DEVELOPMENT OF THE CATEGORY C AMBULANCE SERVICE USER SURVEY 2008

THE CO-ORDINATION CENTRE FOR THE ACUTE SURVEY PROGRAMME



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1 Executive summary

This document details the development of the NHS Ambulance Trust Category C Service User Survey 2008. The development work was carried out by Picker Institute Europe as part of the NHS Patient Survey Programme overseen by the Healthcare Commission.

1.1 Aims

The aims of the survey development work were to:

- Devise a sampling strategy that would be workable in all NHS ambulance service trusts in England
- Develop a questionnaire in collaboration with stakeholders and service users
- Test the face validity of the questionnaire in cognitive interviews with recent Category C service users
- Test the adequacy of the survey tools and procedures in a pilot survey.

1.2 Methods

The methods included:

- A review of service user records at all NHS ambulance service trusts in England and a pilot sampling exercise - to assess possible sampling methods
- A review of existing surveys and the Category C feasibility study conducted by the Healthcare Commission in 2007, along with consultation of stakeholders and service users in focus groups and interviews - to inform the content of a survey specific to Category C service users
- Cognitive interviews with recent Category C service users to test the face validity of the questionnaire
- A pilot survey to test the adequacy of the survey tools and procedures.

1.3 Results

The sampling method, based on that used in the NHS Patient Survey Programme, was adapted to apply to ambulance trusts' record keeping systems identified in the sampling review and pilot sampling exercise. Stakeholder and service user consultation highlighted key issues that were important to include in a survey of Category C service users. A draft questionnaire was developed to address these issues and face validity was tested. The questionnaire was further tested and developed through a pilot survey mailing to 800 recent Category C service users from two ambulance trusts.

2 Background

The system of allocating emergency ambulance calls into three categories (A, B or C), depending on how life-threatening or urgent they are, allows ambulance services to prioritise callers and allocate resources accordingly. Over a quarter of calls (2.1 million in 2007/08)¹ are now assigned to the lowest priority group: Category C - 'non urgent or life threatening' - and the number of calls in this category, as in all categories, is increasing. Emergency ambulance calls have more than doubled in the last decade (from 3.6 million in 1997/98 to 7.2 million in $2007/08^2$).

Since 2004, response standards for Category C calls have been the responsibility of individual ambulance service trusts with no national targets or monitoring imposed. During this time various alternative methods of Category C service provision have been developed in order to better tailor care to people's needs, increase efficiency and meet the increasing demand for services. For example, Category C service users can be offered treatment at home by a nurse, paramedic or emergency care practitioner, they can be given advice over the telephone by nurses and paramedics, and the ambulance service can provide links to alternative services, such as a referral to their local GP or NHS Direct call centre. Reflecting this change to traditional ambulance services, the proportion of emergency incidents resulting in an emergency response arriving at the scene has reduced. In 2007/08 the number of incidents attended was 81% of all emergency calls, compared with 100% in 1994/95³ before the call prioritisation system was introduced. However due to the lack of monitoring at a national level there is currently little information about the range of alternative Category C services that are being provided across the country.

Understanding the experience and perspectives of service users is key to effective auditing of these services and ensuring they are designed around service users needs. The actual experiences and views of service users can be used to inform and improve care and services, both nationally and locally.

¹ Source: Department of Health Ambulance Service Statistics 2007/08

² Source: The Health and Social Care Information Centre - Ambulance Statistics

³ Source: The Health and Social Care Information Centre - Ambulance Statistics

3 Investigation of sampling method

3.1 Introduction

The information systems used in NHS ambulance trusts differ substantially from those used in other NHS acute trusts. They also differ somewhat between each ambulance trust and, in some cases, different systems are used in different areas of the same trust. Therefore, to design a sampling strategy for a national survey of Category C service users, these systems were investigated by conducting:

- A review of how service user information is recorded in each ambulance trust in England
- A pilot sampling exercise across six ambulance trusts

3.2 Sampling review

A sampling review was conducted to determine, i) how much information about service users is recorded by ambulance trusts, ii) the format in which this information is kept, and iii) how this information could be retrieved, with a view to compiling a sample of Category C service users.

Methods

In September and October 2007 representatives from all eleven NHS ambulance trusts in England, plus Isle of Wight NHS PCT⁴, were interviewed by the Co-ordination Centre about the service user information held in their trust's records.

Results

Eleven of the twelve trusts interviewed used the 'Computer Aided Dispatch' (**CAD**) software system which records details of all calls to the service, plus the 'Advanced Medical Priority Dispatch System' software (**AMPDS**) for call prioritisation. One trust used CAD and was piloting new call prioritisation software called NHS Pathways. For Category C calls a response is sent to the incident location where additional information is recorded on a Patient Report Form (**PRF**) and/or calls are passed on to a **telephone advice desk** where further notes are taken.

Trust records

CAD and AMPDS constitute ambulance services' call records and although these systems are separate, information can be linked between them. The CAD software records the location address, age (not necessarily DOB), gender, call date, and (limited) call outcome information⁵. The AMPDS software records the incident

⁴ Isle of Wight ambulance service is not a separate trust, but is integrated with Isle of Wight PCT.

⁵ All trusts record call outcomes (in varying degrees of detail) on their computerised systems. The minimum is whether the caller was passed on for telephone advice, received attendance by an ambulance / emergency care practitioner (ECP) / single responder (plus response time), and conveyance to hospital. For more detailed information on referrals, PRFs or telephone advisor notes would need to be consulted in three of the six trusts; these notes are generally free text therefore requesting this information in the sample will have implications on the workload.

classification. PRFs are more detailed forms filled in when ambulance service staff are dispatched to an incident location. Whilst the information recorded on CAD relates to the call, information recorded on the PRF relates specifically to the service user. Much of the information required for a sample of Category C service users is held on these forms, including home address and more detailed outcome information (often noting any referrals made). At the time of the sampling review these records were paper-based in eleven of the trusts, while in one trust PRFs were partially paper, and partially electronic, depending on the procedure in local regions within the trust. Where trusts had merged during the re-organisation of ambulance trusts in 2006, PRFs were not always collected centrally. Likewise, these forms are not always scanned electronically; the time delay for returning forms and scanning could be up to two months, averaging one month for the majority. Even when scanned electronically, PRFs and CAD (and AMPDS) records have to be linked manually using ID numbering.

All trusts providing a telephone advice desk service (i.e. clinical assessment and advice from a nurse or paramedic in the control room) retained notes from these calls, e.g. on software such as Telephone Assessment System (TAS) or Priority Solutions triage software (PSIAM). As with PRFs, in some cases these notes were paper records, and in one trust, although notes were kept, there was no formalised record keeping. Again, as with PRFs, these records have to be linked manually back to CAD (and AMPDS) records using ID numbering.

Information for the survey sample

Eleven of the twelve trusts always (or 'almost' always) recorded service user's names on the CAD software. The remaining trust did not record service user's names on CAD software as standard, although names could be recorded in free text notes. Service user's names are always recorded on PRFs.

The only address recorded by CAD software is the incident location address. Eight of the twelve trusts did not record on CAD software whether the location address was the same as the service users' home address. Four trusts felt the incident location address was the home address in 'most cases', one further trust estimated it to be 60-70% of the time. The remaining trusts were not able to tell since there was no indicator on their CAD records. Therefore for most trusts identification of home addresses from CAD records would need to be a case by case judgment process and it would not be possible to distinguish from a residential address on CAD whether this is the same as a service user's home address without consulting a PRF.

There was some variation between trusts in mandatory completion of the home address section in the PRF. However across all trusts, it was thought PRFs contained home address in 95% to 100% of cases, making PRF data the most useful and reliable for the purposes of a mailed survey of Category C service users.

Service users receiving telephone advice only

Where the telephone advice is the only service provided there will be no PRF generated to determine service users' home address. For five of the twelve trusts interviewed, service users' home addresses could be extracted from the telephone advice desk records. For three trusts an 'on-scene' response was *always* provided - so PRF records were available for *all* service users. But for the remaining trusts it was thought that no further address information (beyond the incident address on CAD) is recorded at the telephone advice desk. Therefore in these trusts there would be no way of determining the home address for service users receiving telephone advice only, since no PRF is generated. It should be noted that a relatively small proportion of callers only receive telephone advice, around 1% nationally in February 2007.

Source: Category C Review 2007 - conducted on behalf of the Healthcare Commission

All trusts recorded service user age therefore it is possible to identify and remove under 16s from a sample of Category C service users. This is important since the survey is intended for adult Category C service users only.

Since most trusts did not consistently collect date of birth, (and none collected service users' NHS number) tracing deceased service users through the NHS Strategic Tracing Service (NSTS) may not be able to match all records in the sample.

3.3 Pilot sampling exercise

The sampling review raised several concerns over the quality of sample information available from trust records and the linkage of the multiple sources used to collect and store service user information. Before designing a sampling strategy for the survey, it was necessary to gather more information about the quality of data available from these sources. Principally whether sufficient name and address information would be available to conduct a postal survey and secondly whether it would be feasible for trusts to gather this information. To achieve this a pilot sampling exercise was undertaken.

Methods

Survey leads and/or IT managers in ambulance trusts were contacted in November 2007 and asked to provide sample information for all Category C calls within a 24 hour period. Eight trusts were contacted to take part, of which six provided information for the pilot sampling exercise. The agreed sampling period was Thursday 4th October 2007⁶ (from 12am to 12pm). In order to complete all required sample fields⁷, trusts needed to access various different sources, including:

- Computer Aided Dispatch (CAD) system i.e. for information on unique call ID, date of call and time of call.
- Advanced Medical Priority Dispatch Systems (AMPDS) i.e. for information on classification of incident
- Patient Report Forms (PRFs) i.e. for information on home address, (detailed) outcome of call and (detailed) referrals

⁶ This date was chosen to allow enough time for the return and entry of PRF information as the sampling review indicated this could take approximately one month.

⁷ See Appendix 1 – 'Sampling review - Sample excel file of service users' details' for the sample information requested.

The remaining sample fields could be collected from more than one of the above sources, although some trusts found it easier, where possible, to collect information from the CAD system.

Results

Three of the six participating trusts (referred to in the tables below as 'CAD + PRF Trusts') were able to complete the pilot sampling exercise using all data sources listed above; CAD, AMPDS, and PRFs, by electronically linking CAD and AMPDS records and manually linking PRF records (either from paper or electronic records). The remaining three trusts (referred to in the tables below as 'CAD Trusts') were only able to provide information from CAD and AMPDS, due to the lack of resources required to manually link PRF records.

Postal information

Accurate name and address information for service users will be needed for the survey to ensure questionnaires reach the correct person. (Some trusts have successfully completed surveys *without* using named respondents; however this approach is likely to have a negative effect on response rates⁸ and could potentially impact on confidentiality.)

Table 3.1 below shows the proportion of service users' names available from trust records of all Category C incidents in a 24 hour period. Only around half of service users' (full) names were available from CAD records (48%). It cannot be guaranteed that these names were service users' names rather than the names of people calling *on behalf of* service users, although trusts felt this would be a small risk. In contrast, almost all (full) service user names were available from PRF records (96%). Home address information was not available for trusts not using PRF data. Initially it was hoped that it would be possible to identify home address from the incident location field (100% available on CAD system). However upon receipt of the pilot sampling data it became clear that it was not possible to identify whether the incident location address was the home address, only whether it was a residential address or public place (e.g. school or outside). Where trusts used PRF records to compile the sample they were able to differentiate between home and location addresses, and were able to provide a usable postal address for most records (94%).

⁸ Edwards P, Roberts I, Clarke M, DiGuiseppi C, Pratap S, Wentz R, Kwan I, Cooper R. (2003) *Methods to increase response rates to postal questionnaires*. Cochrane Database of Systematic Reviews 2003, Issue 4. Art. No.: MR000008. DOI: 10.1002/14651858.MR000008.pub3

	All	All All	CAE	CAD + PRF Trusts			CAD Trusts		
	CAD + PRF Trusts	All CAD Trusts	Trust 1	Trust 2	Trust 3	Trust 4	Trust 5	Trust 6	
	%	%	%	%	%	%	%	%	
Title	82	1	79	65	1	0	2	0	
First name	96	49	84	97	99	84	44	55	
Surname	96	48	84	98	98	82	44	51	
Usable Address	94	-	82	95	98	-	-	-	
Address + Postcode	79	-	78	66	91	-	-	-	
N	443	599	77	175	191	45*	445	109	

Table 3.1. Proportion of records with complete name and home address information

*Trust 4 only returned records from one of its three regions, an additional 120 records from the remaining two regions not included.

One concern was that home address information for service users receiving only telephone advice would not be as comprehensive since no PRF would be generated (although detailed notes are taken for these calls). Table 3.2 shows the proportion of records with usable home address information for service users who received telephone advice only.

Table 3.2. Proportion of records with complete address information (telephone advice)
only)	

	All All			CAD + PRF Trusts			CAD Trusts		
	CAD + PRF Trusts	CAD					Trust 5		
	%	%	%	%	%	%	%	%	
Usable Address	85	-	80	-*	100	-*	-	-	
N	20		15	0	5				

*Note: Trust 2 and Trust 4 do not provide telephone advice only (i.e. telephone advice is provided but an on-scene response is always sent).

As in Table 3.1, Trust 4, Trust 5 and Trust 6 could not provide any home address information from CAD records. Trust 1 and Trust 3 were therefore the only two trusts providing home address information for service users who received telephone-based advice only.

Call variables

In addition to postal information, information about the call and the type of caller would also be useful to aid understanding and analysis of the survey results. As Table 3.3 shows 100% of records had complete date of call information (it would not have been possible to complete the pilot sampling exercise without this information) and almost all trust records also note the time of call (99-100%).

All trusts were able to provide *some* information on the actions taken as a result of the call (referred to in table 3.3 below as 'single outcome information'). However only

some were able to provide this information to the level of detail of the 8 item numerical coding requested (multiple outcomes recorded), where;

- 1 = Telephone assessment and/or advice
- 2 = Emergency response (including ambulance, ECP or single responder)
- 3 = Urgent journey
- 4 = Patient Transport Service (PTS) journey
- 5 = Transfer to hospital
- 6 = Referral elsewhere
- 7 = Patient cancelled call
- 8 = Other (e.g. taxi booked etc.)

The three trusts using PRF data were able to provide information on outcome of call in the form of the 8 item coding. Two of the three trusts who did not use PRF data were only able to provide single outcome codes for this field. This is because their computerised systems only provided one response outcome, i.e. whilst a service user may have received an 'emergency response' AND received 'transfer to hospital' (codes 2 and 5) this was only recorded as 'emergency response' (code 2). The remaining trust not using PRF data was able to provide outcome information to the level of detail required for the 8 item coding above, with the exception of where service users had received telephone assessment and/or advice (code 1) which they were unable to ascertain from computerised systems. (In this trust an informal telephone advice system was in operation and the only records of this outcome were in free form notes).

All	All	CAE) + PRF Tr	usts	(CAD Trust	s
CAD + PRF Trusts	CAD Trusts	Trust 1	Trust 2	Trust 3	Trust 4	Trust 5	Trust 6
%	%	%	%	%	%	%	%
100	100	100	100	100	100	100	100
99	100	100	98	100	100	100	100
94	67	100	90	96	96	65*	_**
100	28	100	100	100	100	-	100
100	8	100	100	100	100	-	-
443	554	77	175	191	45	445	109
	CAD + PRF Trusts % 100 99 94 100 100	CAD + PRF Trusts All CAD Trusts % % 100 100 99 100 94 67 100 28 100 8	CAD + PRF Trusts All CAD Trust CAL Trust % % % 100 100 100 99 100 100 94 67 100 100 28 100 100 8 100	CAD + PRF Trusts All CAD Trust Trust 1 Trust 2 % % % % 100 100 100 100 99 100 100 98 94 67 100 90 100 28 100 100 100 8 100 100	CAD + PRF TrustsAll CAD TrustsTrust 1Trust 2Trust 3%%%%%100100100100100991001009810094671009096100281001001001008100100100	CAD + PRF Trusts All CAD Trust 1 Trust 1 Trust 2 Trust 3 Trust 4 % % % % % % % 100 100 100 100 100 100 100 99 100 100 98 100 100 100 94 67 100 90 96 96 100 28 100 100 100 100 100 8 100 100 100 100	CAD + PRF TrustsAll CAD TrustsTrust 1Trust 2Trust 3Trust 3Trust 4Trust 5%%%%%%%%1001001001001001001009910010098100100100946710090969665*10028100100100100-1008100100100100-

Table 3.3. Proportion of records with complete call variable information

*Note: Trust 5 had significantly lower retrieval of incident classification information; this is because although information was returned for 100% of records, 35% of records only had information at a most basic level of classification (i.e. Green – meaning Category C). **Note: Trust 6 did not provide incident classification information due to a software retrieval failure at the time of the pilot sampling exercise.

