. Data that can be used to form a valid comparison group exist and are accessible, or can be collected, thus enabling a possible evaluation of the impact of the overall programme through a QED. This might be focused on individual-level data or could relate to different analysis units.

Criteria 3.4: Sample size – there is a sufficiently large potential sample of programme participants to provide some evidence of promise of the practices evaluated (i.e. direction and magnitude of the effect).

An important objective of this project is to test the feasibility of the methods proposed to evaluate variations in practice across multiple delivery sites. This involves understanding the type of sample size that may be required to detect a statistically significant effect of i) specific practices and ii) the overall programme on the outcome measures selected, given other plausible assumptions for parameters affecting statistical power. Power calculations outlining these considerations will thus be provided. However, meeting the required sample size will not be a strict criterion for evaluation feasibility, and if it is not met, we would analyse the direction and magnitude of any effect observed to gauge the promise of impact of the interventions evaluated.

Ethical review

The activities conducted as part of this feasibility assessment can be considered as service evaluation under NHS Health Research Authority guidelines.^{5, 6} As such, they did not require approval from the National Research and Ethics Advisors' Panel (NREAP). However, the observations required registration with the R&D departments of local NHS Trusts as part of this service evaluation.

We received consent to conduct observations as part of a service evaluation from four out of five sites (all except Site D). For the fifth site, the request was not rejected but passed around several different internal teams without a clear response. We therefore did not conduct an observation at that site.

Evaluation activities (post-feasibility stage) would require NREAP approval. The original intention was to begin this application within this feasibility stage. However, when the project was paused in November 2021, it was also agreed that we would pause any work on the ethics application until a decision was made on whether to proceed to the evaluation activities.

Data protection

BIT conducts all research with a privacy-by-design approach to protect and maintain the privacy and security of research participants' and research subjects' data. BIT has implemented appropriate measures to ensure secure storage and handling of personal data, including obtaining a Cyber Essentials Plus certification and developing a comprehensive Data

⁵ See tool <u>http://www.hra-decisiontools.org.uk/research/docs/definingresearchtable_oct2017-1.pdf</u>.

⁶ Per these guidelines, the proposed activities for the feasibility stage would be considered service evaluation in that i) they do not involve randomising individuals into different groups; ii) they do not involve changing the treatment individuals receive; iii) the overall aim of this phase is to understand what the standard service involves; and iv) there will only be minor changes to the delivery of the service, if any.

Handling Protocol. We are registered with the UK ICO under the terms of the Data Protection Act 2018 and have an appointed Data Protection Officer.

For data collected conducted by BIT through interviews and observations, BIT acted as the data controller with 'legitimate interests' as the lawful basis for processing personal data. Data were stored in secure folders only accessible to the project team and BIT's Data Protection Officer. Where data were being transferred, from the researcher to the core BIT team, this was done through encrypted emails.

All interviewees were sent a privacy statement ahead of the interview, which included: what personal data we are collecting, the lawful basis for processing their personal data, our purposes for processing their personal data, our retention periods for that personal data and who it will be shared with. At the start of each interview, the researcher would briefly outline the aims of the project and what data were being used for, give the interviewee a chance to ask questions about the privacy notice and check that the interviewee understood their rights. Interviewees were asked for verbal consent to participate in the interviews and for a recording to be made.

For observations, the purpose of the observation was shared via email with the Navigator Coordinator arranging the observation ahead of time. The privacy statement setting out the data handling approach in more detail was available to all those involved in the observations if they wished to see it.

The privacy statement used for the interviews and observations can be found in the Annex. All participants were able to contact BIT to request that their data be removed.

We had expected to set up a separate data sharing agreement with the VRU for the purpose of sharing and viewing administrative data collected through the programme. However, this was not completed within the project timeframe.⁷ As a result, the VRU shared aggregated or heavily redacted data with us to avoid sharing any personal data. This enabled us to provide summary statistics that are generally sufficient for this report but also meant that we could not look at relationships between multiple variables or more detailed comments on reasons for admission and referral.

Project team/stakeholders

All roles are BIT staff unless otherwise specified.

Team member	Role	Responsibilities

⁷ The data sharing agreement was going to be set up once the VIEWS data platform was up and running, as this would reflect the data format for the remainder of the project. However, there were significant delays to the set-up of VIEWS, which was only completed shortly before the end of the feasibility stage, meaning that it was not possible to get a data sharing agreement in place in time.

Dr Alex Sutherland	Principal investigator	Overall strategic direction and management of strategic relationships. Ultimate responsibility for project delivery and quality
Lucy Makinson	Project manager and delivery point of contact	Day-to-day project management and point of contact for YEF, with an emphasis on delivery of interventions/BI
Clément Bisserbe	Research quality assurance	Management of evaluation requirements and oversight of research activities
Bridie Murphy	Project staff (delivery) and behavioural insights	Point of contact for frontline delivery staff, fieldwork and delivery-partner liaison
Lilli Wagstaff James Farrington	Research advisor	Quantitative researchers supporting statistical elements
Kim Bohling Will Cook	Evaluation advisor and quality assurance	Evaluation specific knowledge/expertise and quality assurance at key steps in the project
Professor lain Brennan	Expert advisor; University of Hull	Provide insights and guidance for the team based on previous experience in VRUs and navigation programmes
Roxana Stuparu	Phase 1 field researcher (freelance)	On-site qualitative fieldworker

The intervention was overseen and delivered by the following individuals.

Team member	Role	Responsibilities
Kelly Reed	Communities & Partnerships – Hospital Navigator Project Lead	Strategic coordination of the hospital Navigator programme with each delivery partner and hospital site
Paul Gretsy	Communities & Partnerships – Strand Lead	Troubleshooting high-level problems within programme delivery
Stan Gilmour	Thames Valley VRU Director	if required
Lewis Prescott- Mayling	Thames Valley DCI Violence Reduction Unit	Key contact for discussions on administrative datasets accessible to VRU

Connection Support	Delivery Partner – The Horton, Banbury, Oxon (Oxford University Hospitals)	
YMCA Milton Keynes	Delivery Partner – Milton Keynes University Hospital	
Starting Point	Delivery Partner – The Royal Berkshire Hospital	Responsible for Navigator programme delivery at respective hospital site
7Roadlight	Delivery Partner – Stoke Mandeville Hospital	
Aik Saath – Together as One	Delivery Partner – Wexham Park Hospital (Slough, Berkshire East)	

Throughout this report, we have referred to sites as Site A–E for anonymity.

Methods

Our approach to this project centred on six core activities:

- 1. ToC workshops and development
- 2. Workshops on applying behavioural insights and an introduction to evaluation
- 3. Interviews with Navigators
- 4. On-site observations
- 5. Support to establish data collection processes
- 6. Review of programme-level data and exploration of administrative datasets

Activities 1-4 were conducted on a site-by-site basis, and participation in each activity is summarised in Table 2. There were initial challenges to delivery in Site E, which meant that there was no Navigator Coordinator in place when the workshops were being delivered, and delivery was only beginning at the end of this project. As a result, very few of the activities involved Site E.

Site	A	В	С	D	E
ToC completed	~	\checkmark	>	>	>
Workshops attended (/3)	3	2	2	2	0
Interviews	4 ⁸	2	1	1	0
Observation	\checkmark	✓	>		

Table 2: Summary of activities, by site

Table 3 summarises each of the research activities and their relationship to the success criteria. The subsequent sections give more detail on each of the research activities.

 $^{^8}$ Three interviews were conducted with two volunteers. One volunteer was interviewed twice – once in 2021 and once towards the end of the project – to understand developments over time. In addition, one interview was conducted with the Navigator Coordinator.

Table 3: Methods overview

Activity	Method/format	Participants/data sources	Analysis method	Criteria
Objective 1: Theory of	f Change			
ToC workshops	Five online workshops with each DP/site moderated by BIT, with an additional check-in call towards the end of the project	DP representatives from each site; NHS representative from corresponding hospital	The information gathered was captured in a ToC template used across all sites, refined through additional conversations and findings from subsequent activities.	1.1
Overall ToC development	Deskwork building on ToC workshops	Consultation with VRU	Common features of the site-specific Theories of Change were identified, along with key differences. These were captured in a diagram that was shared with sites for comment.	1.2
Objective 2: Impleme	ntation			
Workshop on applying behavioural insights	Online workshop with DP representatives from each site, led by BIT	DP representatives from three sites	Ideas on programme design and delivery improvements informed by applications of behavioural frameworks introduced during the workshop were documented and shared with DPs and the VRU.	2.1; 1.1
Interviews with Navigators	Phone interviews (30 minutes) with sample of hospital Navigators recruited through project coordinators	Six volunteer Navigators from four out of five sites. Follow-up interview with one Navigator and an additional interview with a Navigator Coordinator (eight interviews in total).	A consistent interview protocol was used across all interviews, covering the target audience (who was being referred to them); interactions with young people (nature of the conversation, types of signposting); how they understood the outcomes of the Navigator programme; and any challenges they were facing and how those challenges may mediate outcomes. Interview notes were summarised in a coding frame focusing on specific stages in the ToC that could be observed. In addition, the researcher recorded general reflections on areas for improvement. Key insights were discussed with the project lead.	2.1; 2.3

Activity	Method/format	Participants/data sources	Analysis method	Criteria
Objective 2: Impleme	ntation (continued)			
On-site observations and interviews with hospital staff	In-person observations (one to two hours), including informal interviews with Navigators	Three sites observed (a) that had an active programme running at least two months before the end of the project and (b) where we had received service evaluation approval from NHS contacts	The observations focused primarily on the environment around the Navigator and the referral process, with notes recorded in a pro forma for each observation that was informed by the ToC and evaluation objectives. Conversation immediately after the interaction were used to understand the interaction itself, reducing some of the recall and interpretation biases that might occur through the main interviews.	2.1; 2.3
Review of available programme data	Analysis of all programme data and data collection tools provided by the VRU	Data collected by sites on each referral, shared in aggregated form Information on reason for admission and readmittances within a three-month period, provided by hospitals for 10 referrals	Descriptive statistics produced and reviewed for all quantitative indicators, including breakdown by key variables. Data were assessed for consistency with the ToC and sufficiency for evaluation (including conducting power calculations based on the data available).	2.2; 2.3; 3.4
Activity	Method/format	Participants/data sources	Analysis method	Criteria
Objective 3: Evaluation	on feasibility			1
Evaluation workshop	Online workshop with DP representatives from each site, led by BIT	DP representatives from three sites	Reflections from DP representatives pertinent to the feasibility of different evaluation approaches (particularly related to randomisation, outcome data collection and sample size) were documented and considered in the evaluation feasibility assessment.	3.1; 3.2; 3.4
Identification of practice variation ideas and	Online workshop with DP representatives, led by BIT, with deskwork from BIT prior and after	<i>For workshop</i> : DP representatives from two sites	Practices considered were documented throughout the workshop in an online whiteboard and assessed for feasibility and potential impact, drawing on the wider literature.	3.2

randomisation options		<i>For deskwork</i> : discussion with VRU, DPs and providers of data management software used at sites that could be utilised for randomisation		
Support to establish data collection processes	Deskwork (including review of insights generated by previous activities); consultation with VRU and DPs	Discussion with VRU, DPs, hospital staff and providers of data management software used at sites for data collection	Primarily conducted through consultation. A list of suggested outcome and tracking measures was drafted based on the conclusions of earlier activities and shared with the VRU as an example dataset.	3.1
Exploration of administrative datasets for QED	Consultation with VRU	Consultation with VRU on datasets available and their possible uses	A list of potential variables was created.	3.3

Theory of Change workshops and development

Generally, a ToC sets out steps in the change process for an intervention and provides the basis for explaining 'how' change will come about through associated action(s) (De Silva et al, 2014). In our analysis, developing a ToC serves as the foundation for examining implementation, identifying possible refinements to programme design and delivery, and gauging the feasibility of an impact evaluation.

