GUIDANCE ON DATA CLEANING FOR THE 2008 EMERGENCY DEPARTMENT SURVEY

THE ACUTE SURVEYS CO-ORDINATION CENTRE

picker
INSTITUTE

making patients' views count

Last updated: 31st July 2008
Version 2

Contacts

The Acute Surveys Co-ordination Centre
Picker Institute Europe
King's Mead House
Oxpens Road
Oxford
OX1 1RX

Tel: 01865 208127
Fax: 01865 208101
E-mail: emergency.data@pickereurope.ac.uk
Website: www.nhssurveys.org

Authors

Esther Howell
Elisabeth Garratt

Updates

Before you use this document, check that you have the latest version, as there might be some small amendments from time to time (the date of the last update is on the front page). In the very unlikely event that there are any major changes, we will e-mail all trust contacts and contractors directly to inform them of the change.

This document is available from the Co-ordination Centre website at:

www.NHSSurveys.org

Questions and comments

If you have any questions or concerns regarding this document, or if you have any specific queries regarding the submission of data, please contact the Co-ordination Centre:

By e-mail: emergency.data@pickereurope.ac.uk

By phone: 01865 208127

Contents

1 Emergency Survey 2008 – data cleaning

1.1 Introduction

Once fieldwork for the 2008 Emergency Department survey has been completed, participating trusts and contractors will be required to submit data to the Co-ordination Centre in a **raw ('uncleaned')** format. Following this, data for all trusts in the survey will be collated and the full dataset will be cleaned together to ensure that cleaning taking place on data pertaining to different trusts is comparable.

This document provides a description and specification of the processes that will be used by the Co-ordination Centre to clean and make comparable data submitted by contractors and trusts as part of the 2008 Emergency Department survey. By following the guidance contained in this document, it should be possible to recreate this cleaning process.

If you have any comments or queries regarding this document please contact the Co-ordination Centre on **01865 208 127**, or e-mail us at emergency.data@pickereurope.ac.uk

1.2 The core and extended questionnaires

For the 2008 Emergency Department survey, all trusts have the option to use either the 50 item 'core' questionnaire or to use an extended questionnaire with further questions available from the 'question bank' for the survey. The Co-ordination Centre only requires data to be submitted for the 50 core items, and so all cleaning undertaken by ourselves will involve only these 50 core items. As such, this document looks only at the cleaning required for the core survey. Nonetheless, the rules and principles of data cleaning described here can be applied to data from an extended questionnaire.

1.3 Definitions

Definitions of terms commonly used in this document, as they apply to to the Emergency Department survey 2008 are as follows:

Raw/uncleaned data: 'Raw' or 'uncleaned' data is data that has been entered verbatim from completed questionnaires without any editing taking place to remove contradictory or inappropriate responses; thus, all responses ticked on the questionnaire should be included in the data entry spreadsheet[1] (see Section 2: Submitting raw ('uncleaned') data, for detailed guidance on submitting raw data). The requirement for raw/uncleaned data does **not**, however, preclude the checking of data for errors resulting from problems with data entry or similar. Ensuring high data quality is paramount and errors resulting from data entry problems can and should be corrected by checking against the appropriate completed questionnaire.

---

[1] Except where: a) more than one response has been ticked - set these to missing (The **exceptions** to this are for the 'tick all that apply' questions **Q48** and **Q49** where respondents may tick more than one response option)

b) year of birth has been entered in incorrect format - if the patient's *intended* response is unambiguous from the questionnaire, then enter this.

Emergency Department Survey 2008. Data Cleaning Guidance. 17/04/2008. Version 2.

Page 1

Data cleaning: The Co-ordination Centre uses the term 'data cleaning' to refer to all editing processes undertaken upon survey data once the survey has been completed and the data have been entered and collated.