Trusts were also asked to provide detailed information of any referrals provided using a 9 item numerical code frame, where;

- 1 = GP or practice nurse
- 2 = District nurse
- 3 = Falls team
- 4 = Other community care or intermediate care team
- 5 = Mental health team

- 6 = Minor injuries unit
- 7 = Social services
- 8 = NHS Direct
- 9 = Voluntary organization (e.g. Age concern)

Trusts found this coding difficult to complete and it was not possible to accurately assess the proportion of records with complete referral information since the number of service users who were referred is unknown.

Only two trusts (both using PRF data) appeared successfully able to use this coding. However additional comments provided with these codes shows the variation in what could be termed a 'referral', i.e. "appointment made with GP" was allocated to code 1, but "advised to register with GP" was also allocated to code 1.

Three trusts were not able to give information on referrals at all (one using PRF data, two not using PRF data). The remaining trust gave some indication of referrals in comments but did not use the coding provided and noted that this code frame was not comprehensive.

Demographic variables

It is useful to collect demographic information as part of the sample to evaluate nonresponse from different demographic groups. As Table 3.4 shows almost all trusts using PRF records have the necessary age information to be able to exclude under 16s from the sample. However, when using CAD data only, around half of records have age information. Even with the more detailed PRF data, availability of ethnicity information is still very limited.

	All	All	CAE) + PRF Tr	usts	c	AD Trust	S
	CAD + PRF Trusts	CAD Trusts	Trust 1	Trust 2	Trust 3	Trust 4*	Trust 5	Trust 6
	%	%	%	%	%	%	%	%
Date of Birth	91	0	71	93	96	0	0	0
Age	91	56	99	91	88	0	64	47
Age <i>or</i> Date of Birth	98	57	99	97	99	0	64	47
Gender	98	61	100	97	98	89	63	43
Ethnicity	21	0	0	19	32	0	0	0
N	443	599	77	175	191	45	445	109

Table 3.4. Proportion of records with complete demographic information

*No age information was provided by Trust 4

Other variables

Trusts were also asked to provide information on other variables where possible including; NHS number (a requirement if using NSTS to trace for deceased service users), Unique ID (any unique identifier allocated to a service user by the ambulance service), call centre code (the site where calls were taken - to ensure records represent all ambulance call centres in trusts where more than one base exists),

dispatch site code (the site where ambulance service vehicles were dispatched from - to ensure records represent all dispatch sites), response time (as an objective measure of response). Taking these in turn:

- NHS number was only available for 1 service user out of all records for all trusts.
- Unique ID trusts did not allocate an identifier unique to service users but an identifier unique to each incident (i.e. each call).
- Call centre code this was available for all records
- Dispatch codes trusts record the 'call sign' of each vehicle dispatched to an incident. The call sign can be used not only to identify the site from which the vehicle was dispatched but also the type of vehicle and crew (e.g. ECP, ambulance, single responder car etc.). Call sign information would be a useful addition to the sample information.
- Response time this was available for all records

3.4 Conclusions

The pilot sampling exercise determined the sample variables obtainable from trust records and highlighted some variables which were not consistently available (e.g. referral information) and so would not be appropriate to collect as part of sample (if necessary these can be collected from the respondent). Interviews with trust representatives during the sampling review also identified some variables which, although not requested in the pilot sampling exercise, could be included in the sample information, e.g. call sign information - to allow extra analysis at the level of the type of responder; ECP, two person ambulance crew etc).

The sampling review and pilot sampling exercise proved it is essential to use PRF data to verify name and address information for the sample, whilst also necessary to use CAD / AMPDS information for some of the other required sample information, i.e. call categorisation to identify Category C callers (as well as more detailed classification of incident). Therefore the sampling method will need to incorporate linking information from both systems.

Trust representatives interviewed in the sampling review raised concerns over a potential source of sampling bias where telephone assessment and/or advice is the *only* service provided (i.e. no ambulance response is sent to the incident location). Since no PRF is generated, sample information for these service users would need to be obtained from separate telephone advisor notes. The pilot sampling exercise did not indicate these records were any less complete than PRF records in terms of name and address information (see Table 3.2). Therefore this should not be a problem for the survey sampling method.

4 Questionnaire Development

4.1 Introduction

To identify key issues to be addressed in a survey of Category C service users the following investigations were carried out:

- A review of existing surveys and stakeholder consultation
- A focus group and depth interviews with Category C service users who had used the ambulance services in the last twelve months.

4.2 Reviews of existing surveys and stakeholder consultation

The Co-ordination Centre contacted various stakeholders to help determine the content of a survey of Category C service users. The existing surveys by ambulance trusts reviewed were:

- East of England Ambulance Service PSIAM Clinical Advisor Questionnaire and Diabetic Follow-up Call Service Questionnaire (2007)
- East Anglian Ambulance Service Cat C calls report (2006)
- North East Ambulance Service Patient Satisfaction Survey (2007)
- South East Coast Ambulance Service ECP Patient Survey (2005)

In addition to this the development work and questionnaire for the Ambulance emergency and urgent patient survey (2004) and the Category C Survey Feasibility Study (2007) conducted on behalf of the Healthcare Commission were reviewed.

4.3 Focus groups and depth interviews

In October 2007 participants were recruited from three ambulance trusts in England to take part in focus groups or depth interviews. Two trusts sent postal invitations and one trust contacted service users via telephone. In total 180 letters were sent and 35 service users contacted by telephone. Due to a poor response to postal invitations⁹, an advertisement was also placed in a local newspaper and on two localised sections of a national website. The inclusion criteria for participation were ambulance service users over sixteen years old who had made a Category C call in the last twelve months.

Participants

Thirty-five people responded to the advertisements (twenty-six of whom had not been Category C service users so were not applicable). Nine people responded to the postal invitations, and six people responded to the telephone calls. One focus group was held and eight depth interviews were undertaken. In total, twelve people participated in the focus group and depth interviews.

⁹ The poor response to postal invitations may have been due to a number of factors, however it is likely that due to the more transitory care provided by the ambulance service there was less engagement on this subject among service users (therefore a more passive recruitment strategy such as postal invitations failed to engage these people). This is borne out by the fact that many of those who did take part in the focus group and depths were regular, rather than one-off, users of the service.

	Characteristic	Number of participants (n=12)
Gender:	Male Female	9 3
Age:	Range	22 – 74 years
Ethnic Group:	White Black Asian	7 4 1

Table 4.1. Characteristics of focus group and depth interview participants

A number of those involved in the focus group and interviews had, over the years, been regular users of the ambulance service or had used the ambulance service more than once in the last 12 months. Five out of the twelve had used the ambulance service on more than one occasion. These repeat users tended to call regarding the same ongoing problem or medical condition.

Results

Information from stakeholder consultation and the review of existing questionnaires was used to compile a list of questions to be discussed in focus groups and depth interviews with service users (see Appendix 2: Topic Guide for the Category C Service User focus group and depth interviews). The topics explored in the focus group and depths were:

- Perceptions of need for an ambulance
- Knowledge / Use of alternatives to the ambulance service
- The initial 999 call
- Waiting for a response
- Response to call
- Outcome of call
- Expectations of service

The results are presented under the headings of the main topics discussed.

Perceptions of need for an ambulance

Using a scale of one to ten, participants were asked to rate the urgency of their need for an ambulance at the time the call was made. Most participants rated their need as fairly high, around 7 or 8. This is higher than might be expected of Category C service users, who by definition are in a non-life threatening or serious condition. Pain and worry that the situation could deteriorate were key reasons behind high ratings of urgency.

"My pain was intense it really was – about 8 I would say – 7 to 8 definitely – I couldn't stand it..." (White, Male, 45-54 years, Fall injury)

"There was no way they [family and friends] could risk doing anything because it could make it really, really bad." (White, Male, 45, Broken leg)

Linked to urgency is the degree to which participants felt the ambulance service took their need seriously. Where participants did not feel the ambulance service had taken their condition and need for help seriously, this impacted on their confidence in the service and those attending them, as well as impacting on their personal feelings of satisfaction. This issue arose with both control room operators and attending staff and is discussed in more detail later.

> Alternatives to the ambulance service

There was some awareness of alternatives to calling the ambulance service, (such as GPs, out of hours doctors, calling a taxi service or help lines such as NHS Direct), but many did not feel these were appropriate for their situation. Only a few had considered contacting alternative sources of help, these included various telephone help lines, out of hours doctors and direct contact with A&E. Participants' experiences of these alternatives are outlined below.

Telephone help lines

Two participants had first contacted NHS Direct, in both cases an ambulance had been called on their behalf.

"Well initially I rang for a taxi to go to the hospital – the NHS [Direct] said to wait for the ambulance and basically made me stay there until it came." (White, Male, 35-44, Back pain, regular user)

One participant had called various specialist help lines, such as the Samaritans and Mind, who recommended calling an ambulance.

"First of all I had called the Samaritans and told them I had a problem and they suggested I called an ambulance." (White, Female, 37, Mental health)

Out of hours doctors

Two participants had in previous situations contacted out of hours doctors, both expressed dissatisfaction with this service, preferring to go to hospital via ambulance. However a number of individuals said that, had their own GP been available at the time, they would have preferred a visit from them.

"Well I am not a lover of out of hours doctors, the locums, for the simple reasons that knowing my situation with my spine and also knowing what is going on in there, I really felt that it may be not beyond the locum but I really did feel that I needed to be at hospital." (White, Male, 53, Back pain, regular user)

"Several other occasions I have had a problem and I phoned the "out of hours" doctor which is a confounded nuisance because he is about 20 miles away and I eventually got hold of him on the phone and he said 'Well I can't do anything for you because we are not equipped to deal with you. Phone 999 and get an ambulance to take you to your nearest casualty department" (White, Male, 65+, Diabetes, regular user)

Friends, family or taxi to hospital

A few participants had considered calling on friends or family to help them or to take them to hospital, but either these people were not available to help in time or it was decided to call an ambulance so service users would get professional help and advice. One participant called the ambulance service so they could assess the situation and decide whether to provide help or not according to the situation. "[The call room operators should] tell it how it is, if you can't make it out, say so and we can arrange for different sort of transportation there." (Black, Female, 22, Stomach pain, regular user)

Most participants did not believe they had any alternative but to call for an ambulance. It was important to these individuals that professional assistance came quickly, although their situation was not a life threatening emergency. Many of these participants experienced their problems at night or at weekends outside of the hours they could normally expect to see their doctor.

"Well to me – the only access I have is 999 – I don't know about other services – it is 999 for now that I am aware of." (Black, Male, 25-34, Chest pain, regular user)

"I needed someone that knew what they were doing – quickly. I was just thinking about the ambulance service and to have someone that actually knew what they were doing there rather than to just have a normal civilian person helping because anything could happen" (Black, Female, 35-44, Head injury, regular user)

"I would never call an ambulance if I felt I could get myself to a hospital but I couldn't I was in absolute agony – I couldn't even stand up properly." (White, Male, 45-54, Fall injury)

The initial 999 call

Some participants had not called the ambulance themselves and therefore were unable to comment on the call in detail. However those who had been present when the call was made were able to make some general comments. Participants who made the call themselves were able to remember, if not in fine detail, their impression of the call. For both these groups the important features of the call were reassurance, courtesy, and assessment of their condition, these are discussed in turn below.

Reassurance

For participants one of the key roles of the ambulance control room operator was providing reassurance. For some this was the compassion of the operator, providing comfort. For others it was the professional, knowledgeable manner of questioning and practical advice the operator was able to offer.

"I think the most important thing was that they kept me calm and they kept talking to me" (Black, Female, 35-44, Head injury, regular user)

"Reassurance, first of all [was important] – a helpful, practical response with information about what to do. We are not, as a whole, panicky people, but it would have been very easy to have panicked, particularly with kids there – so it was the reassurance that we were doing the right thing. Or equally if we hadn't been to be told that we weren't would have been reassuring just to know but it turned out we were really." (White, Male, 55-64, Broken leg)

"Obviously when one wants an ambulance you want it fairly quickly – I think that is for everybody. I think that now if I can compare now to how it used to be they do ask a lot more questions now. I find that the actual emergency operator asks you a lot more questions about your health and how you are feeling so that I found good and reassuring that someone is actually taking some notice and not just saying "Right we *will get an ambulance to you" and putting the phone down."* (White, Male, 53, Back pain, regular user)

Courtesy and being taken seriously

It was also important that the operator was courteous and appeared to take the callers' needs seriously. This was important again when ambulance staff attended the scene, perhaps more so at this later stage.

"[They said] to me if you seem to be waiting too long ring back which I felt was really helpful because you didn't feel like you were being a nuisance so that was really helpful." (White, Male, 53, Back pain, regular user)

Assessing the situation

Most participants felt that the questions the control room operator asked were necessary and relevant for the operator to understand their condition and offer advice on what they should do.

"They were quite good – they were guiding me and asking me what sort of problems there were." (Black, Male, 23, Road traffic accident)

However, one participant felt that there were too many questions, some irrelevant, and that it was inappropriate to expect a person in pain to be able to answer in that manner.

"Sometimes it is irrelevant what they ask you... I know they have got patience but a bit more patience with people because when you are ill and something has happened to you – you can't speak when it is prompted to you there and then – it takes a lot of energy out of you – so yes, how they speak – how they handle conversations on the phone as well. And to be a bit more direct." (Black, Female, 22, Stomach pain, regular user)

Waiting for a response

There were two main topics participants raised when asked about their wait for an ambulance service response, these were the length of time it took for someone from the ambulance service to arrive (the response time) and the instructions given to them by the operator whilst they were waiting.

Response time

Few participants were told by the operator exactly how soon they could expect a response at the scene, more often being told an ambulance was on its way and would be there soon. This lack of detailed timing information was not an issue for anyone. More important was to know that help was on the way.

"They just said it was on its way and it would be with me in a few minutes – they didn't say precisely." (Black, Female, 35-44, Head injury, regular user)

Although waiting times ranged from less than 10 minutes to more than an hour, few participants complained about the response time, many taking the pragmatic view that traffic and road conditions etc were the main determinants of their wait.

"I think the speed could have been a bit better but like I said – according to the traffic and stuff like that and people's driving nowadays I am sure they did their best to get there as quickly as possible." (Black, Female, 35-44, Head injury, regular user)

Waiting time did become an issue when it led to uncertainty as to whether anyone was coming at all.

"Every minute seemed like an hour. I was just sitting there... I couldn't move – just there holding myself – and it is horrible to feel – you are not sure when these people are going to come for you." (Black, Female, 22, Stomach pain, regular user)

"She said it would take around 5 to 10 minutes but it was around 30 minutes – I was feeling helpless there.... I was just sitting and waiting there" (Asian, Male, 23, Vomiting)

Instructions on what to do while waiting

Some participants said it was important to receive instructions on what to do whilst waiting, partly as reassurance that they would not be making the situation worse. However the majority (perhaps due to a large proportion not making the call themselves) did not remember being given any specific information on what to do whilst waiting. In these cases all they remembered was trying to get as comfortable as possible and simply waiting as they were. For the majority the crucial part of waiting for the ambulance was not the exact timing or what advice they were given, but simply knowing professional help was on its way.