We conducted workshops for each site with the delivery partner and (where possible) a member of the NHS team supporting the programme to jointly develop a ToC for the programme as it was envisioned to be implemented at each site. The focus of these workshops was on defining the key components of the ToC for each site, including the target groups, programme goals and intended outcomes, activities and mechanisms. The conversations were captured in an online whiteboard, developed into a visual model of the programme at each site after the workshop and shared with delivery partners to ensure we had faithfully represented their ideas and comments.

These workshops were conducted in 2021,⁹ when some sites were still developing and testing their programmes. We therefore held follow-up conversations with each site in spring 2022 to check on the progress of their delivery and update their ToC where changes had been made. Theories of Change were shared with sites to ensure they accurately reflected the delivery and objectives of their programme, and any feedback was incorporated into the final versions.

Once the site-specific Theories of Change had been finalised, we were then able to develop a programme-wide ToC that described the unified set of pathways, activities and aims. This was shared with sites at the end of the project.

Workshops on applying behavioural insights and an introduction to evaluation

We conducted three workshops with Navigator Coordinators during the first half of this project addressing behavioural insights, evaluation and idea generation. Each workshop was conducted online over 90 minutes. Navigator Coordinators from each site were invited to each session, and efforts were made to find common times. However, it was not always possible for coordinators to attend every workshop. In addition, Site E was still finalising the programme details and did not attend the workshops. Slides and videos of the sessions were shared with all invitees after the workshop.

Workshop on applying behavioural insights to programme design and delivery: This was the first workshop, designed to introduce delivery partners to behavioural insights and identify

⁹ With the exception of the Site E, which was facing delays in set-up. We conducted their workshop in March 2022 and did not have a separate follow-up call.

possible applications to programme delivery at each site. The workshop introduced participants to BIT's signature methods and tools (including the <u>EAST framework</u>) for improving service delivery. The intention was to equip delivery partners with the skills to codesign variations in practice that could be tested through the evaluation, and initial ideas for these were developed through the workshop. However, it was later decided that a whole-programme evaluation would be both more feasible and informative than evaluating variations in practice.

Evaluation workshop: We led a session introducing delivery partners to evaluation concepts and methods, how they are designed and executed, what insights they can provide and what programme and data conditions they require. This helped to build DP understanding of how the evaluation approach would be decided on and what may be required of them to facilitate an evaluation. The discussions in this workshop, including around the feasibility of different randomisation options, helped us to refine the options being considered through the feasibility assessment.

Identification of practice variation ideas and randomisation options: This workshop was focused on generating ideas to improve delivery of the Navigator programme and possible variations in practice. It was structured around two target behaviours that had emerged as challenges from the ToC workshops:

- 1. Increasing young persons' attendance at the first follow-up meeting post-discharge
- 2. Increasing referrals by NHS staff

For each of the target behaviours, we worked with participants to identify, develop and refine ideas by drawing upon the behavioural science literature, Navigator Coordinators' own experience and BIT's internal expertise developing light-touch interventions. We then assessed each idea on two main criteria: (a) the feasibility of implementing the practice as a randomised trial in each delivery site and (b) the theoretical basis for hypothesising a potential impact of the practice relative to core components of the programme. While the variations of practice were not pursued within the context of this evaluation, anecdotally the sessions provided an opportunity for delivery partners to share best practice and resulted in materials being shared and adapted after the sessions.

Interviews with Navigators

We conducted semi-structured interviews with Navigators to understand the fidelity, dosage and quality of implementation relative to the ToC, understand responsiveness to the programme, and identify similarities and differences in delivery approach and challenges across delivery sites.

Interviews took around 30 minutes and were conducted online. We originally intended to speak to two volunteer Navigators from each site. However, this was adjusted based on feasibility and to focus on the delivery partners with more experience of implementation

(where volunteers could draw on a wider range of examples). For two sites (Sites A and B), we conducted both interviews before the project was paused. In the case of Site A, there were some outstanding questions from these interviews as the programme was still settling at the time. For this reason, we interviewed one of the volunteers again towards the project end and conducted an interview with their Navigator Coordinator. We did not speak to Navigators at Site E as volunteers were only in place shortly before the conclusion of this project.

The interviews primarily focused on how Navigators conduct their role and their interactions with young people. The specific topics covered were: the target audience and referral process (who is being referred to them, how referral happens and the consent process); interactions with young people (nature of the conversation and types of signposting); interactions with NHS staff; how Navigators understand the outcomes of the Navigator programme; and any challenges they are facing and how those challenges might mediate outcomes. These conversations were intended to identify points of alignment and diversion with the ToC and similarities and differences of approach across the delivery partners.

The interview guides and the privacy notices shared with participants can be found in a separate Annex.

On-site observations

To further understand implementation, refine the ToC for each site and identify possible improvements to delivery, we conducted observations at sites. These took place over a couple of hours in a single evening when Navigators were present at the hospitals. Where possible, we tried to select evenings when at least one volunteer was at the hospital, but in the case of Site B, the Navigator Coordinator was the only Navigator that evening.

We considered that observing interactions between Navigators and young people might impact the discussion and, given the vulnerability of the young people involved, carried significant ethical risk. For this reason, the observations primarily focused on the hospital environment, including the visibility of the Navigator programme and the systems in place to support it; interactions between Navigators and NHS staff; the referral process; and any follow-up steps, particularly related to data recording. A pro forma was developed based on the ToC and evaluation objectives and used for each of the evaluations. This can be found in the Annex.

Although we did not observe interactions between the Navigators and young people, researchers conducting the observations were in conversation with the Navigators during the observations and were able to use this time to understand more about the interactions. While this relied on self-reporting, the recency of the interaction and the fact that questions focused on a single interaction (rather than the Navigator's overall experience) should have reduced some of the recall and interpretation biases that might have occurred through the main interviews. However, it did limit our understanding of the young person's experience. For

both the observations and debrief interviews, we did not ask for or record any identifiable data about the young person involved in the interaction.

Observations were approved by NHS teams at each site as part of a service evaluation. Researchers had details of the NHS lead who had approved the evaluation, as well as privacy notices, available for any staff or Navigators who wanted more information.

We were only able to conduct observations at three sites. One site had not approved the service evaluation, while the other did not have volunteers in place for long enough.

Site	А	В	С	D	E
Observed?	>	✓	>		
Navigator interactions during the observation	Two - Woman, 19yo, admitted for mental health and overdose - Boy, 15yo, victim of assault	One - Boy, 13yo, victim of assault	None		

Table 4: Summary of observations

Support to establish data collection processes

We used our ongoing conversations with the VRU, DPs and sites to determine (i) what indicators were most relevant for the evaluation of specific practices and the overall programme and (ii) what indicators could feasibly be accessed or collected. The selection of relevant outcome and implementation indicators was informed in particular by the Theories of Change developed and discussions with the VRU and DPs on which outcomes *they* believed were most appropriate for the Navigator scheme. The selection of feasible indicators was determined by the availability and accessibility of existing data and the feasibility and ease of collecting additional data. This assessment was also informed by conversations with the Thames Valley Together Data Project team at the VRU.

Once we had identified the most promising outcome measures, we continued to consult with the VRU to provide advice on setting up appropriate systems, in particular providing guidance on the measures a data system would be required to track. We attended the onboarding sessions for the chosen data system, VIEWS, to better understand its implementation.

Review of programme-level data and exploration of administrative datasets

In order to assess the scale of the Navigator programme and assess the likely power of an evaluation, we also reviewed available programme data. Our emphasis was on understanding

the number of young people referred to the programme (to estimate power), the age range and reasons for admission (to assess the target group in practice) and their readmittance rates (to estimate the baseline for our outcome measure).

Data were collected through two datasets:

- 1. Data on each individual referred, which was routinely collected by sites. The exact data varied by site but in all cases included the age of the individual referred and the reason for the referral. The original intention was to create a shared data system for all sites so as to collect consistent metrics across all sites. This was in the final stages of being set up when this report was being written. The data that sites had collected themselves were aggregated by the VRU before being shared with us, providing simple breakdowns, such as the number of referrals within a given time period or given age bracket.
- 2. Data on hospital admissions, including the original reason for admission, the number of readmissions over a three-month period and the reason for any readmissions. This was provided by hospitals based on the details of referees that delivery partners sent for checking. Because this checking process was manual and the turnaround times were tight, we only gathered data for 10 referrals for each site. Older referrals were favoured so that the three month follow-up period had ended. This was enough to build a baseline of readmission rates and get a general sense of admission reasons (see Table 7). We were sent a sanitised version, containing the reasons for admission and the readmission rate, but with all personal data removed.

We also had a conversation with data leads within the VRU's Thames Valley Together Data Project team to understand the opportunities available through the data systems they had put in place. In the initial study plan, we had intended to collect these data for some of the Navigator beneficiaries and conduct preliminary analyses of them. However, given that Navigator data were received close to the project end, we were not able to complete this stage.

Table 5: Timeline

Due to site readiness and data availability, evaluation activities were put on pause from the end of November 2021 to March 2022.

Dates	Activity
Objective 1: Theory	y of change
July–Aug 2021	ToC workshops
Aug–Sept 2021	Initial ToC development (site-specific)
Mar–Apr 2022	Follow-up ToC meetings
April 2022	Finalisation of site-specific Theories of Change and development of programme-level ToC
April 2021	Output: Co-designed Theories of Change (programme- and site-level)
Objective 2: Implei	mentation
Aug 2021	Workshop on applying behavioural insights
Aug-Sep 2021	Initial interviews with Navigators (Sites A and B)
Sep–Nov 2021	Application for service evaluation approval
Mar–Apr 2022	Second round interviews with Navigators
April 2022	On-site observations and interviews with hospital staff
April 2022	Review of available programme data
Objective 3: Evalue	ation feasibility
August 2021	Evaluation workshop
August 2021	Workshop to identify practice variation ideas
Aug–Oct 2021/ Mar 2022	Ongoing identification of practice variation ideas and randomisation options
Aug–Nov 2021/ Mar 2022	Support to establish data collection processes
July 2021	Consultation with the Thames Valley Together Data Project to identify potential datasets for QED
Aug-Oct 2021/ Mar 2022	Ongoing exploration of administrative datasets for QED
April 2022	Output: Evaluation feasibility assessment and study plan

Findings

Objective 1: Develop a Theory of Change within and across sites

Criteria **1.1***: Site-level Theory of Change – a Theory of Change can be articulated for each site.*

All sites were able to clearly articulate a ToC. These can be found in a separate Annex. In the next section, we describe their core features in relation to developing the whole-programme ToC.