Routing questions: These are items on the questionnaire which instruct respondents to either continue on to the next question or to skip past irrelevant questions depending on their response to the routing question. For the 2008 Emergency Department survey, the routing questions in the core questionnaire are **Q2, Q3, Q8, Q11, Q22, Q24, Q25, Q31, Q32** and **Q48.**

Filtered questions: Items on the questionnaire that are not intended to be answered by all respondents are referred to as 'filtered' questions. Whether individual respondents are expected to answer filtered questions depends on their responses to preceding routing questions. For the 2008 Emergency Department survey, the filtered questions in the core questionnaire are **Q3, Q4, Q5, Q9, Q12, Q13, Q14, Q15, Q16, Q23, Q25, Q26, Q27, Q32, Q33, Q34, Q35, Q36, Q37** and **Q49.**

Non-filtered questions: these are items in the questionnaire which are not subject to any routing/filtering and which should therefore be answered by all respondents. For the 2008 Emergency Department survey, the non-filtered questions are **Q1, Q2, Q6, Q7, Q8, Q10, Q11, Q17, Q18, Q19, Q20, Q21, Q22, Q24, Q28, Q29, Q30, Q31, Q38, Q39, Q40, Q41, Q42, Q43, Q44, Q45, Q46, Q47, Q48** and **Q50.**

Out-of-range data: This refers to instances where data within a variable has a value that is not permissible. For categorical data – as in the case of the majority of variables in this survey – this would mean a value not allowed in the data, for example, a value of '3' being entered in a variable with only two response categories (1 or 2). For scalar data – e.g. year of birth – data is considered to be out-of-range if it specifies a value that is not possible (for instance, year of birth as 983 or 2983). Out-of-range responses entered into the dataset should not be automatically (eg, algorithmically) removed prior to submitting the data to the Co-ordination Centre (see Section 2: Submitting raw ('uncleaned') data).

Non-specific response: This is a loose term for response options that can be considered as not being applicable to the respondent in terms of directly answering the specific question to which they are linked. Most commonly, these are responses such as "Don't know/Can't remember", which indicate a failure to recall the issue in question. Likewise, responses that indicate the question is not applicable to the respondent are considered 'non-specific' – for example, responses such as "I did not need to find a place to park" or "I did not discuss my condition with a receptionist". A full listing of such responses for the 2008 Emergency Department survey can be found in Appendix B: Non-specific responses.

2 Submitting raw ('uncleaned') data

For the 2008 Emergency Department survey, trusts and contractors are required to submit raw ('uncleaned') data to the Co-ordination Centre. For clarification, raw data is created as follows:

i)   All responses should be entered into the dataset, regardless of whether or not the respondent was meant to respond to the question (eg, where patients answer questions that they have been directed to skip past, these responses should still be entered)

ii)   Where a respondent has ticked more than one response category on a question, the question for that respondent should be set to 'missing' in the data. The **exceptions** to this are for the 'multiple response' questions, **Q48** and **Q49**, where respondents may tick more than one response option (ie. 'tick all that apply')

iii) Where a respondent has crossed out a response, this should not be entered in the data. Where a respondent has crossed out a response and instead ticked a second response option, this second choice should be entered into the data

iv) Where a respondent has given their response inconsistently with the formatting of the questionnaire but where their intended response is nonetheless unambiguous on inspection of the completed questionnaire, then the respondent's *intended* response should be entered. For example, where a patient has written their *date* of birth in the boxes for **Q42**, but written their *year* of birth in at the side of this, then the respondent's year of birth should be entered

v)   For the year of birth question, unrealistic responses should still be entered *except* following **iv)** above. For example, if a respondent enters '2008' in the year of birth box, this should still be entered unless the respondent has unambiguously indicated their actual year of birth to the side

vi) Once the data has been entered, no responses should be removed or changed in any way *except* where responses are known to have been entered incorrectly or where inspection of the questionnaire indicates that the patient's intended response has not been captured. This includes 'out-of-range' responses, which must **not** be *automatically* removed from the dataset. Responses in the dataset should only be changed before submission to the Co-ordination Centre where they are found to have been entered inconsistently with the respondent's intended response.

