National Cancer Patient Experience Survey 2019

Technical Documentation

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Introduction

This document sets out the methodology used in the analysis of the response data to the 2019 National Cancer Patient Experience Survey (CPES) and gives guidance on how to interpret the results. This includes the following:

- how percentage scores have been derived for each scored question
- how the adjusted response rate was calculated
- how scores were adjusted and details on the variables used for the adjustment
- rules on suppression and where it was applied
- methods for establishing differences between different groups of respondents
- methods for establishing changes from 2019 and 2018 and overall changes (2015 to 2019)
- how statistical confidence intervals around scores have been calculated
- methodology for expected range and how to interpret the results

All of the national and local-level results are available at https://www.ncpes.co.uk/current-results.

Acknowledgments

We would like to acknowledge the work of Dr Gary Abel, Senior Lecturer in Statistics at the University of Exeter, in the development of the case-mix adjustment protocol and his technical advice on the implementation of performance ratings along with input by Professor Yoryos Lyratzopoulos, Reader in Cancer Epidemiology at University College London.

Scoring

Scores are presented for 52 questions that relate directly to patient experience. For all but one question (Q61), scores are presented as the percentage of positive responses out of all scored responses. For Q61, respondents rate their overall care on a scale of 0 to 10, of which the average was calculated for this question's presented score.

Positive, negative and neutral scores

For each scored question, each response option has been identified as either a positive, negative or neutral response. Scores were calculated using the total number of positive responses as the numerator and the total number of positive and negative responses as the denominator. Neutral scores (e.g. 'Don't know / can't remember') were excluded from this calculation.

See <u>Appendix A</u> for the mapping of positive, negative and neutral scores for all questions.

Adjusted response rate

During fieldwork for the 2019 survey, all patients were coded with an outcome code depending on their response to being sent the questionnaire. This outcome codes were as follows:

- Outcome 1 = patient completed the questionnaire
- Outcome 2 = questionnaire was returned undelivered (i.e. patient did not receive the questionnaire)
- Outcome 3 = patient deceased after the sample was drawn (i.e. patient may not have received the questionnaire)
- Outcome 4 = patient opted out of the survey (i.e. called the helpline, emailed or returned a blank questionnaire)
- Outcome 5 = patient is ineligible for the survey (i.e. patient was sampled incorrectly and does not meet the eligibility criteria for the survey)
- Outcome 6 = unknown (i.e. there has been no response from the patient)

To calculate the adjusted response rate, the numerator was the total number of patients with an outcome of '1' and the denominator was the total number of patients with an outcome of '1', '4', and '6'. Therefore, patients that may not have received a questionnaire or was not eligible to take part was excluded from this calculation.

Case-mix Adjustment

Introduction

From detailed analyses of previous iterations of the survey (and other surveys), we know that different demographic groups tend to report their experience of care differently. For example, previous analysis indicates that women generally report a significantly less positive experience than men; that black and Asian patients report a less positive experience than white patients on many questions; and that there are significant differences in experiences reported by patients with different types of cancer. Thereby, Trusts with differing populations could potentially lead to results appearing better or worse than they would if they had a slightly different profile of patients.

To adjust for the different proportion of patients within sub-groups across organisations, a case-mix adjustment was done to 'standardise' the data to allow for fair comparisons.

How to interpret the results

The case-mix adjusted scores are the scores we would expect a Trust, CCG or Cancer Alliance to obtain had their mix of respondents been the same demographically across each organisation. Therefore, to compare scores across different organisations, the case-mix adjusted scores, alongside the confidence intervals, should be used.

The following example shows two tables for the same organisation: the first has the total number of respondents to Q7, the unadjusted score, and the corresponding confidence intervals; the second has the same data for Q7 but after the case-mix adjustment has been applied. In this case, the



unadjusted score is 83%. Once the characteristics of the organisation's population are taken into account, the case-mix adjusted score is at 82%. It is this second figure (i.e. case-mix adjusted score) which should be used when making comparisons.

| Question | Question text | Number of | Unadjusted | 95% Confidence Intervals | | |
|----------|---|-----------|------------|--------------------------|-------|--|
| Question | | responses | score | Lower | Upper | |
| Q7 | Were the results of the test explained in a way you could understand? | 500 | 83% | 79% | 86% | |

| Question | Question text | Number of | Adjusted score | 95% Confidence Intervals | | |
|----------|---|-----------|----------------|--------------------------|-------|--|
| Question | QUESTIONTERI | responses | Aujusteu score | Lower | Upper | |
| Q7 | Were the results of the test explained in a way you could understand? | 500 | 82% | 78% | 85% | |

Methodology

Variables used in the case-mix adjustment

Scores were adjusted based on 5 characteristics of the patients: age, ethnicity, gender, cancer type and IMD quintile. Below is a description of how these variables are derived and grouped.

