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Building an understanding of Ethnic minority people's Service Use Relating to Emergency care for injuries: the BE SURE study protocol

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ABSTRACT

Introduction Injuries are a major public health problem which can lead to disability or death. However, little is known about the incidence, presentation, management and outcomes of emergency care for patients with injuries among people from ethnic minorities in the UK. The aim of this study is to investigate what may differ for people from ethnic minorities compared with white British people when presenting with injury to ambulance and Emergency Departments (EDs).

Methods and analysis This mixed methods study covers eight services, four ambulance services (three in England and one in Scotland) and four hospital EDs, located within each ambulance service. The study has five Work Packages (WP): (WP1) scoping review comparing mortality by ethnicity of people presenting with injury to emergency services; (WP2) retrospective analysis of linked NHS routine data from patients who present to ambulances or EDs with injury over 5 years (2016–2021); (WP3) postal questionnaire survey of 2000 patients (1000 patients from ethnic minorities and 1000 white British patients) who present with injury to ambulances or EDs including self-reported outcomes (measured by Quality of Care Monitor and Health Related Quality of Life measured by SF-12); (WP4) qualitative interviews with patients from ethnic minorities (n=40) and focus groups—four with asylum seekers and refugees and four with care providers and (WP5) a synthesis of quantitative and qualitative findings.

Ethics and dissemination This study received a favourable opinion by the Wales Research Ethics Committee (305391). The Health Research Authority has approved the study and, on advice from the Confidentiality Advisory Group, has supported the use of confidential patient information without consent for anonymised data. Results will be shared with ambulance and ED services, government bodies and third-sector organisations through direct communications summarising scientific conference proceedings and publications.

STRENGTHS AND LIMITATIONS OF THIS STUDY

⇒ Mixed quantitative and qualitative methods will ensure representativeness and depth in addressing our research questions.
⇒ The study will use peer researchers from ethnic minorities recruited by local third-sector organisations to support people to complete questionnaires to ensure local buy-in and to achieve as high a response rate to the survey as possible.
⇒ Routine linked data allow the inclusion of a large number of patients and attendances over a 5-year period, producing a comprehensible epidemiological picture.
⇒ Coding of ethnicity may be inaccurately recorded or incomplete in routine health records which may mask heterogeneity within each group.
⇒ Response rates to questionnaire surveys may be low and differ between cohorts, introducing potential bias to findings.

INTRODUCTION

Injuries cause five million deaths worldwide each year and many more people are left with disability.[1] In the UK around six million Emergency Department (ED) visits result from accidental injuries each year[2] and over 14 000 of these injuries result in death.[3]

A founding and sustained principle of the National Health Service (NHS) is that there should be equity of access and treatment for all.[4] However, disparities in access to healthcare and health outcomes for people from ethnic minorities compared with white British people have been regularly reported.[5] Future changes in the delivery of NHS care as proposed in the NHS Long Term Plan[6] may deepen inequalities, as people with urgent care needs including minor injuries are redirected towards NHS 111 (telephone service) and general practitioner (GP) led Urgent Treatment Centres. Following COVID-19, further initiatives have been trialled to control immediate access to emergency care.[7] However, there are concerns that people from ethnic minorities are more likely to make

greater use of emergency healthcare, reflecting difficulties in accessing primary care.[8] In the Health Experiences of Asylum Seekers and Refugees (HEAR) study,[9] 77% of survey respondents knew about the 999 service, but only 28% were aware of the Out of Hours GP service. Research across Europe[10] reports a rise in migrants' and asylum seekers' use of emergency services. High use has been associated with language barriers, social deprivation, poor access to primary care,[10] delayed or restricted access to secondary healthcare[11] or people falling through gaps between other services (such as community mental health services).[12]

People from ethnic minorities across Europe, North America and Oceania have been widely reported to have differences in access, experiences and outcomes when presenting to emergency services. People from ethnic minorities who present with injuries have different experiences in relation to pain management,[13] length of hospital stay,[14] quality of care,[15] disability,[16] repeat attendance[17] and mortality.[18] They also have increased risk of certain injury presentations including gunshot injuries,[19] long bone fractures,[20] head injuries,[21] alcohol-related injury,[22] workplace injury,[23] assaults,[24] self-harm and attempted suicide[25] and Female Genital Mutilation.[26] However, people from ethnic minorities have lower prevalence of other injuries including: falls among the elderly and road traffic injuries,[27] fire injuries[28] and partner violence.[29]

While death and morbidity rates due to injury are higher in some ethnic minority populations in the UK,[30] there remains a gap in evidence on their experiences of emergency services. This is partly due to a lack of focus or priority on this area of inequality until recently.[31] First, there is a weakness in routine information systems, where ethnicity data are often poorly recorded, particularly in emergency prehospital care settings.[32] Second, the preferred language of patients from ethnic minorities are not recorded in routine health data, nor are differences in culture and language adequately accommodated for in emergency services, with a scarcity of government-funded interpreters,[33] public health campaigns[34] and allied health services.[35] There is considerable scope for taking a more analytical approach to studying injury presentation and differences in emergency care among people from ethnic minorities in the UK that will inform policy and practice and help to reduce future disparities and burden of injury, mortality and disability.

Study aim

To describe disparities in injury presentation, processes of care and outcomes between people from ethnic minorities and white British people when they contact emergency health services for injury.

Objectives

We will:

1. Describe the published literature reporting all-cause mortality of people presenting with injury to emergency services by ethnicity.
2. Describe the quality (completeness, consistency) of ethnicity data in routine emergency healthcare datasets.
3. Compare between people from ethnic minorities and white British people: injury type, severity, care delivered, outcomes, beliefs and experiences when they contact emergency health services for injuries.
4. Explore with people from ethnic minorities, including refugees and asylum seekers: knowledge of service availability, factors which deter or encourage them to seek help, experiences of emergency healthcare for injuries.
5. Explore emergency healthcare providers' experiences of delivering care to people from ethnic minorities presenting with injury.
6. Synthesise quantitative and qualitative findings to:
   a. Help policy makers and care providers to develop and implement interventions to promote accessibility of services for injury in ethnic minorities populations.
   b. Enable ambulance service and EDs to improve care and outcomes for people in these populations with injuries.
   c. Inform injury surveillance resources to include ethnicity in their reporting of injury.