3 Editing/cleaning data after submission

3.1 Approach and rationale

Our aim as Co-ordination Centre in cleaning the data submitted to us is to ensure an optimal balance between data quality and completeness. Thus, we seek to remove responses that are known to be erroneous or inappropriate but do this in a relatively permissive way so as to enable as many responses as possible to contribute to the overall survey results.

3.2 Filters

Some of the questions included in the survey are only relevant to a subset of respondents, and in these cases filter instructions on the questionnaire are used to route respondents past questions that are not applicable to them. For example, people who tick "no" to **Q24** in the core questionnaire ("Were you in any pain while you were in the Emergency Department?") are instructed to skip the further questions on pain (e.g. **Q25** to **Q27**).

It is necessary to clean the data to remove inappropriate responses where filter instructions have been incorrectly followed. In such cases, participants' responses to questions that were not relevant to them are deleted from the dataset. Responses are **only** deleted where respondents have answered 'filtered' questions despite ticking an earlier response on a routing question instructing them to skip these questions (eg a respondent ticking "No" to **Q24** but then answering the three questions about pain as in the example above). Responses to 'filtered' questions are **NOT** removed where the response to the routing question is missing.   For example, **Q25-Q27** are filtered by the response to **Q24** (e.g. if **Q24=2**), but if a respondent does not answer **Q24**, or if the **Q24** response is missing for any reason, then responses to **Q25-Q27** should not be removed.

Figure 1 (overleaf) shows a summary of all routing questions, and the filtered questions they relate to, that are included in the 2008 Emergency Department survey. Please note that these instructions should be followed sequentially in order to be consistent with the procedures applied by the Co-ordination Centre.

Figure 1 - List of routing/filtering instructions

	ROUTING QUESTION		RESPONSE VALUES		FILTERED QUESTIONS
if	Q2	=	2,3,4,5,6	*then delete responses to:*	3
if	Q2	=	1,3,4,5,6	*then delete responses to:*	4, 5
if	Q3	=	1,2,3,4	*then delete responses to:*	4, 5
if	Q8	=	1, 8	*then delete responses to:*	9
if	Q11	=	4	*then delete responses to:*	12, 13, 14, 15, 16
if	Q22	=	2	*then delete responses to:*	23
if	Q24	=	2	*then delete responses to:*	25, 26, 27
if	Q25	=	2, 3	*then delete responses to:*	26
if	Q31	=	1, 2	*then delete responses to:*	32, 33, 34, 35, 36, 37
if	Q32	=	2	*then delete responses to:*	33, 34
if	Q48_7	=	1	*then delete responses to:*	49_1, 49_2, 49_3, 49_4, 49_5, 49_6, 49_7, 49_8

Please note that these instructions should be followed sequentially in the order shown above.

A worked example of the cleaning process for removing unexpected responses to filtered questions is included in Appendix A: Example of cleaning.

3.3 Dealing with multiple response questions

For most questions, each column corresponds to one survey question. However, there are some exceptions to this rule. For multiple response questions **Q48** and **Q49** that gives the instruction "Tick all that apply", each response option is treated as a separate question.

....

Emergency Department Survey 2008. Data Cleaning Guidance. 17/04/2008. Version 2.   Page 5

Example

Q48. Do you have any of the following long-standing conditions? **(Tick all that apply)**

- 1 ☑ I have deafness or severe hearing impairment
- 2 ☐ I have blindness or are partially sighted
- 3 ☐ I have a long-standing physical condition
- 4 ☐ I have a learning disability
- 5 ☑ I have a mental health condition
- 6 ☐ I have a long-standing illness
- 7 ☐ I do not have a long-standing condition

Responses to each part of this question are coded: **1 if the box is ticked**
0 if the box is not ticked[1]

Q49 takes up seven columns in the data file, labelled as follows:

Column headings	Q48_1	Q48_2	Q48_3	Q48_4	Q48_5	Q48_6	Q48_7
Codings for this example	1	0	0	0	1	0	0