- Age was derived from sample data provided from the Trust i.e. date of birth of patient. It was then grouped into eight age groups for the case-mix adjustment: 16-24; 25-34; 35-44; 45-54; 55-64; 65-74; 75-84; 85+
- Ethnicity was derived from Q72 in the questionnaire where respondents indicate which ethnic group they belong to. Ethnicity was grouped into six groups for the case-mix adjustment: White; Mixed; Asian; Black; Other; Not given
- Gender was taken from sample data provided from the Trust, unless it was unknown, in which case data from Q66 was taken. If gender was unclear from the sample and response data, a statistical process was taken to assign a gender¹. Gender was grouped into two groups: Male; Female
- Cancer type was derived from clinical codes provided from the Trust i.e. ICD-10 codes. It was then grouped into 38 groups (see <u>Appendix B</u> for the full list)

¹ Consultations with Dr Gary Abel (Senior Lecturer, University of Exeter) were undertaken to identify the best practice for randomly assigning a gender code whilst taking into account the probability of being a particular gender based on the data.

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• IMD quintiles were derived using the patient's postcode data provided from the Trust and used to mail the questionnaire packets. The IMD (i.e. Index of Multiple Deprivation) quintiles were generated by mapping the postcode of referral for each patient against the most recently available published English IMD data using the ONS postcode directory file of February 2020. In some cases (415 in 2019), patients from outside England (from Wales, Scotland, Northern Ireland, the Channel Islands or the Isle of Man) are referred to English NHS Trusts for treatment. However, these patients were not included in the case-mix adjustment and are all described as 'Non-England' in the national tables². The responses from these patients were included in the overall national analysis and in the unadjusted results for the relevant NHS Trust. However, they do not appear in any of the CCG or Cancer Alliance results as these are only presented for relevant English CCGs and Alliances.

Case-mix adjustment for Trusts, CCGs and Cancer Alliances

A logistic regression model was used for the case-mix adjustment to quantify the impact of each of the five variables above on each of the scored questions in the questionnaire. This produced a statistical case-mix adjustment model for each question. This is based on the 2014 paper produced by Abel, Saunders & Lyratzopoulos³.

These individual models were then ran for each question (aside from Q61) to produce a case-mix adjusted score that takes account of how the demographics of an individual Trust differ from the national average. For Q61, the same five variables were used however the case-mix adjustment was created using a linear regression model.

Any questions with zero responses from a particular organisation were removed from the modelling process for these individual questions.

Suppression

Question-level suppression

For unadjusted and adjusted scores at national, Trust, CCG and Cancer Alliance levels, when the base size per question was < 21, the score was suppressed and replaced with an asterisk (*). The base size included only positive and negative response options.

Response-level suppression

Where results are presented at response option level, questions where the number of respondents selecting a given option was not 0 but less than 6 were suppressed and replaced with an asterisk (*). This is to minimise the risk that the results could be disclosed. All other response options, which could be used to calculate the suppressed number, was also suppressed. This suppression

http://www.futuremedicine.com/doi/pdf/10.2217/fon.13.266

² For 2015, a few respondents did not have valid postcodes to generate IMD quintiles, therefore some of the counts in the 2015 data do not match previously published results.

³ Abel, Saunders & Lyratzopoulos, Future Oncol. (2014) 10(9), "Cancer patient experience, hospital performance and case mix: evidence from England",



rule did not apply to all neutral response options (see <u>Appendix A</u> for which response options were included in the suppression).

Double suppression

Results for any sub-group breakdown adheres to the same suppression level as the question-level suppression but has an additional double suppression rule. Where any of the groups within the sub-group breakdown had < 21 respondents then the figure for this particular group was suppressed and replaced with an asterisk (*). If there was only one group within the sub-group that had < 21 respondents and therefore suppressed, the group with the next lowest number of respondents (regardless of whether it was greater than or less than 21) was also supressed and replaced with an asterisk (*). This rule applies to scores and proportions.

Comparisons between groups of respondents

Introduction

Significance tests were carried out to identify a statistically significant difference between groups of respondents on a particular question.

How to interpret the results

In the Excel tables, results for between groups significance tests are marked with either 'Sig.' or 'Not Sig' for statistically significant or not, respectively.

Methodology

Four standard tests of significance were used for identifying statistically significant differences between groups. All tests were set with a confidence level of 95% (p<0.05).