METHODS

Setting

We will conduct this study in the catchment area of one receiving hospital ED within each of four ambulance services (table 1). We selected sites where an established electronic patient data capture system was in place in the ambulance service. The participating ambulance services will provide linkable electronic datasets including ethnicity codes, which are available in approximately 70%

Table 1 Study sites and partners

Ambulance service	Emergency department	Third-sector organisation
East Midlands Ambulance Service	Leicester Royal Infirmary, University Hospitals of Leicester NHS Trust	The Race Equality Centre
South East Coast Ambulance Service	East Surrey Hospital, Surrey and Sussex Healthcare NHS Trust	Surrey Minority Ethnic Forum
Scottish Ambulance Service	Royal Infirmary of Edinburgh, NHS Lothian	The Welcoming
Yorkshire Ambulance Service	Northern General Hospital, Sheffield Teaching Hospitals NHS Foundation Trust	Refugee Council

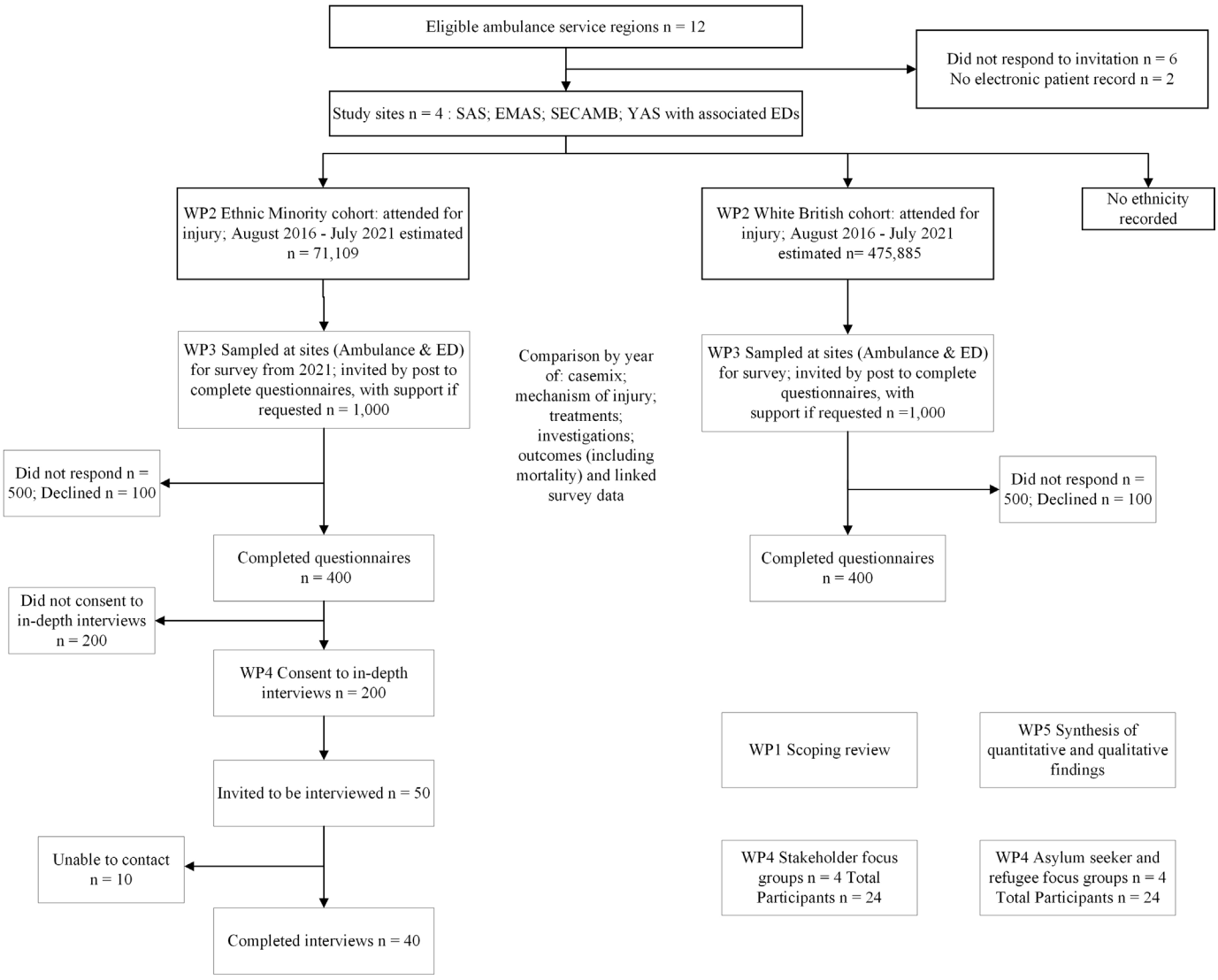

Figure 1 Study design and participant recruitment flowchart. ED, Emergency Department; WP, Work Package.

of patient records.[32] We hope to retrieve 80% of centrally held ED records with ethnicity codes.[36] The study will begin on 01/10/2021 and end on 30/09/2023.

Third-sector organisations that provide support in relation to healthcare for people from ethnic minorities at each site will help connect researchers with the local population. They will promote the study across their networks to encourage people to respond to postal survey questionnaires and provide support with recruiting and managing peer researchers to support sampled patients to complete the questionnaires.

Study design

We will use a convergent model of data collection where the quantitative and qualitative methods are conducted in parallel, and results are merged during the interpretation stage.[37] We will examine disparities in experiences, injury presentation, processes of care and outcomes as both the product of the individual patients' decisions and actions[38] and the organisation decisions, actions and attitudes.[39] As shown in figure 1, in our Work Packages (WP), we will:

WP1: Conduct a scoping review of existing literature.

WP2: Retrieve and analyse retrospective linked NHS routine data over a 5-year period (2016–2021) related to ambulance and ED contacts by patients from ethnic minorities and white British patients for injury to compare demographics, casemix, processes and outcomes of care.

WP3: Conduct a questionnaire survey with samples of people from ethnic minorities and white British people who contacted the ambulance service or attended ED for an injury within a specified recent period of up to 6 months to compare self-reported experiences, satisfaction and health-related quality of life.

WP4: Conduct in-depth interviews in each site with people from ethnic minorities who consent to be contacted for an interview in their completed questionnaires and conduct one focus group with refugees and/or asylum seekers at each site and one focus group with stakeholders at each site: for example, ED clinicians, paramedics, GPs and other primary care staff, social services staff, and third-sector support workers.

WP5: Synthesise our findings from quantitative and qualitative data to generate key messages and implications for policy and service delivery.

WP1: Scoping review

We will undertake a scoping review following the Joanna Briggs Institute (JBI) methodology.[40] We will refer to the Preferred Reporting Items for Systematic Reviews and Meta-analysis Extension for Scoping Reviews (PRISMA-ScR)[41] and JBI reporting checklists to developing a scoping review protocol.[42] The scoping review will aim to describe the published literature reporting cases of mortality by race or ethnicity of adults presenting with injury to emergency services.