"It hurt! The good thing was that we have had this very prompt response, we knew there was an ambulance coming and they had sounded so completely competent and professional and un-panicky." (White, Male, 55-64, Broken leg)

"The best thing was the ambulance arriving. I felt relieved then when I saw them and actually having someone who is trained and well equipped to help me." (Black, Female, 35-44, Head injury, regular user)

No one could remember their call being passed on to a telephone advisor, although it seemed in a couple of cases telephone advisors must have been involved because participants had in depth conversations about their condition and the decision on whether an ambulance was needed. Where this was the case participants simply talked about the service they received over the telephone, (rather than differentiating between the operator and anyone else).

"There is like a triage over the phone system – trying to find out more or less what is what." (Black, Male, 23, Road traffic accident)

Two participants mentioned calling back the ambulance service while they were waiting. One did so to see where the ambulance was, whilst the other recalled that they were offered this opportunity (which they welcomed).

Response to call

Despite the alternative responses available for Category C calls, almost everyone participating in the focus group or interviews received an ambulance followed by transfer to hospital.

A couple of participants recalled the presence of first responders or community responders before a full ambulance crew arrived, however these individuals did not seem to attach much importance to the presence of the first responder or community responder. The significance for them was the arrival of the ambulance crew.

"It was not long – less than 10 minutes. Before that this crew of two came first just to reassure me that the ambulance was on its way …". (Black, Male, 25-34, Chest pain, regular user)

In contrast to this was the experience of one participant who only received a first responder (whom they termed a 'first aider'), although later an ambulance was dispatched. This individual expressed concern at the first responders' ability to assess and diagnose the problem in place of a paramedic or ambulance crew.

"The bad thing was that it seemed like he didn't know anything – he said he didn't know anything and he couldn't say anything about what was going on." (Asian, Male, 23, Vomiting)

Similar topics were raised when talking about the response to the call as the initial 999 call; reassurance, courtesy, and assessment, but in addition to this was; the treatment service users received, their handling and transport to hospital and the information provided about what was happening. These are discussed in detail below.

Reassurance

Again, reassurance was a key aspect of the ambulance crews' role. Reassurance was derived partly through the professional skills and knowledge of the crew in their ability to assess the situation, but largely through their manner and personal skills.

"The importance was to keep calm, have a joke if necessary because that will boost morale and just know who you are talking to." (White, Male, 45, Broken leg)

"They just picked up the mood and the atmosphere very, very well. So they were professional and reassuring but funny with it – in a way that I think they wouldn't have been funny if we hadn't been. They weren't laughing at me they were joining in with the mood which was great." (White, Male, 55-64, Broken leg)

It seemed important to participants that the ambulance crew was both professional but also personal in their manner, treating service users as individuals. A number of participants mentioned the crew picking up on their mood or individual situation.

"I was depressed about being on my own and that and they said "You will make some new friends". I think that was a really nice thing to say to someone who is depressed – you will make some new friends – they were sort of reassuring me." (White, Female, 37, Mental health)

A more personal approach from ambulance service staff was not only important for reassuring service users and putting them at ease, but also in listening and getting the necessary information.

"I didn't know which hospital I was going to and what would happen next and they couldn't really tell me that. It did in the end but I had to talk to them – part of the problem was that I was so confused mentally... They talked to me and reassured me because I was – they had some sort of idea of how to talk to people with mental

health difficulties... they were two people that didn't know me and I could talk about what happened." (White, Female, 37, Mental health)

Part of the reassurance provided by the ambulance service was their ability to deal with a stressful situation.

"Some people cannot actually handle a lot of stress and strain in that situation – so maybe the more veteran people would have to risk that. [Referring to a team of two, one of whom seemed more junior]" (Black, Male, 23, Road traffic accident)

"I was more or less thinking about all the things that could go wrong... Having the ambulance service there – they are taught to cope in that kind of thing." (Black, Female, 35-44, Head injury, regular user)

Courtesy and being taken seriously

The seriousness with which their condition was treated affected participants' confidence in the ambulance crew.

"Well they got me there quickly when it was needed and even though it was a psychiatric problem it was taken seriously. So they had prevented me in a way from taking too many tablets." (White, Female, 37, Mental health)

"It was again very serious because again it was the chest pain – so it was serious and when I was saying that I have pain – maybe they were expecting me to shout or throw myself on the floor or something like that but I told them about the pain and that I was feeling very, very bad and I needed help from a doctor now." (Black, Male, 25-34, Chest pain, regular user)

Where ambulance staff questioned the need for an ambulance, transport to hospital, or the need to go to hospital at all, participants who felt they did need this help felt they were not being taken seriously. This lead to service users feeling they were perceived as time wasters.

"Well we will take you if you want to go – but in other words you are wasting our time." (White, Male, 35-44, Back pain, regular user)

"It is like he [the operator] was making out he [the person calling 999] was lying sort of thing – the pain wasn't that bad you know? As soon as they hear it is the stomach – it is like "Oh she'll be alright, she is young" – they hear your age as well – that is the main one – when you are about 22 or around that age, oh you are young and fit, she will get over that – it is probably alcohol or something. Yes – if I was an older woman then it would have been more prompt." (Black, Female, 22, Stomach pain, regular user)

Assessment and treatment

Aside from reassurance, practical assessment of the situation was important, as was pain relief.

Participants' reasons for calling the ambulance service to ranged from simple to complex, therefore varying amounts of assessment of medical history and current injuries were needed. For some the ambulance crew were unable to do anything on scene to help. In such cases what was important to participants was not a lengthy assessment, but to get to hospital as soon as possible.

"I think they were going to take me to St Mary's but like I said I was quite upset and I think they were just trying to take me somewhere as quick as possible and to get seen as soon as possible so I feel that was the best thing that they have done..." (Black, Female, 35-44, Head injury, regular user)

Others felt a thorough assessment by the ambulance crew was important in order to get the medication or pain relief needed and particularly for the ambulance crew to be able to make a decision on what to do next.

[Talking about the ambulance crews decision not to take him to hospital] *"I found it quite amusing when they hadn't even taken a BP or anything."* (White, Male, 35-44, Back pain, regular user)

The speed of the assessment was noted by some participants, positive comments related to the unhurried attitude of staff, taking their time, this contributing to a feeling of confidence and reassurance. One participant felt they had been forced to go beyond a comfortable pace. This made them think the ambulance staff had not taken their condition seriously and they were not being treated as a 'patient' in need of care.

"To actually take their time and didn't rush and I thought that was really – they didn't rush inside – when I was in the ambulance – didn't rush on the way to the hospital – and I didn't seem like some sort of burden to them – which is really helpful when you are dealing with anyone." (White, Male, 45, Broken leg)

"It is the handling bit when they ask you to stand up and things – stand up – it was like a bullying tactic to get you up. It is like when you have had all this "I have got stomach ache, but I haven't or I have broken my leg but I haven't" – they don't like that so it is like rush, rush – come on let's get to it and then get you down the hospital if you need to go." (Black, Female, 22, Stomach pain, regular user)

For those who had been in pain, it was important to be offered pain relief by the ambulance crew. Aside from this there were few comments on the actual assessment and treatment provided by the ambulance service. Participants expected in the ambulance crew to know the correct the procedure and assumed that this was followed.

Handling and transport

Few participants had much to comment specifically on their handling into the ambulance, or the actual journey, or on cleanliness or comfort. Those who did mention their handling and transport in the ambulance focused on the efforts of the ambulance service staff to make them comfortable.

"They were excellent and they gave me this happy gas – because the suspension is not very good on their ambulances are they?" (White, Male, 45-54 years, Fall injury)

"They should have given me some space to lie in because I was feeling uncomfortable at that moment – they just let me sit on the seat over there. I told them I wanted to lie down – I was not feeling good – they said "No" once you are in hospital you can." (Asian, Male, 23, Vomiting)

The decision about transport, i.e. whether the service user should be conveyed to hospital, was mentioned by a number of participants. A couple felt their condition

had not been correctly assessed and they were not taken seriously when the ambulance service questioned their need to go to A&E.

"They came and it was "Why don't you wait to see the GP" – and I told them that if I call an ambulance it is serious and I am not feeling OK ..." (Black, Male, 25-34, Chest pain, regular user)

Keeping service users informed

Only a couple of participants were unhappy with the explanation the ambulance service gave of what was happening. One had not felt able to ask questions, the other did not have their questions answered properly.

"I think I would, I would ask more questions, if they said the ambulance is on its way to you – I would ask "How long?" "How long will it be to reach where I am?" Is it best I take a cab to the hospital instead?" (Black, Female, 22, Stomach pain, regular user)

"They didn't tell me anything – they just said they would be there in five minutes and to relax." (Asian, Male, 23, Vomiting)

Outcome of call

Many participants, although happy with the service provided by the ambulance service, had problems with their subsequent treatment at A&E or elsewhere (particularly with waiting times). Despite this most agreed that the ambulance service had passed them on to the most appropriate place. Only one participant felt that he would have been better off going home, but this was not a judgement they made at the time, only after his treatment at A&E.

All participants who were taken to hospital were happy with the handover they received there. Some mentioned the ambulance crew calling ahead with their details to let nurses know they would be arriving, this was particularly appreciated.

"They phoned ahead – they knew what had happened so there is no question of "Who is this bloke? What has happened to him?" (White, Male, 55-64, Broken leg)

A couple of participants had been given a choice of hospital and in both cases this was appreciated, both for the proximity of the location and the hospitals reputation for quality.

"They gave us a choice between two local centres where there were big hospitals and said which one would we prefer to go to which again was fantastically helpful because people have preferences about distances and hospitals and things – so they gave my wife and my friend the choice of which one to go to." (White, Male, 55-64, Broken leg)

Some participants' problems had not been resolved to their satisfaction, but this was attributed to failings in the health service in general, not specifically to the ambulance service. It is important to separate the ambulance and other services; some were dissatisfied with their treatment but felt satisfied that the ambulance service had done all it could, however this opinion was not universal.

"When you call an ambulance you expect them to guide you in the proper direction to bring you to where the health professionals are. That night unfortunately I found myself at the hospital – after all the investigations the only thing that they could tell me was go back home." (Black, Male, 25-34, Chest pain, regular user)

Expectations of service

Almost all participants said they received the service they expected from the ambulance service, even though the traditional 'blue light' response was not provided. The exception to this was where the service users' did not feel they were taken seriously.

"I think they should treat everyone equally – not "He is normal he will be fine in 10 minutes". Just treat them like patients so they will be more comfortable...I don't think that it should be like this." (Asian, Male, 23, Vomiting)

4.4 Conclusions

Overall, participants were very complimentary about the quality of the service and the skills and attitude of operator and ambulance staff. It was particularly important to participants that the ambulance service staff provided them with reassurance, and made them feel that they were being taken seriously. The attitude and personal skills of ambulance service staff also seemed to affect judgment of competency, (more so than advice or assessment provided). Response time or time spent at the scene was generally considered appropriate to the situation, although the importance of not being rushed by ambulance staff was highlighted.

The following summarises the main issues discussed in the focus group and depth interviews which, along with the topics highlighted by earlier stakeholder consultation, were used to develop a questionnaire:

- Appropriateness of alternatives to ambulance service
- Reassurance and being taken seriously by ambulance call centre operator
- Advice provided by operator
- Ambulance response time
- First responders
- Reassurance and being taken seriously by ambulance crew
- Speed of assessment and treatment
- Handling, transport and pain relief
- Decision to go to hospital
- Handover to hospital staff
- Waiting time and treatment at hospital

5 Cognitive interviews

5.1 Introduction

Twelve cognitive interviews were conducted in December 2007. The purpose of the cognitive interviews was to test the face validity of the questionnaire. The participants were asked to read the instructions on the front of the questionnaire and to answer the questions. They were asked whether the instructions were clear and easy to understand, and were encouraged to comment on any thoughts they had whilst completing it. The researchers continually probed the participants whilst they were completing the questionnaire to assess their comprehension of the questions and to ensure that the given response options were appropriate to their answer. Interviewees were also asked if any issues had been omitted.

The questionnaire was updated during the course of interviewing using information from earlier interviews; four versions of the questionnaire were tested in total (versions 7.0 through to 7.3).

5.2 Participants

An advertisement was placed in a local newspaper and on two localised sections of a national website to recruit people who used the ambulance service in the last twelve months, respondents to these adverts were then asked to provide further qualifying information over the telephone to determine whether they had been prioritised as Category C, only Category C service users were interviewed. The interviewees were also recruited from those who were unable to attend the focus groups and depth interviews earlier in the development work but who were willing to take part in a cognitive interview at this stage.

Characteristic		Number of participants (n=12)
Gender:	Male Female	5 7
Age:	Range	22 – 89 years
Ethnic Group:	White Black	10 2

Table 5.1.	Characteristics	of coanitive	interview	participants
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5.3 Changes to the questionnaire following cognitive interviews

Important note: Unless stated, all question numbers in this section refer to the Final Questionnaire numbering (see Appendix 7: Final Questionnaire)

Changes to Section: Calling the ambulance

Change 1.1

The wording of Q3 Did **you** speak to the operator? (Q4 in the pilot questionnaire) was changed slightly to stress its meaning, i.e. to ascertain whether it was the respondent who spoke to the operator or someone else (rather than whether or not it was an operator they spoke to). The routing at this question was defined so anyone who *did not* speak to the operator (option 2) is routed straight to the section 'Attendance by the ambulance service', skipping the section 'Telephone assessment and advice'. It was confusing for participants to try and answer Q6 Did the ambulance service control room operator pass your call on to a telephone advisor to assess your situation or give you advice over the phone? (Q7 in the pilot questionnaire) if they had not spoken to the operator. Respondents answering 'Don't know/ Can't remember' (option 3) at Q3 will however be routed to Q6 to double check whether they spoke to a telephone advisor.

Q3. Did you speak to the operator at the ambulance control room?

1 D Yes

➔ Go to 4

→ Go to 6

 $_{2}$ \Box No, someone else spoke to them on my behalf \rightarrow Go to 14

3 Don't know/ Can't remember

Q6. Did the ambulance control room operator pass your call on to a telephone advisor to assess your situation or give you advice over the phone?

1 🗖 Yes	➔ Go to 7
2 🗖 No	➔ Go to 14
3 Don't know/ Can't remember	➔ Go to 14

A more detailed instruction 'IF YOU SPOKE TO THE OPERATOR' was added after Q3 to route respondents who did not speak to an operator around this section. This is important because missing the routing instruction here leads to respondents going through a large number of questions that are irrelevant.

Changes to Section: Telephone assessment and advice

Change 2.1

Questions in the section: 'Telephone assessment and advice' previously made reference to being 'assessed'. This was problematic for some service users who did not feel they had been assessed until the ambulance crew arrived. Therefore the phrase 'advice' was added. An additional instruction was added at the beginning of this section to explain what a telephone advisor was. All references to 'assessment' from the questions in this section were removed.

Change 2.2

Routing was added to Q11 Did you feel you were given enough advice on the telephone about what to do? (Q12 in the pilot questionnaire) for respondents who did

not want or need advice (option 4) taking them to Q14 Did anyone from the ambulance service come out to help you? (Q15 in the pilot questionnaire). This skips questions following up on any advice provided.

Change 2.3

Q12 Did they explain the advice they gave you in a way you could understand? (Q13 in the pilot questionnaire) is based on Q11 in the 2004 Ambulance emergency and urgent service questionnaire, but after cognitive testing was changed to refer to advice rather than care and treatment. Respondents are more likely to think of what they received over the telephone as 'advice', as opposed to 'care and treatment' which was provided at hospital or by the ambulance crew.

Changes to Section: Attendance by the ambulance service

Change 3.1

The heading and introduction for this section (previously 'Attendance at the scene') were changed to remove any reference to 'on the scene' as this could be confusing for respondents at home (who may not think of this as a 'scene'). The term 'scene' was also removed from all questions in this section.

Heading: ATTENDANCE BY THE AMBULANCE SERVICE Introduction: This section is about any ambulance service staff who may have come out to help you. This could be an ambulance crew, or a single responder in a car or anyone else from the ambulance service.