- A z-test of proportions was used to test whether there is a significant difference between the scores of two groups for all scored questions aside from Q61:
 - o gender (male vs female)
 - o sexual orientation (heterosexual vs non-heterosexual)
 - deprivation (1st quintile vs 5th quintile).
 - Tumour type (Each tumour type vs. score for all tumour types combined) (brain/CNS, breast, colorectal/LGT, gynaecological, haematological, head and neck, lung, prostate, sarcoma, skin, upper gastro, urological, other) (see <u>Appendix B</u> for the mapping document used)
- A Pearson chi-square test was used to test whether there are significant differences in scores across multiple groups for all scored questions aside from Q61:
 - o ethnicity (across White, Mixed, Asian, Blank, Other, Not given)
 - o age (across 16-24, 25-34, 35-44, 45-54, 55-64, 65-74, 75-84, 85+)
- A two-sample t-test was used to compare the mean score from Q61 (overall experience question) in the following forms:



- o gender compared mean scores for male vs female
- o sexual orientation compared mean scores for heterosexual vs non-heterosexual
- o deprivation compared mean scores for 1st quintile vs 5th quintile
- A one-sample t-test was used to compare the national mean score from Q61 (overall experience question) to the national score for the following groups:
 - each ethnicity group vs. score for all ethnicity groups combined (White, Mixed, Asian, Blank, Other, Not given)
 - each age group vs. score for all ages groups combined (16-24, 25-34, 35-44, 45-54, 55-64, 65-74, 75-84, 85+)
 - each tumour type vs. score for all tumour types combined (brain/CNS, breast, colorectal/LGT, gynaecological, haematological, head and neck, lung, prostate, sarcoma, skin, upper gastro, urological, other) (see <u>Appendix B</u> for the mapping document used)

Comparisons between 2019 and 2018, and trend comparisons (2015-2019)

Introduction

Where possible⁴, the scores for each of the scored questions from the 2019 results were compared with those from the 2018 results to see if there are any significant differences. Comparisons were also made across the last 5 iterations of the survey (2015-2019) to see if there are any trends. Comparisons were made at national, trust, CCG and Cancer Alliance level for each scored question. See <u>Appendix C</u> for a list of which questions were comparable to previous year's scores.

How to interpret the results

In the Excel tables, results between 2019 and 2018 as well as trend results are marked with either ' \uparrow ' or ' \downarrow ' for a statistically significant increase or decrease, respectively.

Methodology

A longitudinal logistic regression model with robust variance estimation⁵ was used to determine whether there has been a significant change from the previous year and whether there are any trends over the last 5 years.⁶ A linear regression was used to determine whether there are any changes to Q61 (overall experience question) from last year and for identifying any trends. Age,

⁴ For the 2019 survey, 37 questions were comparable to 2018. For the trend comparisons, 37 questions were comparable across 2016-2019 and 35 questions were comparable across 2015-2019.

⁵ The regression models differ slightly from those used in previous iterations of the survey. The change was made because some respondents did not have NHS numbers and this makes it difficult to reliably identify where patients have completed the survey in successive years. The revised approach has been tested against the previous method and found to give very similar results. We therefore do not expect these to have led to different conclusions about change over time.

⁶ In a small number of cases, data conditions (primarily small numbers of responses) did not permit the regression model to converge on an estimate of the year to year effect. In these cases, the significance test was omitted.

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IMD quintile, ethnicity and tumour type are added as covariates since these variables may differ across years. Results were considered significant at the 99% (p<0.01) level.

Confidence intervals

Introduction

The single percentage figures given as a score for each organisation for each question are an estimate of the score from the population, based on the responses received. Assuming the sample is representative of the organisation, confidence intervals are a method of describing the uncertainty around these estimates. The most common methodology, which was been used here, is to produce and report 95 percent confidence intervals around the results. At the 95 percent confidence level the confidence intervals are expected to contain the true value 95 percent of the time (i.e. out of 100 such intervals, 95 will include the true figure).

How to interpret the results

The following example shows the unadjusted score for an organisation with 500 respondents to Q7 in the questionnaire, which asks about the explanation of test results. In this case, the unadjusted score is 83% and the confidence interval is calculated as between 79% and 86%.

| Question | Question text | Number of | Unadjusted | 95% Confidence Intervals | | |
|----------|---|-----------|------------|--------------------------|-------|--|
| Question | Question lext | responses | score | Lower | Upper | |
| Q7 | Were the results of the test explained in a way you could understand? | 500 | 83% | 79% | 86% | |

Methodology

Confidence intervals for unadjusted scores for all questions (aside from Q61) were calculated using Wilson's Confidence Intervals. This particular approach was chosen as it is more robust for small numbers (both numerators and denominators), and for results close to 0% or 100%. For Q61, confidence intervals are +/- 1.96 standard errors, which was calculated by:

S.E. =
$$\frac{\sigma}{\sqrt{N}}$$

Where σ is the standard deviation of responses for that particular organisation.

For the case-mix adjusted scores for all scored questions (aside from Q61), confidence intervals were calculated using a binomial approach with Wilson adjustment. For Q61, +/- 1.96 standard errors was used again, derived as a by-product of the regression routine itself.