We will identify papers from database searches (EBSCO=CINAHL, MEDLINE and PsycInfo; SCOPUS and COCHRANE) which will be screened independently by title, abstract and full paper following a protocol by at least two reviewers from the research team (see online supplemental file 1). We will include studies that report all cases of mortality by race or ethnicity of adults presenting to emergency services for injury. We will exclude studies involving people with no ethnicity record; no record of injury as the cause of emergency service use; no reporting of mortality by race and ethnicity and those reporting non-emergency care such as scheduled appointments, outpatient department services and elective surgeries. All discrepancies between reviewers will be resolved by a third reviewer.

WP2: Epidemiology of injury presentation, care delivery and outcomes using anonymised linked routine data

We will link routine ambulance service data between August 2016 and July 2021 related to patients presenting with injury within the ambulance service catchment area of each participating ED to centrally held ED, inpatient, outpatient and Office of National Statistics (ONS) datasets (using NHS Digital in England and eDRIs in Scotland).[43] Individual-level prehospital data on calls made for injury will be retrieved by each ambulance service from its computer-aided dispatch and patient clinical record systems; these data are currently unavailable in NHS Digital or Electronic Data Research and Innovation Service (eDRIS). Clinical data will include ethnicity; condition code; job cycle time (from first 999 call for the incident to time ambulance reported free to respond to next 999 call); medications given and disposition (conveyed to hospital, treated without conveyance). We will link this data using a study-specific Identity to patient-identifiable data held in separate files—the 'split file' method[44]—and uploaded to NHS Digital or eDRIS by each site. We will then use patient-identifiable data within NHS Digital or eDRIS to create anonymised linkage fields and retrieve routinely recorded outcomes for these patients (figure 2).

We will also retrieve routine data on ED attendances for injury from participating EDs for the same period from NHS Digital/eDRIS. We will then retrieve anonymised linked routine health outcomes for 6 months after index presentation with injury to ambulance services and EDs to assess outcomes unless the person has specifically opted out.[45] We will request data related to: diagnoses; disposition from ambulance service and ED; length of stay at index episode in hospital; treatments received and discharge code; Intensive Care Unit (ICU) admissions and length of stay; further ED attendances and emergency admissions and deaths up to 6 months.

We will partition the aggregated data into cohorts of patients from ethnic minorities, patients from the white British population and those for whom no ethnicity is recorded, with appropriate subgroups identified using 2011 Census ethnicity categories.[46] We will include patients with multiple presentations or attendances with the first presentation or attendance as baseline and data from subsequent presentations or attendances contributing to outcomes. We will hold a consultation workshop with stakeholders at the outset of the study to help clarify and define our study outcome measures.

We will compare patterns of presentation, processes of care and outcomes through cross-sectional analyses to investigate differences in:

- Demographics; geography and deprivation index; mechanism of injury; severity; injury type (accidental, non-accidental, assault, self-harm); casemix; route to care (direct, via 111 telephone advice service or via general practice).
- Treatments and investigations.
- Potential safety incidents (eg, hospital admission or death within 72 hours of discharge from 999 or ED care) following injury.
- Immediate outcomes (at index event) including ambulance attendance, transportation to hospital, hospital admission, length of stay in hospital and ICU, death following injury.
- 6-month outcomes (further ED or hospital attendances, length of stay in hospital and deaths) following injury.

WP3: Questionnaire survey

We will survey people from ethnic minorities and white British people who have presented with injury to one of the four ambulance services or nominated ED. Each of the four study sites will search through their routine ambulance service and ED records to identify patients presenting with injury and coded as being from an ethnic minority, including patients who presented to the ambulance service but were not conveyed to hospital. They will also identify a similar-sized cohort of patients identified as white British.

Each study site (comprising one ambulance service and one ED) will send out 500 postal questionnaires (n=2000 in total, 4 sites) to 250 patients from ethnic minorities and 250 white British patients. Before sending out questionnaires, the clinical care team will check death records to ensure that the person has not died to avoid causing distress to their family. All recipients will be asked to