Change 3.2

The routing from Q14 Did anyone from the ambulance service come out to help you? (Q15 in the pilot questionnaire) was changed so option 2 and 3 route to Q26 (Q28 in the pilot questionnaire) skipping the section: 'Transfer to hospital'. This is because if no one arrived to help, respondents cannot have been transported anywhere. However if the respondent answers 'Don't know/ Can't remember' at Q14 they will be routed to Q23 Were you provided with transport by the ambulance service? at the start of the section: 'Transfer to hospital' to double check they did not receive transport. Similarly the routing on Q23 – option 2 - has been changed to direct respondents to Q26 Did you agree with the decision not to be taken to hospital by the ambulance service? (Q28 in the pilot questionnaire), rather than double checking whether respondents were taken to hospital.

Change 3.3

The words 'ambulance service' were added to clarify the questions refer to the ambulance service rather than any other services or organisations involved.

Change 3.4

Q21 Did they explain your care and treatment in a way you could understand? (based on Q11 in the 2004 Ambulance emergency and urgent service questionnaire) was altered to allow respondents who did not receive any treatment at the scene to specify this (option 5).

Change 3.5

Q22 If friends or relatives were with you, do you think they were given enough information about your condition and treatment? (based on Q14 in the 2004 Ambulance emergency and urgent service questionnaire) was altered to allow respondent to express that they do not want their friends or relatives to be involved (option 4).

Changes to Section: Transport

Change 4.1

Q27 Did the ambulance service put you in touch with, or tell you to contact, any other parts of the NHS or any other organisations? (Q31 in the pilot questionnaire) was tested in various forms to try and establish whether respondents were forwarded on to another organisation. The term 'referral' was problematic, therefore the question was simplified to remove any reference to referrals and only differentiate between where the respondent has been told to contact another organisation by themselves and where the ambulance service has played a more active role. An additional question Q28 How much information was given to you by the ambulance service to help you contact this service or organisation? was added to assess the issue of how much information respondents were given. The wording of all subsequent questions was changed to fit the wording of Q27.

Change 4.2

Q29 Who were you put in touch with or told to contact? (TICK ALL THAT APPLY) (Q33 in the pilot questionnaire) was changed from a single response question to a multiple response question, since respondents may have been told to contact more than one service and it was not necessary to identify one service or organisation once the follow up questions on this service were removed (see Table 5.2 - Questions deleted).

Change 4.3

The following question was found to be problematic for service users referred somewhere other than A&E since it was not clear what the ambulance services role was supposed to be in this process and in many cases will be beyond the scope of what ambulance services can do. For those who were taken to A&E it was not deemed important to ask this question since it is standard procedure¹⁰. Therefore the question was removed.

When you were seen (or spoken to) did the person have all the necessary information about you and your condition?

1 🛛 Yes

 $_2$ \square No, but I think they should have done

- $_{3}$ \Box No, but this was not necessary
- 4 Don't know/ Can't remember

Changes to Section: Overall

Change 5.1

Q32 Do you feel the ambulance service staff understood your needs? (Q36 in the pilot questionnaire) was moved from the section: 'Telephone Assessment and Advice' to the 'Overall' section. This was because it is more appropriate to ask 'whether their needs were understood' *overall*, rather than asking respondents specifically about the telephone advisor. Respondents who were attended by an ambulance are likely to view understanding from the ambulance crew as more important than on the phone.

¹⁰ In the Ambulance Emergency and Urgent Patient Survey (2004) by Picker Institute Europe 99% answered 'Yes' to the question 'As far as you know, did the ambulance crew give hospital staff all the necessary information about you?'.

Changes to Section: About You

Change 6.1

Q36 How many times (including this one) have **you** used the emergency ambulance services in the last 12 months? (excluding any times you may have called an ambulance for someone else) (Q41 in the pilot questionnaire) was changed to specify use of emergency ambulance - as opposed to routine transport that may be provided by the ambulance service. To clarify that the question is asking about the number of times the respondent has called as a service *user* rather than for someone else, an instruction in brackets was added.

5.4 Changes to the questionnaire following consultation with stakeholders

The Co-ordination Centre consulted various stakeholders at the Healthcare Commission and Department of Health about the content for the questionnaire. This section outlines the questions which were removed from the questionnaire, and those that were added following the consultation.

Table 5.2 shows the questions which were removed because they were considered of less importance or were replaced by more refined questions. As always, the issue of having limited space in the questionnaire means that only the most important questions were retained in the questionnaire. In order to keep the questionnaire manageable and prevent any negative impact on response rates it was aimed to keep the Category C service user questionnaire to a maximum of 8 pages.

Question	Response options
Section: Telephone assessment and advice	-
	1 No, they asked too few
Do you feel they asked the right amount of	2 Yes, they asked the right amount
questions?	3 No, they asked too many
	4 Don't know/ Can't remember
Do you feel the guestions they called were relevant	1 Yes, all or most were relevant
Do you feel the questions they asked were relevant to your care?	2 No, few or none were relevant
	3 Don't know/ Can't remember
	1 Yes, definitely
Did you have trust and confidence in the	2 Yes, to some extent
professional skills of the person on the phone?	3 No
	4 Don't know/ Can't remember
Section: Attendance by the ambulance service	
	1 Yes
Were you told how long you would have to wait for someone from the ambulance service to arrive?	2 No, but I would have like to have been told
someone from the ampulance service to arrive?	3 No, but I did not mind
	4 Don't know/ Can't remember
	1 Yes
Did they arrive within the time you were told?	2 No, they arrived later
	3 Don't know/ Can't remember
Did the person (or persons) attending you ask	1 Yes
about your previous medical history?	2 No

Table 5.2. Questions deleted

Question	Response options
	3 Don't know/ Can't remember
Section: Transport to hospital	
	1 Yes, definitely
Did the driver take care to make the journey as	2 Yes, to some extent
comfortable as possible?	3 No
	4 Don't know/ Can't remember
Section: What happened next	
	1 Yes, definitely
Do you feel this was appropriate for your needs?	2 Yes, to some extent
be you leer this was appropriate for your needs.	3 No
	4 Don't know/ Can't remember
	1 I did not have to wait at all
	2 It was within 2 hours
	3 More than 2 hours, but less than 4 hours
How long did you wait until you were seen? (or in	4 More than 4 hours, but within 24 hours
the case of NHS Direct, for a response to your call?)	5 More than 24 hours, but within 48 hours
	6 More than 48 hours
	7 Don't know / Can't remember
	8 Did not contact the organisation or service
	1 I was attended to as soon as I thought was necessary
How do you feel about the length of time you waited to be seen? (or in the case of NHS Direct,	2 I should have been attended to a bit sooner
for a response to your call?)	3 I should have been attended to a lot sooner
Section: Overall	
	1 Yes, definitely
Do you feel the ambulance service took you	2 Yes, to some extent
seriously?	3 No
	4 Don't know/ Can't remember

After the removal of the above, the questions shown in Table 5.3 were refined and added.

Table 5.3. Questions added

Question	Response options			
Section: Attendance by the ambulance service				
	1 Yes, but the wait was shorter			
Were you told how long you would have to wait for someone from the ambulance service to arrive? ¹¹	2 Yes, and I had to wait about as long as I was told			
	3 Yes, but the wait was longer			
	4 No, I was not told			
	5 Don't know/ Can't remember			
Section: If you were not taken to hospital				
How much information was given to you by the	1 Not enough			
ambulance service to help you contact this service or organisation?	2 Right amount			
	3 Too much			
	4 I did not want/ need any information			
Section: Overall				
Do you feel the ambulance service staff listened	1 Yes, definitely			
carefully to what you had to say? 12	2 Yes, to some extent			
	3 No			
	4 Don't know/ Can't remember			

5.5 Conclusions

Initial consultation with stakeholders and service users identified the areas of importance to include in a survey of Category C service users. This information was used to develop a questionnaire, based on the 2004 Ambulance Emergency and Urgent Patient Survey Questionnaire, which was then subject to cognitive testing. Cognitive testing resulted in refinement of the questions and routing instructions, as well as the removal of certain questions that, upon testing, were unworkable. Consultation with stakeholders identified further refinements to questions and questions for deletion to reduce the questionnaire length to 8 pages.

¹¹ This question format corresponds with the format used in the Emergency Department Patient Survey 2008.

¹² This question format corresponds to the format used in the PCT Survey 2008.

6 Pilot Survey

6.1 Introduction

Prior to the national survey of Category C service users, a pilot survey was required to test the survey tools, practicalities and sampling techniques.

The sampling review for the Category C service user survey raised several sampling issues over the quality of information available from trusts. The pilot sampling exercise provided more information on many of these concerns (see Section 3 Investigation of sampling method), however, a pilot survey was required to test the accuracy of service user name and address information, both from PRF records and telephone advisor records. In addition, further testing of linking PRF records to call records was required before determining the feasibility of this.

6.2 Methods

An application for ethical approval for the survey was submitted to Glasgow West Research Ethics Committee on 18th January 2008. It was the opinion of the committee that under the responsibilities of the Research Governance Framework the survey did not require review by an ethics committee as the survey was considered to be service evaluation rather than research.

The two pilot trusts drew a random sample of 400 Category C service users¹³ who used the ambulance service in a two week period between 7th January and 3rd February 2008, using guidance notes provided by the Co-ordination Centre on how to draw a sample of eligible service users. The trusts were required to check the sample for deceased service users using the National Strategic Tracing Service (NSTS) and trust records.

To comply with the Data Protection Act, participating trusts mailed questionnaires or agreed to allow two named researchers at the Picker Institute to organise the mailing of questionnaires by working under the terms of an honorary contract. Before sending out the questionnaires, a unique number was assigned to each service user in the sample, which corresponded to numbers printed on the questionnaires. Questionnaires were then mailed from the week commencing 24th March 2008 (n=800 across two trusts)¹⁴. Approximately ten days after the mailing, a reminder letter was sent out to all participants who had not returned their questionnaire. A second reminder along with a replacement questionnaire was sent to non-respondents approximately one month after the original mailing.

The data provided here includes all completed questionnaires returned by 2nd May 2008.

¹³ Category C patients were selected using the Department of Health definition of Category C callers, with the following exceptions; test calls, blank calls, hang-ups before coding is complete, caller not with patient and unable to give details, caller refuses to give details, hoax calls where response is not activated, response cancelled before coding is complete (e.g. patient recovers), referrals from healthcare practitioners (non 999 calls).

⁴ A third trust was unable to mail their sample due to issues of access to NSTS.

6.3 Response rates

Table 6.1. Mailing dates

	Trust A	Trust B
1 st Mailing	25/03/2008	08/04/2008
2 nd Mailing	04/04/2008	18/04/2008
3 rd Mailing	21/04/2008	28/04/2008
Closing date for returns	30/05/08	30/05/08
Approx. number of weeks	10 weeks	8 weeks

Table 6.2. Response rate by trust – 30/05/2008

	Trust A	Trust B	Overall
Returned useable questionnaire	177	193	370
Returned undelivered or moved house	9	24	33
Deceased	2	8	10
Too ill, opted out or returned blank questionnaire	7	14	21
Not eligible	0	1	1
Questionnaire not returned	205	160	365
Sum	400	400	800
Raw Response Rate (%)	44%	48%	46%
Adjusted denominator*	389	367	756
Adjusted Response Rate (%)	46%	53%	49%

*Undelivered questionnaires and deceased/ineligible service users removed

Given the shortness of the fieldwork period, particularly in Trust B, we consider this response rate to be extremely encouraging. (Over ~ 12 weeks, the 2007 Adult Inpatient Survey response rate was 54% and the 2008 Primary Care Trusts Survey achieved 40% over a similar time scale.)

6.4 Freephone calls

The covering letters and questionnaires sent to participants provided a freephone number that participants could call if they had any queries about how to complete the questionnaire or if they wished to opt out of the survey.

Across both trusts participating in the pilot there were 14 calls to the FREEPHONE, representing 1.8% of those surveyed. The calls can be grouped as follows:

- 4 called to opt out of the survey
- 3 called to say they had received a reminder but not the questionnaire sent out originally, and said they would like to receive a questionnaire (sent in the second reminder stage)
- 2 reported they had received reminders but had returned the questionnaire some time ago
- 1 had a question about how to complete the questionnaire (requiring the help of a language line interpreter)
- 1 reported a change of address
- 1 called to say the recipient was not known at the address
- 1 reported they had never used the ambulance service
- 1 called to say the recipient was deceased

6.5 Non-response bias

The pilot trusts supplied the gender, age and ethnic group of the service users included in the sample. Using this information and the outcome of each sample member (i.e. whether they returned a completed questionnaire or not), the response rates were calculated for gender, age and ethnic groups to determine how representative the responders were of all sampled service users.

Gender

The response rates by gender are shown in Table 6.3. There is no difference in the response rates between males (49%) and females (49%).

Gender	Responded		Did not respond / Opted out		Total
	Count	Percent	Count	Percent	rotar
Male	156	49%	161	51%	317
Female	214	49%	225	51%	439
Total	370	49%	386	51%	756

Table 6.3. Response rates by gender

Age

The response rates by age group are shown in Table 6.4. The response rates generally increase with age, with the highest response rate among those aged 50 to 69 years (62%) and the lowest response rate for those aged 16 to 29 years (32%). The differences in response rates between age groups were significant (Chi

square=42.4, df=4, p<0.001), indicating that the achieved sample was not representative of some age groups.

This analysis has shown that one of the limitations of the pilot study is that, in common with many other research studies, younger service users were less likely to participate, whereas older people were more likely to respond. This is the same trend as in other NHS patient surveys.

Age group	Responded		Did not respond / Opted out		Total
	Count	Percent	Count	Percent	- Otal
16 to 29 years	49	32%	106	68%	155
30 to 49 years	63	43%	83	57%	146
50 to 69 years	83	62%	51	38%	134
70+ years	175	55%	146	46%	321
Total	370	49%	386	51%	756

Table 6.4. Response rates by age group

Ethnic group

Information on the ethnic group was only available for 30% of the service user records sampled¹⁵ (n=243). The response rates by ethnic group are shown in Table 6.5. There was a difference between the White (46%) and the non-White group (61%), although the base size for the latter is very low and the difference is not significant (Chi-square=3.6, df=1, p=0.058). Base sizes were too low to compare response rates between specific ethnic groups.

Table 6.5. Response rates by ethnic group	Table 6.5.	Response	rates by	ethnic	group
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Ethnic group	Resp	Responded		Did not respond / Opted out	
	Count	Percent	Count	Percent	Total
White	86	46%	101	54%	187
Non-white [!]	30	61%	19	39%	49
Total	116	49%	120	51%	236

[!] Caution: low base size

Ambulance service response

The response rates by type of response provided by the ambulance service (i.e. an on scene emergency response, from an ambulance, first responder, ECP etc. or telephone based assessment and advice) are shown below in Table 6.6. No significant difference was found in response rates of each group, (Chi-square=1.94, df=1, p=0.164), but the base size for those that received telephone advice *only* was very low.

¹⁵ The vast majority of records with ethnic group information available were from Trust A (96%).

Ambulance service response	Responded		Did not Opte	Total	
	Count	Percent	Count	Percent	
Telephone advice only	26 [!]	41%	38	59%	64
Emergency response	344	50%	348	50%	692
Total	370	49%	386	51%	756

Table 6.6. Response rates by ambulance service response type

[!] Caution: low base size

6.6 Item non-response

The combined dataset from the pilot trusts was used to calculate the non-response rate for each question. The item non-response rate is the number of missing values on a question, as a percentage of the total number of respondents who could have answered the question¹⁶.

The item non-response rate ranged from 0% to 15%. Many of the questions with a particularly high non-response rate (8% - 15%) were towards the end of the questionnaire, indicating there may have been some response fatigue due to the length of the questionnaire, and also because these closing questions were demographic questions, which may be perceived as more sensitive and of less relevance.

6.7 Open text responses

Space was allocated at the end of the questionnaire for respondents to write their own comments about their experience of the ambulance service and the care they received.

