

Analysing and interpreting your survey data

Question Numbering

There are three questionnaire types for the following urgent and emergency care services/ settings:

- Emergency Department / Out of Hours care
- Ambulance care
- GP practice care

Your organisation would have opted for one of the following:

- Using the two separate survey versions (recommended) there are two separate survey versions:
 - One questionnaire worded for children aged 8 years and over to complete themselves, about their recent care;
 - Another survey worded for parents of children aged 0-7 years to complete about their child's recent care
- Using the combined version of the parent/ child questionnaire (not recommended as this is untested and un-validated)

Regardless of which of the above versions you selected, the question numbering throughout this document will remain unchanged.

Although the questionnaires are largely similar, there are some slight differences (i.e. not all questions are asked in all surveys). The following table indicates which questions appear in which survey version (EME = Emergency survey; GP = GP survey; AMB = ambulance survey).

Question	EME	GP	AMB
If an ambulance was called, did the ambulance staff explain what was happening in a way you could understand?	E1	-	-
How well do you think the ambulance staff looked after you/ your child ?	E2	-	-
How did you feel about how long you had to wait (to be seen)?	E3	G1	A1
While waiting, did someone keep you informed about what was happening ?	E4	G2	A2
While waiting, did someone tell you what to do ?	-	-	A3
Was there enough for you/ your child to do when waiting ?	E5	G3	-
Was there everything you needed while you waited?	E6	G4	-

Were you/ your child looked after while you waited?	E7	G5	-
How clean was the waiting area?	E8	G6	-
Did the staff explain what they were doing in a way you could understand?	E9	G7	A4
Did the staff explain what was wrong with you/ your child in a way you could understand?	E10	G8	A5
Did staff do everything they could to calm and comfort you/ your child?	E11	G9	A6
Did staff do everything they could to help with your/ your child's pain?	E12	G10	A7
Were you/ your child given enough privacy when being examined or treated?	E13	G11	-
What happened after the emergency care?	E14	G12	A8
Did staff tell you when you/ your child could re-start usual activities (e.g. playing sport/ returning to school)?	E15	G13	-
Did staff tell you what you should watch out for at home after your/ your child's emergency care?	E16	G14	A9
Did staff tell you what to do or who to contact if you were worried about anything after the Emergency care?	E17	G15	A10
Did you receive enough information about child's condition and treatment?	E18	G16	A11
How well do you think you/ your child was looked after during the emergency care?	E19	G17	A12
Was the main reason for the Emergency care dealt with well?	E20	G18	A13
Who was the main person who answered the questions on this survey?	E21	G19	A14
Is child male or female?	E22	G20	A15
How old is child?	E23	G21	A16
Ethnic background of child	E24	G22	A17
Main language spoken at home	E25	G23	A18
Anything really good about Emergency Care? FREETEXT	E26	G24	A19
Anything that could have been better? FREETEXT	E27	G25	A20

Problem scores

Most patients are highly appreciative of the care they receive. However, it is evident that there is also a lot of scope for improving the patient experience. Picker Institute Europe uses a simple summary score to help organisations identify where their patients think there is a problem or room for improvement regarding a specific aspect of care.

Problem scores can be used as a summary measure, to help monitor results over time and to show how your organisation compares to others. They can be used to target areas in need of attention – this in turn can help you to bring about real quality improvement for your patients.

What is a problem score?

The problem score shows the percentage of patients for each question who, by their response, indicated that a particular aspect of their care could have been improved. We have found this to be the simplest summary measure that focuses on quality improvement.

How are problem scores calculated?

We calculate the problem scores by combining the response category or categories that indicate room for improvement. For example, for the following question 'Did staff explain what they were doing in a way you could understand?', we have combined the responses 'Yes, to some extent / sort of' and 'No', to create a single problem score. Asterisks indicate which response categories have been combined to create the problem score:

EXAMPLE 1 (example data only)

E9/G7/A4. Did staff explain what they were doing in a way you could understand?