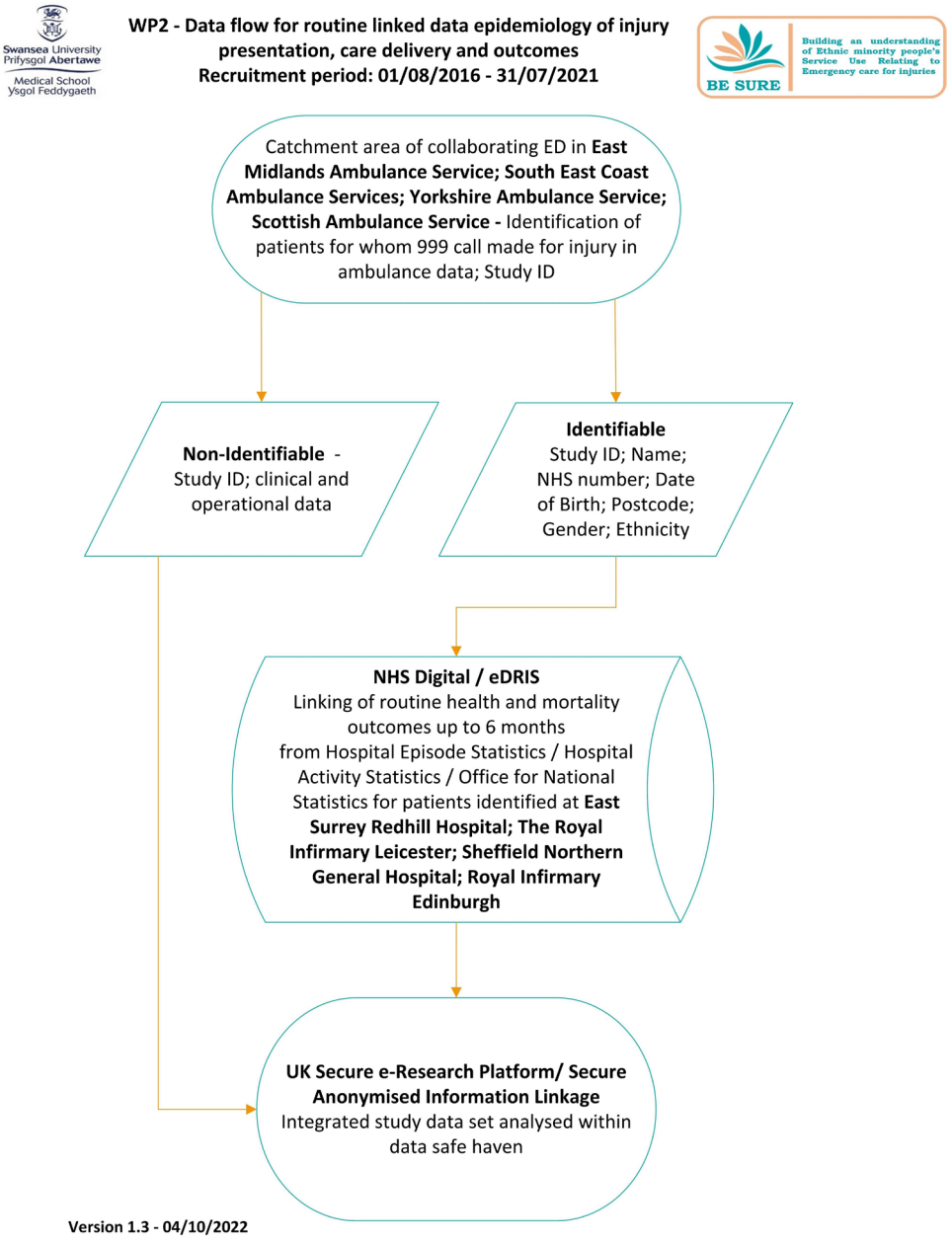

Figure 2 WP2—Data flow for routine linked data epidemiology of injury presentation, care delivery and outcomes.

return completed questionnaires in a prepaid envelope to Swansea University. A reminder letter will be sent after 2 weeks. Recipients will also have the option to complete the questionnaire online (via a secure approved platform) using a QR code, reducing the potential burden of having to return the questionnaire by post. Where patient contact numbers are available, the clinical care team will contact the patient by telephone 1 week after sending the questionnaire, to offer support to complete the questionnaire over the telephone or to refer the participant to a local peer researcher to provide this support where consent is provided. The expected 800 analysable questionnaire responses will (using 90% power, 5% significance) enable us to detect differences in outcomes equivalent to a standardised statistical effect of ~0.23; this, in turn, corresponds to clinically meaningful differences in study outcomes (eg, self-reported Health Related Quality of Life). We will offer all respondents a £10 voucher for completing the questionnaire.[47] All questionnaire data will be inputted and stored on secure Swansea University database.

We will base our survey questions on those used successfully in the HEAR survey,[9] focusing on knowledge of services, beliefs, experiences of injury, expectations and health-seeking behaviour. The questionnaire (see online supplemental file 2) will also include standardised questionnaires to measure satisfaction with care (Quality of Care Monitor)[48] and current health status (SF-12).[49] The questionnaire will be translated into several languages and translated versions will be available on request.

We will recruit and train 12 community peer researchers[50] from ethnic minorities to support with

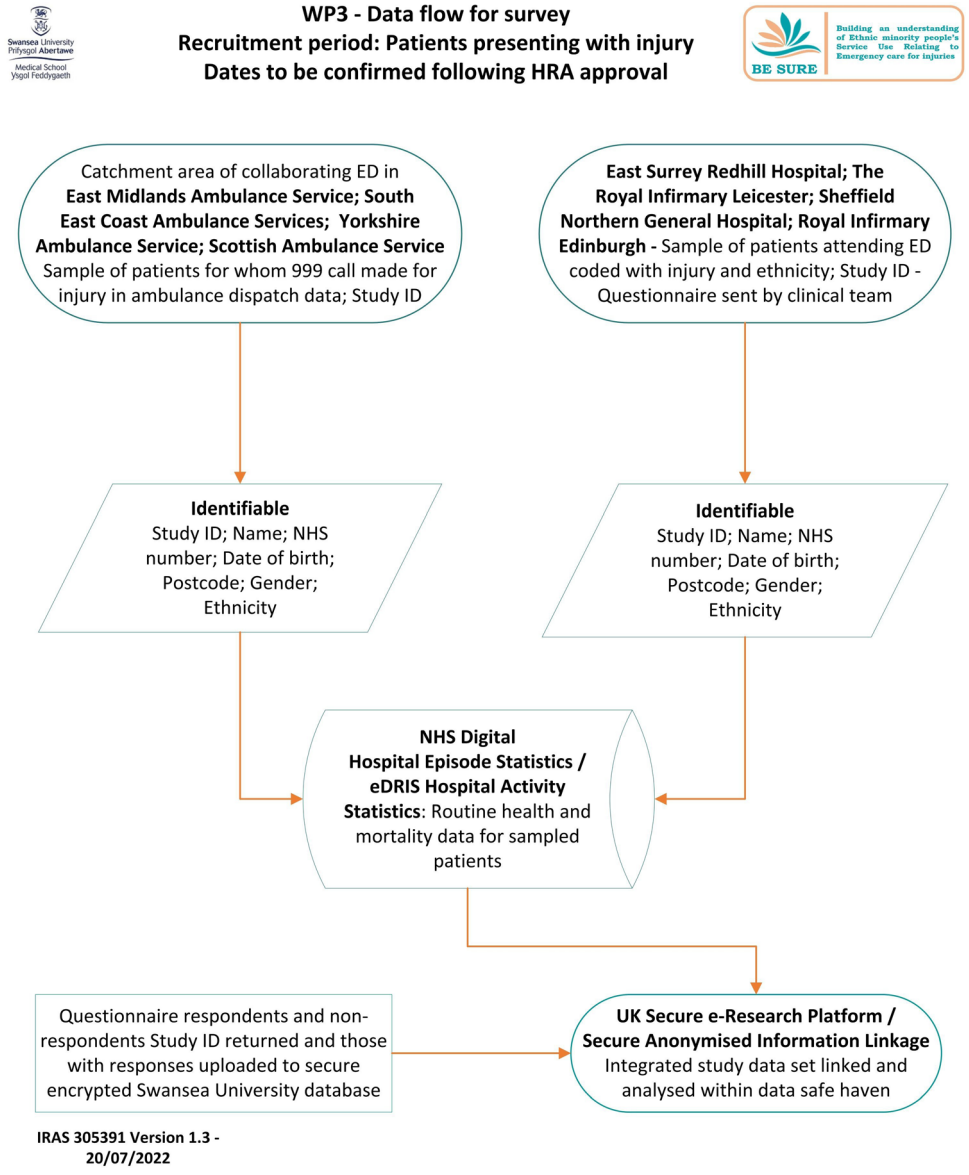

Figure 3 WP3—Data flow for questionnaire survey.

the collection of questionnaire data. We will recruit and train peer researchers with support from our third-sector partner organisations at each site. The peer researchers will work closely with the clinical care team in their localities who will refer respondents who request language support to the appropriate peer researcher with the patient's consent to help complete the questionnaire.

Identifiable data for all patients who are sampled to receive the questionnaire will be saved by participating services in a 'split file' format and uploaded into NHS Digital or eDRIS (figure 3). Questionnaire responses will be linked to clinical records from ED (Hospital Episode Statistics (HES) and Emergency Care Data Set (England); Hospital Activity Statistics and Ambulance & Emergency Datamart (Scotland)) and hence to factors and covariates derived from these data sources.