However, the last response to each of these questions is an exclusive option. If,a respondent ticks option 7 to **Q48** (i.e. "I do not have a long-standing condition"), options 1-6 should not have also been ticked; if any of these options have been ticked, they should be recoded from '1' to '0' when cleaning the data. The same applies for **Q49**; if response option 8 ("No difficulty with any of these") is ticked, options 1-7 should not have also been ticked; if they have been ticked they should be recoded from '1' to '0'

---

[1] Please note: if a respondent does not answer any part of a multiple response question, (ie does not tick any of the response options) then it should be left blank or coded as a full stop (.)

Example

Q48. Do you have any of the following long-standing conditions? **(Tick all that apply)**

    ₁ ☑ I have deafness or severe hearing impairment

    ₂ ☐ I have blindness or are partially sighted

    ₃ ☐ I have a long-standing physical condition

    ₄ ☐ I have a learning disability

    ₅ ☑ I have a mental health condition

    ₆ ☐ I have a long-standing illness

    ₇ ☑ I do not have a long-standing condition

BEFORE CLEANING: Q48 is coded as follows:

Column headings	Q48_1	Q48_2	Q48_3	Q48_4	Q48_5	Q48_6	Q48_7
Codings for this example	1	0	0	0	1	0	1

AFTER CLEANING: Q48 is coded as follows:

Column headings	Q48_1	Q48_2	Q48_3	Q48_4	Q48_5	Q48_6	Q48_7
Codings for this example	0	0	0	0	0	0	1

When the data is cleaned, the responses to Q48_1 and Q48_5 are re-coded as '0' because option 7 (i.e. "I do not have a long-standing condition") has also been ticked.

3.4 Dealing with demographics

Basic demographic information, including age, sex, and ethnicity of patients are included in the sample section of the data, but the 'About You' section at the end of the questionnaire also asks respondents to provide this information. In a minority of cases, the information provided from the sample frame and by the respondents does not correspond – for example, the sample may identify an individual as male only for them to report being female (eg **Q42=2**).

Because of this, and because questions about demographics tend to produce relatively high item non-response rates, it is not appropriate to rely on either source of data alone.

Where responses to demographic questions are present, it is assumed these are more likely to be accurate than sample frame information (since it is assumed that respondents are best placed to

know their own sex, age, and ethnic group)[1]. Where responses to demographic questions are missing, however, sample data are used in their place.

For demographic analysis on groups of cases, then, it is necessary to use some combination of the information supplied in the sample frame and by the respondents. To do this, we first copy all valid responses to survey demographic questions into a new variable. Where responses are missing we then copy in the relevant sample information (note that for a very small number of patients demographic information may be missing in both the sample and response sections; in such cases data must necessarily be left missing in the new variable).[2]

Certain demographic variables require special consideration during data cleaning:

Age (Q42)

A common error when completing year of birth questions on forms is for respondents to accidentally write in the current year – thus responses to Q42 of '2008' will be set to missing during cleaning. Out-of-range responses will also be set to missing[3]. For the 2008 Emergency Department survey, out-of range responses are defined as **Q42≤1880 OR Q42≥2009**.

3.5 Usability and eligibility

Sometimes questionnaires are returned with only a very small number of questions completed. For the Emergency Department survey 2008, questionnaires containing fewer than five responses are considered 'unusable' – we will delete all responses pertaining to such cases and outcome codes of 1 ('returned useable questionnaire') relating to these cases will be changed to 6 ('questionnaire not returned'). Please note that the number of responses per questionnaire will be counted after all other cleaning, and that all responses remaining at this stage will be counted (including responses to the demographic questions and so on)[4]. This should only affect a very limited number of cases, and so should not have a significant impact on response rates.