Expected values and comparability charts

Introduction

We have continued to use an adapted version of the Care Quality Commission⁷ standard for reporting comparative performance, based on calculation of expected ranges, adjusted for overdispersion.

A standard technique for comparing organisations' performance to the national mean is to identify the range of scores (for a given size of organisation) outside of which there is evidence that the score is different from the national mean (i.e. it is statistically significantly different). The problem with this method is that when the sample size is large and standard errors on organisational scores are small a large number of organisations may be flagged as outliers even when their score is close to the national mean. This variation in organisational performance gives rise to over-dispersion, i.e. there is more variation in the scores than described by the binomial distribution.

By identifying and quantifying the real variation between organisations (rather than that due to chance) we can then calculate an expected range of scores. This expected range is the range of scores expected for organisations of a given sample size to lie within if their underlying performance (rather than measured performance) was within the core of the distribution of performance between organisations.

As such, the organisations outside this range are flagged as outliers and have scores that are not expected for most organisations. This method is a way of fairly treating organisations of different sizes in the presence of natural variation between them.

The methodology to detect over-dispersion is described in detail in the methodology section that follows. Its purpose is to allow organisations of different sizes to be judged equally.

How to interpret the results

The following example shows the scores for an organisation with 500 respondents to Q7 in the survey, asking about the explanation of test results. In this case, the expected range calculated for this organisation is between 78% and 85%. The case-mix adjusted score is 86%, which is above the expected range. This organisation is therefore performing at a *higher* level than expected on this question. We have flagged the performance rating in such cases as dark blue in the local CCG, Trust and Alliance-level reports, and in the data tables.

| Question | Oursetion toxt | Number of | Adjusted | Performance | Expected range | | |
|----------|---|-----------|----------|-------------|----------------|-------|--|
| Question | | responses | score | rating | Lower | Upper | |
| Q7 | Were the results of the test explained in a way you could understand? | 500 | 86% | 1 | 78% | 85% | |

⁷ <u>https://www.cqc.org.uk/sites/default/files/inpatient_survey_technical_document.pdf</u>

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The following example shows how we would report the score for the same organisation if it were below the expected range. In this case, the expected range calculated for this organisation is still between 78% and 85%; however the case-mix adjusted score is 75%, which is *below* the expected range. This organisation is therefore performing at a lower level than expected on this question. We have flagged the performance rating in such cases as pale blue in the local CCG, Trust and Alliance-level reports, and in the data tables.

| Question | Question text | Number of | Adjusted | Performance | Expected range | | |
|----------|---|-----------|----------|-------------|----------------|-------|--|
| Question | | responses | score | rating | Lower | Upper | |
| Q7 | Were the results of the test explained in a way you could understand? | 500 | 75% | 3 | 78% | 85% | |

The following example shows the scores for another, smaller, organisation, with 100 respondents, to the same question. In this case, the expected range calculated for this organisation is wider (as the results are less certain because the sample size is smaller), between 74% and 82%. The case-mix adjusted score is 75%, which is within the expected range for this specific organisation. This organisation is therefore performing *within* the expected range on this question. We have flagged the performance rating in such cases as grey in the local CCG, Trust and Alliance-level reports, and in the data tables.

| Question | Question text | Number of | Adjusted | Performance | Expected range | | |
|----------|---|-----------|----------|-------------|----------------|-------|--|
| Question | | responses | score | rating | Lower | Upper | |
| Q7 | Were the results of the test explained in a way you could understand? | 100 | 75% | 2 | 74% | 82% | |

This above example illustrates how a smaller sample size will widen the expected range of results, due to the increased influence of chance. Hence a given score could be inside the expected range for one organisation and outside it for another if their sample sizes differ.

Methodology

The calculations included three steps: (1) testing for over-dispersion; (2) adjusting for overdispersion; and (3) identifying the expected range and assigning a performance rating. These are described in detail below.

1. Testing for over-dispersion



For each organisation, for each question, the standard error (S.E._{ij}) around the national figure (p_{Nj}) was calculated using the number of responses (n_{ij}) , as follows:

$$S.E._{ij} = \sqrt{(p_{Nj} \times (1 - p_{Nj}) / n_{ij})}$$

Z-scores (Z_{ij}) were calculated, as follows:

$$Z_{ij} = (p_{ij} - p_{Nj}) / S.E._{ij}$$

The z-scores were ranked within each question. The z-scores of those in the bottom 20% were set to be equal to the z-score of the 20th percentile. Similarly, the z-scores of those in the top 20% were set to be equal to the z-score of the 80th percentile (a process known as Winsorisation). These adjusted z-scores were squared and φ was calculated for each question by summing the squares and dividing by the number of relevant organisations (CCGs, Trusts or Alliances), i.e. by 191, 143 or 20. For example, for CCGs:

$$\varphi = \Sigma Z_{adj}^2 / N$$

From this, if

 $N \times \phi > N-1$

then the scores were taken to be over-dispersed and needed adjustment. If not, the scores were assumed to not be over-dispersed and the original z-scores were used.