All Patients	N	%
Yes, completely	164	71.6%
* Yes, to some extent / sort of	40	17.5%
* No	3	1.3%
I did not need an explanation	11	4.8%
Don't know / can't remember	2	0.9%
<i>Not answered</i>	9	3.9%
Problem Score: 18.8%	229	

Problem Score Interpretation: 19% of respondents said staff did not fully explain what they were doing

A second example of a problem score calculation is displayed below for the question 'Overall, how well do you think you / your child was looked after?'. The responses 'Not very well' and 'Not at all well' have been combined to create a single problem score. Asterisks indicate which response categories have been combined to create the problem score:

EXAMPLE 2 (example data only)

E19/G17/A12. Overall, how well do you think you / your child was looked after?

All Patients	N	%
Very well	158	69.0%
Fairly well	47	20.5%
* Not very well	3	1.3%
* Not at all well	1	0.4%
Not answered	20	8.7%
Problem Score: 1.7%	229	

Problem Score Interpretation: 2% of respondents said that overall, they (or their child) was not looked after very well

How should we use problem scores?

As the name suggests, problem scores indicate where there may be a problem within a service that may need further investigation. It is useful to keep in mind that **lower scores reflect better performance**. Where there are high problem scores, or scores that are high in comparison with other organisations, this area should be highlighted as a potential problem area that needs to be looked at further. By targeting these areas, you can hopefully start to bring about real quality improvement for your patients. Problem scores are an **interpretation of the data** recommended by the Picker Institute Europe. Any comparisons made within an organisation (internal benchmarks, historic comparisons) or between organisations (external benchmarks) can be made using these scores.

Targeted questions

In response to client feedback and in the interests of accuracy we recommend that you use derived questions to produce more meaningful scores for questions that **may not be applicable to all respondents**, but are not preceded by a filter question – in other words, all those that have a response code such as *I did not use a toilet*. The purpose is to produce more precise indicators of where the problems lie within an organisation. For each question of this nature we would recommend that you therefore re-calculate the scores, **excluding those respondents to whom the question does not apply**. The new calculation can be illustrated in an **additional question** (e.g. see below **frequency tables for questions E1+, E3+/G1+/A1+; and E12+/G10+/A7+**).

Note on low numbers of respondents

The questionnaire used includes some filter questions, whereby only relevant questions are asked of patients. So, for example, patients that have reported not having to wait to be seen would not be asked subsequent questions about waiting. This means that fewer patients will answer some of the questions in the questionnaire. Where fewer than 50 respondents have answered a particular question, the result should be treated with caution, as the number of respondents answering is relatively small.

How to display data in Frequency Tables, and how to calculate Problem Scores for each question in the survey

This section shows how you can display your survey data in frequency tables, and how to calculate your problem scores for each of the survey questions.

Frequency tables can be used to present a full breakdown of responses for each survey question (number and percent). They can also show which group(s) of patients responded to each question and how the problem score was calculated.

The letter preceding the question number in the following frequency tables refers to the questionnaire type. The number reflects the question number in that survey.

- 'E' refers to the question number on the Emergency Department questionnaire
- 'G' reflects the question number on the GP survey
- 'A' corresponds to the number on the Ambulance questionnaire

Findings are arranged by the question order in the survey. The below frequency tables can be used to display the number of missing responses for each question, along with details of who and how many people answered, and the proportion of patients that selected each response option.

Problem Score Calculation: The response categories that should be combined to calculate the problem score are indicated with an asterisk. The green text under each problem score indicates how the score could be presented.

Derived Questions: A question number followed by a '+' symbol indicates a derived question. This is where a frequency table has excluded a subset of respondents to whom the question does not apply. For example, question E1 asks about ambulance care, so question E1+ excludes those who did not receive care from an ambulance, as the question does not apply to them.

E1. If an ambulance was called, did the ambulance staff/paramedics explain what was happening in a way you could understand?

All Patients (<i>Emergency Dept Survey only</i>)	N	%
Yes, definitely	12	5.5%
Yes, to some extent / sort of	4	1.8%
No	2	0.9%
An ambulance was not called	121	55.8%
I can't remember	1	0.5%
<i>Not answered</i>	77	35.5%
	217	

E1+. If an ambulance was called, did the ambulance staff/paramedics explain what was happening in a way you could understand?