---

[1] Please note though that respondents will *not* be considered ineligible for the survey solely on the basis of their response to the year of birth question indicating that they are under the age of sixteen. This is because of the difficulty of inferring the source of errors when year of birth from sample and response sections are mismatched – in other words, because we cannot be *certain* whether this mismatch occurs due to an error in the sample file, an error in the patient's completion of the questionnaire form, or an error in data entry *[see overleaf]*.

[2] Please note that whilst a combination of sample and response information is used for demographic analysis on groups of cases, **only the sample information is used to calculate response rates by demographic groups**. Unlike subgroup analysis of variables which is only carried out for respondents, response rates are calculated using all patients in the sample. Because response rates vary between groups with differing demographic variables, using response and sample data to calculate response rates would create a systematic source of bias in that we are only able to amend information for the *respondents*. Therefore, only the sample information should be used to calculate response rates by demographic groups.

[3] The majority of out-of range responses present in data relating to year of birth questions result from errors in data entry (for example, not keying one of the digits – so '1983' may become 983, 183, 193, or 198). In such cases it is important that the responses be checked against the completed questionnaire forms, and data corrected if necessary, **prior** to submission of data to the Co-ordination Centre.

[4] Please note that the multiple choice questions, Q48 and Q49 are only counted once. So for example, even if Q48_1 and Q48_4 are ticked, this would count as only one response for the purpose of determining if a questionnaire is usable.

Outcome codes for respondents will also be changed if the respondents are believed to be under the age of sixteen and therefore ineligible for participation. Since the sample files for the survey are checked by the Co-ordination Centre prior to mailing, this is unlikely to affect more than a handful of cases throughout the survey, as patients coded as being aged under 16 will be identified and removed from the sample before the start of the survey.   Sample members will not, however, be removed from the sample if data on their year of birth is missing from the sampling frame. If sample information on a respondent's year of birth is missing, though, and their response to **Q42** indicates that they are under 16 (specifically, if **Q42 > 1992**) then the outcome code for that patient should be recoded from 1 ('returned completed questionnaire') to 5 ('ineligible for participation in the survey'). ***This should only be done where sample information is missing***. If sample information indicates a patient is aged 16 or over, but this is contradicted by the patient's response, then the patient's survey outcome should remain as 1. This is to avoid removing legitimate responses because of an overly conservative approach to assessing eligibility; in other words, where the patient's age is uncertain (because sample and response information contradict each other, and in different instances either of these may be accurate or inaccurate) the benefit of the doubt is given in any assessment of eligibility.

3.6 Missing responses

It is useful to be able to see the numbers of respondents who have missed each question for whatever reason. Responses are considered to be missing when a respondent is expected to answer a question but no response is present. For non-filtered questions, responses are expected from all respondents – thus any instance of missing data constitutes a missing response. For filtered questions, only respondents who have answered a previous routing question instructing them to go on to that filtered question or set of filtered questions are expected to give answers. Where respondents to the survey have missed a routing question, they are not expected to answer subsequent 'filtered' questions; thus only where respondents were explicitly instructed to answer filtered questions should such blank cells be coded as missing responses.

The Co-ordination Centre codes missing responses in the data with the value 999[1]. For results to be consistent with those produced by the Co-ordination Centre, missing responses should be presented but should not be included in the base number of respondents for percentages.

3.7 Non-specific responses

As well as excluding missing responses from results, the Co-ordination Centre also removes non-specific responses from base numbers for percentages. The rationale for this is to facilitate easy comparison between institutions by presenting only results from those patients who felt able to give an evaluative response to questions. For a full listing of 'non-specific' responses in the 2008 Emergency Department survey, please see Appendix B: Non-specific responses.

---

[1] This is an arbitrary value chosen because it is 'out-of-range' for all other questions on the survey.