Criteria **1.2**: *Programme-level Theory of Change* – *a coherent programme-level (cross-site)* Theory of Change *can be established.*

Differences between the Theories of Change and the original Navigator model

Before discussing the similarities and differences between each of the Theories of Change, it is worth noting the ways in which the Theories of Change described by sites differed from the model set out at the start of the project. Most crucially, the Navigator programme was being applied to a much larger target group; it was not only violent injuries that were being referred to the programme but also cases of self-harm and alcohol and drug-related admissions. While the exact target criteria varied by site (and is discussed in more detail below), the fact that it was broader than violent injuries inflicted by others was true across all the sites. On discussing this with sites, it was clear that this was largely a product of admissions – while all sites saw some violent injuries, the numbers were modest, and Navigators' time would not have been used effectively if it was constrained to only supporting admissions with violence-related injuries.

This broader intake impacted, to some extent, the activities undertaken by Navigators and, to a greater extent, the outcomes the programme aimed to achieve. While many sites saw a reduction in violence as a key outcome of the Navigator programme, it was often felt that this did not capture the full range of outcomes because it was not relevant to all young people referred to the Navigators.

Consistent elements of the Theories of Change

As highlighted above, the breadth of reasons a young person might be admitted to the Navigator programme made it difficult to identify a single metric that could capture their range of outcomes. However, we found one metric that both captured this breadth and appeared, in some form, across the Theories of Change: reducing readmissions of young people to EDs. All sites described the importance of reducing the burden on the NHS through the programme, which could be linked back to reducing admissions. Additionally, regardless of the reason an individual was originally admitted, not being readmitted in the future could be taken as an indicator that their situation had improved.

While the five DPs' individual Theories of Change do reflect some differences in delivery approaches, there are several core and consistent, if not standardised, elements of the programme across sites.

Across all sites, there is a consistent process employed by hospital Navigators (who are all volunteers) regarding initial referral and engagement. Navigators at each site will predominantly await referral by NHS staff in the given hospital ward. These staff assess incoming patients to the ward and refer those meeting eligibility criteria to the Navigators, who then make an initial engagement to try and build rapport, signpost to other relevant local and national services and leave contact details for a follow-up session. There is also a standardised approach for out-of-hours referrals: NHS staff are relied upon to identify suitable incoming patients and complete a corresponding referral form to collect patient contact details and permission for future contact to Navigators.

Since the integration of the VIEWS dashboard tool in early 2022, sites are now aligned on data management. Navigators are required to upload referred patients' contact details, reason for hospital admission and demographic information onto the dashboard. This Navigator activity is crucially standardised across sites, and while extra detail can be optionally included by Navigators (in particular, case notes from initial engagement and follow-up sessions), the collection of key outcomes and demographic information for an overall programme impact evaluation can be made mandatory for each DP.

The uniform engagement activity of Navigator teams across sites involves signposting referred patients to relevant local and national services. Service signposting is delivered by all sites to offer young people support services at a crucial moment and inform them about the existence of relevant services going forward. These can then provide a foundation of emotional, practical and potentially financial support, which translate into better health and safety for the individual. We saw a lot of consistency in the types of services being signposted to organisations that help with housing, extracurricular programmes, addiction support and careers guidance. However, the specific services signposted are naturally different between sites: for example, Site E receives a large number of students and therefore frequently signposts to university support offerings, whereas Site C sees cases of domestic abuse and therefore has more signposting to the individual, whose characteristics may be different across sites due to differences in targeting. Navigators also need to consider the availability and quality of local services when signposting.

Furthermore, all sites attempt to follow up after initial engagement in the hospital. During the first follow-up meeting (almost always done via phone call), teams generally attempt to check in on the patient's engagement with signposted services, while establishing trust and gathering more contextual detail about their case. This can then develop into further follow-up calls, a meeting in person or successful termination, where the Navigator team member is

satisfied with the patient's situation and cannot provide further direct help. This process is not fully standardised; at some sites, this is always done by the Navigator Coordinator (Sites A, C and E); for others, the default is for the Navigator who made initial contact to follow up themselves.

Whole programme Theory of Change



Age Lower age bound of 11yo (16+ for one site) There is a general focus on targeting those aged 25 and under, however spare capacity and resources of some sites means adults can be referred. Still, referrals at these broader sites are predominantly11-25yo.

Hospital zones

 All delivery partners cover A&E wards within their hospital (U16 A&E and adult A&E) Some also cover separate pediatric/kids wards.

Reasons for admission

 All sites include: < Injuries from interpersonal violence

< MH-related problems

- < Substance misuse One site reported cases arising from domestic abuse, but this tends to be older patients Hospital staff may refer other patients with vulnerabilities they believe the navigators could address – these are
- taken on a case-by-case basis.

Key terms

· Delivery Partners (DPs): organisations responsible for organising and delivering the navigator programme. · Navigator Coordinator (NC): the paid staff within the delivery partner who are responsible for delivering the programme (one NC per DP) · Navigators: volunteers who attend the hospital and engage with patients. This may include NCs, who sometimes do shifts. • Patients: any patients within the hospital . Young Person (YP): In this context, we mean individuals

who navigators are engaging with. • Sites: the hospitals where the navigator programme is taking place.



Variations between Theories of Change

Sites do not always target the same segments of the population for referral to respective Navigator teams. While there is a general focus among all sites on engaging with young people admitted due to violence-related injuries, the full age and admission criteria are heterogeneous. All sites (except Site E¹⁰) share a common lower age bound of 11 years old for referral, but upper age limits and reasons for admission vary. For example, both Site A and E focus on those aged 25 or under (although exceptions are occasionally made if they receive a referral outside of this). In contrast, Site D has the lowest age cut-off, focusing on under 18s, while Sites B and C include patients in their 30s. For these reasons, certain Navigator teams operate predominantly in adult A&E wards and others in paediatric facilities. Table 6 presents the target group and criteria for each of the sites. A breakdown of actual referral numbers for patients aged 17–25 and 16 and under, by site, can be found in Table 7.

Site	А	В	С	D	E
Target age	11–25	11–35	11+ (rarely over 50)	11–18	16–25
Additional target criteria	 Admissions resulting from: Interpersonal violence Mental health-related problems Substance misuse Criteria may be adapted on a case-by-case basis. 				
Referral	Doctors, nurses or approached by Navigators	By doctors and nurses only			
Engagement	Navigators talk to patients in wards and attempt to build rapport. Navigators signpost to relevant local and national services, as needed.				
Follow-up	Follow-up call from <u>Navigator</u> <u>Coordinator</u> . Offers a meeting and, if qualifying, is directed to organisation's mentoring programmes	Follow-up call from <u>Navigator</u> with option of a meeting and development of an action plan	Follow-up call from <u>Navigator</u> <u>Coordinator</u> . Offers a meeting and option of light-touch mentoring	Follow-up call from <u>Navigator</u> , who offers a meeting	Follow-up call from <u>Navigator</u> <u>Coordinator</u> . Offers a meeting and option of light-touch mentoring

Table 6: Key aspects of each Theory of Change, by site

¹⁰ Site E started implementing quite recently and are currently only in the adult A&E. They intend to expand to younger age groups once the programme is more established.

The variations in admission reasons are driven, in part, by the differing hospital intakes and the different age criteria. While all sites prioritise patients with injuries from interpersonal violence, the rates of this vary substantially and criteria have expanded to ensure Navigators' time is used effectively. Most sites include patients presenting with mental health challenges,¹¹ substance abuse and overdoses although, again, prevalence varies. At Site C, several patients who had been victims of domestic abuse had been referred, but this was not identified by any other sites. This is likely to be because of the higher age cut-off in Site C, as domestic abuse referrals are generally over 30. Varying target groups means the needs and preferences of recipients across sites differ significantly, and therefore the exact nature of Navigator support is not always the same across sites or individual recipients. This is a consideration for the evaluation in terms of treating sites as a single programme, but also for finding a single outcome measure that potentially measures improvement given a diverse range of initial challenges.

The range of Navigator support offerings is another point of variation in programme delivery approaches. As a baseline, Navigator teams at all sites attempt a follow-up call after initial engagement in the hospital. This will generally be an opportunity to check in and identify more services that could support them and is likely to be followed up weeks later to track progress. However, the services that young people are referred to varies. The most notable distinction is that the delivery partner in Site A operates several mentoring programmes through their organisation, and eligible young people will often be referred to these. This places more focus on sustained engagement, which is designed to give the recipient ongoing practical and moral support in achieving their goals. Other sites may refer young people to local mentoring services, but this is less common and will be a transfer of support to the other mentoring organisation. Smaller differences occur based on the types of services available in an area or the focus of the delivery partner. For example, the delivery partner in Site D places greater emphasis on engaging young people in community programmes, compared to sites that have more emphasis on immediate practical needs (such as housing support or career guidance). Differences in the nature of support across sites could make it difficult to precisely attribute the underlying causes of impact at the programme level.

Developing a programme-wide Theory of Change

The programme-wide ToC synthesises the approaches of the underlying delivery partners. The main aspects of this overarching ToC are encoded in the activities, mechanisms, proximal outcomes and key measurable outcomes.

The core activities – Navigator recruitment and management; patient referral; initial engagement; follow-up; data management – are all generally consistent if not standardised across the sites.

¹¹ In Site D, this excludes anyone who is already receiving mental health support through CAMS.

Furthermore, regardless of the target group, these consistent programme activities rely on similar mechanisms to generate impact for the recipient: increasing knowledge of support services and providing tailored recommendations of services and practical and moral support. This is important support for the basis for evaluating the programme as a whole.

The moderating factors for programme impact are consistent across sites. NHS staff are key agents in the referral process, and so the awareness and prioritisation of doctors and nurses will affect the quantity and suitability of referred patients and therefore programme outcomes. The programme may be more effective or engaging depending on recipient demographics and emotional factors (e.g. distress pertaining to their cause of admission). Equally, the approach of Navigator teams (tailored, holistic or relational) heavily moderates the impact of their engagement. Finally, contextual factors such as the availability and quality of external services affect signposting as a channel of support.

The proximal outcomes at the programme-wide ToC are feeling valued by a trusted adult, accessing targeted support services, engaging with community activities and making personal progress towards goals, and these are all targeted by the individual delivery partners. The primary measurable outcomes is clearly reducing readmissions to emergency departments, thus complementing overarching objectives to reduce crime and violence and creating a safer society.

We acknowledge wide heterogeneity in target groups of individual sites, and we resolve this by describing a broad target group in the programme-wide ToC. We note that there is a general focus on targeting young people aged 11–25 years old with violence-related injuries but still covering those admitted with mental health-related problems and substance misuse.

We also acknowledge that there is a distinction between the programme having consistent elements and being delivered consistently. For example, Navigator recruitment and training were all delivered by individual delivery partners based on their own materials. As a result, we would anticipate differences in how the programme was delivered in practice, and this is also reflected in some of the detail within the site-level ToC or in subsequent conversations with delivery partners (as discussed in the previous section). This would pose a challenge to creating standardised protocols, which would likely have to be broad enough to reflect the flexibility in programme delivery.