54% of respondents commented about their care in this section; 47% wrote a comment about what was particularly *good* about their care, 11% wrote a comment about what could have been *improved*, and 15% wrote a comment in the general *'anything else'* section.

Further analysis revealed that the likelihood of service users making an open text comment did not differ significantly between demographic groups, such as age, gender, ethnicity, number of times using an ambulance (in the last 12 months), self reported health status.

6.8 Questionnaire routing

The questionnaire contained some fairly complex routing instructions based on the type of ambulance response service users may have received; these were designed so respondents could miss out questions about certain services that were not applicable to them. The extent to which respondents were able to correctly follow these routing instructions can, to some extent, be assessed by comparing the type of

¹⁶ I.e. the number of respondents who should have answered the question based on routing from their answers to previous questions, plus the number of respondents who **did not answer** these previous routing questions (so it is **not known** whether they should have answered the question or not).

ambulance response recorded in the sample information (i.e. telephone advice or emergency response) to the way respondents answered the questionnaire (i.e. the extent to which respondents' answers relate to the incident sampled). However, due to limitations of data collection systems trusts only provided information on the single (final) response provided. Therefore where sample information indicates telephone advice; this is where no further response (i.e. an emergency response) was provided.

Table 6.7 shows that 44 respondents who said they had received telephone advice, (i.e. answered 'yes' at Q7), were coded as having received an 'emergency response' in the sample information. However, further analysis confirmed that all 44 respondents who said they had received telephone advice (i.e. answered 'Yes' at Q7) also responded that they had received an emergency response from the ambulance service (i.e. answered 'Yes' at Q15 'Did anyone from the ambulance service come out to help you?').

A further 2 respondents thought they had **only** spoken to a control room operator and **not** a telephone advisor (i.e. answered 'no' at Q7), but were coded in the sample as having received telephone advice.

Q7 Did the ambulance control room operator pass your call on to a telephone advisor to assess your	The type of am response reasering sample in	Total*	
situation or give you advice over the phone?	Telephone advice only	No telephone advice	
Yes	14	44	58
No	2	41	43
Total	16	85	101

Table 6.7. Telephone advice response vs. sample information

Answered by all except those who did NOT speak to an operator

*Total specific responses only; missing responses and 'don't know' responses have been removed

If those respondents who said they had received *both* telephone advice and an emergency response are removed from the analysis, there is fairly good correspondence between sample and response information with regards to the type of response provided (Table 6.8).

Table 6.8. Telephone advice only response vs. sample

Q7 Did the ambulance control room operator pass your call on to a telephone advisor to assess your	The type of amb response record sample informat	Total*			
situation or give you advice over the phone?	Telephone advice only	No telephone advice			
Yes	12	0	12		
No	2	39	41		
Total	14	39	53		

Answered by all except those who did NOT speak to an operator

*Total specific responses only; missing responses and 'don't know' responses have been removed

As shown in Table 6.9 there is a high correspondence between sample information and response information for service users who received an emergency ambulance response.

Table 6.9. Emergency ambulance response vs. sample								
Q15 Did anyone from the ambulance service come out to help you?	response re	The type of ambulance service response recorded in the sample information						
	Emergency response	No emergency response	Total*					
Yes	288	8	296					
No	2	15	17					
Total	290	23	313					

Table 6.0. Emergeney ambulance response ve sample

Answered by all

*Total specific responses only; missing responses and 'don't know' responses have been removed

6.9 Recommendations: Survey methods

The pilot survey showed that it was possible for trusts to follow the sampling instructions, obtain the required information and carry out the necessary checks such as excluding deceased service users from the sample. Following the pilot the following recommendations were made:

Pre-publicity \geq

By informing front line staff of the survey there is the opportunity improve the quality of the sample information by asking them to pay extra attention to recording the required sample information over the sampling period. In certain trusts it may also be more efficient to request staff to return PRFs directly to survey leads. It is worth noting that collection of sample information in the NHS patient survey programme is not usually as dependent on front line staff as it is in ambulance trusts where they are solely responsible for recording contact details for service users. Informing front line staff of the survey could alter their behaviour to service users and potentially introduce a bias into the survey. However on balance the advantages to be gained by publicising the survey outweigh the potential disadvantages, therefore prepublicity to staff is recommended.

 \triangleright Increasing sample size

If a trust wishes to make comparisons between groups within the trust it is recommended that, if necessary, they 'boost' their sample beyond the 850 requirement to obtain sufficient numbers. The final adjusted response rate for the pilot was 49%¹⁷ after 8 – 10 weeks in field (see Section 6.3 Response rates). This is in line with other national patient surveys¹⁸. For the national Category C Service User survey, taking a sample of 850 (as used across the NHS patient survey programme acute surveys) with a 50% expected response rate ensures sufficient responses to

¹⁷ The adjusted response rate is calculated once undelivered questionnaires and deceased/ineligible patients are removed.

¹⁸ Over ~ 12 weeks, the 2007 Inpatient Survey response rate was 54% and the 2008 PCT survey achieved 40% over a similar time scale.

detect differences between trusts at a national level. However comparing results *within* a trust considerably reduces the number of responses in each group, for example if individual trusts wish to make comparisons between different areas within the trust, or to perform analysis by particular groups such as respondents receiving 'telephone advice only'. In this case the sample size of 850 may not be enough to detect differences between groups.

One month sampling period

It is recommended that the sampling period span one calendar month, with the option to extend into the previous month if insufficient records are available. Most trusts will need to collect PRFs and check name and address data from these manually, this suggests it would be best to sample over the shortest possible period, in order to increase the amount of time available for manual checking and data entry. While the largest trust receives almost 4,000 Category C calls per week, the smallest receives less than 500^{19,} therefore the minimum sampling period required to obtain an 850 sample will vary between one week and three weeks across trusts of different sizes. That said, there was some variation in the amount of records removed by each pilot trust when applying exclusion criteria to the sample. Therefore the number of records necessary for a final sample of 850 may also differ between trusts depending on the quality of information recorded²⁰. In addition to this many trusts only collate PRFs and other call information at the end of the month.

6.10 Recommendations: Questionnaire

The face validity of the questionnaire had already been tested through the cognitive interviews and several revisions made on the basis of this (see Section 5 Cognitive interviews). However the pilot survey highlighted some additional areas which required further amendment to lower the percentage of missing responses to some questions and to encompass respondent's feedback. The following changes were made to the questionnaire following the pilot:

Important note: All question numbers in this section refers to the Pilot Questionnaire numbering (see Appendix 3)

Section 1: Calling the ambulance

Item non-response rate: Q1=1.8% (n=6), Q2=6.7% (n=22), Q3=1.8% (n=6)

Q2 What was the main reason you (or they) chose to call the ambulance service?

Item non response = 6.7% (n=22)

The high item non response at Q2 was due to respondents providing multiple responses to this single code question. This problem was likely to be intrinsic to the question since for some people there are multiple reasons for calling the ambulance service and not one clear, main reason. One solution would be to allow multiple

¹⁹ Figures are based on the Category C Review (2007) conducted on behalf of the Healthcare Commission; this requested a detailed breakdown of all Category C calls and responses in February 2007 from each NHS Ambulance Service Trust in England.

²⁰ Information on the number of records removed when applying exclusion criteria can be collected from trusts and used to assess the representativeness of the sample (as in the 2004 Ambulance Emergency and Urgent Services Survey).

coding at this question, however many respondents would then be likely to tick *all* the options, providing little useful information. It is likely that the answer to this question is too complex to be recorded in a simple tick box format.

This question was removed from the questionnaire since it could not be used to assess trust performance and as therefore of little interest to the Healthcare Commission and Department of Health.

Section 2: First contact with the ambulance control room Item non-response rate: Q4=4.3% (n=14), Q5=0.9% (n=1), Q6=0.9% (n=1)

Q4 Did you speak to the operator at the ambulance control room? Item non response = 4.3% (n=14)

The item non response rate for Q4 was higher than the other questions in this section (Q5 and Q6), this could have been part of a general trend seen elsewhere in the questionnaire - that respondents tended to be more likely to skip routing questions²¹. However part of the problem with this question may have been that the section heading was slightly superfluous and, if interpreted literally, the question wording implied respondents' presence *at* the control room.

The section heading 'First contact with the ambulance control room' was removed combining this section with the previous section 'Calling the ambulance'. A simplified introduction was added in its place: '*When the call was put through to the ambulance service control room...*'. The wording of Q4 was changed accordingly to: 'Did you speak to the operator?'

Analysis of questionnaire routing errors (see Table A2, Appendix 5: Questionnaire routing errors) showed that a notable proportion of respondents who *should not* have been answering Q5 and Q6 in Section 2, (i.e. those who answered 'No, someone else spoke to them on my behalf' at Q4 'Did you speak to the operator at the ambulance control room?'), were answering these questions about the operator (9.2% and 10.1% respectively). Although these responses are removed during data cleaning, responding to irrelevant questions here could increase the perceived burden of the overall questionnaire.

The routing instructions before Q5 and Q6 were clarified accordingly.

Section 3: Telephone assessment and advice

Item non-response rate: Q7=1.7% (n=2), Q8=0% (n=0), Q9=3.3% (n=2), Q10=3.3% (n=2), Q11=1.7% (n=1), Q12=0% (n=1), Q13=1.7% (n=1), Q14=1.7% (n=1)

Analysis of questionnaire routing errors (see Table A2, Appendix 5: Questionnaire routing errors) showed that a between 12% and 14% of respondents who *should not* have been answering questions in Section 3, (i.e. those who answered 'No' at Q7 'Did the ambulance control room operator pass your call on to a telephone advisor to assess your situation or give you advice over the phone?') were answering questions 8 to 14 about the telephone advisor. Although these responses are removed during data cleaning, responding to irrelevant questions here could increase the perceived burden of the overall questionnaire.

²¹ Q15 (at the start of the section: 'Attendance by the ambulance service') and Q23 (at the start of the section: 'Transport') also showed a higher item non response than subsequent questions in these sections.

The routing instructions before Q8 were clarified accordingly.

Q9 How do you feel about the length of time you waited before you spoke to them?

Item non response = 3.3% (n=2)

The null option for Q9; 'Don't know / Can't remember', did not quite fit this question since it is asking for an opinion.

This was changed to 'Not sure / Can't remember. The same was applied to Q17.

Q10 Were they reassuring?

Item non response = 3.3% (n=2)

The question wording of Q10 was clarified to make sure respondents answer about the telephone advisor: 'Was the telephone advisor reassuring?'. Similarly the wording of the previous two questions (Q8 and Q9) was amended to specify the telephone advisor.

Section 4: Attendance by the ambulance service

Item non response: Q15=4.0% (n=13), Q16=1.6% (n=5), Q17=1.9% (n=6), Q18=3.3% (n=10), Q19=1.9% (n=6), Q20=3.6% (n=11), Q21=5.2% (n=16%), Q22=4.5% (n=14)

Q15 Did anyone from the ambulance service come out to help you? Item non response = 4.0% (n=13)

There was a fairly high level of non response to Q15, however the proportion saying that they received an on-scene response (i.e. those who answered 'Yes') matched the sample information. Although splitting the 'No' response (into 'No, but I think they should have' and 'No, and I agreed with this decision') makes the question more complex, stakeholders at ambulance services expressed an interest in knowing whether service users who did not receive an on-scene response agreed with this decision (see Section 4.2 Review of existing surveys and stakeholder consultation).

The routing instructions before Q16 were clarified accordingly.

Q20 Did they do everything they could to help control your pain? Item non response = 3.6% (n=11)

A fairly high proportion of respondents (14%) selected option 4 'I did not have any pain' at Q20.

A filtering question was added before this question: Were you in any pain at the time? (as per the Adult Inpatient Survey 2007, Q42).

Q20 asks service users for an opinion and does not require them to have factual knowledge (i.e. of all pain relief options available).

The question was reworded to reflect that is was asking for an opinion: 'Do you think they did everything they could to help control your pain?'.

Q21 Did they explain your care and treatment in a way you could understand? Item non response = 5.2% (n=16) During cognitive testing (see Section 5 Cognitive interviews) it was identified that some service users did not feel they received any *care and treatment* from the ambulance service (in particular service users who used the service simply as a means of getting to hospital). Comments made on returned pilot questionnaires also suggested that some respondents felt that no explanation of their care and treatment was necessary. These groups may account for the high non response rate seen at Q21 as it is not really applicable to them. However, for some service users, for example those who received pain medication, this question is relevant – therefore should not be removed altogether.

An extra null option was added to include the possibility that no explanation was needed: 'No explanation was needed'.

Q22 If friends or relatives were with you, were they given enough information about your condition and treatment?

Item non response = 4.5% (n=14)

As at Q20, Q22 is not asking for factual knowledge, but for service users to provide an opinion - on behalf of any friends or relatives that were with them.

The question was rephrased as: 'If friends or relatives were with you, do you think they were given enough information about your condition and treatment?'.

Section 5: Transport

Item non response: Q23=5.8% (n=18), Q24=0.7% (n=2), Q25=1.0% (n=3), Q26=1.0% (n=3), Q27=1.7% (n=5)

Q24 What kind of vehicle was it?

Item non response = 0.7% (n=2)

Q24 was a routing question included for the purpose of directing respondents who had not received transport in an ambulance service vehicle past Q25 (How clean was the inside of the vehicle?), since this question would not be relevant. The pilot results showed that less than 1% of respondents who received an on scene response, received anything other than an ambulance service vehicle, (i.e. n=1 received a taxi). Responses can also be cross checked with sample information to ensure that any non-ambulance service transport is removed from analysis of Q25.

This question was removed and an extra option was added to the end of Q25 for any respondents to whom Q25 is not applicable (i.e. those who were provided with some form of transport other than an ambulance service vehicle).

Q26 Was the way you got into the vehicle appropriate considering your condition at the time? (e.g. by walking, on a stretcher etc.) Item non response = 1.0% (n=3)

Although respondents had no difficulty answering Q26 it showed a strong ceiling effect; 98% answering 'Yes'.²²

This question was removed.

²² This is the same as the Ambulance Emergency and Urgent Services survey 2004, where again 98% answered 'Yes' to the question 'Was the way you got into the ambulance suitable? (e.g. by walking, on a stretcher etc.)'.

Section 6: If you were not taken to hospital

Item non response rate: Q28=4.6% (n=3), Q29=6.2% (n=4), Q30=6.2% (n=4), Q31=3.1% (n=2), Q32=0% (n=0), Q33=0% (n=0)

Some of the non responders to the questions in Section 6 could have been respondents - routed from earlier in the questionnaire - missing this section out. (Two respondents who should have answered these questions missed out this section entirely).

The routing instructions at the start of the section were clarified accordingly.

Q29 How much information about your condition and treatment was given to you by the ambulance service?

Item non response rate = 6.2% (n=4)

Q29 covers the same topic (*information and advice*) to Q21, Q22 (for those receiving an ambulance) and Q12, Q13 (for those who received telephone advice. There should not be any respondents in the sample who have not received one or the other of these services²³ therefore Q29 is redundant.

This question was removed.

Q30 Were you given advice about what to do if you needed help again? Item non response rate = 6.2% (n=4)

Q30 is not applicable to a significant proportion of respondents who call the ambulance service for an isolated incident rather than an on-going condition, e.g. a traumatic injury or fall. (This is may be the cause of the high non response rate for this question). Advice about what to do if help was needed again was not highlighted as a priority in either the stakeholder consultation (see Section 4.2 Review of existing surveys and stakeholder consultation) or the qualitative work with service users (see Section 4.3 Focus groups and depth interviews).

This question was removed.

Q33 Who were you put in touch with or told to contact?

Item non response rate = 0% (n=0)

Although caution is needed when applying Q33 responses from the two pilot trusts to other trusts (since different trusts may have different referral pathways), the pilot results showed that the majority of respondents referred elsewhere were referred to either 'a GP or Nurse' (option 1) or 'A&E' (option 2). Option 4 'mental health services', option 6 'other health care team' were not used at all in the pilot. It is unlikely that respondents make much distinction between option 6 'other health care team' and option 9 'other service or organisation'. It is also unlikely that many respondents would be referred to a mental health service – in the Category C review

²³ If a patient did not receive either an on scene response, or telephone advice, there would be no PRF or telephone advice record generated, therefore no home address could obtained. Therefore this patient could not be included in the sample.