4 Appendix A: Example of cleaning

4.1 Incorrectly followed routing

Figure 2: Example 'raw'/'uncleaned' data

Record	Outcome	Q2	Q3	Q4	Q5	Q6
Patient Record Number	Outcome of sending questionnaire (N)	How did you travel to the hospital?	Was it possible to find a convenient place to park in the hospital car park?	Did the ambulance crew explain your care and treatment in a way you could understand?	Overall, how would you rate the care you received from the ambulance service?	Were you given enough privacy when discussing your condition with the receptionist?
A	2					
B	1	5	3	.	.	1
C	1	1	2	.	.	3
D	4					
E	1	2	3	1	3	3
F	6					
G	1	3	.	.	.	2
H	1	4	4	4	.	1
I	1	.	1	4	.	

Figure 2 shows hypothetical raw/uncleaned data for nine sample members, six of whom have responded to the survey. It can be seen from this data that some of the respondents have followed filter instructions from routing questions incorrectly:

> Respondent 'B' reported that they travelled to the hospital on public transport (**Q2=5**), but responded to the filtered question (**Q3**) before correctly skipping the remaining questions. Respondent 'E' answered that they had travelled by ambulance (**Q2=2**) but then answered the car parking question (**Q3**). Respondent 'H' travelled to the hospital on foot but then answered the filtered questions (**Q3**) and (**Q4**) before correctly skipping the remaining ambulance question (**Q5**). Respondent 'I' did not answer **Q2**, answered the car parking question (**Q3**), but then answered the filtered question on ambulance services (**Q4**) before correctly skipping the remaining ambulance question (**Q5**).

Following the cleaning instructions above will remove these inappropriate responses. Firstly, the filter instructions specify that:

if	**Q2**	=	2, 3, 4, 5, 6	*then delete responses to:*	3

In accordance with this, all responses for **Q3** must be removed where the respondent has ticked option **2, 3, 4** or **5** to **Q2**. Looking in column **Q2** we can see that respondent 'B' ticked **Q2=5**, respondent 'E' ticked **Q2=2**, and respondent 'H' ticked **Q2=4**, so all their responses to **Q3** should be removed.

Similarly, the filter instructions specify that:

| if | **Q2** | = | 1, 3, 4 ,5, 6 | *then delete responses to:* | **4, 5** |

In accordance with this, all responses to **Q4** and **Q5** must be removed where the respondent has answered **option 1, 3, 4, 5, 6** to **Q2**. Column Q2 shows that respondent 'H' ticked **Q2=4** (travelled to the hospital on foot) so their response to **Q4** should be removed.

| if | **Q3** | = | 1, 2, 3, 4 | *then delete responses to:* | **4, 5** |

In accordance with this, all responses to **Q4** and **Q5** must be removed where the respondent has answered **Q3** on hospital parking. Column Q3 shows that respondent 'I' ticked the first response option to the car parking question (**Q3=1**) but then answered one of the filtered questions on the ambulance service (**Q4**), so their response to this question should be removed. [Note: column Q3 shows that respondent 'H' ticked **Q3=4**, but their responses to **Q4** would have already been removed from the previous cleaning, i.e. *if* Q2=1,3,4,5,6 *then delete responses* to Q4 and Q5].

Figure 3 (below) shows how the data would look following cleaning by the co-ordination centre to remove responses to filtered questions that should have been skipped – cells where responses have been removed are shaded.

Figure 3: Data from Figure 3 following cleaning

Record	Outcome	Q2	Q3	Q4	Q5	Q6
Patient Record Number	Outcome of sending questionnaire (N)	How did you travel to the hospital?	Was it possible to find a convenient place to park in the hospital car park?	Did the ambulance crew explain your care and treatment in a way you could understand?	Overall, how would you rate the care you received from the ambulance service?	Were you given enough privacy when discussing your condition with the receptionist?
A	6					
B	1	4	Removed	.	.	1
C	1	1	2	.	.	3
D	4					
E	1	2	Removed	1	3	4
F	6					
G	1	3	.	.	.	2
H	1	4	Removed	Removed	.	1
I	1	.	1	Removed		3

5 Appendix B: Non-specific responses

The following table lists all 'non-specific responses' included in the 2008 Emergency Department survey. Please note that this table also includes items from the question bank which are not included in the minimal 'core' questionnaire. Numbers in the final column indicate the response options that should be considered non-specific. Where the 'non-specific responses' column contains only a dash, the relevant question has no such response options.