Conclusion: We were able to develop Theories of Change for each of the delivery partners. However, these pose challenges to the evaluation in two respects. First, there is some variation in delivery approaches by site, e.g. in terms of how follow-up is conducted or the exact target group. Second, there is some variation in how support recipients of a given delivery partner receive support because of the substantial differences in their needs and preferences. On this basis *we do not believe it would be possible to evaluate changes within the programme because there is not enough standardisation of the process to be able to make concrete changes to it.*

However, the overall structure and objectives of the programme were generally consistent enough to develop a clear ToC for the programme across delivery partners. Given that the ambition for this project was to provide an evaluation approach that could be used for multisite projects, where the expectation is that there will be some heterogeneity in delivery across sites, *we believe this provides a strong enough basis for evaluating the programme as a single intervention.* However, there are still outstanding questions about the delivery in practice, which we address in the next sections.

The Theories of Change for each site can be found in a separate Annex

Objective 2: Examine implementation relative to the Theory of Change and support refinements

Criteria 2.1: Fidelity and adaptation – the programme is implemented as envisioned in the site-level Theory of Change, or the Theory of Change can be adapted to reflect adjustments in delivery.

Across the observations and interviews conducted, we found generally high consistency with sites' individual Theories of Change. In particular, we considered the target group, the referral process within the hospital, the engagement between the patient and the Navigator and the follow-up (the latter two were only assessed through interviews as they could not be observed for ethical or practical reasons).

For many sites, the target group evolved over the period of delivery, something we observed in the ToC follow-up calls. For example, the initial interviews with Site A mentioned that attempted suicide and self-harm were not part of the criteria. However, by the later ToC conversations, these had been added to the criteria. Similarly, the age group criteria were expanded across Sites A and C between the early and later ToC conversations. However, we generally found consistency between the ToC conversations, the interviews and the observations. Within the observations, we observed three referrals covering admissions for violence and substance misuse (an overdose) and ranging in age from 12–16 years old. This was consistent with the latest ToC for each of the sites being observed.

In terms of the referral process, in the Theories of Change, nurses and other NHS staff were responsible for identifying patients and referring Navigators to them. This was generally reflected in the interviews and the observations conducted. There were two exceptions to this. First, during the ToC, Site A identified that they had permission to approach patients themselves. This was not observed when we were at the hospital, but it was reflected in interviews with their volunteers. This represents a distinction in Site A's ToC compared to other sites rather than a departure from their stated practice. Second, the Navigator Coordinator from Site C identified one instance in which she had approached a patient at the hospital who was clearly distressed. This was a departure from their ToC, but it was noted as an exception to standard practice and not something the volunteer Navigators were told to do.

We did not observe interactions between patients and Navigators because we were not confident that we could do so without impacting the quality of the interaction, and the benefits at this stage in the process did not seem to outweigh the potential risks. However, across all three interactions while we were present at the hospitals, they took between 5–15 minutes, and the patients' parent(s) were present. One was conducted in the Paediatric Department waiting area, whereas in the other two the Navigator was able to use a cubicle to afford the conversation more privacy.

This is consistent with what we heard during interviews: interactions were generally less than fifteen minutes, unless the patient required a high level of emotional support within the moment; and while Navigators tried to find private spaces where possible (such as an available cubicle), many of the interactions took place within the waiting room. None of this is out of line with the Theories of Change, although we discuss the length of time and location of the discussions in the next section.

Finally, we explored the follow-up process through the interviews. Volunteer Navigators consistently passed on information to the Navigator Coordinator for follow-up, although in interviews conducted towards the start of the programme, some volunteer Navigators were unsure what the next steps were. Navigator Coordinators themselves were clear on the next steps, but we were not able to observe the extent to which these were implemented.

One point of interest is that one site had received some referrals who were prisoners at a nearby prison. They had been brought to the hospital for treatment and referred to the Navigators – consistent with the ToC. However, this does affect post-hospital follow-up, as prisoners cannot take regular phone calls and are not able to engage with many of the support services that might be signposted. This site now includes a question on the referral form to identify whether a patient was brought in by the police or a prison officer so that they can identify (and exclude) patients they cannot follow-up with. However, the Navigator Coordinator for this site, who has previously done work in the prison, is looking at whether it would be possible to get access in order to conduct follow-up meetings within the prison.

As our focus was understanding programme delivery, we were less involved in the recruitment and training of Navigators. However, we noted through our conversations with DPs the wide variety of recruitment strategies used, including reaching out to existing networks, producing recruitment posters and videos, and working with local organisations and universities to identify potential volunteers. We also observed a training session for new volunteers with one DP. This outlined what Navigators could expect on site, addressed safeguarding guidance and process and prompted discussions on how to address challenging situations that arose. Navigators were also directed to a toolkit from the DP's other programmes with activities and conversation prompts, although it was not a requirement to use them. Notably, the training did not proscribe specifics of the interaction, and this was largely left to the judgement of the Navigator.

Criteria 2.2: Responsiveness – *take-up* is sufficient to enable testing and refinement of implementation.

There are two points at which take-up can be assessed:
- 1. Young person take-up of initial Navigator conversation. Once hospital staff identify a patient, they must consent to speak to the Navigator.¹² This is the point at which the young person would be considered to have taken up the intervention and is our primary consideration for this success criteria.
- 2. **Hospital take-up of the programme.** Given that NHS staff identify patients for the programme, the scale of the programme is partly dependent on their willingness and ability to identify suitable patients and pass them on to the Navigators.

Data on (1) are covered more extensively in the next section, which reviews data received from sites. However, there are insights from the interviews and observations and our conversations with Navigator Coordinators throughout this project that shed some light on each of these.

Young person take-up of initial Navigator conversation

In our observations, all the patients flagged by NHS staff agreed to speak to the Navigators. This may have been encouraged by the presence of parents in all cases we observed, who seemed particularly supportive of the Navigators' involvement. In the interviews, having parents present was also indicated as a positive factor that could facilitate conversation. Consistent with what we observed, interviewees did not mention young person take-up as a particular challenge. However, when young people were under the influence of drugs or alcohol, it could be difficult for the Navigators to engage with them.

Hospital take-up of the programme

This was flagged as a challenge faced by delivery partners throughout, although the experiences varied by site and appear to be related to the length of time delivery partners had been operating in hospitals. For example, Sites A and B – the first sites with volunteers in place – reported good relationships with the hospitals, which converted into higher referral rates. This was reflected in our observations, where hospital staff were actively flagging patients to them. However, they also noted that this required regular engagement with hospital staff, particularly because of changing shift patterns and turnover. For example, Site A built strong relationships with some of the junior doctors, but they were rotated in July, requiring them to rebuild the relationships from scratch.

For other delivery partners, awareness among hospital staff was something they had to consistently work on, requiring them to remind staff more regularly while they were on site. We saw some positive evidence of this happening during our observation with Site C, where the doctor in charge introduced the coordinator to the Mental Health Nurse from the hospital. As a result, they shared more information about the Navigator programme and

¹² This is based on the ToC workshops, but we were not able to observe this process during the observations.

passed contact details to arrange a meeting to further discuss on how they could work together.

Hospital staff awareness is primarily a risk to out-of-hours referrals – when Navigators were on site and visible and gave reminders to hospital staff, they generally received referrals where there were eligible patients. Navigators had clear routines for their time on site, for example in terms of key members of staff they would introduce themselves to or the order in which they would circulate the wards.

Where out-of-hours referrals remain a challenge, there is some indication that this might improve over time. This is based on the relationships observed in the more established delivery partners and the fact that experiences have appeared more positive as this project has gone on.

Criteria 2.3: Dosage and quality – dosage and quality of delivery activities are sufficient to expect a potential impact on target outcomes.

We identified two key aspects of dosage and intervention quality that could be considered, which we outline below.

Interaction with Navigators

The engagement between the Navigator and the young person broadly has three possible stages: an initial conversation in the hospital, which generally takes less than fifteen minutes (although there are exceptions); a follow-up call (or possible meeting) often in the following week by the Navigator or coordinator; and longer-term follow-up, which will often be a call, or a short series of calls, in the weeks and months following (some young people may choose to contact Navigator Coordinators more regularly for support). These stages are also outlined in the Theories of Change.

Given the complexity of the challenges this programme seeks to address, it is unlikely that (in isolation) this limited number of interactions will change the outcomes of many in the long term. This is particularly true given that, based on our observations, hospital interactions often take place within a public setting (rather than a private room or cubicle), creating less opportunity to build rapport. Positive outcomes therefore seem most likely for young people with a high level of engagement after hospital attendance, for example those that have regular phone calls and possible face-to-face meetings in the weeks following discharge. We did hear of examples of this happening during conversations with the Navigator Coordinators, but it is not universal. At the other end of the spectrum, sites noted the difficulty in engaging some patients after they had been discharged, even for a single phone call. One site reported just over half had answered the phone, which was reflective of the challenges raised by sites across the board.

Engagement with signposted services

A core component of the Navigator intervention is signposting to additional services. It is therefore not correct to base the estimate of impact solely on the Navigator interaction. During the ToC workshops, delivery partners were clear on the role Navigators play in mediating the relationship to other support services.

There is a huge range of services that Navigators recommend, depending on the site and the needs of the young person, ranging from the practical (including housing support, financial assistance and career guidance) to the socioemotional (such as community activities or mentoring). Many of these services provide more intensive and/or longer-term support than the Navigator programme itself, thus suggesting more opportunity for long-term impact on outcomes. There is therefore opportunity for significant impact by increasing engagement with these services.

Our understanding of engagement with signposted services comes from discussions with Navigator Coordinators, who were able to provide clear examples of where young people had engaged with services. For example, one Navigator, who works with youth offenders, signposted a young person in hospital to the support programme they work with. The Navigator has now been made their designated supporter and regularly works with them. A separate delivery partner has been engaging with one person for seven months, who was originally admitted to hospital as a drug addict, was signposted to drug support services, and has kept-up regularly with the DP and Navigator Coordinator. They have been clean since.

We do not have clear evidence of where young people have not engaged with services. However, it is likely that – just as many young people do not engage with Navigators after discharge – a fair proportion will not follow up with signposted services either. This view was also shared by some of the Navigators we spoke to. However, the impacts on those that do engage could be sufficient to make the programme as a whole effective.

Conclusion: Delivery of the Navigator programme was consistent with the Theories of Change for each site. We also encountered many anecdotal successes from the programme where young people had acted on the advice of Navigators with positive outcomes or received sustained support from signposted services.

However, our observations and interviews also highlighted some challenges faced by the programme. For example, there are varying levels of programme awareness among hospital staff, which affects referrals to Navigators (particularly out of hours). Also, many of the hospital interactions take place in public spaces, which limits the ability to build rapport. It is also clear that not all young people engage with the programme after discharge, either through the Navigators or signposted services, and this is almost certainly critical to have a realistic chance at impact.

There are significant limitations to the dosage of the intervention, which may hamper its effectiveness. However, there is some promise from individuals who do engage with Navigators and services in the longer term to provide some basis for an evaluation.

Objective 3: Assess the feasibility of evaluating the impact of (i) variations in practice and (ii) the overall programme

Having developed the site-level Theories of Change and closely examined implementation of the Navigator programme by the various delivery partners, we find that the lack of a standardised process in terms of patient engagement and follow-up support precludes our ability to evaluate or even measure variations in practices within the programme. Meanwhile, the feasibility of evaluating impact of the overall programme hinges on the following criteria: data collection processes, availability of a comparison group and sample size/power.