2. Adjusting for over-dispersion

Where over-dispersion was identified across organisations, within a question, then there was a need to estimate the expected variance between organisations. This was done by calculating the standard deviation of individual Trust, CCG or Alliance scores.

First, we calculated for each organisation within the question under consideration:

$$w_i = 1 / S.E._{ij}^2$$

Then, τ^2 was calculated from:

$$T^2 = ((N \times φ) - (N - 1)) / (Σw_i - Σw_i^2 / Σwi)$$

Having calculated τ^2 , this was added to the squared standard error, and used to calculate revised z-scores for each organisation for this question using the following formula:

$$Zij(rev) = (p_{ij} - pNj) / \sqrt{(S.E._{ij}^2 + T^2)}$$

3. Identifying the expected range and assigning a performance rating

Once the appropriate z-scores were calculated (either the original z-scores, or revised z-scores if there was over-dispersion for a particular question), then an expected range was calculated around the national⁸ figure for each organisation for each question.

⁸ For patients residing in England.



First, expected ranges were calculated by finding the scores that would have produced a revised z-score of either 1.96 or -1.96. Thus organisations with revised z-scores either greater than 1.96 or less than -1.96 can be considered as lying outside of the expected range.

Organisations with scores below the lower limit are outside the expected range, performing lower than expected and coloured pale blue in the tables and comparability charts. Organisations with scores above the upper limit are outside the expected range, performing higher than expected and coloured dark blue in the tables and comparability charts. Organisations with scores between the upper and lower limits are within the expected range, and coloured grey in the tables and comparability charts.

To summarise, the equations used for calculating expected range were:

Lower_exp = $(S.E._{ij} * (-1.96)) + p_{Nj}$ Higher_exp = $(S.E._{ij} * (1.96)) + p_{Nj}$

Where over-dispersion was identified across organisations for this question, a revised S.E. $_{ij}$, S.E. $_{z}$, were substituted in the Lower_exp and Higher_exp equations above, where S.E. $_{z}$ was calculated as follows:

$$S.E._z = (p_{ij} - p_{Nj}) / Z_{ij}(rev)$$

For question 61 (overall experience question), all of the steps described above were repeated in exactly the same way as for the other questions, with the exception of the first step – calculating standard errors. In this case, the standard errors were derived as a by-product of the regression routine itself.

Respondent burden calculation

The National Cancer Patient Experience Survey (CPES) complies with the Code of Practice for Statistics. Within the code, Practice V5.5 requires producers of statistics to monitor the burden on respondents providing their information. In order to achieve this, the following calculation is done for CPES:

Number of respondents x Average time spent completing the survey

There were 67,858 responses to the 2019 CPES. The median completion time based on online completion was 19 minutes per survey. Therefore, respondent burden calculated results for the 2019 CPES are:

67,858 respondents x 19 minutes = 21,488 hours spent completing the survey

Further information

For further information on the methodology and details of the statistical analysis, please contact <u>CPES@PickerEurope.ac.uk</u>



Appendix A

This table lists all questions, excluding the last section (about you) in the questionnaire. The questions were recoded into binary variables where 1 meant positive experience and 0 meant negative experience. The proportion of positive responses to negative responses were then used to calculate unadjusted and adjusted scores. The last column of this table indicates 'Yes' for response options that were used within the response-level suppression rule an 'No' if it was excluded from this suppression rule.

| Question | Question text | Answer option | Option text | Scoring | Used in suppression |
|----------|--|------------------|--|---------|---------------------|
| | Before you were told | 1 | None – I went straight to hospital | n/a | Yes |
| | you needed to go to hospital about cancer, | 2 | None – I went to hospital following a cancer screening appointment | n/a | Yes |
| Q1 | vou see vour GP | 3 | I saw my GP once | 1 | Yes |
| | (family doctor) about | 4 | I saw my GP twice | 1 | Yes |
| | the health problem | 5 | I saw my GP 3 or 4 times | 0 | Yes |
| | caused by cancer? | 6 | I saw my GP 5 or more times | 0 | Yes |
| | | 7 | Don't know / can't remember | n/a | No |
| | How do you feel about | 1 | I was seen as soon as I thought was necessary | 1 | Yes |
| Q2 | had to wait before | 2 | I should have been seen a bit sooner | 0 | Yes |
| | with a hospital doctor? | 3 | I should have been seen a lot sooner | 0 | Yes |
| | How long was it from | 1 | Less than 3 months | n/a | Yes |
| | the time you first | 2 | 3-6 months | n/a | Yes |
| Q3 | thought something | 3 | 6-12 months | n/a | Yes |
| | vou until vou first saw | 4 | More than 12 months | n/a | Yes |
| | a GP or other doctor? | 5 | Don't know / can't remember | n/a | No |
| | In the last 12 months | 1 | Yes | n/a | Yes |
| Q4 | have you had diagnostic test(s) for cancer such as an endoscopy, biopsy, mammogram, or scan at one of the hospitals named in the covering letter? | 2 | No | n/a | Yes |
| Q5 | Reference did you | 1 | Yes | 1 | Yes |
| | have all the | 2 | No, I would have liked more information | 0 | Yes |
| | needed about your | 3 | No, I did not need any information | n/a | No |
| | 1001: | 4 | Don't know / can't remember | n/a | No |