WP4: Qualitative interviews and focus groups

We will conduct a total of 40 interviews with patients from ethnic minorities (10 in each site, identified from survey respondents who provide their consent and contact details) and four focus groups with Asylum Seekers and Refugees (up to six participants per site, identified by third-sector organisations).

We will purposively sample survey respondents who have experienced an injury in the previous 12 months by key characteristics such as injury type, injury severity, age, gender and ethnic background to provide consent for interview (see online supplemental file 3). Where language is a barrier, an interpreter will be present. Those who participate will be provided with contact numbers for support groups should they experience any distress during their participation and would like additional support. We will offer all participants in patient interviews and focus groups a £20 voucher in recognition of their

contributions.[42] We will conduct all focus groups at the premises of a local third-sector organisation.

We will also conduct four focus groups with stakeholders, one in each site with up to six participants, supplemented with telephone interviews as necessary. We will recruit stakeholders from a range of professional groups: ambulance call takers, paramedics and operational managers; ED clinicians; GPs and other primary care staff; social services staff and third-sector support workers. We will explore participants' experiences and practicalities of delivering care to patients from ethnic minorities who present with injury, including their resource and training needs. We will offer all participants a £20 voucher to acknowledge the time taken to contribute to the study.[51]

WP5: Synthesis of quantitative and qualitative findings

We will synthesise findings obtained from the four previous WPs to ensure that findings assist policymakers, commissioners and care providers to achieve the best outcomes for patients, staff and the wider healthcare system.

Analysis

WP1: Scoping review

We will chart data reporting on aims, sample size, demographics, injury presentation, cause of injury, definition of mortality and the difference in rate of mortality. We will describe but not appraise included papers for methodological quality or risk of bias, which is consistent with guidance on conducting scoping reviews.[42]

WP2: Epidemiology of injury presentation, care delivery and outcomes using anonymised routine linked data

Our statistical analysis plan will characterise and allow for differences in population between study sites. We will interpret results in light of these differences to maximise generalisability across the UK population. We will detail conventions on comparison of processes and outcomes (including inclusion and exclusion rules for covariates and factors), management of missing data, selection of confounders and the reporting of outcomes. To ensure we can report on outcomes by ethnicity (and ethnic subgroups, where appropriate), we will cross-reference and validate key variables across data sources (eg, HES or ONS and CCG (England)). We will adjust our comparisons between cohorts (people from ethnic minorities and white British) and subgroups using prespecified factors and covariates (eg, age; gender; socioeconomic status) obtainable from routine data. We will request deprivation measures associated with patient residence. These socioecological data will comprise an Index of Multiple Deprivation and component domains and we will include appropriate summaries as confounders in our statistical models.

We will describe and compare when analysing our routine data, summarising the epidemiology of injury by ethnicity (including patterns of presentation; injury type, severity and case-mix; processes and outcomes of care) based on those presenting to the emergency services within and between people from ethnic minorities and white British people. We will include analysis by ethnic subgroups where numbers allow. Across the four study sites, we expect to identify approximately 70 000 people from ethnic minorities and 480 000 white British people who have sought emergency care for injury. This will give ample power to undertake meaningful comparisons across aspects of presentation (eg, proportion presenting with a specific condition), disposition (eg, proportion admitted to hospital; length of stay) and further outcomes (eg, reattendance rates, mortality) over time and between cohorts and prespecified subgroups.

Limitations in routine data will define a third study cohort, comprised of people presenting with injury but for whom no useable data on ethnicity are available. We will describe the characteristics and outcomes (eg, age, sex, injury type and severity; and health outcomes) for this cohort and compare them with the people from ethnic minorities and white British cohorts. This will address our objective related to the quality of ethnicity data in emergency care settings.

WP3: Questionnaire survey

We will collate questionnaire data on a secure platform; initial processing will include data validation, assessment of its quality and completeness and implementation of published scoring algorithms. In our analyses, we will report descriptive summaries of responses (using standard methods, including tabulated counts and percentages); comparative analyses, combining questionnaire outcomes with prespecified factors and covariates and, where feasible, description and comparison of questionnaire respondents and non-respondents.

WP4: Qualitative interviews and focus groups

We will use framework analysis[52] to analyse qualitative interview and focus group data. We will identify themes from our study questions, the literature and initial analysis of survey data to develop our framework. We will code transcripts according to these themes and refine as analysis progresses. Experienced qualitative researchers will lead analysis of interview and focus group transcripts. Two public contributors will help to validate the analysis process, supporting key stages of coding, refining themes and providing a critical stance.[53] We will use NVivo 11, computer-assisted qualitative data analysis, to manage data. We will remove all identifiable data from interview and focus group transcripts and assign a participant number for identification. Where appropriate, anonymous coded excerpts or quotes will be included in outputs.

WP5: Synthesis of quantitative and qualitative findings

We will synthesise and report on quantitative and qualitative findings by identifying meta-themes that cut across each component of the study.[54] We will interpret the results and consider similarities and differences, including

recurring themes and issues that emerge from the scoping review, routine data, survey responses and people's views and experiences of injury and care received. We will use this evidence to inform our policy recommendations for improving injury care for people from ethnic minorities, including direction of future research.

ETHICS AND DISSEMINATION

We have obtained a favourable ethical approval from the Wales Research Ethics Committee (305391). We have also completed all necessary research permissions through the Health Research Authority. In addition, we obtained information governance approvals from the Confidentiality Advisory Group to conduct data linkage and retrieval of outcomes for analysis from NHS Digital in England and are in the process of gaining approval from eDRIS in Scotland. Due to data protection and patient confidentiality, participating Trusts are unable to share medical records with peer researchers or third-sector organisations. Therefore, the research paramedics and nurses will identify and recruit participants from routine records to take part in the questionnaire survey (WP3) and qualitative interviews (WP4).

Patient and public involvement

We will ensure our public contributors are actively involved in all aspects of the study.[55] We have strong relationships with people from ethnic minorities who have contributed experience-based expertise throughout the process of planning this proposal. We have drawn on the experiences and knowledge of two experienced public contributors to design the study who will join the Research Management Group to implement the research (TH, SS). We will recruit two additional public contributors to join the independent Study Steering Committee alongside clinical, policy, academic, methodological and subject experts. We will also regularly present progress and emerging findings of our study to two public advisory groups, the PRIME SUPER Group[56] and the SAIL Consumer Panel.[57] We will provide honoraria, briefings and other support as needed in line with best practice and report public involvement in our outputs.[58]

Dissemination

We will include engagement with patient and professional groups, NHS managers, commissioners and policy makers and third-sector organisations in our communication, publication and dissemination plan. We will use the plan to guide our second Stakeholder Event, which will take place once the study data collection and analysis are complete. The Stakeholder Event will be designed to be inclusive allowing patients, public contributors, third-sector organisations, service providers and policy makers the space to share their views. At the event, we will discuss and refine our findings to ensure our results are credible and are widely shared with the community and service providers.