Criteria 3.1: *Data collection* – there are processes in place to collect, store and share reliable data for at least one relevant and feasible outcome measure.

We believe that the most relevant outcome measure would be hospital readmittances. There are three aspects that make this particularly appropriate. First, reducing burden on the NHS is a core outcome for the site-wide ToC, so it clearly measures the programme objectives. Second, it is applicable to all young people that enter the programme, which is a particular challenge given the diversity of the target group (for example, a measure that looked at job outcomes or survey measures of delinquency, such as the Self-Report Delinquency Scale (SRDS), might be more applicable to certain programme beneficiaries than others). Third, the data can be collected for all young people admitted to hospital, enabling us to measure outcomes for a control group (unlike survey measures, which could only be collected from young people engaged in the programme).

There are processes in place to collect, store and share reliable data related to this outcome and other indicators of interest for the evaluation of the overall programme. These data comprise two key elements:

- 1. Navigator programme monitoring data containing information about all referrals and engagement, which is recorded in a standardised template on the VIEWS dashboard tool that was set up to facilitate this evaluation. All delivery partners have now incorporated VIEWS into their data management processes.
- 2. Hospital data, provided by the VRU, which details dates and reasons for A&E (re)admission. These data sources can be merged by the VRU and 'sanitised' to remove personally identifiable information before securely sharing them with the evaluation team. This dataset would contain the necessary variables to comprehensively measure outcomes for referred patients (whether or not they are readmitted) and potentially useful explanatory variables (demographics and programme engagement information).

Table 7 displays the full admission and readmission statistics for referred patients across all of the sites.

Table 7:	Referral	summary	statistics	by site
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	Site: A	Site: B	Site: C	Site: D	Site: E	Total
	N = 74	N = 44	N = 31	N = 16	N = 12	N = 178
	(% of site total)					
Age						
16 and under	31	12	9	11	0	63
	(42%)	(27%)	(29%)	(69%)	(0%)	(35%)
17—25уо	43	32	23	5	12	115
	(58%)	(73%)	(71%)	(31%)	(100%)	(65%)
Admission reason	•		•	•	•	
Admission: Violence-	20	3	22	11	6	62
related	(27%)	(7%)	(71%)	(69%)	(50%)	(35%)
Admission: Drugs or	10	4	3	1	3	21
Alcohol	(14%)	(9%)	(10%)	(6%)	(25%)	(12%)
Admission:	34	14	6	2	2	58
Mental health related	(46%)	(32%)	(19%)	(13%)	(17%)	(33%)
Admission:	10	23	0	2	1	36
Other/NA	(14%)	(52%)	(0%)	(13%)	(8%)	(20%)
Other			·			
Readmitted within three months	18	13	2	4	1	38
	(24%)	(30%)	(6%)	(25%)	(8%)	(21%)
Total Navigator referrals in the previous month (11–25yo)	13	11	12	7	10	53 (30%)

Note: Some sites started implementing in hospitals much earlier than others, so total numbers do not cover the same time period for all sites. The bottom row of the table covers referrals in the last month, giving the best indication of referral rates.

In addition to hospital readmission data, there is an opportunity to collect a range of other outcome measures. A key source for this is the Thames Valley Together Data Project, which is able to match individual data to a range of police and social service interactions. This could potentially provide incredibly rich data to better understand who the Navigator programme is benefiting and how it complements other services. If we were also able to collect such data for a comparison group, it would open up the possibility of conducting robust cost-benefit analyses for the Navigator programme. We would also hope to collect process measures through the Navigator programme's routine data collection, including whether follow-up phone calls were made and answered, which services were signposted and for how long a young person continued to engage with the Navigators.

While our conversations with the VRU (including the Thames Valley Together Data Project) and delivery partners suggest that all these datasets would be possible to collect, it is important to note that we have not been able to collect and test these data systems within this project. We have been assured by the Thames Valley Together Data Project that they would be able to match data given the name of the young person supported by the Navigator

project, but there has not been time to test this system. In terms of process measures, we are confident that new fields (such as follow-up calls) could be added to the VIEWS data system, which has been put in place by the VRU to support this evaluation. Based on our engagement with delivery partners so far, we have a high degree of confidence that every effort would be made to collect these data. However, we do not know what the baseline rates would be and whether there would be challenges with missing data.

Criteria 3.2: Practices – at least one practice is identified that can feasibly be varied within each delivery site and for which an effect on the target outcome(s) can be theorised.

Having developed the site-level Theories of Change and closely examined implementation of the Navigator programme by the various delivery partners, we find that the lack of a standardised process in terms of patient engagement and follow-up support precludes our ability to evaluate or even measure variations in practices within the programme.

Criteria 3.3: Comparison group – data are available and accessible, or can be collected, on young people (or other units of analysis) that could provide a comparison group for a QED.

In considering potential comparison groups, we have primarily focused on comparison groups within the existing partner hospitals. The reason for this is mainly practical: our proposed outcome measure requires hospital data that must be pulled for each individual in the analysis, and accessing this for sites where we do not have existing relationships is likely to be far more challenging.

For comparison groups within the existing partner hospitals, we have identified two potential options. In both cases, we are not comparing the Navigator programme with no programme at all. Instead, we are comparing the on-site Navigator programme with a reduced, out-of-hours format.¹³ However, given that the in-hospital service has the substantive cost (particularly the opportunity cost of the volunteers' time), we believe that this evaluation is still a comprehensive evaluation of the programme. The two options for comparison groups are:

 Patients referred to Navigators through the out-of-hours route (vs in-hour referrals): It is possible to compare hospital readmission rates of people referred directly to a present Navigator vs referrals made out of hours. Anecdotal evidence from Navigator teams suggests that there is roughly an even split between these two sources of

¹³ NHS staff can complete a registration form, which is sent to the Navigator Coordinator to follow up. From this point, the young person should receive the same service as if they had been referred when a Navigator was present at the hospital.

referral, which would bode well for treatment and comparison group sizes and therefore for statistical power.

However, we have concerns about the comparability of out-of-hours referrals. First, a patient is less likely to be referred through the out-of-hours service. Although the total number of referrals through out-of-hours and in-hour referrals is similar, Navigators are on site for far less than half the week (at most, a few evenings). There are clear barriers to out-of-hours referrals, including more work for NHS staff to complete the referral form and the Navigator programme being less salient. We might therefore expect out-of-hours referrals to only be completed for more critical cases, which may also have higher readmittance rates.

Second, and relatedly, the challenges faced by out-of-hours referrals may be notably different. Because awareness is a key issue for out-of-hours referrals, they may be more likely to come from specific members of staff with a particular remit. For example, in Site D, out-of-hours referrals came mainly from the safeguarding team, which meant they were skewed towards younger age groups. These differences make it harder to treat these groups as similar in an impact evaluation.

2. Recommended option. Patients admitted when Navigators aren't there (vs admitted when Navigators are there): As noted above, there are likely to be substantial discrepancies between who is referred to the Navigator programme in hours versus out of hours. An alternative approach, which avoids this, is to base the analysis on hospital admittance rather than referral. In practice, this is an intent-to-treat analysis rather than evaluating the effect on the treated.

In order to implement this approach, we would have to more clearly define the target group for the Navigator programme in a way that is captured within NHS data, e.g. patients aged 11–25 with specific admittance reasons. Any patients that meet the criteria would be included within the sample, regardless of whether they are referred to the Navigators. If the Navigators are present at the hospital within an hour of them being admitted, they would be considered as part of the treatment group, whereas if the Navigators are absent, they would form the control or comparison group.

This approach has several advantages over the first approach outlined. First, it removes the selection effects from in-hour vs out-of-hour referral practices. Second, it provides an opportunity to introduce some randomisation. Currently, Navigators are almost exclusively in hospitals in the late afternoon or evenings, between Thursday and Sunday. At minimum, we would want to base the control group on patients admitted at similar times (for example, excluding morning admissions and choosing days around the weekend that Navigators are not present). However, there may also be an opportunity to randomise the days that Navigators attend the hospital, or Navigators could be randomised to a specific ward on different days (basing

themselves in paediatric A&E on some days and adult A&E on others). This would increase our confidence in the comparability of the sample. Furthermore, gaining access to this comparison group would boost overall sample size and therefore make impact estimates more precise and better powered.

There are two limitations to this approach. First, the target group would need to be more precisely defined. This may be challenging to implement in practice and could exclude some potential beneficiaries. Second, even within a defined criteria, only a portion of those eligible will be referred (making this an intent-to-treat analysis). This is likely to understate the true impact of the programme, and any adjustments to the analysis to infer a treatment-on-the-treated impact will carry additional assumptions.

A further – and more critical – assumption for this approach is that we are able to collect outcome measure data for the comparison group. Because we are using equivalent patients from the same hospital, there is no concern about the availability of these data. However, patients who have not engaged with the Navigator programme will not have given consent for data sharing. This should be surmountable if we reduce the data requirements sufficiently to remove any risk of the data being identifiable (the reason for admission, an age bracket and the number of admissions within a subsequent three-month period should be sufficient to conduct the analysis). However, simplifying the data in this way may require more work from hospitals, and even in simplified form, hospitals may have reservations about sharing the data. In addition, if we want to use the wider public service datasets accessible through the Thames Valley Together Data Project, then names would need to be shared with the VRU.

We have not covered the use of patients at other hospitals as a comparison group here because of the potential challenges associated with accessing their data. However, this could be used to supplement the above approaches, or as a substitute, if we were able to partner with alternative hospitals.

Criteria 3.4: Sample size – there is a sufficiently large potential sample of programme participants to provide some evidence of promise of the practices evaluated (i.e. direction and magnitude of the effect).

An important objective of this project is to test the feasibility of the methods proposed to evaluate variations in practice across multiple delivery sites. This involves understanding the type of sample size that may be required to detect a statistically significant effect of i) specific practices and ii) the overall programme on the outcome measures selected, given other plausible assumptions for parameters affecting statistical power.

From the monitoring data provided by the VRU and delivery partners, we were able to construct estimates for the minimum detectable effect sizes (MDES) on readmission rates. The bottom row in Table 7 suggests that we can expect around 50 referrals a month in total. This is likely to be a lower bound as the programme becomes more established and familiar to hospital staff. However, assuming this trend holds, we can expect to gather data on about 300 referred patients over 12 months, 450 over 18 months and 600 over two years. The historical monitoring data also suggest a baseline rate of readmissions of around one in five (21%). We use this information to calibrate our MDES calculations, assuming 80% power. Across most combinations of data collection lengths and thresholds for statistical significance (5% vs 10% levels), we estimate an MDES of around 10 percentage points (pp) (range: 6.0– 14.3pp). That is, the readmittance rate would have to be 10pp lower in the treatment group than the control group for us to be confident of detecting a significant effect. Given that the rate of readmissions is only around 20%, the programme would have to reduce an implausibly large proportion of these in order to detect a statistically significant result. However, as noted, meeting a lower MDES is not a binding criterion for evaluation feasibility. Although any impact evaluation would likely be underpowered, we could analyse the direction and magnitude of any effect observed to gauge the promise of impact and make more tentative conclusions.