 $(2007)^{24}$ only 1% of all referrals were to mental health services, this was 0.03% of all Category C calls.

Option 4 'mental health services' and option 6 'other health care team' were removed.

Section 7: Overall

Item non response: Q34=1.8% (n=6), Q35=3.7% (n=12), Q36= 4.0% (n=13), Q37=6.4% (n=21), Q38=5.2% (n=17), Q39=4.0% (n=13)

Three respondents skipped this section entirely, possibly due to the length of the questionnaire.

Q35 Do you feel that ambulance service staff listened carefully to what you had to say?

Item non response = 3.7 (n=12)

Comments made on returned pilot questionnaires indicated that some respondents were not answering this question because their care had been fairly straight forward so they had not needed to say much to the ambulance crew – and therefore could not make a judgment on the listening skills of ambulance service staff.

An extra option 'Not applicable – I did not need to say anything' was added.

Q37 Were you involved as much as you wanted to be in decisions about your care and treatment?

Item non response = 6.4% (n=21)

Questions about 'care and treatment' (i.e. Q21, Q22, Q29, Q37) generated a higher than average item non response rate (Q21=5.2%, Q22=4.5%, Q29=6.2%). This could have been due to some respondents not viewing the ambulance service as providing care and treatment (as suggested in some of the cognitive interviews – see Section 5 Cognitive interviews). The high item non response rate at Q37 could also be due to there being less scope for involvement in decisions in the type of situations dealt with by the ambulance service²⁵. That said, involvement in decisions is an important issue to be addressed, and will be relevant to some ambulance service users. For example, in the qualitative work service users expressed satisfaction in being involved in the decision about which hospital to go to (see Section 4.3 Focus groups and depth interviews).

An extra null option 'I did not want/ need to be involved' was added.

Q38 Was the main reason for your call to the ambulance service dealt with to your satisfaction?

Item non response = 5.2% (n=17)

²⁴ The Category C Review (2007) was conducted on behalf of the Healthcare Commission; this requested a detailed breakdown of all Category C calls and responses in February 2007 from each NHS Ambulance Service Trust in England.

²⁵ The same question in the 2004/05 Emergency Department survey (Q20) had a much lower item non response rate of 1.5%.

Q38 is a cognitively demanding question that respondents may not have known the answer to²⁶. Comments made on the returned pilot questionnaires suggest that this is in fact the reason some respondents did not answer this question.

An extra option 'Not sure / Can't say' was added.

Section 8: About you

Item non response: Q40=5.5% (n=18), Q41=9.8% (n=32), Q42=3.7% (n=12), Q43=2.8% (n=9), Q44=6.5% (n=21), Q45=6.5% (n=21), Q46=8.3% (n=27), Q47=8.0% (n=26), Q48=7.4% (n=24), Q49=15.0% (n=49), Q50=4.2% (n=7), Q51=6.4% (n=21)

Q42 through Q51 are standard demographic questions that cannot be altered. The high item non response rate found here is likely due in part to length of questionnaire, resulting in fatigue, and also the demographic nature of the questions.

Q40 Who filled in this questionnaire?

Q40 was removed since it does not provide any information on the service user's experience.

Q41 How many times (including this one) have you used the emergency ambulance services in the last 12 months? Item non response = 9.8% (n=32)

Comments written on returned pilot questionnaires suggested a proportion of those not answering Q41 were unsure of the exact number of times they had used the ambulance service. A further 7% of respondents provided an out of range response, i.e. zero.

As planned, the response frequencies from the pilot were used to construct ranged response options, plus a 'Don't know / Can't remember' option.

EQ-5D (Q44 to Q48)

Item non response: Q44=6.5% (n=21), Q45=6.5% (n=21), Q46=8.3% (n=27), Q47=8.0% (n=26), Q48=7.4% (n=24)

The non response rates across all five EQ-5D questions were among the highest in the questionnaire, and appeared to increase as respondents progressed through the five questions. EQ-5D is a standardized measure of health status and no changes are permitted to this question.

Q49 Do you have any of the following long-standing conditions?

Item non response = 15.0% (n=49)

The non response rate was particularly high for Q49, especially when compared to the same question in the Primary Care Trust Survey 2008 (item non response = 5.5%) and the Adult Inpatient Survey 2007 (item non response = 9.2%). Since the PCT questionnaire is of similar length (56 questions) to the Category C Service User questionnaire, and Adult Inpatient questionnaire is longer (79 questions) it is possible that the addition of EQ-5D prior to this question had some effect on responses, beyond simply increasing the length of the questionnaire.

²⁶ The same question in the 2004/05 Emergency Department survey (Q40) also had a fairly high item non response rate of 3.0%.

The questionnaire was re-ordered so that Q49 (Do you have any of the following long-standing conditions?) and Q50 (Does this condition(s) cause you difficulty with any of the following?) are placed before the EQ-5D questions, to prevent order effects on these standard questions.

7 Appendix 1: Sampling Review - Sample excel file of service users' details

Record number	NHS number Unique Call ID	Title	First Name	Surname	Location of call out	Location Address1			Home Address1	Home Address5	Home Postcode	Date of birth	Age	Gender	Ethnic category	Day of call	Month of call	Year of call	Time of call	Call centre site code	Dispatch site code	Classification of incident	Outcome of call	Referral	-
1001	4 3 2	Mr	A	Ings	1			N1 4RS			N1 4RS	05/11/7 5	32	1	A	6	1	2007	12:00	кт	кт	DP945	1		
1002	4 5	Mr	Be n	Todd	1			AB2 6XZ			AB2 6XZ	07/03/7 4	33	1	А	5	1	2007	13:06	YK	YK	AD064	6	4	
1003	52	-	-	-	-			-			- - - - -	- - - - - -	-					-	-	-	-	-		-	-
2952	7 6 5	Miss	L	Smith	2		 - - -	AB4 7IP			NC2 4N	23/06/5 3	54	2	А	3	1	2007	04:55	кт	SS	AC094	2 , 6	3	1 6
2953	1 3 2	Mr	Ti m	Blake	2		-	AB9 5ZX		-	KT2 5W	14/12/8 4	23	1	D	14	1	2007	08:20	MN	MN	CB493	1 , 6	2	

8 Appendix 2: Topic Guide for Category C service user focus group and depth interviews

Topic guide for focus groups and interviews - to inform the development of the Category C Service User Survey Questionnaire.

Introduction

- Welcome from facilitator
- Introduction to Picker Institute Europe
- Background to the survey and purpose of the focus group: to find out people's views of cat c ambulance services
- Emphasise confidentiality all personal details to be removed from transcripts so no individual can be identified
- Importance of respecting other participants views and privacy
- Group to last about 1 and a half hours / Interview to last about 1 hour
- Questions from participants about survey (and group)
- Signing consent forms
- Obtain group verbal consent to turn on tape recorder
- Warm up each participant briefly introduces themselves to the group – name they would like to be addressed by during group and why they were interested to attend group

Exploring aspects of the patients journey

1) Thinking about the last time you made a 999 call for an ambulance...

Can I ask who made the call themselves?

(YES = x NO = x)

Can I just ask those who DID NOT make the call themselves..... did you know the call was being made?

Check: what, when, where, who and how

ALL THOSE WHO KNEW CALL WAS MADE

a) When call was made, how urgent did you think your need for an ambulance was? (scale of 1 to 10)

b) Before you called, had you contacted any other service for help? (explore)

c) Before you called, had you thought about calling any other service for help?

(explore)

2) Next, I'd like to find out a bit about what happened to each of you when the initial 999 call was made...

Prompts:

- What was good/bad?
- What was the best/worst thing?
- What could have been handled better?

3) I'd now like to find out a bit about what happened while you were waiting for the ambulance service to respond to your 999 call

Prompts:

- What was good/bad?
- What was the best/worst thing?
- What could have been handled better?

Check:

- Were you told how long you would have to wait for a response?
- How long did you wait for a response?
- What was the wait like?

4) Finally, I'd like to find out a bit about how you felt about the outcome of your 999 call.

Check:

• What was the outcome? Explore participants experiences of cat c response (possible options listed below):

Attendance by

- Ambulance, sometimes followed by transfer to hospital
- Single responder, sometimes followed by transfer to hospital
- Emergency care practitioner (ECP), sometimes followed by transfer to hospital
- Patient Transport Service (booked for a specific time later in the day, to transfer patient to hospital - not A&E)

Referral to

- GP
- Practice nurse
- District nurse
- Falls team, specifically set up to carry out investigative / preventive work with (usually elderly) fallers suffering minor or no injuries

- Other community care or intermediate care team
- Mental health team
- Minor injuries unit
- Social services
- Age Concern
- NHS Direct

Advice only

• Self-care telephone advice only by ambulance service clinician

Other

• e.g. taxi booked by ambulance service to take patient to hospital

Prompts:

- Did you get the service you expected?
- What was good/bad?
- What was the best/worst thing?
- What could have been handled better?

Drawing discussion to a close

- 5) If the same thing was to happen to you again, what one thing would you most like to be handled differently?
- 6) Looking back over the whole experience, what one message do you have for service providers?

Close

- Any questions
- Next steps

Thanks and goodbye

9 Appendix 3 Pilot Questionnaire

10 Appendix 4: Item non response

Table A1 Ite	em non	response
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Questi	ion	Ν	Item Non-response Rate %
Q1	Before the ambulance service was called did you (or the	326	
	person who called the ambulance service) consider calling		
	any other organization or service for help?		1.8
Q2	What was the main reason you (or they) chose to call the	326	
	ambulance service?		6.7
Q3	Where were you when the ambulance service was called?	326	1.8
Q4	Did you speak to the operator at the ambulance control	326	
	room?		4.3
Q5	Was the ambulance control room operator reassuring?	110	0.9
Q6	How would you rate the courtesy of the ambulance control	109	
	room operator?		0.9
Q7	Did the ambulance control room operator pass your call on	115	
ς.	to a telephone advisor to assess your situation or give you		
	advice over the phone?		1.7
Q8	How long did you have to wait to speak to this person?	60	
QU		00	0
Q9	How do you feel about the length of time you waited	60	
	before you spoke to them?		3.3
Q10	Were they reassuring?	60	3.3
Q11	How would you rate the courtesy of the telephone advisor?	60	1.7
Q12	Did you feel you were given enough advice on the	60	
	telephone about what to do?		0
Q13	Did they explain the advice they gave you in a way you	57	
2.0	could understand?	07	1.7
Q14	How would you rate the advice you were given over the	57	
QIT	telephone?	07	1.7
Q15	Did anyone from the ambulance service come out to help	326	
GIU	you?	520	4.0
Q16	Were you told how long you would have to wait for	309	4.0
QIU	someone from the ambulance service to arrive?	503	1.6
Q17	How do you feel about the length of time you were waiting	309	1.0
	before someone from the ambulance service arrived?	309	1.9
Q18	Was the person(s) who came out to help you reassuring?	309	3.3
Q19	Did you have trust and confidence in them?	309	1.9
Q20	Did they do everything they could to help control your	309	
0.01	pain?	0.00	3.6
Q21	Did they explain your care and treatment in a way you	309	5.0
	could understand?		5.2
Q22	If friends or relatives were with you, were they given	309	
	enough information about your condition and treatment?		
0.00			4.5
Q23	Were you provided with transport by the ambulance	309	
	service?		
<u></u>			5.8
Q24	What kind of vehicle was it?	280	0.7
Q25	How clean was the inside of the vehicle?	279	0.7
Q26	Was the way you got into the vehicle appropriate	297	
	considering your condition at the time? (e.g. by walking, on		
	a stretcher etc.)		1.0
Q27	Were you taken to a hospital?	297	1.7
Q28	Did you agree with the decision not to be taken to hospital	64	
	by the ambulance service?		4.6
Q29	How much information about your condition and treatment	64	
			6.2
	was given to you by the ambulance service?		0.2
Q30	Were you given advice about what to do if you needed	64	0.2

Quest	ion	Ν	Item Non-response Rate %
Q31	Did the ambulance service put you in touch with, or tell you to contact, any other parts of the NHS or any other	64	
	organisations?		3.1
Q32	How much information was given to you by the ambulance	21	
	service to help you contact the service or organisation?		0
Q33	Who were you put in touch with or told to contact?	28	0
Q34	Overall do you feel the ambulance service staff treated you with respect and dignity?	326	1.8
Q35	Do you feel the ambulance service staff listened carefully to what you had to say?	326	3.7
Q36	Do you feel the ambulance service staff understood your needs?	326	3.9
Q37	Were you involved as much as you wanted to be in decisions about your care and treatment?	326	6.4
Q38	Was the main reason for your call to the ambulance service dealt with to your satisfaction?	326	5.2
Q39	Overall, how would you rate the care you received from the ambulance service?	326	4.0
Q40	Who filled in this questionnaire?	326	5.5
Q41	How many times have you used the emergency ambulance services in the last 12 months?	326	9.8
Q42	Are you male or female?	326	3.7
Q43	What is your year of birth?	326	2.8
Q44	Mobility	326	5.5
Q45	Self-care	326	6.5
Q46	Usual activities	326	8.3
Q47	Pain / Discomfort	326	8.0
Q48	Anxiety / Depression	326	7.4
Q49	Do you have any of the following long-standing conditions?	326	15.0
Q50	Does this condition(s) cause you difficulty with any of the following?	168	4.2
Q51	To which of these ethnic groups would you say you belong?	326	6.4

Questions with a non-response rate over 5.0% are shaded.