DISCUSSION

This is the first study in the UK to use routine anonymised linked data to compare outcomes and experiences for people from ethnic minorities and white British people when they present with injury to emergency health services. Our mixed-methods design builds on this innovative approach to capturing data by employing qualitative methods (WP4) to gain an in-depth understanding of a range of experiences, outcomes and views about emergency care that are not available in routine health records. Our focus groups with asylum seekers and refugees (WP4) provide a valuable insight into the ways an already vulnerable population accesses and navigates emergency health services when contacted for care following injury.

The strength of this study lies in its multifaceted approach to study design, data collection and analysis which stems from the diverse study team. Collaborating with ambulance services, EDs, community members and third-sector organisations strengthens the implementation of the study's research activities and ensures that the contribution this study makes to the evidence base will be informed by those who deliver and use emergency services.

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Competing interests None declared.

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

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BE SURE – Scoping Review Database Search Strategy

Databases Searched: EBSCO = CINAHL, MEDLINE AND PsycInfo; SCOPUS and COCHRANE

Limits applied – Date: January 2010 – May 2022; Human (only applied in EBSCO)

Search terms 1-5 combined with AND

1. **Population**:

(Ethnicit* OR Race OR "BAME" OR "Black, Asian and minorit* ethnic*" OR "Black, Asian & minorit* ethnic*" OR Immigrant* OR Migrant* OR "Asylum seeker*" OR Refugee* OR Multicultural OR Language OR English OR Ethnic OR Religion OR Culture OR Latin*o OR Latina OR Indigenous OR Aboriginal OR Native OR "First Nation*" OR "Afro-Caribbean*" OR "African American*" OR Gyps* OR Roma OR "Hispanic American")

2. **Emergency Service:**

("emergency service*" OR ambulance* OR "Emergency department*" OR "Accident and emergency department*" OR "Accident & emergency department*" OR A&E OR "emergency room*" OR "emergency care*" OR "999 calls and admission*" OR "Emergency health service*" OR 999 OR 911 OR "Ambulance service" OR "Ambulance trust" OR "Emergency medical service*" OR "EMS" OR "Patient transport" OR "control room")

3. **Patient Category:**

(Patient OR Inpatient OR Outpatient OR "In-Patient" OR "Out-Patient")

4. **Clinical care:**

("Quality of care" OR Pain OR "Pain management" OR "length of hospital stay*" OR disability OR "Process of care" OR "Repeat attendance*" OR "Mortality" OR Treatment OR "Emergency treatment" OR "Clinical care" OR Rehabilitation)

5. **Injury:**

(Injur* OR assault* OR "Domestic violence" OR "Intimate partner violence" OR "self-harm" OR suicide OR accident* OR Violence)

Baghdadi F, *et al. BMJ Open* 2023; 13:e069596. doi: 10.1136/bmjopen-2022-069596

BE SURE Interview Guide

Interviews with people identifying from an ethnic minority

Aim: to give people an opportunity to provide their own narrative about their circumstances, routes to seeking care, injury experiences (personal or family), views regarding their need, service use, care received, and post injury impact on physical and mental health including terminology (labels) used.

Guide

We have contacted you because you indicated on our survey that you wanted to participate in an interview to talk about your experience and journey of care on [*insert date*]. We will focus on that experience in this interview, but we will also ask other questions about your general experience of any other times in the past when you had an injury, and your use of ambulance and emergency services.

1. Can you tell me what happened on that day?
    a) Injury to self or other?
    b) Nature of injury or incident how, what, when it happened? Who else was there?
    c) What help did ambulance and emergency care on this occasion?
2. Why did you make the above choice?
3. What was the experience like calling 999?

    E.g. Prompts for their journey of care – calling 999, talking to someone on the phone, waiting, ambulance attending, ambulance to the hospital, transfer, receiving care at the hospital, aftercare - ask about feelings of being discriminated against at each stage and what type of, based on, and how discrimination – language, ethnicity, religion, gender, sexuality, lass, geography, etc.

4. What was the experience like in the emergency department?

BE SURE Interview Guide

E.g. Prompts for their **journey of care** – triage, waiting, receiving care at the hospital, aftercare - ask about feelings of being discriminated against at each stage and what type of, based on, and how discrimination – language, ethnicity, religion, gender, sexuality, class, geography, etc.

5. Have you had any other experience of getting health care after an injury?

a) How did that time compare with the time we've been talking about?

6. If you were injured would you call 999 and/or go to the emergency department again?

a) What would you think about when you decided what to do?

b) Who is the emergency department for?

7. Can you think of any other ways to get help after an injury?

a) Prompts: NHS111, pharmacy, GP, family/friends

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A. Your Details

1. What is your gender ☐ Female ☐ Male ☐ Other ☐ Prefer not to say

2. What is your age in years? ☐

3. What ethnicity do you identify as?

☐ White British	☐ Other mixed	☐ African
☐ White Irish	☐ Indian	☐ Other Black
☐ Other White	☐ Pakistani	☐ Chinese
☐ White/Black Caribbean	☐ Bangladeshi	☐ Other ethnic group?
☐ White/Black African	☐ Other Asian	Please Specify
☐ White/Asian	☐ Caribbean	☐

4. What is your preferred language?

☐ English	☐ Gujarati	☐ Portuguese	☐ German
☐ Scots	☐ Arabic	☐ Tamil	☐ Persian/Farsi
☐ Polish	☐ French	☐ Turkish	☐ Tagalog/Filipino
☐ Punjabi	☐ Mandarin	☐ Slavak	☐ Romanian
☐ Urdu	☐ Cantonese	☐ Somali	☐ Other
☐ Bengali	☐ Spanish	☐ Lithuanian	☐

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5. What do you feel is your level of English?

Please tick all that apply.

5.1. Reading.

- ☐ I can read English well
- ☐ I can read a little English
- ☐ I cannot read English

5.2. Speaking.

- ☐ I can speak English well
- ☐ I can speak a little English
- ☐ I cannot speak English

5.3. Holding a conversation.

- ☐ I can talk in English with a health professional (i.e. doctor, nurse, or paramedic)
- ☐ I find it difficult to talk in English with a health professional
- ☐ I cannot talk in English with a health professional

6. How long have you lived in the UK?

- ☐ My whole life, go to question 7
- ☐ More than 5 years
- ☐ 1-5 years
- ☐ Less than 1 year

6.1. What country were you living in before settling in the UK?

☐

B. Your knowledge of healthcare services

In this section we want to understand what you know about the different emergency healthcare services that are available.