Duration of	Comparison		Baseline proportion of	MDES (pp reduction in readmissions)	
data collection	group	Total sample size	readmissions	p-value = 0.05	p-value = 0.1
12 months	Direct referrals vs out-of- hours referrals	300	20%	14.3pp	12.6pp
12 months	Navigators present vs not present	600	20%	9.9pp	8.7pp
18 months	Direct referrals vs out-of- hours referrals	450	20%	11.5pp	10.1pp
18 months	Navigators present vs not present	900	20%	8.0pp	7.0pp
24 months	Direct referrals vs out-of- hours referrals	600	20%	9.9pp	8.7pp
24 months	Navigators present vs not present	1200	20%	6.8рр	6.0рр

Table 8: Summary of MDES calculations (power = 80%)

Conclusion: Assessing the feasibility of an impact evaluation for the hospital Navigator programme is not clear-cut. There are necessary data collection processes in operation across all sites that would enable us to test a relevant outcome measure: hospital readmission rates of referred patients. There is also the likely opportunity to link to a wider set of outcomes through the Thames Valley Together Data Project.

While there is some scope to construct comparison groups to test the in-person services

component of the programme, these are not without threats to internal validity. Comparisons of in-person versus out-of-hours referrals risks overestimating the impact of in-person referrals because Navigators are far less selective when present in the hospital wards. Instead, we believe that comparisons between groups of young patients on days when Navigators are present with those when Navigators are absent hold greater validity and are more advantageous in terms of boosting the sample size for evaluation. There is also the opportunity to introduce some randomisation, for example by randomising the days in which Navigators attend or the wards they base themselves in. Therefore, we recommend further consideration of this trial design.

In any case, given that the rate of new referrals across sites is quite low, the data collection period would likely need to be well beyond a year to approach minimum sample size thresholds such that the evaluation is better powered. Early MDES calculations have been calibrated using existing hospital monitoring data and suggest that we would only be able to detect very large programme impacts of around 10pp. Although inadequate power is not a decisive reason to abandon a potential impact evaluation, it would strongly limit the insights and precision of any results and our ability to confidently conclude on the success of the programme.

Conclusion

Evaluator judgement of evaluation feasibility

An evaluation of this Navigator programme that meets conventional levels of statistical power and has no threats to internal validity is highly unlikely to be possible. However, **we believe it is possible to run a pragmatic evaluation that would 'provide evidence of promise' of the Navigator programme** in terms of its quantitative impact; that conducting such an evaluation would have substantial benefits to this programme, related programmes and our understanding of multisite evaluations; and that there are aspects of this specific programme within Thames Valley that make it a good fit for such an evaluation.

By our assessment, the Navigator programme meets the majority of the success criteria, bar one, which we do not believe meaningfully impacts our ability to evaluate the programme.

• **Criteria 3.2: Practices.** We did not identify a specific practice that could be varied across sites because of the flexible nature of the Navigator programme as a whole and some heterogeneity between sites. However, we believe that evaluating the programme as a whole, rather than variations in practice, would be possible and a better approach given the sample size and statistical power.

An extended discussion of the success criteria can be found in the next section.

However, passing the success criteria does not necessarily mean that an evaluation is feasible. We believe that the best comparison group comes from comparing patients that are admitted when Navigators are present with patients admitted when Navigators are not on site. Ideally, we would also introduce some randomness to shift allocation (this can be done using the existing shift-allocation system) to reduce any systematic differences between the patients in the treatment and comparison group. Overall, this should provide a robust evaluation of the Navigator programme in comparison to an out-of-hours only service.

However, this comparison group approach has risks. It requires us to specify defined criteria for inclusion in the study (based on age and admittance reason) and then include all eligible patients in the sample regardless of whether they were referred to the Navigator programme or not. If referral rates are low even when Navigators are on site, this will understate the impact of the Navigator programme on those that are referred. Awareness of the Navigator programme across hospital staff and, in turn, referrals to the programme have been a regular challenge for sites, so this is a genuine risk. In the starting months of the evaluation, we therefore recommend working with the existing hospital contacts to identify opportunities to increase the consistency of referrals, ideally looking at whether patients meeting set criteria could be automatically flagged. A second risk is data access. We know that it is possible to get outcome data for young people who are referred to the Navigator programme, but we have not yet tested the feasibility of accessing these data for young people who are not referred

(and have therefore not provided explicit consent). We believe that this is likely to be feasible by reducing our data requirements such that no identifiable data are required. However, this still depends on the agreement of each hospital. In addition, the current process for collecting the data is manual and requires NHS staff to look up data for each patient referred. If we were to expand this to all patients meeting a set criteria, regardless of referral status, we would also need to identify a faster system for extracting the data so as to reduce NHS burden.

The further risk is sample size. Based on current referral rates, the evaluation would be substantially underpowered if it were to be run for one year, even if accepting a higher significance threshold. However, we believe that by incorporating the recommendation above to review and improve referral practices in hospitals, combined with delivery partners having more time for their programmes to become established, the referral numbers would likely increase. In addition, we suggest that the evaluation runs for two years rather than one. This would not only result in a mechanical increase of the sample size but also give sites further time to embed their practices.

A summary of our findings in relation to each of the success criteria is given on the next page. The opportunities and risks of an evaluation are also discussed in more detail in the following section.

Table 9: Summary of feasibility study findings

Research objective and success criteria	Finding			
Objective 1: Develop a Theory of Change within and across sites				
Criteria 1.1: Site-level Theory of Change – a Theory of Change can be articulated for each site.	All sites were able to articulate a satisfactory ToC.			
Criteria 1.2: Programme-level Theory of Change – a coherent programme-level (cross-site) Theory of Change can be established.	There were some differences in the site-specific details of the ToC. However, the overall principles, target, activities, mechanisms and outputs had enough consistency to develop a coherent ToC.			
Objective 2: Examine implementation relative to the Theor	y of Change and support refinements			
Criteria 2.1: Fidelity and adaptation – the programme is implemented as envisioned in the site-level Theory of Change, or the Theory of Change can be adapted to reflect adjustments in delivery.	We did not find significant deviations from the Theories of Change in our observations or interviews. Where there were exceptions, these were generally noted as such and did not change the overall picture of programme delivery.			
<i>Criteria 2.2: Responsiveness</i> – take-up is sufficient to enable testing and refinement of implementation.	In general, we observed a willingness on the part of young people to engage with Navigators. Interviews revealed that this was not universal, but young person engagement is not a key barrier. A greater challenge is 'take-up' by NHS staff responsible for referring young people, particularly for out-of-hours referrals. Despite this, however, all sites managed to average five referrals per week at the time of this report.			
<i>Criteria 2.3: Dosage and quality</i> – dosage and quality of delivery activities are sufficient to expect a potential impact on target outcomes.	The length and intensity of Navigator support is short and light-touch relative to other effective interventions for tackling such complex challenges. However, a key component of the programme is signposting to other services and groups that provide deeper support, which could drive long-term impact. Navigator Coordinators shared examples where young people had engaged with signposted services, or continued to engage with the coordinator, and benefited from doing so.			

Objective 3: Assess the feasibility of evaluating the impact of i) variations in practice and ii) the overall programme				
Criteria 3.1: Data collection – there are processes in place to collect, store and share reliable data for at least one relevant and feasible outcome measure.	Hospital readmissions have been identified as an outcome measure that could be used across all sites. These data can be collected and shared, and there are also systems in place to record details of programme recipients. However, we have not yet tested the feasibility of collecting this for the comparison group.			
<i>Criteria 3.2: Practices</i> – at least one practice is identified that can feasibly be varied within each delivery site and for which an effect on the target outcome(s) can be theorised.	Based on the variations in the Theories of Change and the general flexibility of the Navigator model, we do not believe that evaluating variations in practice is likely to produce a robust evaluation. Instead we recommend evaluating the in-hospital programme relative to an out-of-hours service.			
Criteria 3.3: Comparison group – data are available and accessible, or can be collected, on young people (or other units of analysis) that could provide a comparison group for a QED.	Young people admitted when Navigators are not on site can provide a relatively strong comparison group. As data on hospital readmissions are routinely collected for all patients, these can be collected for both programme beneficiaries and the comparison group.			
Criteria 3.4: Sample size – there is a sufficiently large potential sample of programme participants to provide some evidence of promise of the practices evaluated (i.e. direction and magnitude of the effect).	The sample size is insufficient to conduct a fully powered trial, if aiming for a 5% significance threshold. However, we believe that the sample is sufficient to provide evidence of promise and for the findings to meaningfully update our estimate of the programme's effectiveness.			

Interpretation

There are several features of this programme that make it particularly advantageous for evaluation. For example, there is a clear outcome measure (hospital readmittances) that can be collected across sites, is relevant for all programme beneficiaries and also exists for nonbeneficiaries – enabling a comparison group to be created and tracked. There is also a probable opportunity to link to other datasets through the Thames Valley Together Data Project, allowing outcomes such as police engagements to be tracked. While these would not be the primary outcome measure, they could add huge depth to the insights from this study. In addition, there are five sites that have shown strong engagement with the evaluation process and would provide solid partnerships for an ongoing evaluation.

This programme also represents a particularly interesting test case for a multisite evaluation. There is some heterogeneity between the sites that adds some complication but is, ultimately, an accurate reflection of how the majority of programmes being delivered by multiple partners in several locations look. Yet, within this heterogeneity, there is sufficient consistency between the five sites to provide a strong basis for evaluating them in combination, providing substantially more statistical power than if individual programmes were evaluated.

The biggest challenge for a future evaluation is the trial design. Our recommendation is to compare the outcomes of patients who arrive at the hospital when Navigators are not present with those who arrive when they are. In order to do so, we would need to set clear criteria on who is, and is not, eligible and conduct the evaluation on an intention-to-treat basis. This will understate the effect size on those who are supported. These estimates should therefore be adjusted to take into account the probability of being referred within the eligible pool, but doing so introduces new assumptions (and limitations). Even aside from this, the study is unlikely to be powered to detect significant effects, given a 95% confidence interval. However, given the lack of robust quantitative evidence for these interventions and the general challenges associated with evaluating small-scale interventions to tackle youth violence and personal harm, we believe that if the evaluation is conducted over 18–24 months, the conclusions will be robust enough to meaningfully improve our understanding of Navigator programme impacts.

There are two further risks that are worth recognising. The first is a risk to sustainable delivery. We have only observed three out of five sites, in large part because some have started implementing relatively recently. In addition, several sites have faced ongoing challenges with the recruitment of volunteers and programme awareness among hospital staff. However, we believe this does not pose a fundamental risk to the evaluation. There is, of course, a risk that a site may not be able to retain volunteers and may have to withdraw. However, even if this did happen, the withdrawal of one site would not jeopardise the evaluation as a whole

(although power would be reduced). On the other hand, the fact that some sites are relatively new to implementation suggests that their referral numbers are likely to increase as the programme becomes more established, increasing the power of the evaluation.

The second risk is ethics approval to conduct the evaluation. This process was put on hold when this project was paused at the end of 2021 and would have to be completed at the start of the evaluation phase. This would delay the start of any randomisation and carries the risk that approval is not granted. However, the time taken for the ethics application to be completed and reviewed would not be lost in the evaluation. While we cannot randomise any aspect of the Navigator programme in this time, there is natural variation in regard to when Navigators are present in hospitals. This could still be used as part of a QED evaluation, with caveating assumptions.

