

GUIDANCE ON DATA CLEANING FOR THE NHS ADULT INPATIENTS SURVEY 2008

THE CO-ORDINATION CENTRE FOR THE
NHS ADULT INPATIENT SURVEY

Contacts

The Co-ordination Centre for the Adult Inpatient Survey¹
Picker Institute Europe
King's Mead House
Oxpens Road
Oxford
OX1 1RX

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

Author

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: Acute.data@PickerEurope.ac.uk

By phone: 01865 208127

¹ Previously the NHS Patient Survey Advice Centre

Contents

Guidance on data cleaning for the NHS Adult Inpatients survey 2008	1
The Co-ordination Centre for the	1
NHS Adult inpatient survey	1
1 Inpatient Survey 2008 – data cleaning	1
1.1 Introduction	1
1.2 The core and extended questionnaires	1
1.3 Definitions	1
2 Submitting raw ('uncleaned') data	3
3 Editing/cleaning data after submission	4
3.1 Approach and rationale.....	4
3.2 Filters	4
Figure 1 - List of routing/filtering instructions	5
3.3 Dealing with multiple response questions	5
3.4 Dealing with demographics.....	7
3.5 Usability and eligibility.....	8
3.6 Missing responses	9
3.7 Non-specific responses	9
4 Appendix A: Example of cleaning.....	10
4.1 Incorrectly followed routing	10
Figure 2: Example 'raw'/'uncleaned' data	10
Figure 3: Data from Figure 3 following cleaning	11
5 Appendix B: Non-specific responses.....	12
6 Submitting data	18

1 Inpatient Survey 2008 – data cleaning

1.1 Introduction

Once fieldwork for the 2008 national inpatient 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 standardise data submitted by contractors and trusts as part of the 2008 national survey of inpatients. 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 acute.data@pickereurope.ac.uk.

1.2 The core and extended questionnaires

For the 2008 national inpatient survey, all trusts have the option to use either the 80 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 80 core items, and so all cleaning undertaken by ourselves will involve only these 80 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 the National Survey of Adult Inpatients 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 spreadsheet¹ (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) multiple responses have been ticked - set these to missing (The **exceptions** to this are for the 'tick all that apply' questions **Q78** and **Q79** 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.

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 has 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 national survey of inpatients, the routing questions in the core questionnaire are **Q1, Q2, Q14, Q16, Q17, Q45, Q48, Q53, Q57, Q61 and Q78**.

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 national survey of inpatients, the filtered questions in the core questionnaire are **Q2 – Q11¹, Q15, Q17, Q18, Q46, Q49 – Q55², Q58 – Q59, Q62 – Q64 and Q79**.

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 national survey of inpatients, the non-filtered questions are **Q1, Q12 – Q14, Q16, Q19 – Q45, Q47 – Q48, Q56 – Q57, Q60 – Q61, Q65 – Q78 and Q80**

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 – eg 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 have any food" or "I did not use any bathrooms". A full listing of such responses for the 2008 inpatient survey can be found in [Appendix B: Non-specific responses](#).

¹ The range Q2-Q11 includes two separate sets of filtered questions; Q2-Q5 and Q6-Q11.

² The range Q49-Q55 includes two separate sets of filtered questions; Q49–Q55, and Q54.

2 Submitting raw ('uncleaned') data

For the 2008 national inpatient 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, this should be set to 'missing' in the data. The **exceptions** to this are for the 'multiple response' questions, **Q78** and **Q79**, 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 Q76, 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

The aim of the 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 **Q57** (“On the day you left hospital, was your discharge delayed for any reason?”) are instructed to skip all further questions on delayed discharge (e.g. **Q58** and **Q59**).

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 **Q57** but then answering the two questions about delayed discharge as in the example above). Responses to ‘filtered’ questions are not removed where the response to the routing question is missing. For example, **Q2-Q5** are filtered by the response to **Q1** (e.g. if **Q1=2**), but if a respondent does not answer **Q1**, or if the **Q1** response is missing for any reason, then responses to **Q2-Q5** should not be removed.