Those who called an ambulance (<i>Emergency Dept Survey only</i>)	N	%
Yes, definitely	12	12.5%
* Yes, to some extent / sort of	4	4.2%
* No	2	2.1%
I can't remember	1	1.0%
<i>Not answered</i>	77	80.2%
Problem Score: 6.3%	96	

Problem Score Interpretation: 6% of respondents said that ambulance staff / paramedics did not fully explain what was happening

E2. Overall, how well do you think ambulance staff / paramedics looked after you / your child?

Those who called an ambulance (<i>Emergency Dept Survey only</i>)	N	%
Very well	13	13.5%
Fairly well	4	4.2%
* Not very well	0	0.0%
* Not at all well	0	0.0%
I can't remember	1	1.0%
<i>Not answered</i>	78	81.3%
Problem Score: 0.0%	96	

Problem Score Interpretation: 0% of respondents said that ambulance staff / paramedics did not look after child very well

E3/G1/A1. How did you feel about how long you had to wait to be seen?

All Patients	N	%
I / we did not have to wait at all	53	23.1%
The wait was shorter than expected	92	40.2%
The wait was about as long as expected	42	18.3%
The wait was longer than expected	24	10.5%
<i>Not answered</i>	18	7.9%
	229	

E3+/G1+/A1+. How did you feel about how long you had to wait to be seen?

Those who waited	N	%
The wait was shorter than expected	92	52.3%
The wait was about as long as expected	42	23.9%
* The wait was longer than expected	24	13.6%
<i>Not answered</i>	18	10.2%
Problem Score: 13.6%	176	

Problem Score Interpretation: 14% of respondents had to wait for longer than expected

E4/G2/A2. While you were waiting, did someone tell you / keep you informed about what was happening?

Those who waited	N	%
Yes, definitely	51	29.0%
Yes, to some extent / sort of	21	11.9%
No, but this was not necessary / needed	75	42.6%
* No, but I / we would have liked to have been told	17	9.7%
Don't know / can't remember	4	2.3%
<i>Not answered</i>	8	4.5%
Problem Score: 9.7%	176	

Problem Score Interpretation: 10% of respondents said that they were not kept informed about what was happening when waiting

A3. While you were waiting, did someone tell you what to do?

*** Interpret with caution – low number of respondents**

Those who waited (<i>Ambulance Survey only</i>)	N	%
Yes, definitely	3	42.9%
Yes, to some extent / sort of	2	28.6%
No, but this was not needed	1	14.3%
* No, but I/we would have liked to have been told	1	14.3%
I can't remember	1	0.5%
<i>Not answered</i>	0	0.0%
Problem Score: 14.3%	7	

Problem Score Interpretation: 14% of respondents said that they were not told what to do when waiting, but would have liked this

E5/G3. Was there enough for you / your child to do when waiting to be seen (such as toys, games and books)?

Those who waited (<i>Emergency and GP survey only</i>)	N	%
Yes, lots to do	31	18.3%
* Yes, some things, but not enough	18	10.7%
* There were things, but not for my / my child's age group	32	18.9%
* No	56	33.1%
Can't remember / did not notice	9	5.3%
We had our own things do to	16	9.5%
<i>Not answered</i>	7	4.1%
Problem Score: 62.7%	169	

Problem Score Interpretation: 63% of respondents said that there was not enough for child's age group to do when waiting to be seen

E6/G4. Was there everything you needed while you waited (such as food, drink and toilets)?

Those who waited (<i>Emergency and GP survey only</i>)	N	%
Yes, definitely	54	32.0%
* Yes, to some extent / sort of	57	33.7%
* No	18	10.7%
We did not need anything	34	20.1%
Don't know / can't remember	1	0.6%
<i>Not answered</i>	5	3.0%
Problem Score: 44.4%	169	

Problem Score Interpretation: 44% of respondents said that they did not have everything that was needed when waiting

E7/G5. Were you / your child looked after while you waited (for example, given pain medicine, blankets or sick bowls if needed)?