CORE	BANK	Question	Non-specific responses
	A1	When you went to the Emergency Department, how long did it take you to get to the hospital?	4
Q1	A2	What was the **MAIN** reason that you went to the Emergency Department?	-
Q2	A3	How did you travel to the hospital?	-
Q3	A4	Was it possible to find a convenient place to park in the hospital car park?	3, 4
Q4	A5	Did the ambulance crew explain your care and treatment in a way you could understand?	4
Q5	A6	Overall, how would you rate the care you received from the ambulance service?	-
Q6	A7	Were you given enough privacy when discussing your condition with the receptionist?	4
	A8	How would you rate the courtesy of the Emergency Department receptionist?	7
Q7	B1	How long did you wait before you **first spoke** to a nurse or doctor?	5
	B2	Were you able to find a comfortable place to sit in the waiting area?	4, 5
	B3	Did someone in the Emergency Department help get messages to family or friends?	3
Q8	B4	From the time you first arrived at the Emergency Department, how long did you wait **before being examined** by a doctor or nurse?	7, 8
Q9	B5	Were you told **how long** you would have to wait to be examined?	5
	B6	Were you told **why you had to wait** to be examined?	4
	B7	Did someone apologise for the delay?	-
	B8	How do you feel about the length of time you waited to be examined?	-
	B9	While you were in the Emergency Department, were you ever waiting on a trolley?	-
	B10	If you waited on a trolley, how long did you wait?	8
Q10	B11	Overall, how long did your visit to the **Emergency Department** last?	8
Q11	C1	Did you have **enough time** to discuss your health or medical problem with the doctor or nurse?	4
Q12	C2	While you were in the Emergency Department, did a doctor or nurse explain your condition and treatment in a way you could understand?	4
Q13	C3	Did the doctors and nurses listen to what you had to say?	-

CORE	BANK	Question	Non-specific responses
	C4	Did you think that doctors or nurses were deliberately not telling you certain things that you wanted to know?	-
Q14	C5	If you had any anxieties or fears about your condition or treatment, did a doctor or nurse discuss them with you?	4
Q15	C6	Did you have confidence and trust in the doctors and nurses examining and treating you?	-
	C7	In your opinion, did the doctors and nurses in the Emergency Department know enough about your condition or treatment?	5
Q16	C8	Did doctors or nurses talk in front of you as if you weren't there?	-
	D1	Do you need any help understanding English?	-
	D2	When you were in the Emergency Department, was there someone who could interpret for you?	-
Q17	D3	While you were in the Emergency Department, how much information about your condition or treatment was given to **you**?	-
	D4	How much information about your condition or treatment was given to **your family or someone close to you**?	4, 5, 6
	D5	Were you given enough privacy when **discussing your condition or treatment?**	-
Q18	D6	Were you given enough privacy when **being examined or treated?**	-
Q19	D7	If you needed attention, were you able to get a member of staff to help you?	5
Q20	D8	Sometimes in a hospital, a member of staff will say one thing and another will say something quite different. Did this happen to you in the Emergency Department?	-
Q21	D9	Were you involved as much as you wanted to be in decisions about your care and treatment?	4
	D10	Were you asked your **name and address** more often than you thought should have been necessary?	-
	D11	Were you asked to give details of **your condition or illness** more often than you thought should have been necessary?	-
	D12	Were medical students present when you were being treated or examined?	-
	D13	Were you asked for permission for medical students to be present when you were being treated or examined?	-
	D14	Were you upset because medical students were present?	-
	D15	Did the staff treating and assessing you introduce themselves?	4
	D16	Did staff wear name badges?	4
Q22	E1	Did you have any tests (such as x-rays, scans or blood tests) when you visited the Emergency Department?	-
	E2	Did a member of staff explain **why you needed these test(s)** in a way you could understand?	-
	E3	How long did you wait **for your tests to be carried out**?	8
	E4	Did a member of staff explain **why** you had to wait for your for tests to be carried out?	-
Q23	E5	Did a member of staff explain **the results of the tests** in a way you could understand?	4, 5
	E6	How long did you have to **wait for the results** of your tests?	9