[Figure 1](#) (overleaf) shows a summary of all routing questions, and the filtered questions they relate to, that are included on the 2008 national inpatient 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
<i>if</i> Q1 = 2	<i>then delete responses to:</i>	Q2 – Q5
<i>if</i> Q2 = 1	<i>then delete responses to:</i>	Q6 – Q11
<i>if</i> Q2 = 2	<i>then delete responses to:</i>	Q3 – Q5
<i>if</i> Q14 = 2	<i>then delete responses to:</i>	Q15
<i>if</i> Q16 = 1 OR 4	<i>then delete responses to:</i>	Q17 – Q18
<i>if</i> Q17 = 2	<i>then delete responses to:</i>	Q18
<i>if</i> Q45 = 2	<i>then delete responses to:</i>	Q46
<i>if</i> Q48 = 2	<i>then delete responses to:</i>	Q49 – Q55
<i>if</i> Q53 = 2	<i>then delete responses to:</i>	Q54
<i>if</i> Q57 = 2	<i>then delete responses to:</i>	Q58 – Q59
<i>if</i> Q61 = 5	<i>then delete responses to:</i>	Q62 – Q64
<i>if</i> Q78 = 7	<i>then delete responses to:</i>	Q79

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

Please note that **Q1** should not be considered a routing question in the traditional sense – for example, responses to **Q6-Q11** – the questions on planned admissions – must not be automatically removed if **Q1=1**. It should be noted from the questionnaire that even though patients responding “emergency or urgent” to **Q1** are identifying themselves as emergency admissions, they may subsequently report not having been to an Emergency Department as part of their admission – eg if **Q2=2** – and that in such cases they are then asked to continue from **Q6**. Thus, not all respondents ticking **Q1=1** will be expected to skip **Q6-Q11**.

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 **Q78** and **Q79** that gives the instruction ‘Tick all that apply’, each response option is treated as a separate question.

Example

Q78. Do you have any of the following long-standing conditions? (Tick ALL that apply)

- 1 Deafness or severe hearing impairment
- 2 Blindness or partially sighted
- 3 A long-standing physical condition
- 4 A learning disability
- 5 A mental health condition
- 6 A long-standing illness, such as cancer, HIV, diabetes, chronic heart disease, or epilepsy
- 7 No, 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 ticked¹

Q78 takes up seven columns in the data file, labelled as follows:

Column headings	Q78_1	Q78_2	Q78_3	Q78_4	Q78_5	Q78_6	Q78_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 **Q78** (“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 **Q79**; 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

Q79. 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: Q79 is coded as follows:

Column headings	Q79_1	Q79_2	Q79_3	Q79_4	Q79_5	Q79_6	Q79_7	Q79_8
Codings for this example	1	0	0	0	1	0	0	1

AFTER CLEANING: Q79 is coded as follows:

Column headings	Q79_1	Q79_2	Q79_3	Q79_4	Q79_5	Q79_6	Q79_7	Q79_8
Codings for this example	0	0	0	0	0	0	0	1

When the data is cleaned, the responses to Q79_1 and Q79_5 are re-coded as '0' because option 7 ("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 **Q75=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 (Q76)

A common error when completing year of birth questions on forms is for respondents to accidentally write in the current year – thus responses to Q76 of ‘2008’ will be set to missing during cleaning. Out-of-range responses will also be set to missing³. For the 2008 national inpatient survey, out-of range responses are defined as **Q76≤1880 OR 76≥2008**.

3.5 Usability and eligibility

Sometimes questionnaires are returned with only a very small number of questions completed. For the inpatient 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 [*see overleaf*] 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.

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, Q78 and Q79 are only counted once. So for example, even if Q78_1 and Q79_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 **Q76** indicates that they are under 16 (specifically, if **Q76>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 999¹. 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 national inpatient 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	Q1	Q2	Q3	Q4	Q5
Patient Record Number	Outcome of sending questionnaire (N)	Was your most recent hospital stay planned in advance or an emergency?	When you arrived at the hospital, did you go to the Emergency Department (Casualty / A&E/ Medical or Surgical Admissions Unit)?	While you were in the Emergency Department, how much information about your condition or treatment was given to you?	Were you given enough privacy when being examined or treated in the Emergency Department?	Following arrival at the hospital, how long did you wait to before being admitted to a bed on a ward?
A	6					
B	1	2	.	.	.	.
C	1	1	1	1	2	1
D	4					
E	1	2	2	.	.	.
F	6					
G	1	2	1	2	1	1
H	1	3	2	1	1	1

Figure 2 shows hypothetical raw/uncleaned data for eight sample members, five 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:

Respondents 'E' and 'G' have reported that their admission to hospital was planned or from a waiting list (**Q1=2**), but have both responded to filtered questions ('E' has answered the first question after the filter (**Q2**) before skipping the remaining questions, whilst 'G' has answered **Q2, Q3, Q4** and **Q5**).