Those who waited (<i>Emergency and GP survey only</i>)	N	%
Yes, definitely	43	25.4%
* Yes, to some extent / sort of	9	5.3%
* No	10	5.9%
We did not need anything	95	56.2%
Don't know / can't remember	2	1.2%
<i>Not answered</i>	10	5.9%
Problem Score: 11.2%	169	

Problem Score Interpretation: 11% of respondents said that they were not looked after while they waited

E8/G6. How clean was the waiting area?

Those who waited (<i>Emergency and GP survey only</i>)	N	%
Very clean	74	43.8%
Quite clean	74	43.8%
* Not very clean	16	9.5%
* Not at all clean	0	0.0%
Can't remember / did not notice	1	0.6%
<i>Not answered</i>	4	2.4%
Problem Score: 9.5%	169	

Problem Score Interpretation: 10% of respondents said that the waiting area was not clean

E9/G7/A4. Did staff explain what they were doing in a way you could understand?

All Patients	N	%
Yes, completely	164	71.6%
* Yes, to some extent / sort of	40	17.5%
* No	3	1.3%
I did not need an explanation	11	4.8%
Don't know / can't remember	2	0.9%
<i>Not answered</i>	9	3.9%
Problem Score: 18.8%	229	

Problem Score Interpretation: 19% of respondents said staff did not fully explain what they were doing

E10/G8/A5. Did staff explain what was wrong with you/ your child in a way you could understand?

All Patients	N	%
Yes, completely	153	66.8%
* Yes, to some extent / sort of	48	21.0%
* No	6	2.6%
Don't know / can't remember	3	1.3%
They did not know what was wrong with me / my child	4	1.7%
<i>Not answered</i>	15	6.6%
Problem Score: 23.6%	229	

Problem Score Interpretation: 24% of respondents said that staff did not fully explain what was wrong with child

E11/G9/A6. Did staff do everything they could to calm and comfort you / you and your child?

All Patients	N	%
Yes, completely	147	64.2%
* Yes, to some extent / sort of	37	16.2%
* No	4	1.7%
This was not necessary / needed	31	13.5%
<i>Not answered</i>	10	4.4%
Problem Score: 17.9%	229	

Problem Score Interpretation: 18% of respondents said that staff did not do everything they could to calm and comfort parent/child

E12/G10/A7. If you / your child was in any pain, did staff do everything they could to help with your pain?

All Patients	N	%
Yes, definitely	112	48.9%
Yes, to some extent / sort of	34	14.8%
No	4	1.7%
I / my child was not in any pain	66	28.8%
<i>Not answered</i>	13	5.7%
	229	

E12+/G10+/A7+. If you / your child was in any pain, did staff do everything they could to help with your pain?

Those who were in pain	N	%
Yes, definitely	112	68.7%
* Yes, to some extent / sort of	34	20.9%
* No	4	2.4%
<i>Not answered</i>	13	8.0%
Problem Score: 23.3%	163	

Problem Score Interpretation: 23% of respondents said that staff did not do everything they could to help with child's pain

E13/G11. Were you / your child given enough privacy when being treated and examined?

All Patients (<i>Emergency and GP survey only</i>)	N	%
Yes, definitely	178	80.5%
* Yes, to some extent / sort of	14	6.3%
* No, but I / we did not mind	8	3.6%
* No, but I / we would have liked this	0	0.0%
Don't know / can't remember	5	2.3%
<i>Not answered</i>	16	7.2%
Problem Score: 10.0%	221	

Problem Score Interpretation: 10% of respondents said that they were not given enough privacy when being treated or examined

E14/G12/A8. After your emergency visit / care, what happened?

All Patients	N	%
Went to hospital / stayed overnight in hospital	15	6.6%
Went home / stayed at home	171	74.7%
Other / went to stay somewhere else	3	1.3%
<i>Not answered</i>	40	17.5%
	229	

E15/G13. Did someone tell you when you/ your child could re-start your / their usual activities, such as playing sport and returning to school?