7. Do you know healthcare care is free in the United Kingdom?

☐ Yes ☐ No

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8. Do you know 999 ambulance service care is free in the United Kingdom?

☐ Yes ☐ No ☐ Not Sure

9. Do you know Emergency Department care is free in the United Kingdom?

☐ Yes ☐ No ☐ Not Sure

10. Have you heard of the following services?

	Not heard of the service	Heard of the service but don't know how to contact	Have heard of and would know how to access the service
NHS 111/NHS Direct telephone advice			
Minor Injuries Unit			
999 ambulance service			
Emergency Department (A&E)			

11. Did you know that the NHS should provide you with an interpreter if you need one?

☐ Yes ☐ No ☐ Not Sure

C. Who you contact when hurt

12. How often have you called the 999 ambulance service in the last 12 months for an injury?

☐ 0 ☐ 1-2 ☐ 2-5 ☐ 5+

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13. How often have you visited an Emergency Department in the last 12 months for an injury?

☐ 0 ☐ 1-2 ☐ 2-5 ☐ 5+

D. Your experience of care

In this section we want to understand your experience of healthcare provided by the 999 ambulance service, Emergency Department, or both on the date on the cover letter of this questionnaire. You only need to answer questions that are relevant to your experience.

Calling 999 ambulance service

14. Did you make the 999 ambulance service call?

☐ Yes ☐ No if no – go to Q.27, Page 5.

15. Do you feel that the 999 ambulance service call taker listened to you?

☐ Yes, completely ☐ Yes, somewhat ☐ No ☐ Don't know

16. Did you think that the 999 ambulance service call taker asked questions relevant to your problem?

☐ Yes, completely ☐ Yes, somewhat ☐ No ☐ Don't know

17. Did you feel reassured when speaking to the 999 ambulance service call taker?

☐ Yes, completely ☐ Yes, somewhat ☐ No ☐ Don't know

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18. Did the 999 ambulance service call taker tell you an ambulance would be sent to you?

☐ Yes

☐ No

If no, what did the call taker advise? Tick all that apply and go to Q.27, Page 7

☐ Manage the problem at home yourself

☐ Go to the Pharmacist

☐ Go to your GP

☐ Call NHS 111

☐ Call back if the problem gets worse

19. If you needed help, did the 999 ambulance service call taker tell you how long you could expect to wait for help to arrive?

☐ Yes, but wait was shorter

☐ Yes, and that was about right

☐ Yes, but wait was longer

☐ No

☐ Don't know

20. How would you rate your experience of using 999 ambulance service telephone service on this occasion?

☐ Very good

☐ Good

☐ Fair

☐ Poor

☐ Very Poor

When the Ambulance Arrived

21. Did the paramedics or ambulance workers you saw explain what they were doing in a way you could understand?

☐ Yes, completely

☐ Yes, somewhat

☐ No

☐ Don't know

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22. Did the paramedics or ambulance workers explain what was wrong with you in a way you could understand?

☐ Yes, completely ☐ Yes, somewhat ☐ No ☐ Don't know

23. If you were in pain, did the paramedics or ambulance workers do all they could to help?

☐ Yes, definitely ☐ Yes, somewhat ☐ No ☐ I was not in any pain

24. Once the paramedics or ambulance workers completed their work, did they tell you what to do if you continued to feel unwell or if your condition worsened?

☐ Yes, they told me to call the ambulance service back ☐ Yes, they told me to call my GP ☐ Yes, they told me to call another health care professional ☐ Yes, they gave me an information leaflet ☐ No, they did not provide any advice if I continued to feel unwell ☐ No advice was wanted/ needed ☐ Don't know

25. Overall, how well do you think you were looked after by the paramedics or ambulance workers?

☐ Very well ☐ Fairly well ☐ Not very well ☐ Not at all well

26. Did you travel to the Emergency Department in the ambulance?

☐ Yes ☐ No – if no, got to Q32, Page 8.

Journey to Emergency Department

27. Was it your decision to go to the Emergency Department?

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☐ Yes ☐ No ☐ Not sure

28. Was the length of time the ambulance workers spent with you before taking you to hospital or elsewhere what you expected?

☐ Yes ☐ No, it was too long ☐ No, it was too short ☐ Don't know

29. Did the ambulance workers talk to you during the journey? (Please tick all that apply)

☐ Yes, they told me what was happening

☐ Yes, they asked me about how I was feeling

☐ Yes, they talked to me about what would happen when we got to the hospital or elsewhere

☐ Yes, they talked about something else

☐ No, they didn't talk to me

30. How well do you feel you understood what the paramedics or ambulance workers were saying to you during your journey?

☐ Very well ☐ Well ☐ Neutral ☐ Not well ☐ Not at all

31. When you arrived at the hospital did the paramedics or ambulance workers wait with you until you were seen by a doctor or nurse?

☐ Yes ☐ No ☐ Can't remember

Go to Q.41, Page 9.

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Arriving at the Emergency Department yourself

Please complete this section only if you travelled to the Emergency Department without an ambulance; if an ambulance brought you to the Emergency Department - go to Q.41, Page 9.

32. Who did you go to the Emergency Department with?

- ☐ Myself
- ☐ Friend
- ☐ Neighbour
- ☐ Family member
- ☐ Care worker
- ☐ Health professional
- ☐ Other (specify) ☐

33. When you arrived at the Emergency Department, was it clear to you where to register?

☐ Yes, definitely ☐ Yes, somewhat ☐ No, this was not needed ☐ No, this would have helped ☐ Can't remember

34. Did anyone help to explain your problem to the person who registered you?

- ☐ Friend
- ☐ Neighbour
- ☐ Another patient in Emergency Department
- ☐ Care Worker
- ☐ Family
- ☐ Not Applicable
- ☐ Other (please specify) ☐

35. Did the person who registered you understand your problem?

☐ Yes, completely ☐ Yes, somewhat ☐ No ☐ Don't know ☐ Not Applicable

36. After your registration, did you have to wait to be seen again?

☐ Yes ☐ No ☐ Can't remember (If no or can't remember, go to Q.41, Page 9.)

37. Was the length of time you waited to be seen again what you expected?

☐ I did not have to wait at all ☐ The wait was shorter than expected ☐ The wait was about as long as expected ☐ The wait was longer than expected ☐ Don't Know

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38. While you were waiting, did someone tell you what was happening?