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

<i>if</i>	Q1 = 2	<i>then delete responses to:</i>	Q2 – Q5
-----------	---------------	----------------------------------	----------------

In accordance with this, all responses for **Q2, Q3, Q4** and **Q5** must be removed in cases where the respondent has ticked **Q1=2** ('waiting list or planned in advance'). Looking in column **Q1** we can see that three respondents, 'B', 'E' and 'G', have ticked **Q1=2**, so any responses they gave to questions two through to five should be removed. This will lead to one response being removed for patient 'E' (**Q2**) and four responses being removed for respondent 'G' (**Q2, Q3, Q4, and Q5**), who have for whatever reason followed the routing instructions incorrectly and continued to answer the section on emergency care.

[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	Q1	Q2	Q3	Q4	Q5
Patient Record Number	Outcome of sending questionnaire (N)	Was your most recent hospital stay planned in advance or an emergency?	When you arrived at the hospital, did you go to the Emergency Department (Casualty / A&E/ Medical or Surgical Admissions Unit)?	While you were in the Emergency Department, how much information about your condition or treatment was given to you?	Were you given enough privacy when being examined or treated in the Emergency Department?	Following arrival at the hospital, how long did you wait to before being admitted to a bed on a ward?
A	6					
B	1	2	.	.	.	.
C	1	1	1	1	2	1
D	4					
E	1	2	.	.	.	.
F	6					
G	1	2	.	.	.	.
H	1	3	2	1	1	1

5 Appendix B: Non-specific responses

The following table lists all 'non-specific responses' included in the 2008 inpatient 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
Q1	A1	Was your most recent hospital stay planned in advance or an emergency?	-
	A2	Did you travel to the hospital by ambulance?	-
	A3	Were the ambulance crew reassuring?	4
	A4	Did the ambulance crew explain your care and treatment in a way you could understand?	4
	A5	Did the ambulance crew do everything they could to help control your pain?	4
	A6	Overall, did the ambulance crew treat you with respect and dignity?	4
Q2	A7	When you arrived at the hospital, did you go to the Emergency Department (Casualty/A&E/Medical or Surgical Admissions unit)?	-
	A8	How organised was the care you received in the emergency department?	-
	A9	While you were in the Emergency Department, did you get enough information about your medical condition and treatment?	4
	A10	For most of the time, were you waiting in...?	5
	A11	For most of the time, were you waiting on...?	5
	A12	Did you think the order in which patients were seen in the Emergency Department was fair?	3
Q3	A13	While you were in the Emergency Department, how much information about your condition or treatment was given to you?	5
Q4	A14	Were you given enough privacy when being examined or treated in the Emergency Department?	4
Q5	A15	Following arrival at the hospital, how long did you wait before being admitted to a bed on a ward?	6
Q6	A16	When you were referred to see a specialist, were you offered a choice of hospital for your first hospital appointment?	3
	A17	Were you given a choice about which hospital you were admitted to?	3, 4
	A18	Overall, did you get enough information about the different hospitals to make your choice?	4
	A19	Other than your local hospital, how many choices of hospital were you given?	5
	A20	Was the information about different hospitals easy to understand?	-
Q7	A21	Who referred you to see a specialist?	5
Q8	A22	Overall, from the time you first talked to this health professional about being referred to a hospital, how long did you wait to be admitted to hospital?	6
Q9	A23	How do you feel about the length of time you were on the waiting list before your admission to hospital?	-
	A24	When you were told you would be going into hospital, were you given enough notice of your date of admission?	-
Q10	A25	Were you given a choice of admission dates?	3
Q11	A26	Was your admission date changed by the hospital?	-