| Question | Question text | Answer option | Option text | Scoring | Used in suppression |
|----------|--|-----------------------------|---|---------|---------------------|
| | Overall, how did you | 1 | It was about right | 1 | Yes |
| 00 | feel about the length | 2 | It was a little too long | 0 | Yes |
| Qb | of time you had to wait for your test to be | 3 | It was much too long | 0 | Yes |
| | done? | 4 | Don't know / can't remember | n/a | No |
| | | 1 | Yes, completely | 1 | Yes |
| | | 2 | Yes, to some extent | 0 | Yes |
| 07 | Were the results of the test explained in a | 3 | No, I did not understand the explanation | 0 | Yes |
| QT | way you could understand? | 4 | I did not have an explanation but would have liked one | 0 | Yes |
| | | 5 | I did not need an explanation | n/a | No |
| | | 6 | Don't know / can't remember | n/a | No |
| | | 1 | Less than 6 months ago | n/a | Yes |
| Q8 | How long ago were you told that you had | 2 | At least 6 months ago but not more than twelve months ago | n/a | Yes |
| cancer? | cancer? | 3 | More than twelve months ago | n/a | Yes |
| | 4 | Don't know / can't remember | n/a | No | |
| | | 1 | A specialist doctor or consultant at hospital | n/a | Yes |
| | Who told you that you had cancer? (Cross ALL that apply) | 2 | My GP | n/a | Yes |
| Q9 | | 3 | A Clinical Nurse Specialist (CNS) | n/a | Yes |
| | | 4 | Someone else | n/a | Yes |
| | | 5 | Don't know / can't remember | n/a | No |
| | When you were first | 1 | Yes | 1 | Yes |
| | told that you had | 2 | No | 0 | Yes |
| Q10 | told you could bring a | 3 | I was told I had cancer by phone or letter | 0 | Yes |
| | friend with you? | 4 | Don't know / can't remember | n/a | No |
| | | 1 | It was done sensitively | 1 | Yes |
| Q11 | How do you feel about the way you were told | 2 | It should have been done a bit more sensitively | 0 | Yes |
| | you had cancer? | 3 | It should have been done a lot more sensitively | 0 | Yes |
| | Did you understand | 1 | Yes, I completely understood it | 1 | Yes |
| Q12 | the explanation of | 2 | Yes, I understood some of it | 0 | Yes |
| | | 3 | No, I did not understand it | 0 | Yes |
| | ,00. | 4 | Don't know / can't remember | n/a | No |
| 013 | When you were told you had cancer, were | 1 | Yes, and it was easy to understand | 1 | Yes |
| Q IO | you given written information about the | 2 | Yes, but it was difficult to understand | 0 | Yes |



| Question | Question text | Answer option | Option text | Scoring | Used in suppression |
|----------|---|------------------|--|---------|---------------------|
| | type of cancer you had? | 3 | No, I was not given written information about the type of cancer I had | 0 | Yes |
| | | 4 | I did not need written information | n/a | No |
| | | 5 | Don't know / can't remember | n/a | No |
| | | 1 | Yes, completely | 1 | Yes |
| | Before your cancer | 2 | Yes, to some extent | 0 | Yes |
| | treatment started, | 3 | No | 0 | Yes |
| Q14 | were your treatment options explained to you? | 4 | There was only one type of treatment that was suitable for me | n/a | Yes |
| | | 5 | Don't know / can't remember | n/a | No |
| | | 1 | Yes, definitely | 1 | Yes |
| | Were the possible | 2 | Yes, to some extent | 0 | Yes |
| Q15 | treatment(s) explained | 3 | No, side effects were not explained | 0 | Yes |
| | understand? | 4 | I did not need an explanation | n/a | No |
| | | 5 | Don't know / can't remember | n/a | No |
| | Were you offered | 1 | Yes, definitely | 1 | Yes |
| | practical advice and | 2 | Yes, to some extent | 0 | Yes |
| Q16 | support in dealing with the side effects of your treatment(s)? | 3 | No, I was not offered any practical advice or support | 0 | Yes |
| | | 4 | Don't know / can't remember | n/a | No |
| | Before you started | 1 | Yes, definitely | 1 | Yes |
| | your treatment(s), | 2 | Yes, to some extent | 0 | Yes |
| Q17 | were you also told about any side effects | 3 | No, future side effects were not explained | 0 | Yes |
| | of the treatment that | 4 | I did not need an explanation | n/a | No |
| | future rather than straight away? | 5 | Don't know / can't remember | n/a | No |
| | Were you involved as | 1 | Yes, definitely | 1 | Yes |
| | much as you wanted | 2 | Yes, to some extent | 0 | Yes |
| Q18 | to be in decisions about your care and treatment? | 3 | No | 0 | Yes |
| Q19 | Were you given the | 1 | Yes | 1 | Yes |
| | name of a Clinical | 2 | No | 0 | Yes |
| | Nurse Specialist who would support you through your treatment? | 3 | Don't know / can't remember | n/a | No |
| 020 | How easy or difficult | 1 | Very easy | 1 | Yes |
| Q20 | has it been for you to | 2 | Quite easy | 1 | Yes |