CORE	BANK	Question	Non-specific responses
Q24	F1	Were you in any pain while you were in the Emergency Department?	-
	F2	When you had pain, was it severe, moderate or mild?	-
	F3	While you were in the Emergency Department, how much of the time were you in pain?	-
Q25	F4	Did you request pain relief medication?	3
Q26	F5	How many minutes after you requested pain relief medication did it take before you got it?	-
	F6	Overall, how much pain relief medication did you get?	5
Q27	F7	Do you think the hospital staff did everything they could to help control your pain?	4
Q28	G1	In your opinion, how clean was the Emergency Department?	5
Q29	G2	How clean were the toilets in the Emergency Department?	5
Q30	G3	While you were in the Emergency Department, did you feel bothered or threatened by other patients?	-
	G4	Were you able to get suitable refreshments when you were in the Emergency Department?	5
Q31	H1	What happened at the end of your visit to the Emergency Department?	-
Q32	H2	Before you left the Emergency Department, were any **new** medications prescribed or ordered for you?	-
	H3	Did a member of staff explain to you **how to take** the new medications?	4
Q33	H4	Did a member of staff explain **the purpose** of the medications you were to take at home in a way you could understand?	4
Q34	H5	Did a member of staff tell you about **medication side effects** to watch for?	4
	H6	Did the Emergency Department staff give you a **printed information leaflet** about your medicines?	-
	H7	Before you left the Emergency Department, were you given any **written or printed information** about your condition or treatment?	3
Q35	H8	Did a member of staff tell you when you could **resume your usual activities**, such as when to go back to work or drive a car?	4
	H9	Did hospital staff take your **family or home situation** into account when you were leaving the Department?	4
Q36	H10	Did a member of staff tell you about what **danger signals** regarding your illness or treatment to watch for after you went home?	4
Q37	H11	Did hospital staff tell you **who to contact** after if you were worried about your condition or treatment after you left the Emergency Department?	3
	H12	Was a follow-up appointment made for you at the hospital?	3
	H13	Were you given a choice of times for your follow-up appointment?	3
Q38	J1	Was the main reason you went to the Emergency Department dealt with to your satisfaction?	-
Q39	J2	Overall, did you feel you were treated with respect and dignity while you were in the Emergency Department?	-
Q40	J3	Overall, how would you rate the care you received in the Emergency Department?	-

CORE	BANK	Question	Non-specific responses
	J4	If you needed to complain about the care you received, did you know how to do this?	3
Q41	K1	Are you male or female?	-
Q42	K2	What was your **year** of birth?	-
	K3	How old were you when you left full time education?	-
Q43	K4	**Mobility**	-
Q44	K5	**Self-Care**	-
Q45	K6	**Usual Activities**	-
Q46	K7	**Pain/Discomfort**	-
Q47	K8	**Anxiety/Depression**	-
Q48	K9	Do you have any of the following long-standing conditions? (TICK ALL THAT APPLY)	-
Q49	K10	Does this condition(s) cause you difficulty with any of the following? (TICK ALL THAT APPLY)	-
Q50	K11	To which of these ethnic groups would you say you belong?	-

6 Submitting data

Data may be submitted to the Co-ordination Centre either by e-mail or by post (with the data on a CD or floppy disk). There is no requirement for the anonymised dataset to be password protected (If trusts wish to password protect their data, please contact us for further information).

Data should be submitted to the following address:

By e-mail: emergency.data@pickereurope.ac.uk

or

By post: The Acute Surveys Co-ordination Centre
Picker Institute Europe
King's Mead House
Oxpens Road
Oxford
OX1 1RX