CORE	BANK	Question	Non-specific responses
	A27	Before being admitted to hospital, were you given any printed information about the hospital?	-
	A28	Before being admitted to hospital, were you given any printed information about your condition or treatment?	-
	A29	Before you were admitted, were you invited to visit the hospital to meet the staff?	4
	A30	Did visiting the hospital and meeting the staff help you when you were actually admitted?	-
	A31	How organised was the admission process?	-
Q12	A32	From the time you arrived at the hospital, did you feel that you had to wait a long time to get to a bed on a ward?	-
	A33	Did a member of staff explain why you had to wait?	-
	A34	How would you rate the courtesy of the staff who admitted you?	-
Q13	B1	While in hospital, did you ever stay in a critical care area (Intensive Care Unit, High Dependency Unit or Coronary Care Unit)?	3
Q14	B2	When you were first admitted to a bed on a ward, did you share a sleeping area, for example a room or bay, with patients of the opposite sex?	-
Q15	B3	When you were first admitted, did you mind sharing a sleeping area, for example a room or bay, with patients of the opposite sex?	-
Q16	B4	During your stay in hospital, how many wards did you stay in?	4
Q17	B5	After you moved to another ward (or wards), did you ever share a sleeping area, for example a room or bay, with patients of the opposite sex?	-
Q18	B6	After you moved, did you mind sharing a sleeping area, for example a room or bay, with patients of the opposite sex?	-
Q19	B7	While staying in the hospital, did you ever use the same bathroom or shower area as patients of the opposite sex?	4, 5
	B8	For most of your stay, what type of room or ward were you in?	-
	B9	When you reached the ward, did you get enough information about ward routines, such as timetables and rules?	4
	B10	Were you ever bothered by noise during the day from other patients?	-
	B11	Were you ever bothered by noise during the day from hospital staff?	-
Q20	B12	Were you ever bothered by noise at night from other patients?	-
Q21	B13	Were you ever bothered by noise at night from hospital staff?	-
Q22	B14	In your opinion, how clean was the hospital room or ward that you were in?	-
Q23	B15	How clean were the toilets and bathrooms that you used in hospital?	5
Q24	B16	Did you feel threatened during your stay in hospital by other patients or visitors?	-
Q25	B17	Did you have somewhere to keep your personal belongings whilst on the ward?	4, 5
Q26	B18	How would you rate the hospital food?	5
	B19	Was there healthy food on the hospital menu?	4
	B20	How much food were you given?	-
Q27	B21	Were you offered a choice of food?	-
	B22	Did you get the food you ordered?	-
Q28	B23	Did you get enough help from staff to eat your meals?	4
	B24	How would you rate the courtesy of the catering staff?	-
	B25	How would you rate the courtesy of the hospital porters?	-
	B26	How would you rate the courtesy of the cleaning staff?	-

CORE	BANK	Question	Non-specific responses
	C1	Was there one doctor in overall charge of your care?	3
Q29	C2	When you had important questions to ask a doctor, did you get answers that you could understand?	4
	C3	If you had any worries or fears about your condition or treatment, did a doctor discuss them with you?	4
Q30	C4	Did you have confidence and trust in the doctors treating you?	-
Q31	C5	Did doctors talk in front of you as if you weren't there?	-
	C6	If you ever needed to talk to a doctor, did you get the opportunity to do so?	4
	C7	How would you rate the courtesy of your doctors?	-
	C8	Did you ever think that doctors were deliberately not telling you certain things that you wanted to know?	-
	C9	While you were in hospital, did doctors give you any information in a way which upset you?	-
	C10	In your opinion, did the doctors who treated you know enough about your condition or treatment?	5
Q32	C11	As far as you know, did doctors wash or clean their hands between touching patients?	4
Q33	D1	When you had important questions to ask a nurse, did you get answers that you could understand?	4
	D2	If you had any worries or fears about your condition or treatment, did a nurse discuss them with you?	4
Q34	D3	Did you have confidence and trust in the nurses treating you?	-
Q35	D4	Did nurses talk in front of you as if you weren't there?	-
	D5	While you were in hospital, did nurses ever give you any information in a way which upset you?	-
	D6	In your opinion, were there enough nurses on duty to care for you in hospital?	-
	D7	If you ever needed to talk to a nurse, did you get the opportunity to do so?	4
	D8	How would you rate the courtesy of your nurses?	-
	D9	Did you ever think that nurses were deliberately not telling you certain things that you wanted to know?	-
Q36	D10	In your opinion, did the nurses who treated you know enough about your condition or treatment?	5
Q37	D11	As far as you know, did nurses wash or clean their hands between touching patients?	4
Q38	E1	Sometimes in a hospital, a member of staff will say one thing and another will say something quite different. Did this happen to you?	-
Q39	E2	Were you involved as much as you wanted to be in decisions about your care and treatment?	-
Q40	E3	How much information about your condition or treatment was given to you?	-
Q41	E4	If your family or someone else close to you wanted to talk to a doctor, did they have enough opportunity to do so?	4, 5, 6
	E5	How much information about your condition or treatment was given to your family or someone close to you?	4, 5, 6
Q42	E6	Did you find someone on the hospital staff to talk to about your worries and fears?	4
Q43	E7	Were you given enough privacy when discussing your condition or treatment?	-
Q44	E8	Were you given enough privacy when being examined or treated?	-