Those who did not stay in hospital (<i>Emergency and GP survey only</i>)	N	%
Yes, definitely	78	36.8%
* Yes, to some extent / sort of	17	8.0%
* No	16	7.5%
This was not needed	68	32.1%
<i>Not answered</i>	33	15.6%
Problem Score: 15.6%	212	

Problem Score Interpretation: 16% of respondents said that they were not told when child could re-start their usual activities

E16/G14/A9. Did someone tell you what you should watch out for at home after your / your child's emergency care?

Those who did not stay in hospital	N	%
Yes, definitely	98	45.8%
* Yes, to some extent / sort of	24	11.2%
* No	12	5.6%
This was not necessary / needed	44	20.6%
Don't know / can't remember	2	0.9%
<i>Not answered</i>	34	15.9%
Problem Score: 16.8%	214	

Problem Score Interpretation: 17% of respondents said that they were not told what to watch out for at home after the emergency care

E17/G15/A10. Did staff tell you what to do or who to contact if you were worried about anything after the emergency care?

Those who did not stay in hospital	N	%
Yes	150	70.1%
* No	22	10.3%
Don't know / can't remember	10	4.7%
<i>Not answered</i>	32	15.0%
Problem Score: 10.3%	214	

Problem Score Interpretation: 10% of respondents said that they were not told what to do or who to contact if worried after the emergency care

E18/G16/A11. During your care did you receive enough information about your/ your child's condition and treatment?

All Patients	N	%
Yes, enough information	172	75.1%
* Some, but not enough information	16	7.0%
* None, but I would have liked some	4	1.7%
None, but I did not need any	16	7.0%
They did not know what was wrong with me / my child	2	0.9%
<i>Not answered</i>	19	8.3%
Problem Score: 8.7%	229	

Problem Score Interpretation: 9% of respondents said that they did not receive enough information about child's condition/ treatment

E19/G17/A12. Overall, how well do you think you / your child was looked after?

All Patients	N	%
Very well	158	69.0%
Fairly well	47	20.5%
* Not very well	3	1.3%
* Not at all well	1	0.4%
<i>Not answered</i>	20	8.7%
Problem Score: 1.7%	229	

Problem Score Interpretation: 2% of respondents said that overall, they (or their child) was not looked after very well

E20/G18/A13. Was the main reason for your emergency visit / care dealt with well?

All Patients	N	%
Yes, completely	163	71.2%
* Yes, to some extent / sort of	36	15.7%
* No	1	0.4%
<i>Not answered</i>	29	12.7%
Problem Score: 16.2%	229	

Problem Score Interpretation: 16% of respondents said that the main reason for their emergency care was not dealt with completely well

E21/G19/A14. Who was the main person who answered the questions on this survey?

All Patients	N	%
Child (patient)	41	17.9%
Parent / carer	136	59.4%
Both child and parent/ carer together	32	14.0%
<i>Not answered</i>	20	8.7%
	229	

E22/G20/A15. Are you / is your child male or female?

All Patients	N	%
Male	100	43.7%
Female	116	50.7%
<i>Not answered</i>	13	5.7%
	229	

E23/G21/A16. How old are you / is your child?

All Patients	N	%
0-2 years old	50	21.8%
3-5 years old	30	13.1%
6-8 years old	30	13.1%
9-11 years old	34	14.8%
12-14 years old	28	12.2%
15-16 years old	9	3.9%
<i>Not answered</i>	22	9.6%
	229	

E24/G22/A17. Which of these best describes your / your child's ethnic background?

All Patients	N	%
White (e.g. British, Irish, European)	154	67.2%
Mixed (e.g. White and Asian)	11	4.8%
Asian / Asian British (e.g. Indian)	22	9.6%
Black / Black British	16	7.0%
Chinese	1	0.4%
Any other ethnic group	6	2.6%
<i>Not answered</i>	19	8.3%
	229	

E25/G23/A18. Which of these is the MAIN language spoken at home?

All Patients	N	%
English	182	79.5%
Other European language	7	3.1%
Asian language (such as Hindi, Gujarati, Punjabi, Urdu, Bengali, Thai)	9	3.9%
African language (such as Swahili, Hausa, Yoruba)	2	0.9%
Other, including British Sign Language	6	2.6%
<i>Not answered</i>	23	10.0%
	229	