☐ Yes, definitely ☐ Yes, somewhat ☐ No, this was not needed ☐ No, this would have helped ☐ Can't remember

39. While you were waiting, did someone tell you what to do?

☐ Yes, definitely ☐ Yes, somewhat ☐ No, this was not needed ☐ No, this would have helped ☐ Can't remember

40. While you were waiting, did you get all the things you needed (like medicine, food, drink and toilets)?

☐ Yes, definitely ☐ Yes, somewhat ☐ No ☐ I did not need anything ☐ Don't know

Receiving Care

41. Could you understand when Emergency Department staff explained…

41.1. What they were doing?

☐ Yes, completely ☐ Yes, somewhat ☐ No ☐ Don't know

41.2. What was wrong with you?

☐ Yes, completely ☐ Yes, somewhat ☐ No ☐ Don't know

42. If you were in pain, did Emergency Department staff do all they could to help your pain?

☐ Yes, definitely ☐ Yes, somewhat ☐ No ☐ I was not in pain ☐ Don't know

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43. Were you given enough privacy when being treated and examined?

☐ Yes, definitely ☐ Yes, somewhat ☐ No ☐ I did not want privacy ☐ Don't know

44. After your attendance at the Emergency Department, what happened?

☐ I was admitted to hospital

☐ I was told to go home

☐ I was told to go see another health care worker (please specify)

☐ I discharged myself and went..., (please specify where)

45. Did anyone at the Emergency Department tell you when you could restart your usual activities?

☐ Yes definitely ☐ Yes somewhat ☐ No ☐ This was not necessary ☐ Don't know

46. Did anyone at the Emergency Department tell you how to provide self-care at home after your hospital care?

☐ Yes definitely ☐ Yes somewhat ☐ No ☐ This was not necessary ☐ Don't know

47. Did anyone at the Emergency Department tell you what to do or who to contact if you were still worried about anything?

☐ Yes ☐ No ☐ Don't know

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E. Satisfaction with Care

Satisfaction with 999 Ambulance Service

If you travelled to the Emergency Department without an ambulance - go to Q.50, Page 13.

48. Please read the statements below and place an **X** in the box that reflects your agreement with each.

	Not applicable	Strongly agree	Agree	Neither agree nor disagree	Disagree	Strongly disagree
The ambulance crew who attended me listened carefully to my problem						
I think the crew were polite						
I got the advice I needed						
I was reassured by the advice given to me						
I was satisfied with the explanation I was given						
I was given advice about when to get more help						
I was satisfied with the ambulance crew						
I was made to feel I was wasting the crew's time						

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49. If the same health problem arose again, would you call an ambulance to help you with your problem?

☐ Yes ☐ No ☐ Don't know

If no, who would you contact for advice or help, or would you look after yourself?

Tick any that apply.

☐ I would go to ED myself
☐ I would look after myself
☐ NHS Direct/NHS111
☐ Careline
☐ GP
☐ Mental Health Team
☐ District Nurse
☐ Social Worker
☐ Other – please specify

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Satisfaction with Emergency Department (A&E)

50. Please read statements below and place an X in the box that reflects your agreement with each.

	Not applicable	Strongly agree	Agree	Neither agree nor disagree	Disagree	Strongly disagree
The Emergency Department staff who supported me listened carefully to my problem						
I think the staff were polite						
I got the amount of advice I needed						
I was reassured by the advice I received						
I was satisfied with the explanation I received						
I was given advice about when to get more help						
I was generally satisfied with the Emergency Department staff						
I was made to feel I was wasting the worker's time						

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51. If the same health problem arose again, would you go to the Emergency Department to help you with your problem?

☐ Yes ☐ No ☐ Don't know

If no, who would you contact for advice or help, or would you treat/look after yourself?

Tick any that apply.

☐ I would call 999	☐ GP	☐ Social Worker
☐ I would look after myself	☐ Mental Health Team	☐ Careline
☐ NHS Direct/NHS 111	☐ District Nurse	☐ Other – please specify

F. Your health and wellbeing

This section asks for your views about your health and how well you are able to do your usual activities. **Answer each question by choosing just one answer**. If you are unsure how to answer a question, please give the best answer you can.

1. **In general, would you say your health is:**

☐ Excellent ☐ Very Good ☐ Good ☐ Fair ☐ Poor

The following questions are about activities you might do during a typical day. Does your health now limit you in these activities? If so, how much?

	YES, limited a lot	YES, limited a little	NO, not limited at all
2. **Moderate activities such as** moving table, pushing vacuum cleaner, bowling, or playing golf.	☐	☐	☐
3. Climbing **several** flights of stairs.	☐	☐	☐

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During the past 4 weeks, have you had any of the following problems with your work or other daily activities as a result of your physical health?

	YES	NO
4. **Accomplished less** than you would like.	☐	☐
5. Were limited in the **kind** of work or other activities.	☐	☐

During the past 4 weeks, have you had any of the following problems with your work or other daily activities as a result of any emotional problems (like feeling anxious or depressed)?

	YES	NO
6. **Accomplished less** than you would like.	☐	☐
7. Did work or activities **less carefully than usual**.	☐	☐

8. **During the past 4 weeks, how much did pain interfere with your normal work (including work outside the home and housework)?**

☐	☐	☐	☐	☐
Not at all	A little	Moderately	A lot	Extremely

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These questions are about how you have been feeling during the past 4 weeks.
For each question, please give the answer that comes closest to the way you have been feeling.
How much of the time during the past 4 weeks…

	All of the time	Most of the time	A good bit of the time	Some of the time	A little bit of the time	None of the time
9. Have you felt calm and peaceful?	☐	☐	☐	☐	☐	☐
10. Did you have a lot of energy?	☐	☐	☐	☐	☐	☐
11. Have you felt down-hearted and blue?	☐	☐	☐	☐	☐	☐

12. **During the past 4 weeks, how much of the time has your physical health or emotional problems interfered with your social activities (like visiting friends, relatives, etc.)?**

☐ All of the time ☐ Most of the time ☐ Some of the time ☐ A little of the time ☐ None of the time

G. Final questions and thank you

52. Please enter today's date. ☐

53. Did anyone help you to complete this questionnaire (family, friend, support worker, or researcher)?

☐ Yes ☐ No

If yes, please describe your relationship with your helper.

☐

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We would like to link your questionnaire to your routine NHS information anonymously. Place an **X** in the box if you **DO NOT** agree for us to link your questionnaire answers to your NHS information. ☐

54. We would like to invite you to take part in a one-to-one interview by telephone or in person to talk about the experience you described in this questionnaire. Would you be interested in talking to us about your experience of care?

☐ Yes ☐ No

If yes, please provide your contact details and we will arrange a convenient time and date for the interview.

Name	
Phone	
Email	

If you would like to receive a £10 High Street voucher for completing this questionnaire, please provide your full name and email address below. If you do not have an email address, please provide your full home address including post code.

Name	
Email	
Address and post code	

Thank you for your helping us with this study.