Finally, it is worth noting that by measuring hospital readmittances as the primary outcome measure, the proposed evaluation would not be measuring violence as an outcome. Exploratory analyses could consider the reason for admission, but given the diverse reasons young people are referred to the Navigator programme and the limited sample size for this evaluation, we do not anticipate any conclusive findings relating to violence specifically.

On balance, however, we believe that the evaluation opportunity presented by this Navigator scheme is worth pursuing. It could provide substantial insight into both the impact of the Navigator programme and how programmes taking place across multiple organisations with some heterogeneity can be evaluated. The risks are either manageable or near universal for similar initiatives and can (likely) be overcome.

Future research

The outstanding question is whether Navigator programmes that use volunteers as a core part of delivery can have a measurable impact on young person outcomes. Based on the work conducted within this phase, we have outlined three recommendations for the next stage of research.

1. Work with delivery partners and hospitals to automatically 'flag' eligible patients. The proposed evaluation plan would define the trial sample based on whether an eligible patient was admitted to hospital (and when) rather than whether they were referred to the Navigator programme. This approach removes some of the systemic biases that would arise from only including patients referred to the Navigator programme, but it would understate the impact on those that are referred. Higher referral rates, as well as referrals that more consistently reflect the target population, would improve both the quality of the evaluation and the impact of the programme as a whole. However, this has been a challenge for the programme to date. As a starting point, in order to increase referrals and consistency, the evaluator, delivery partners and hospitals should work together to identify opportunities to create automatic flags when patients meet the target criteria.

2. Conduct a two-year evaluation of the Navigator programme using quasi-random variation of shifts. Based on our assessment, the Navigator programme would be best evaluated by comparing the outcomes of patients who are admitted when the Navigators are on site (or shortly before) with equivalent patients admitted when the Navigators are not present. To reduce the likelihood that differences in outcomes are due to the days on which Navigators are present, the evaluation should introduce some variation into shift patterns. We anticipate that a true randomisation of shifts is likely to be infeasible because it would require a high degree of flexibility on the part of volunteers. However, there are several approaches that would introduce variation with less disruption, including fortnightly shift schedules, default slots that volunteers can override or varying the ward that Navigators base themselves in as opposed to the day they attend. The acceptability of each of these options should be discussed with delivery partners.

Based on current referral rates, we recommend that such an evaluation is conducted over two years. As well as increasing the sample size, this would have the added benefit of giving the programme more time to mature, such that the majority of the evaluation would be measuring the programme at its full potential. It is worth noting that any randomisation of shifts would require NHS ethics approval and is therefore likely to take a few months before it can be implemented. However, this earlier data could still be used as part of the evaluation. We would recommend running two analyses: (1) using all the available data to maximise power and (2) using the postrandomisation period, which could serve as a robustness check on the magnitude of impact identified through the first analysis.

The exact analytical strategy will depend on several factors, including the variability in shift patterns before the randomisation is introduced and what can be achieved through randomisation given the feasibility constraints. However, we suggest that a primary concern should be controlling for the non-random nature of shifts, for example by including day of the week fixed effects or creating a day-specific control using data from other hospitals (see below). We also believe this could be a good use case for a Bayesian analytical approach, particularly given the challenges with power – framing the results in terms of the likelihood of a given effect range is likely to be more relevant and informative than basing conclusions on a specific significance threshold.

3. Investigate the possibility of additional data sources for non-referred patients. The proposed evaluation plan requires data on hospital readmittances (the primary outcome measure) to be collected for all eligible patients regardless of whether or not

they are referred to the Navigator programme. This should be possible without requiring any personal data to be shared and only requires data from existing partner hospitals. However, there are two additional data sources that would be more challenging to access but could have a large benefit to the evaluation.

The first data source is the administrative datasets accessible through the Thames Valley Together Data Programme. If these data were available for both the treatment and comparison groups, it would enable sophisticated cost-benefit analyses of the Navigator programme. However, for the Data Programme to match data for the trial sample, it requires the name of each individual within the sample, thus requiring the hospital to share personal data for individuals that have not consented to participate in the Navigator programme. This may not be possible, but given the potential insight such data would open up, it is worth investigating.

The second data source is from other hospitals. Data that covered admittances (and readmittances) for the target group in other hospitals could be used in two ways. First, such data could be used to conduct a separate analysis, using other hospitals as the comparison group rather than patients on different days. This could provide a robustness check to the main analysis. Second, the data could be used to create day-specific effects for use in the main analysis model. As with the readmittance data we have proposed collecting for the main analysis, these data do not need to be identifiable. However, it will require new hospital partnerships, who may also be less willing to share data if they are not involved in the programme.

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Appendix 1. Research Project Privacy Notice

Research Project Privacy Notice YEF Multisite evaluation

Introduction

These interviews or observations are part of a project to evaluate the impact of the navigator programme across five sites in Thames Valley. In this first phase, we are trying to establish how that evaluation could be conducted, by understanding more about the Navigator programmes in Thames Valley.

This privacy notice sets out how we collect and use your personal data if you are a participant in this research project.

Our research is being conducted in collaboration with the Youth Endowment Fund (the funder) and Thames Valley Violence Reduction Unit (VRU), who have helped to organise the navigator programme.

Contact details

Behavioural Insights Ltd (the legal name of Behavioural Insights Team (**BIT**)) is the controller and is responsible for your personal data collected in connection with this project. This notice applies to the personal data we collect directly from you and personal data which is provided to us by third parties. Where we collect personal data from you directly, please make sure that any personal details you provide are accurate and up to date, and let us know about any changes as soon as possible.

We have appointed a Data Protection Officer (DPO) who is responsible for overseeing questions in relation to this privacy notice. If you have any questions about this privacy notice, including any requests to exercise your legal rights in relation to your personal data, please contact the DPO:

Post: Behavioural Insights Ltd, 4 Matthew Parker Street, London, SW1H 9NP

Email: dpo@bi.team.

You also have the right to make a complaint at any time to the Information Commissioner's Office (ICO), the UK supervisory authority for data protection issues (<u>www.ico.org.uk</u>). We would, however, appreciate the chance to deal with your concerns before you approach the ICO so please contact us in the first instance.

What personal data will we collect?

As part of this research, we will be conducting interviews and observations with navigators. For the interviews, we will collect the first names of navigators we speak to, and general information captured during the interview that might help us better understand their experience (for example, how long a navigator has been in post, their gender, and professional background). For the observations, we may collect the first name of any navigators or NHS staff we speak to and the role of NHS staff.

What do we do with information we collect?

The purpose for which BIT is processing your personal data is to better understand the navigator programme and how it is being delivered. In order to do this, we will summarise the notes from our interviews and observations.

What is our lawful basis for processing your personal data?

Data protection laws require us to meet certain conditions before we are allowed to use your data in the manner described in this notice, including having a lawful basis for the processing.

For all information collected BIT is relying on the lawful basis of:

LEGITIMATE INTERESTS: Our lawful basis for processing your personal data is legitimate interests (as per Article 6 (1) (f) of the GDPR) and we have considered that your interests and fundamental rights do not override those legitimate interests). It is necessary in BIT's 'legitimate interests' to process the personal data identified above in order to evaluate the navigator programme. The research project fulfils BIT's core business aims including undertaking research, evaluation and information activities in sectors that will deliver social impact.

Who has access to your information?

Your information will be accessed by a limited number of researchers and advisors in BIT's project team working on this project.

BIT may disclose your information to third parties in connection with the purposes of processing your personal data set out in this notice. These third parties may include:

- other companies in BIT's group;
- regulators, law enforcement bodies and the courts, in order to comply with applicable laws and regulations, assist with regulatory enquiries, and cooperate with court mandated processes, including the conduct of litigation;
- research assistants and sub-contractors who conduct interviews and observations on behalf of BIT. These third parties are known as data processors

and when we use them we have contractual terms and policies and procedures in place to ensure that your personal data is protected. This does not always mean that they will have access to information that will directly identify you as we will share anonymised or pseudonymised data only wherever possible. We remain responsible for your personal information as the controller; and

• any third party to whom we are proposing to sell or transfer some or all of our business or assets.

We may also disclose your personal information if required by law, or to protect or defend ourselves or others against illegal or harmful activities, or as part of a reorganisation or restructuring of our organisations.

International Transfers

Your personal information will not be transferred outside of the European Economic Area ("EEA"). References in this notice to the EEA include the UK, even where the UK is no longer a member of the European Union / European Economic Area.

Security

We take reasonable steps to protect your personal information and follow procedures designed to minimise unauthorised access, alteration, loss or disclosure of your information.

Taking into account the state of the art, the costs of implementation and the nature, scope, context and purposes of processing as well as the risk of varying likelihood and severity for the rights and freedoms of natural persons, we implement appropriate technical and organisational measures to ensure a level of security appropriate to the risk of processing.

We ensure that those who have permanent or regular access to personal data, or that are involved in the processing of personal data, are trained and informed of their rights and responsibilities when processing personal data. We provide such access on a needto-know basis, and have measures in place which are designed to remove that access once it is no longer required.

Physical personal devices used by BIT are encrypted to protect your data, and confidential hard copy data (including special category data) is kept in locked rooms or cabinets.

We have put in place procedures to deal with any suspected personal data breach and will notify you and any applicable regulator of a breach where we are legally required to do so.

Data Retention

We will only retain your personal data for as long as necessary to fulfil the purposes we collected it for, including for the purposes of satisfying any legal, accounting, or

reporting requirements. When it is no longer necessary to retain your personal data, it will be securely deleted.

To determine the appropriate retention period for personal data, we consider the amount, nature, and sensitivity of the personal data, the potential risk of harm from unauthorised use or disclosure of your personal data, the purposes for which we process your personal data and whether we can achieve those purposes through other means, and the applicable legal requirements.

Taking the above factors into consideration, our anticipated date of deletion for your personal data is May 2022.

In some circumstances, we will retain an anonymised dataset (so that it can no longer be associated with you) for research or statistical purposes, in which case we may use this information indefinitely without further notice to you.

Your legal rights

Under certain circumstances, you have rights under data protection laws in relation to your personal data, including rights to:

- Request access to your personal data: this enables you to receive a copy of the personal data we hold about you and to check we are lawfully processing it.
- Request correction of your personal data: this enables you to have any incomplete or inaccurate data we hold about you corrected.
- Request erasure of your personal data: this enables you to ask us to delete or remove personal data where there is no good reason for us continuing to process it.
- Object to processing of your personal data: for example, you can object where we are relying on a legitimate interest (or those of a third party) and there is something about your particular situation which makes you want to object to processing on this ground as you feel it impacts on your fundamental rights and freedoms.
- Request restriction of processing your personal data: This enables you to ask us to suspend the processing of your personal data.
- Data portability: Where the processing takes place on the basis of your consent or contract, and is carried out by automated means, you have the right to request that we provide your personal data to you in a machine-readable format, or transmit it to a third party data controller, where technically feasible.