CORE	BANK	Question	Non-specific responses	
Q45	E9	Were you ever in any pain?	-	
	E10	When you had pain, was it usually severe, moderate, or mild?	-	
	E11	During your stay in hospital, how much of the time were you in pain?	-	
	E12	Did you ever request pain medicine?	-	
	E13	How many minutes after you requested pain medicine did it usually take before you got it?	-	
	E14	While you were in hospital, were you given any medicine to help with your pain (such as tablets, a spray, or pump) which you could decide when to take without having to ask hospital staff?	-	
Q46	E15	Do you think the hospital staff did everything they could to help control your pain?	-	
	E16	Overall, how much pain medication did you get?	-	
	E17	When you needed help from staff getting to the bathroom or toilet, did you get it in time?	4	
Q47	E18	How many minutes after you used the call button did it usually take before you got the help you needed?	6	
	E19	During your stay in hospital, did doctors, nurses, or other hospital staff ask you your name and address more often than you thought should have been necessary?	-	
	E20	During your stay in hospital, did doctors, nurses, or other hospital staff ask you to give details of your condition or illness more often than you thought should have been necessary?	-	
	E21	During your stay in hospital, did you have any tests, x-rays, or scans other than blood or urine tests?	-	
	E22	Were you told in advance when your tests, x-rays, or scans were going to take place?	-	
	E23	Were your scheduled tests, x-rays or scans performed on time?	-	
	E24	Did a member of staff explain why the scheduled tests were not performed on time?	-	
	E25	Did a doctor or nurse explain the results of the test in a way that you could understand?	-	
	E26	Were medical students present when you were being examined or treated?	-	
	E27	Were you asked for permission for medical students to be present when you were being treated or examined?	-	
	E28	Were you upset because medical students were present?	-	
	Q48	F1	During your stay in hospital, did you have an operation or procedure?	-
	Q49	F2	Beforehand, did a member of staff explain the risks and benefits of the operation or procedure in a way you could understand?	4
	Q50	F3	Beforehand, did a member of staff explain what would be done during the operation or procedure?	4
	Q51	F4	Beforehand, did a member of staff answer your questions about the operation or procedure in a way you could understand?	4
Q52	F5	Beforehand, were you told how you could expect to feel after you had the operation or procedure?	-	
Q53	F6	Before the operation or procedure, were you given an anaesthetic or medication to put you to sleep or control your pain?	-	
Q54	F7	Before the operation or procedure, did the anaesthetist or another member of staff explain how he or she would put you to sleep or control your pain in a way you could understand?	-	