11 Appendix 5: Questionnaire routing errors

Table A2 Questionnaire routing errors

Questi	ion	Ν	% should	Number	%.
			be answering question	answering question in error	answering question in error
Q1	Before the ambulance service was called did you (or the person who called the ambulance service) consider calling any other organization or service for help?	326	All	NA	NA
Q2	What was the main reason you (or they) chose to call the ambulance service?	326	All	NA	NA
Q3	Where were you when the ambulance service was called?	326	All	NA	NA
Q4	Did you speak to the operator at the ambulance control room?	326	All	NA	NA
Q5	Was the ambulance control room operator reassuring?	326	34%	30	9.2%
Q6	How would you rate the courtesy of the ambulance control room operator?	326	33%	33	10.1%
Q7	Did the ambulance control room operator pass your call on to a telephone advisor to assess your situation or give you advice over the phone?	326	35%	42	12.9%
Q8	How long did you have to wait to speak to this person?	326	18%	46	14.1%
Q9	How do you feel about the length of time you waited before you spoke to them?	326	18%	44	13.5%
Q10	Were they reassuring?	326	18%	42	12.9%
Q11	How would you rate the courtesy of the telephone advisor?	326	18%	43	13.2%
Q12	Did you feel you were given enough advice on the telephone about what to do?	326	18%	42	12.9%
Q13	Did they explain the advice they gave you in a way you could understand?	326	17%	41	12.3%
Q14	How would you rate the advice you were given over the telephone?	326	17%	40	12.3%
Q15	Did anyone from the ambulance service come out to help you?	326	All	NA	NA
Q16	Were you told how long you would have to wait for someone from the ambulance service to arrive?	326	95%	2	0.6%
Q17	How do you feel about the length of time you were waiting before someone from the ambulance service arrived?	326	95%	1	0.3%
Q18	Was the person(s) who came out to help you reassuring?	326	95%	1	0.3%
Q19	Did you have trust and confidence in them?	326	95%	2	0.6%
Q20	Did they do everything they could to help control your pain?	326	95%	2	0.6%
Q21	Did they explain your care and treatment in a way you could understand?	326	95%	2	0.6%
Q22	If friends or relatives were with you, were they given enough information about your condition and treatment?	326	95%	2	0.6%
Q23	Were you provided with transport by the ambulance service?	326	95%	3	0.9%
Q24	What kind of vehicle was it?	326	86%	2	0.6%

Questi	ion	Ν	% should	Number	%
			be .	answering	answering
			answering question	question in error	question in error
Q25	How clean was the inside of the vehicle?	326	86%	3	0.9%
Q26	Was the way you got into the vehicle appropriate considering your condition at the time? (e.g. by walking, on a stretcher etc.)	326	91%	3	0.9%
Q27	Were you taken to a hospital?	326	91%	5	1.5%
Q28	Did you agree with the decision not to be taken to hospital by the ambulance service?	326	20%	25	7.7%
Q29	How much information about your condition and treatment was given to you by the ambulance service?	326	20%	48	14.7%
Q30	Were you given advice about what to do if you needed help again?	326	20%	51	15.6%
Q31	Did the ambulance service put you in touch with, or tell you to contact, any other parts of the NHS or any other organisations?	326	20%	47	14.4%
Q32	How much information was given to you by the ambulance service to help you contact the service or organisation?	326	6%	45	13.8%
Q33	Who were you put in touch with or told to contact?	326	9%	44	13.5%
Q34	Overall do you feel the ambulance service staff treated you with respect and dignity?	326	All	NA	NA
Q35	Do you feel the ambulance service staff listened carefully to what you had to say?	326	All	NA	NA
Q36	Do you feel the ambulance service staff understood your needs?	326	All	NA	NA
Q37	Were you involved as much as you wanted to be in decisions about your care and treatment?	326	All	NA	NA
Q38	Was the main reason for your call to the ambulance service dealt with to your satisfaction?	326	All	NA	NA
Q39	Overall, how would you rate the care you received from the ambulance service?	326	All	NA	NA
Q40	Who filled in this questionnaire?	326	All	NA	NA
Q41	How many times have you used the emergency ambulance services in the last 12 months?	326	All	NA	NA
Q42	Are you male or female?	326	All	NA	NA
Q43	What is your year of birth?	326	All	NA	NA
Q44	Mobility	326	All	NA	NA
Q45	Self-care	326	All	NA	NA
Q46	Usual activities	326	All	NA	NA
Q47	Pain / Discomfort	326	All	NA	NA
Q48	Anxiety / Depression	326	All	NA	NA
Q49	Do you have any of the following long- standing conditions?	326	All	NA	NA
Q50	Does this condition(s) cause you difficulty with any of the following?	326	52%	22	6.7%
Q51	To which of these ethnic groups would you say you belong?	326	All	NA	NA

12 Appendix 6: Overall Pilot results

Calling the ambulance

Q1 Before the ambulance service was called did you (or the person who called the ambulance service) consider calling any other organisation or service for help? (e.g. NHS Direct, GP)

	Number	Percentage
Yes	74	25%
No	227	75%
Total specific responses	301	100%
Don't know/ Can't remember	19	
Missing responses	6	

Answered by all

Q2 What was the main reason you (or they) chose to call the ambulance service?

	Number	Percentage
the ambulance service could give me the professional attention I needed	159	52%
the ambulance service could respond quickly	65	21%
the ambulance service could provide me with transport to hospital	40	13%
I was not aware of any other service available at the time	7	2%
I did try to get help elsewhere, but was told I needed the a	23	8%
Some other reason	9	3%
Total specific responses	303	100%
Don't know/ Can't remember	1	
Missing responses	22	

Q3 Where were you when the ambulance service was called?

	Number	Percentage
At home	264	83%
In a public place	32	10%
Somewhere else	24	8%
Total specific responses	320	100%
Don't know/ Can't remember	0	
Missing responses	6	

Answered by all

First contact with the ambulance control room

Q4 Did you speak to the operator at the ambulance control room?

	Number	Percentage
Yes	107	35%
No, someone else spoke to them on my behalf	198	65%
Total specific responses	305	100%
Don't know/ Can't remember	7	
Missing responses	14	

Answered by all

Q5 Was the ambulance control room operator reassuring?

	Number	Percentage
Yes, definitely	88	81%
Yes, to some extent	18	17%
No	2	2%
Total specific responses	108	100%
Don't know/ Can't remember	1	
Missing responses	1	

Answered by all who spoke to an operator

Q6 How would you rate the courtesy of the ambulance control room operator?

	Number	Percentage
Excellent	60	56%
Very good	37	34%
Good	6	6%
Fair	3	3%
Poor	0	0%
Very poor	2	2%
Total specific responses	108	100%
Missing responses	1	

Answered by all who spoke to an operator

Telephone assessment and advice

Q7 Did the ambulance control room operator pass your call on to a telephone advisor to assess your situation or give you advice over the phone?

	Number	Percentage
Yes	58	57%
No	43	43%
Total specific responses	101	100%
Don't know/ Can't remember	12	
Missing responses	2	

Answered by all except those who did NOT speak to an operator

Q8 How long did you have to wait to speak to this person?

	Number	Percentage
I spoke to them straight away	42	72%
Fifteen minutes or less	10	17%
More than fifteen minutes but less than half an hour	1	2%
More than half an hour	5	9%
Total specific responses	58	100%
Don't know/ Can't remember	1	
Missing responses	0	

Answered by all who spoke to a telephone advisor

Q9 How do you feel about the length of time you waited before you spoke to them?

	Number	Percentage
It was as soon as I thought was necessary	47	82%
It should have been a bit sooner	5	9%
It should have been a lot sooner	5	9%
Total specific responses	57	100%
Don't know/ Can't remember	1	
Missing responses	2	

Answered by all who spoke to a telephone advisor

Q10 Were they reassuring?

	Number	Percentage
Yes, definitely	45	78%
Yes, to some extent	10	17%
No	3	5%
Total specific responses	58	100%
Don't know/ Can't remember	1	
Missing responses	2	

Answered by all who spoke to a telephone advisor

Q11 How would you rate the courtesy of the telephone advisor?

	Number	Percentage
Excellent	27	46%
Very good	23	39%
Good	4	7%
Fair	3	5%
Poor	1	2%
Very poor	1	2%
Total specific responses	59	100%
Missing responses	1	

Answered by all who spoke to a telephone advisor

Q12 Did you feel you were given enough advice on the telephone about what to do?

		Number	Percentage
Yes, de	finitely	38	69%
Yes, to	some extent	15	27%
No		2	4%
Total s	pecific responses	55	100%
I did not advice	want/ need any	3	
Don't kr rememt	now/ Can't per	1	
Missing	responses	0	

Answered by all who spoke to a telephone advisor

Q13 Did they explain the advice they gave you in a way you could understand?

	Number	Percentage
Yes, definitely	44	81%
Yes, to some extent	9	17%
No	1	2%
Total specific responses	54	100%
Don't know/ Can't remember	1	
Missing responses	1	

Answered by all who were given advice by a telephone advisor

Q14 How would you rate the advice you were given over the telephone?

	Number	Percentage
Excellent	25	45%
Very good	16	29%
Good	6	11%
Fair	4	7%
Poor	3	5%
Very poor	1	2%
Total specific responses	55	100%
Missing responses	1	

Answered by all who were given advice by a telephone advisor

Attendance by the ambulance service

Q15 Did anyone from the ambulance service come out to help you?

	Number	Percentage
Yes	296	95%
No, but I think that they should have	6	2%
No, and I agreed with this decision	11	4%
Total specific responses	313	100%
Don't know/ Can't remember	0	
Missing responses	13	

Answered by all

Q16 Were you told how long you would have to wait for someone from the ambulance service to arrive?

	Number	Percentage
Yes, but the wait was shorter	125	50%
Yes and I had to wait about as long as I was told	56	22%
Yes, but the wait was longer	19	8%
No, I was not told	49	20%
Total specific responses	249	100%
Don't know/ Can't remember	44	
Missing responses	5	

Answered by all who had someone from the ambulance service come out to help

Q17 How do you feel about the length of time you were waiting before someone from the ambulance service arrived?

	Number	Percentage
They arrived as soon as I thought was necessary	231	86%
They should have arrived a bit sooner	25	9%
They should have arrived a lot sooner	13	5%
Total specific responses	269	100%
Don't know/ Can't remember	24	
Missing responses	6	

Answered by all who had someone from the ambulance service come out to help

Q18 Was the person(s) who came out to help you reassuring?

	Number	Percentage
Yes, definitely	265	91%
Yes, to some extent	19	7%
No	6	2%
Total specific responses	290	100%
Don't know/ Can't remember	2	
Missing responses	8	

Answered by all who had someone from the ambulance service come out to help

Q19 Did you have trust and confidence in them?

	Number	Percentage
Yes, definitely	271	91%
Yes, to some extent	22	7%
No	5	2%
Total specific responses	298	100%
Don't know/ Can't remember	3	
Missing responses	6	

Answered by all who had someone from the ambulance service come out to help

Q20 Did they do everything they could to help control your pain?

	Number	Percentage
Yes, definitely	186	77%
Yes, to some extent	42	17%
No	15	6%
Total specific responses	243	100%
I did not have any pain	44	
Don't know/ Can't remember	8	
Missing responses	11	

Answered by all who had someone from the ambulance service come out to help

Q21 Did they explain your care and treatment in a way you could understand?

	Number	Percentage
Yes, definitely	214	83%
Yes, to some extent	38	15%
No	7	3%
Total specific responses	259	100%
I did not receive any treatment	22	
Don't know/ Can't remember	9	
Missing responses	16	

Answered by all who had someone from the ambulance service come out to help

Q22 If friends or relatives were with you, were they given enough information about your condition and treatment?

	Number	Percentage
Yes	193	96%
No	8	4%
Total specific responses	201	10%
No friends or relatives were with me	60	
No information was wanted/ needed	22	
Don't know/ Can't remember	9	
Missing responses	14	

Answered by all who had someone from the ambulance service come out to help

Transport

Q23 Were you provided with transport by the ambulance service?

	Number	Percentage
Yes	262	91%
No	27	9%
Total specific responses	289	100%
Missing responses	18	

Answered by all who had someone from the ambulance service come out to help OR were unsure

Q24 What kind of vehicle was it?

	Number	Percentage
Ambulance van or car	264	100%
Тахі	1	0%
Some other form of transport	0	0%
Total specific responses	265	100%
Missing responses	2	

Answered by all who were provided with transport by the ambulance service

Q25 How clean was the inside of the vehicle?

	Number	Percentage
Very clean	193	84%
Fairly clean	35	15%
Not very clean	1	0%
Not at all clean	0	0%
Total specific responses	229	100%
Don't know/ Can't remember	36	
Missing responses	2	

Answered by all who were provided with an ambulance (van or car)

Q26 Was the way you got into the vehicle appropriate considering your condition at the time? (e.g. by walking, on a stretcher etc.)

	Number	Percentage
Yes	253	98%
No	5	2%
Total specific responses	258	100%
Don't know/ Can't remember	8	
Missing responses	3	

Answered by all who were provided with transport by the ambulance service

Q27 Were you taken to a hospital?

	Number	Percentage
Yes	261	98%
No	5	2%
Total specific responses	266	100%
Missing responses	5	

Answered by all who were provided with transport by the ambulance service

If you were not taken to hospital

Q28 Did you agree with the decision not to be taken to hospital by the ambulance service?

	Number	Percentage
Yes	35	78%
No	10	22%
Total specific responses	45	100%
Not sure	3	
I was advised to go to hospital but chose not to	6	
Missing responses	3	

Answered by all who were NOT taken to hospital by the ambulance service

Q29 How much information about your condition and treatment was given to you by the ambulance service?

	Number	Percentage
Not enough	6	13%
Right amount	39	87%
Too much	0	0%
Total specific responses	45	100%
I was not given any information about my treatment/condition	9	
Missing responses	4	

Answered by all who were NOT taken to hospital by the ambulance service

Q30 Were you given advice about what to do if you needed help again?

	Number	Percentage
Yes	41	82%
No	9	18%
Total specific responses	50	100%
I did not want/need advice	1	
Don't know/ Can't remember	3	
Missing responses	4	

Answered by all who were NOT taken to hospital by the ambulance service

Q31 Did the ambulance service put you in touch with, or tell you to contact, any other parts of the NHS or any other organisations?

	Number	Percentage
Yes, I was put in touch with someone else	7	14%
Yes, I was told to contact them myself	19	37%
No	25	49%
Total specific responses	51	100%
Don't know/ Can't remember	3	
Missing responses	2	

Answered by all who were NOT taken to hospital by the ambulance service

Q32 How much information was given to you by the ambulance service to help you contact the service or organisation?

	Number	Percentage
Not enough	1	7%
Right amount	13	93%
Too much	0	0%
Total specific responses	14	100%
I did not want/ need any information	6	
Missing responses	0	

Answered by all who were told to contact another organisation or service

Q33. Who were you put in touch with or told to contact?

	Number	% (Base: Responde nts)	% (Base: Responses)
I was put in touch with or told to contact a GP or nurse	21	77%	60%
I was put in touch with or told to contact A&E	6	22%	17%
I was put in touch with or told to contact a walk in centre or minor injuries unit	1	4%	3%
I was put in touch with or told to contact a mental health service	0	0%	0%
I was put in touch with or told to contact NHS Direct	3	11%	9%
I was put in touch with or told to contact some other health care team	0	0%	0%
I was put in touch with or told to contact social services	2	7%	6%
I was put in touch with or told to contact a voluntary organisation	0	0%	0%
I was put in touch with or told to contact some other service or organisation	1	4%	3%
Total	27	125%	100%
Don't know	1		

Answered by all who were put in touch with or told to contact any other parts of the NHS or other organisations

Overall

Q34 Overall do you feel the ambulance service staff treated you with respect and dignity?

	Number	Percentage
Yes, definitely	299	94%
Yes, to some extent	14	4%
No	5	2%
Total specific responses	318	100%
Don't know/ Can't remember	2	
Missing responses	6	

Q35 Do you feel the ambulance service staff listened carefully to what you had to say?

	Number	Percentage
Yes, definitely	285	93%
Yes, to some extent	17	6%
No	4	1%
Total specific responses	306	100%
Don't know/ Can't remember	8	
Missing responses	12	

Answered by all

Q36 Do you feel the ambulance service staff understood your needs?

	Number	Percentage
Yes, definitely	266	86%
Yes, to some extent	34	11%
No	9	3%
Total specific responses	309	100%
Don't know/ Can't remember	4	
Missing responses	13	

Answered by all

Q37 Were you involved as much as you wanted to be in decisions about your care and treatment?

	Number	Percentage
Yes, definitely	227	79%
Yes, to some extent	48	17%
No	12	4%
Total specific responses	287	100%
Don't know/ Can't remember	18	
Missing responses	21	

Answered by all

Q38 Was the main reason for your call to the ambulance service dealt with to your satisfaction?

	Number	Percentage
Yes, completely	275	89%
Yes, to some extent	21	7%
No	13	4%
Total specific responses	309	100%
Missing responses	17	

Q39 Overall, how would you rate the care you received from the ambulance service?

	Number	Percentage
Excellent	217	69%
Very good	69	22%
Good	13	4%
Fair	6	2%
Poor	5	2%
Very poor	3	1%
Total specific responses	313	100%
Missing responses	13	

Answered by all

About You

Q40 Who filled in this questionnaire?

	Number	Percentage
The person named on the front of the envelope	216	70%
Both the person named and someone else	44	14%
Someone else	48	16%
Total specific responses	308	100%
Missing responses	18	

Answered by all

	Number	Percentage
1	157	53%
2	67	23%
3	34	12%
4	15	5%
5	9	3%
6	5	2%
7	2	1%
8	1	0%
9	1	0%
10	1	0%
12	1	0%
15	1	0%
Total specific responses	294	100%
Missing responses	32	

Q44 Mobility

	Number	Percentage
I have no problems in walking about	124	40%
I have some problems in walking about	178	58%
I am confined to bed	6	2%
Total specific responses	308	100%
Missing responses	18	
Answered by all		

Q45 Self-care

	Number	Percentage
I have no problems with self care	195	64%
I have some problems with washing or dressing myself	86	28%
I am unable to wash or dress myself	24	8%
Total specific responses	305	100%
Missing responses	21	

Answered by all

Q46 Usual activities

	Number	Percentage
I have no problems with performing my usual activities	116	39%
I have some problems with performing my usual activities	125	42%
I am unable to perform my usual activities	58	19%
Total specific responses	299	100%
Missing responses	27	

Q47 Pain / Discomfort

	Number	Percentage
I have no pain or discomfort	103	34%
I have moderate pain or discomfort	158	53%
I have extreme pain or discomfort	39	13%
Total specific responses	300	100%
Missing responses	26	

Answered by all

Q48 Anxiety / Depression

	Number	Percentage
I am not anxious or depressed	198	66%
I am moderately anxious or depressed	89	29%
I am extremely anxious or depressed	15	5%
Total specific responses	302	100%
Missing responses	24	

Q49. Do you have any of the following long-standing conditions?