- Right to withdraw consent to the processing of your personal data: This applies where we have relied on consent to process personal data. Please note that withdrawal of consent will not affect the lawfulness of any processing carried out before withdrawing your consent.
- Right not to be subject to decisions based purely on automated processing where it produces a legal or similarly significant effect on you. Please note that BIT does not engage in automated decision making without manual intervention in its research projects.

If you wish to exercise any of the rights set out above, please contact the Data Protection Officer with your specific request by email to: <u>dpo@bi.team</u>

It is important to understand that the extent to which these rights apply to research will vary and that in some circumstances your rights may be restricted.

Ordinarily, you will not have to pay a fee to access your personal data (or to exercise any of the other rights). However, we may charge a reasonable fee if your request is clearly unfounded, repetitive or excessive. Alternatively, we may refuse to comply with your request in these circumstances.

We may need to request specific information from you to help us confirm your identity and ensure your right to access your personal data (or to exercise any of your other rights). This is a security measure to ensure that personal data is not disclosed to any person who has no right to receive it. We may also contact you to ask you for further information in relation to your request to speed up our response.

We try to respond to all legitimate requests within one month. Occasionally it may take us longer than a month if your request is particularly complex or you have made a number of requests. In this case, we will notify you and keep you updated.

Please also note that we can only comply with a request to exercise your rights during the period for which we hold personal information that directly identifies you. If we have only collected pseudonymised information (e.g. where we have not collected any names or contact details) or personal data has been irreversibly anonymised and has become part of the research data set, it will not be possible for us to comply.

Changes to this Notice

We may change this Privacy Notice from time to time. If we make any significant changes in the way we treat your personal information we will make this clear by contacting you directly.

Appendix 2. Observation Guide

Evaluating the navigator programme

Interview guide (volunteers)

Purpose: The purpose of these observations is to gain an insight into, a) how Navigators conduct their role and, b) the similarities and differences of approach across the delivery partners, and to develop ideas for types of practices that can be tested. By capturing this detail these interviews will help to shape the Theory of Changes (ToC) for each site.

Instructions: In this document, we provide an empty observation guide for you to fill it while you are carrying out observations at delivery sites.

- This guide is to be used live during observations to improve accuracy. So print a copy ahead of going to the delivery site.
- When observing, introduce yourself to the volunteers at the appropriate moment and explain that we are observing to understand more about the Navigator Programme so it can be evaluated and scaled. Make sure to say any notes you jot down will be kept anonymous and confidential.

Project objectives:

These observations feed into the following project objective:

Objective 1a: Establish shared understanding of the intervention

The first aim of this phase is to gather information and establish a shared understanding of how the Navigator programme brings about change. We will achieve this through (i)

developing theories of change, and (ii) undertaking field research to understand delivery contexts.

Navigator Programme observation guide

(print one copy per visit)

Part 1: General Information				
Date and time of observation:	Location of observation:	Volunteer observed:		

Part 1: Details on the identification of young people (YP)
1. How are the YP first identified to speak with volunteer navigators? E.g. flagged to them by nurse or volunteers proactively seeking out appropriate YP.
1a. Are set criteria being used to identify target YP? Circle as appropriate.
YES / NO
1b. If yes, list the criteria.
1c. Based on your observations, what type of YP are being selected to speak with volunteer navigators?
1d. Are all YP agreeing to engage with volunteer navigators?

Part 2: Details on the volunteers interactions with YP You should not observe the interaction itself. This is for recording any insights from conversations with Navigators.
2. What kind of conversations are volunteer navigators having with YP?
2a. Are volunteers signposting towards other resources/services?
YES / NO
2b. If yes, list the resources/ services.
2c. Are volunteers offering follow up support? If yes, what does this support look
like?

Part 3: Details on the challenges being faced

3. Are there any stumbling blocks NHS staff/ volunteer navigators are encountering when delivering this intervention?

Any other observations

Write any useful observations/ notes below that haven't been captured by Part 1-3 of this observation guide.

Evaluating the navigator programme

THE BEHAVIOURAL INSIGHTS TEAM

Interview guide (volunteers)

Interview purpose

The purpose of these interviews is to gain an insight into a) how Navigators experience and conduct their role and, b) the similarities and differences of approach across the delivery partners, and to develop ideas for types of practices that can be tested. By capturing this detail these interviews will help us to understand how the programme is being delivered in comparison to the Theory of Changes (ToC).

We are particularly interested in:

- What the programme looks like in practice, e.g.
 - Who is being referred to navigators
 - What the conversations between navigators and "patients" look like (any standard structure/resources?)
 - Any follow-up that the navigators are involved in (do they stay in touch, or pass details to the main navigator coordinator? If passing details, do they introduce beforehand?)
- Whether the programme is capturing all the target audience
 - How are people referred to the navigators?
 - If hospital staff refer people, how regularly is that being done?
 - Are there people that could be eligible that they think aren't being referred?
- Any materials being used

The timings given for each section below are a guide - you may spend longer or shorter on each section. Lead questions are presented as a bullet point, with potential follow-up questions presented below. As the interviews are semi-structured, not all questions need to be asked and they do not need to be asked in order. Additional pointers and guidance is given throughout in italics. The interviewer should be responsive to what the interviewee says, following the direction of the conversation and following-up with additional questions as needed. Interviews should last around 25-30 minutes.

Project objectives

These interviews feed into the following project objectives:

Objective 2.1: Fidelity & Adaptation

Understand whether the programme is implemented as envisioned in the site-level theory of change, or if the theory of change can be adapted to reflect adjustments in delivery. **Objective 2.2: Dosage & quality**

Understand whether the dosage and quality of delivery activities are sufficient to expect a potential impact on target outcomes.

Delivery partners

Navigators will be volunteering with one of 5 delivery partners, depending on their location. They are unlikely to be familiar with the term "delivery partner" so we have referred to it as the "organisation" they are volunteering with. The table below gives the name of each delivery partner -- if you can refer to it by name, even better.

Location	Name of delivery partner / organisation
Oxfordshire North	Connection Support
Milton Keynes	ҮМСА МК
Slough	Aik Saath (Together as One)
Bucks	7Roadlight
Reading, Berkshire West	Starting Point (The Mustard Tree)

Structure of the interview

Main objective	Purpose of section	Guide timings
1. Introductions and background	To explain the purpose of the interview and what participation will involve, as well as preparing the interviewee for the discussion.	2 min
2. Context	To build rapport with the volunteer.	2 mins
3. Details on the target audience	To understand the patients that are being identified to engage with navigators at the delivery partner's site.	10 mins
4. Details on the volunteers interactions with young people (YP)	To understand the activities volunteers are delivering i.e. the conversations they are having with YP, if/ what follow up engagement they are offering/ delivering etc	10 mins
5. Details on challenges being faced	To understand the potential moderating factors at play.	5 mins
6. Close	Thank you and close.	1 min
		30 min

Topic guide

1. Introductions and background	2 min
 Introduction: Introduce yourself Introduce BIT - explain that we are independently evaluating the Navigator Programme. Aims of this interview: We are here to learn more about what the navigator programme looks like in practice, from your perspective. This includes: What you do when you're at the hospital, What your interactions with young people have been like, Any follow-up that you have with young people after you speak to 	To explain the purpose of the interview and what participation will involve, as well as preparing the interviewee for the discussion.
 them, Your expectations around the impact the programme is having or that you hope it will have. We're not here to judge you or the programme, just to understand it better. 	
 This interview: Should take about 25-30 minutes. We want to understand your views and experiences. No answers are right or wrong. 	
 Anonymity and privacy: All information gathered will be in strict confidence. If you agree, we would like to record the interview. The recordings will be stored on a drive only accessible to people working on this project, and will be stored under a code (rather than your name). We'll delete the recording at the end of the project, but you can also ask for the recording and any notes to be deleted before that just let us know. 	
 We won't share what you have told us with your navigator coordinator or with the organisation. When we write up the interview, you won't be identifiable in any reports. If at any point you feel uncomfortable or prefer not to answer a question, just say so 	
 You don't have to take part, and you can end the interview at any point, without giving a reason. Before beginning the interview Any questions? Are you happy to proceed with the interview? 	
 [switch on recording] Now that we're recording, can you confirm again that we have discussed the interview and how any data will be stored, that you understand you can stop the interview at any time without giving a reason, and that you are happy to continue? 	

2. Context	2 mins
 How did you get into volunteering on this programme? Have you done anything like this before? How have you been finding it so far? (If the respondent gives you a long answer, you can move forward by saying something along the lines of 'That is interesting, I have some questions about this topic later the interview, it will be great to hear more at that time, but first I wanted to ask about [next question]') 	To build rapport with the volunteer.
3. Details on the target audience and referrals	10 mins
 How many people roughly have you engaged with so far? Can you describe what the people you have engaged with have been like? (see prompts below) Age range? Gender? Reason for present at A&E e.g. assault injuries, self-harm, substance abuse etc. How are you identifying the people to talk to? Are NHS staff referring them? Do you approach anyone yourself? [if yes] Is there any difference between the types of people that you approach and the types of people NHS staff refer? Why do you think that is? Do you think there are people coming into the hospital that could benefit from the programme but you aren't getting to speak to? What is limiting them from being included? 	To understand the patients that are being identified to engage with navigators at the delivery partner's site.
4. Details on the volunteers interactions with YP	10 mins
 Can you walk me through an interaction between you and a person you're supporting? Start from when you introduce yourself to them, what does that look like? (<i>then probe for specific information, see below. If they get stuck, ask them to focus on the last engagement they had</i>) What happens next? Could you tell me more about the nature of those conversations? Which resources/ services are you signposting to? Do you use the same approach with all the people you speak to? Do you have any materials or resources you use? What happens at the end of the interaction? Listen and repeat back what they say, trying to pick out specific activities and then ask whether there's anything else. E.g. "So it sounds like when the YP is triaged to you you start by having a general conversation with them to build their trust, you tell them about X service and then you set up a time to meet with them in the 	To understand the activities volunteers are delivering i.e. the conversations they are having with YP, if/ what follow up engagement they are offering/ delivering etc.

 coming X days/ weeks/ months. Are there other things you do which I've missed there?" We would like to cover the following stages: initial engagement with the YP, getting their consent to engage and share data, the conversation, any sign-posting to services/extra support. Also good to understand how the experience might differ depending on the YP they help. What happens after the interaction? Do you make any notes or record any data? Is there any follow-up you have to do at the hospital? What about after the hospital? Do you have any contact with the young person? What does this look like? We'd be particularly interested in the support the YP receives going forward, and (if there are different levels) how that decision is made. However, navigators may not know this. 	
5. Details on challenges being faced	5 mins
 Have you encountered any stumbling blocks when conducting your role? Have there been any factors that have limited your ability to carry out your role? Have you been facing any challenges in supporting young people in this way? Are you aware of anything that's getting in the way of achieving impact through this intervention? 	To understand the potential moderating factors at play.
6. Close	1 min
Was there anything else that you wanted to discuss that we've not yet talked about? Thank them for their time and check whether they have any questions.	To give the volunteer a chance to tell you any final thoughts, and thank

Appendix 4. Multi-Site Theory of change


Appendix 5. Individual site theories of change

Oxford



Reading



Slough



Milton Keynes



Bucks







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@YouthEndowFund

The Youth Endowment Fund Charitable Trust Registered Charity Number: 1185413