| Question | Question text | Answer option | Option text | Scoring | Used in suppression |
|--------------------------------|--|-----------------------------|---|---------|---------------------|
| | contact your Clinical | 3 | Neither easy nor difficult | 0 | Yes |
| | Nurse Specialist? | 4 | Quite difficult | 0 | Yes |
| | | 5 | Very difficult | 0 | Yes |
| | | 6 | I have not tried to contact my Clinical Nurse Specialist | n/a | No |
| | When you have had | 1 | All or most of the time | 1 | Yes |
| | important questions to | 2 | Some of the time | 0 | Yes |
| 021 | ask your Clinical | 3 | Rarely or never | 0 | Yes |
| QZ I | often have you got answers you could understand? | 4 | I have not asked any questions | n/a | No |
| Did hospital staff give | 1 | Yes | 1 | Yes | |
| Q22 | you information about Q22 support or self-help | 2 | No, but I would have liked information | 0 | Yes |
| groups for people with cancer? | groups for people with | 3 | It was not necessary | n/a | No |
| | 4 | Don't know / can't remember | n/a | No | |
| | Did hospital staff | 1 | Yes | 1 | Yes |
| | discuss with you or give you information | 2 | No, but I would have liked a discussion or information | 0 | Yes |
| Q23 | about the impact cancer could have on your day to day activities (for example, your work life or education)? | 3 | It was not necessary / relevant to me | n/a | No |
| | | 4 | Don't know / can't remember | n/a | No |
| | Did hospital staff give | 1 | Yes | 1 | Yes |
| Q24 | you information about how to get financial | 2 | No, but I would have liked information | 0 | Yes |
| Q2 1 | help or any benefits | 3 | It was not necessary | n/a | No |
| | you might be entitled to? | 4 | Don't know / can't remember | n/a | No |
| | | 1 | Yes | 1 | Yes |
| Q25 | Did hospital staff tell you that you could get | 2 | No, but I would have liked information | 0 | Yes |
| | free prescriptions? | 3 | It was not necessary | n/a | No |
| | | 4 | Don't know / can't remember | n/a | No |
| | During the last 12 | 1 | Yes | n/a | Yes |
| Q26 | months, have you had an operation (such as removal of a tumour or lump) at one of the hospitals named in the covering letter? | 2 | No | n/a | Yes |
| Q27 | | 1 | Yes | 1 | Yes |



| Question | Question text | Answer option | Option text | Scoring | Used in suppression |
|-----------------|--|------------------|--|---------|---------------------|
| | Beforehand, did you have all the | 2 | No, I would have liked more information | 0 | Yes |
| | needed about your operation? | 3 | Don't know / can't remember | n/a | No |
| | After the operation, | 1 | Yes, completely | 1 | Yes |
| | did a member of staff | 2 | Yes, to some extent | 0 | Yes |
| Q28 | explain how it had gone in a way you | 3 | No, but I would have liked an explanation | 0 | Yes |
| | could understand? | 4 | I did not need an explanation | n/a | No |
| | During the last 12 | 1 | Yes | n/a | Yes |
| Q29 | Q29 months, have you stayed overnight for cancer care at one of the hospitals named | 2 | No | n/a | Yes |
| | Did hospital staff talk | 1 | Yes, often | 0 | Yes |
| Q30 in f you | in front of you as if | 2 | Yes, sometimes | 0 | Yes |
| | you weren't there? | 3 | No | 1 | Yes |
| | Did you have | 1 | Yes, in all of them | 1 | Yes |
| Q31 | confidence and trust in the doctors treating you? | 2 | Yes, in some of them | 0 | Yes |
| | | 3 | No, in none of them | 0 | Yes |
| | | 1 | Yes, definitely | 1 | Yes |
| | | 2 | Yes, to some extent | 0 | Yes |
| | If your family or | 3 | No | 0 | Yes |
| Q32 | someone else close to you wanted to talk to | 4 | No family or friends were involved | n/a | No |
| | a doctor, were they able to? | 5 | My family did not want to talk to a doctor | n/a | No |
| | | 6 | I did not want my family or friends to talk to a doctor | n/a | No |
| | Did you have | 1 | Yes, in all of them | 1 | Yes |
| Q33 | confidence and trust | 2 | Yes, in some of them | 0 | Yes |
| | In the ward nurses treating you? | 3 | No, in none of them | 0 | Yes |
| | In your opinion, were | 1 | There were always or nearly always enough on duty | 1 | Yes |
| Q34 | there enough nurses on duty to care for you | 2 | There were sometimes enough on duty | 0 | Yes |
| | in hospital? | 3 | There were rarely or never enough on duty | 0 | Yes |
| | While you were in | 1 | Yes, all of them did | 1 | Yes |
| Q35 | hospital did hospital | 2 | Only some of them did | 0 | Yes |
| | staff ask you what | 3 | None of them did | 0 | Yes |