CORE	BANK	Question	Non-specific responses
Q55	F8	After the operation or procedure, did a member of staff explain how the operation or procedure had gone in a way you could understand?	-
	G1	Do you feel you were discharged too early, at the right time, or too late?	-
Q56	G2	Did you feel you were involved in decisions about your discharge from hospital?	4
Q57	G3	On the day you left hospital, was your discharge delayed for any reason?	-
Q58	G4	What was the main reason for the delay?	-
Q59	G5	How long was the delay?	-
	G6	Did a member of staff tell you how long the delay would be?	-
	G7	Did a member of staff explain the reason for the delay?	-
	G8	Where did you spend your time waiting to be discharged from hospital?	-
	G9	Before you left hospital, did the doctors and nurses spend enough time explaining about your health and care after you arrive home?	-
Q60	G10	Before you left hospital, were you given any written or printed information about what you should or should not do after leaving hospital?	-
Q61	G11	Did a member of staff explain the purpose of the medicines you were to take at home in a way you could understand?	4, 5
Q62	G12	Did a member of staff tell you about medication side effects to watch for when you went home?	4
Q63	G13	Were you told how to take your medication in a way you could understand?	4
Q64	G14	Were you given clear written or printed information about your medicines?	4
Q65	G15	Did a member of staff tell you about any danger signals you should watch for after you went home?	4
	G16	Did hospital staff take your family or home situation into account when planning your discharge?	-
Q66	G17	Did the doctors or nurses give your family or someone close to you all the information they needed to help care for you?	4, 5
	G18	Did someone tell you when you could resume your usual activities, such as when to go back to work or drive a car?	-
Q67	G19	Did hospital staff tell you who to contact if you were worried about your condition or treatment after you left hospital?	3
	G20	Did hospital staff discuss with you whether you would need any health or social care services after leaving hospital? (e.g. district nurse, care assistant, physiotherapist or social worker)	3
	G21	After leaving hospital, do you think you received enough care and assistance from health and social services?	4, 5
Q68	G22	Did you receive copies of letters sent between hospital doctors and your family doctor (GP)?	3
	H1	Did you know that you could ask to look at the file of your medical records while you were in hospital?	-
	H2	While you were in hospital, did you look at the file of your medical records?	3
Q69	J1	Overall, did you feel you were treated with respect and dignity while you were in the hospital?	-
Q70	J2	How would you rate how well the doctors and nurses worked together?	-
Q71	J3	Overall, how would you rate the care you received?	-
	J4	Are you confident that the hospital is keeping your personal information / health records secure and confidential?	-
	J5	Would you recommend this hospital to your family and friends?	-

CORE	BANK	Question	Non-specific responses
Q72	J6	During your hospital stay, were you ever asked to give your views on the quality of your care?	3
Q73	J7	While in hospital, did you ever see any posters or leaflets explaining how to complain about the care you received?	3
Q74	J8	Did you want to complain about the care you received in hospital?	-
	J9	Did the hospital staff give you the information you needed to do this?	-
Q75	K1	Are you male or female?	-
Q76	K2	What was your year of birth?	-
	K3	What is your religion?	-
	K4	Were your religious beliefs respected by the hospital staff?	4
	K5	Were you able to practice your religious beliefs in the way you want to in hospital?	4
	K6	How old were you when you left full-time education?	-
Q77	K7	Overall, how would you rate your health during the past 4 weeks?	-
Q78	K8_1	I have a long-standing condition involving deafness or hearing impairment	-
Q78	K8_2	I have a long-standing condition involving blindness or are partially sighted	-
Q78	K8_3	I have a long-standing physical condition	-
Q78	K8_4	I have a long-standing condition involving a learning disability	-
Q78	K8_5	I have a long-standing mental health condition	-
Q78	K8_6	I have a long-standing condition involving an illness such as cancer, HIV, diabetes, CHD, or epilepsy	-
Q78	K8_7	I do not have a long-standing condition	-
Q79	K9_1	This condition causes me difficulty with everyday activities that people of my age can usually do	-
Q79	K9_2	This condition causes me difficulty at work, in education, or training	-
Q79	K9_3	This condition causes me difficulty with access to buildings, streets, or transport vehicles	-
Q79	K9_4	This condition causes me difficulty with reading or writing	-
Q79	K9_5	This condition causes me difficulty with people's attitudes to me because of my condition	-
Q79	K9_6	This condition causes me difficulty with communicating, mixing with others, or socializing	-
Q79	K9_7	This condition causes me difficulty with other activities	-
Q79	K9_8	This condition does not cause me difficulty with any of these	-
Q80	K10	To which of these ethnic groups would you say you belong? (Tick ONE only)	-

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. Data should be submitted to the following address:

By e-mail: Acute.Data@PickerEurope.ac.uk

or

By post: Co-ordination Centre for the Adult Inpatient Survey 2008
Picker Institute Europe
King's Mead House
Oxpens Road
Oxford
OX1 1RX