	Number	% (Base: Responde nts)	% (Base: Responses)
I have a long-standing condition involving deafness or hearing impairment	47	17%	13%
I have a long-standing condition involving blindness or partially sighted	27	10%	8%
I have a long-standing condition involving a physical condition	84	30%	24%
I have a long-standing condition involving a learning disability	5	2%	1%
I have a long-standing condition involving a mental health condition	15	5%	4%
I have a long-standing condition involving an illness such as cancer, HIV, diabetes, CHD, or epilepsy	65	23%	18%
I do not have a long- standing condition	109	39%	31%
Total	277	127%	100%
Missing responses	52		

Q50. Does this condition(s) cause	you difficulty with any	of the following?
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	Number	% (Base: Responde nts)	% (Base: Responses)
This condition causes me difficulty with everyday activities that people of my age can usually do	115	65%	31%
This condition causes me difficulty at work, in education, or training	27	15%	7%
This condition causes me difficulty with access to buildings, streets, or transport vehicles	68	38%	18%
This condition causes me difficulty with reading or writing	38	21%	10%
This condition causes me difficulty with people's attitudes to me because of my condition	21	12%	6%
This condition causes me difficulty with communicating, mixing with others, or socialising	53	30%	14%
This condition causes me difficulty with other activities	28	16%	7%
This condition does not cause me difficulty with any of these	26	15%	7%
Total Missing responses	177 10	212%	100%

Answered by those with a long-standing condition

13 Appendix 7: Final Questionnaire



Ambulance Service Questionnaire

What is the survey about?

This survey is about your recent experience of the ambulance service.

Who should complete the questionnaire?

The questions should be answered by the person named on the front of the envelope. If that person needs help to complete the questionnaire, the answers should be given from his/her point of view – not the point of view of the person who is helping.

Completing the questionnaire.

For each question please tick clearly inside one box using a black or blue pen.

Sometimes you will find the box you have ticked has an instruction to go to another question. By following the instructions carefully you will miss out questions that do not apply to you.

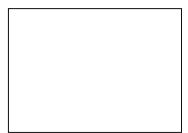
Don't worry if you make a mistake; simply cross out the mistake and put a tick in the correct box.

Please do not write your name or address anywhere on the questionnaire.

Your participation in this survey is voluntary.

If you choose not to take part in this survey it will not affect the care you receive from the NHS in any way. If you do not wish to take part, or you do not want to answer some of the questions, you do not have to give us a reason.

Your answers will be treated in confidence.



CALLING THE AMBULANCE

- Before the ambulance service was called did you (or the person who called the ambulance service) consider calling any other organisation or service for help? (E.g. NHS Direct, GP)
- 1 🛛 Yes
- 2 🗖 No
- ³ Don't know/ Can't remember
- 2. Where were you when the ambulance service was called?
- 1 At home
- 2 In a public place
- ³ Somewhere else
- ⁴ Don't know/ Can't remember

When the call was put through to the ambulance service control room...

- 3. Did you speak to the operator?
- 1 🛛 Yes

➔ Go to 4

- ² \square No, someone else spoke to them on my behalf \rightarrow Go to 14
- ³ □ Don't know/ Can't remember → Go to 6

IF YOU SPOKE TO THE OPERATOR AT THE AMBULANCE CONTROL ROOM PLEASE GO TO QUESTION 4.

IF SOMEONE ELSE SPOKE TO THE OPERATOR PLEASE GO TO QUESTION 14

 4. Was the ambulance control room operator reassuring? 1	REMEMBER: THESE QUESTIONS ARE ABOUT THE TELEPHONE ADVISOR, <u>NOT</u> THE AMBULANCE CONTROL ROOM OPERATOR		
$_2$ \Box Yes, to some extent			
₃ □ No	7. How long did you have to wait to speak to the telephone advisor?		
4 Don't know/ Can't remember	$_{1}$ \Box I spoke to them straight away		
	$_2$ \square 15 minutes or less		
E lleve would you note the countery of the			
How would you rate the courtesy of the ambulance control room operator?	₃		
1 D Excellent	₄ ☐ More than half an hour		
2 Very good	₅ Don't know/ Can't remember		
3 🗖 Good			
4 🗖 Fair	8. How do you feel about the length of time you		
₅ 🗖 Poor	waited before you spoke to the telephone		
6 🗖 Very poor	advisor?		
	$_{\scriptscriptstyle 1}$ \square It was as soon as I thought was necessary		
TELEPHONE ASSESSMENT AND	² It should have been a bit sooner		
ADVICE	₃ ☐ It should have been a lot sooner		
	₄ ☐ Not sure/ Can't remember		
Sometimes calls are passed on to a telephone advisor. Telephone advisors are nurses or paramedics trained by the ambulance service to provide assessment and advice over the telephone.	 9. Was the telephone advisor reassuring? 1 Yes, definitely 		
6. Did the ambulance control room operator pass	² Tes, to some extent		
your call on to a telephone advisor to assess your situation or give you advice over the	3 🗖 No		
phone?	4 Don't know/ Can't remember		
₁ □ Yes → Go to 7			
2 □ No → Go to 14	10. How would you rate the courtesy of the		
₃ 🗖 Don't know/ Can't remember 🛛 → Go to 14	telephone advisor?		
	1 D Excellent		
	2 🗖 Very good		
	₃ 🗖 Good		
	4 🗖 Fair		
	₅ 🗖 Poor		

6 🛛 Very poor

11.Did you feel you were given enough advice on the telephone about what to do?	ATTENDANCE BY THE AMBULANCE SERVICE
The Yes, definitely \rightarrow Go to 12	This section is about any ambulance service staff
² \Box Yes, to some extent \Rightarrow Go to 12	who may have come out to help you. This could be an ambulance crew, or a single responder in a car
$_{3}$ \square No \rightarrow Go to 12	or anyone else from the ambulance service.
^₄ ☐ I did not want/ need any advice → Go to 14	14.Did anyone from the ambulance service come
$_{5}$ Don't know/ Can't remember \rightarrow Go to 12	out to help you?
	1 ☐ Yes → Go to 15
	$_2$ \Box No – but I think they should have \rightarrow Go to 26
	₃ □ No – and I agreed with this decision → Go to 26
12.Did they explain the advice they gave you in a way you could understand?	^₄ ☐ Don't know/ Can't remember → Go to 23
$_{1}$ \Box Yes, definitely	IF THE AMBULANCE SERVICE CAME OUT TO
$_2$ \square Yes, to some extent	HELP YOU PLEASE GO TO QUESTION 15
3 🗖 No	IF THE AMBULANCE SERVICE DID NOT COME OUT TO HELP YOU PLEASE GO TO
4 Don't know/ Can't remember	QUESTION 26.
 13. How would you rate the advice you were given over the telephone? 1 Excellent 2 Very good 3 Good 4 Fair 5 Poor 6 Very poor 	 15. Were you told how long you would have to wait for someone from the ambulance service to arrive? 1 Yes, but the wait was shorter 2 Yes, and I had to wait about as long as I was told 3 Yes, but the wait was longer 4 No, I was not told 5 Don't know/ Can't remember 16. How do you feel about the length of time you were waiting before someone from the ambulance service arrived? 1 They arrived as soon as I thought was necessary 2 They should have arrived a bit sooner 3 They should have arrived a lot sooner 4 Not sure/ Can't remember

	_
17. Was the person(s) who came out to help you reassuring?	22.If friends or relatives were with you, do you think they were given enough information about your condition and treatment?
₁ 🗖 Yes, definitely	1 🗖 Yes
$_2$ \square Yes, to some extent	$_{2}$ \square No
3 🗖 No	 3 In No friends or relatives were with me
4 Don't know/ Can't remember	⁴ □ No information was wanted/ needed
	⁴ □ No mornation was wanted/ needed 5 □ Don't know/ Can't remember
18. Did you have trust and confidence in them?	
$1 \square$ Yes, definitely	
_	TRANSPORT
² ☐ Yes, to some extent ³ ☐ No	
_	oo . We are seen a manifold with the many and the the
4 📙 Don't know/ Can't remember	23. Were you provided with transport by the ambulance service?
19. Were you in any pain at the time?	₁ □ Yes → Go to 24
\rightarrow Go to 20	$_2$ \square No \rightarrow Go to 26
$_2$ \square No \rightarrow Go to 21	
 20.Do you think they did everything they could to help control your pain? 1 Yes, definitely 2 Yes, to some extent 3 No 4 Don't know/ Can't remember 21.Did they explain your care and treatment in a way you could understand? 	 24. How clean was the inside of the ambulance or ambulance car? 1 Very clean 2 Fairly clean 3 Not very clean 4 Not at all clean 5 I was not provided transport in an ambulance or ambulance car 6 Don't know/ Can't remember
₁ ☐ Yes, definitely	
$_2$ \square Yes, to some extent	25. Were you taken to a hospital?
3 🗖 No	₁ □ Yes → Go to 30
$_4$ \square No explanation was needed	2 □ No → Go to 26
I did not receive any treatment from the person(s) who came out to help me	
6 Don't know/ Can't remember	

L

IF YOU WERE NOT TAKEN TO	
HOSPITAL	

² Accident & Emergency Department (A&E) IF YOU WERE NOT TAKEN TO HOSPITAL BY THE AMBULANCE SERVICE, OR YOU WENT $_{3}$ \Box A walk in centre or minor injuries unit TO HOSPITAL ON YOUR OWN, PLEASE GO ⁴ **D** NHS Direct TO QUESTION 26. ₅ □ Social services IF YOU WERE TAKEN TO HOSPITAL BY THE AMBULANCE SERVICE PLEASE GO TO ⁶ Voluntary organisation (e.g. Age Concern, **QUESTION 30** Samaritans etc.) 7 Other service or organisation ⁸ Don't know/ Can't remember 26.Did you agree with the decision not to be taken to hospital by the ambulance service? 1 🛛 Yes $_2$ \square No **OVERALL** 3 D Not sure ⁴ I was advised to go to hospital but chose not to Now thinking overall about your experience of the ambulance service on this occasion... 30. Overall do you feel the ambulance service staff treated you with respect and dignity? 27. Did the ambulance service put you in touch with, or tell you to contact, any other parts of the ¹ Ves, definitely NHS or any other organisations? $_{2}$ \Box Yes, to some extent $_{1}$ \Box Yes – I was put in touch with someone else → Go to 29 ₃ Π Νο $_{2}$ \Box Yes – I was told to contact them myself 4 Don't know/ Can't remember → Go to 28 3 🗖 No → Go to 30 ₄ 🔲 Don't know/ Can't remember → Go to 30 31.Do you feel the ambulance service staff listened carefully to what you had to say? ¹ Ves, definitely $_{2}$ \Box Yes, to some extent 28. How much information was given to you by the ambulance service to help you contact this 3 🗖 No service or organisation? ⁴ • Not applicable – I did not need to say anything 1 **Not enough** ⁵ Don't know/ Can't remember ² Right amount ³ Too much 4 I did not want/ need any information

29. Who were you put in touch with or told to

contact? (TICK ALL THAT APPLY)

1 A GP or nurse

	—
I 32. Do you feel the ambulance service staff understood your needs?	ABOUT YOU
 Yes, definitely Yes, to some extent No Don't know/ Can't remember 	All the questions should be answered by the person named on the front of the envelope that this questionnaire was sent in. If you are helping someone to fill in the questionnaire, the answers given should still be from the point of view of the person named on the envelope.
 33.Were you involved as much as you wanted to be in decisions about your care and treatment? 1 Yes, definitely 2 Yes, to some extent 3 No 4 I did not want/ need to be involved 5 Don't know/ Can't remember 	 36. How many times (including this one) have you used the emergency ambulance services in the last 12 months? (excluding any times you may have called an ambulance for someone else) 1 This was the only time 2 Twice 3 3 - 4 times 4 More than 4 times 5 Don't know / Can't remember
 34.Was the main reason for your call to the ambulance service dealt with to your satisfaction? 1 Yes, completely 2 Yes, to some extent 3 No 4 Not sure / Can't say 	 37. Are you male or female? 1 Male 2 Female 38. What was your year of birth? (Please write in) e.g. 1 9 3 4
 35.Overall, how would you rate the care you received from the ambulance service? 1 Excellent 2 Very good 3 Good 4 Fair 5 Poor 6 Very poor 	

- **39.** Do you have any of the following long-standing conditions? **(TICK ALL THAT APPLY)**
- □ Deafness or severe hearing impairment
 → Go to 40
- ² \square Blindness or partially sighted \rightarrow Go to 40
- ³ A long-standing physical condition

➔ Go to 40

- ₄ □ A learning disability → Go to 40
- $_{5}$ \Box A mental health condition \rightarrow Go to 40
- G A long-standing illness, such as cancer, HIV, diabetes, chronic heart disease, or epilepsy
 → Go to 40
- 7 \square No, I do not have a long-standing condition \rightarrow Go to 41
- Does this condition(s) cause you difficulty with any of the following? (TICK ALL THAT APPLY)
- Everyday activities that people your age can usually do
- ² At work, in education, or training
- ³ Access to buildings, streets, or vehicles
- ⁴ **D** Reading or writing
- 5 People's attitudes to you because of your condition
- 6 Communicating, mixing with others, or socialising
- 7 Any other activity
- $_{s}$ \Box No difficulty with any of these

41. To which of these ethnic groups would you say you belong? (Tick one only)

a. WHITE

- 1 🛛 🛛 British
- 2 🛛 Irish
- Any other White background (Please write in box)

b. MIXED

- 4 White and Black Caribbean
- ⁵ White and Black African
- 6 White and Asian
- Any other Mixed background (Please write in box)

c. ASIAN OR ASIAN BRITISH

- 8 🛛 Indian
- 9 D Pakistani
- 10 Bangladeshi
- Any other Asian background (Please write in box)

d. BLACK OR BLACK BRITISH

- 12 Caribbean
- 13 🗋 African
- Any other Black background (Please write in box)

e. CHINESE OR OTHER ETHNIC GROUP

- 15 Chinese
- Any other ethnic group (Please write in box)

Your own health state today

By placing a tick in one box in each group below, please indicate which statement best describes your own health state today.

Was there anything particularly good about your 42. Mobility care? ¹ I have no problems in walking about $_{2}$ I have some problems in walking about $_{3}$ \Box I am confined to bed 43. Self-Care ¹ I have no problems with self-care ² L I have some problems washing or dressing myself $_{3}$ \Box I am unable to wash or dress myself Was there anything that could have been improved? 44. Usual Activities (e.g. work, study, housework, family or leisure activities) ¹ I have no problems with performing my usual activities $_{2}$ \Box I have some problems with performing my usual activities ³ I am unable to perform my usual activities 45. Pain/Discomfort ¹ I have no pain or discomfort

- ² I have moderate pain or discomfort
- ³ I have extreme pain or discomfort

46. Anxiety/Depression

- 1 L I am not anxious or depressed
- ² I am moderately anxious or depressed
- ³ I am extremely anxious or depressed

OTHER COMMENTS

If there is anything else you would like to tell us about your experience of the ambulance service, please do so here

Any other comments?

THANK YOU VERY MUCH FOR YOUR HELP

Please check that you answered all the questions that apply to you.

Please post this questionnaire back in the FREEPOST envelope provided.

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