| Question | Question text | Answer option | Option text | Scoring | Used in suppression |
|---|--|------------------|--|---------|---------------------|
| | name you prefer to be called by? | | | | |
| | Were you given | 1 | Yes, always | 1 | Yes |
| 0.00 | enough privacy when | 2 | Yes, sometimes | 0 | Yes |
| Q36 | discussing your condition or treatment? | 3 | No | 0 | Yes |
| | During your hospital | 1 | Yes, definitely | 1 | Yes |
| | visit, did you find | 2 | Yes, to some extent | 0 | Yes |
| Q37 | someone on the | 3 | No | 0 | Yes |
| | about your worries and fears? | 4 | I had no worries or fears | n/a | No |
| | Do you think the | 1 | Yes, definitely | 1 | Yes |
| | hospital staff did | 2 | Yes, to some extent | 0 | Yes |
| Q38 | everything they could | 3 | No | 0 | Yes |
| | nain? | 4 | I did not have any pain | n/a | No |
| | Overall, did you feel | 1 | Yes, always | 1 | Yes |
| | you were treated with | 2 | Yes, sometimes | 0 | Yes |
| Q39 | respect and dignity while you were in the hospital? | 3 | No | 0 | Yes |
| Were you given clear | | 1 | Yes | 1 | Yes |
| | written information | 2 | No | 0 | Yes |
| Q40 should or should no do after leaving bospital? | about what you should or should not do after leaving hospital? | 3 | Don't know / can't remember | n/a | No |
| | Did hospital staff tell | 1 | Yes | 1 | Yes |
| | you who to contact if | 2 | No | 0 | Yes |
| Q41 | you were worried about your condition or treatment after you left hospital? | 3 | Don't know / can't remember | n/a | No |
| | During the last 12 | 1 | Yes | n/a | Yes |
| Q42 wonths, have you been treated as an outpatient or day case for cancer care at one of the hospitals named in the covering letter? | | 2 | No | n/a | Yes |
| | While you were being | 1 | Yes, definitely | 1 | Yes |
| 0.15 | treated as an | 2 | Yes, to some extent | 0 | Yes |
| Q43 | outpatient or day | 3 | No | 0 | Yes |
| | case, did you find someone on the | 4 | I did not have any worries or fears | n/a | No |



| Question | Question text | Answer option | Option text | Scoring | Used in suppression |
|---|--|------------------|---|---------|---------------------|
| | hospital staff to talk to about your worries and fears? | | | | |
| | The last time you had | 1 | Yes | 1 | Yes |
| | an outpatients | 2 | No | 0 | Yes |
| Q44 | appointment with a cancer doctor, did | 3 | I didn't have an appointment with a cancer doctor | n/a | No |
| | documents, such as medical notes, x-rays and test results? | 4 | Don't know / can't remember | n/a | No |
| | During the last 12 | 1 | Yes | n/a | Yes |
| Q45 | months, have you had radiotherapy at any of the hospitals named in the covering letter? | 2 | No | n/a | Yes |
| | Beforehand, did you | 1 | Yes, completely | 1 | Yes |
| | have all of the | 2 | Yes, to some extent | 0 | Yes |
| Q46 | ntormation you needed about your radiotherapy treatment? | 3 | No | 0 | Yes |
| | | 4 | I did not need any information | n/a | No |
| | Once you started your | 1 | Yes, completely | 1 | Yes |
| | treatment, were you given enough information about whether your radiotherapy was | 2 | Yes, to some extent | 0 | Yes |
| | | 3 | No | 0 | Yes |
| Q47 | | 4 | It is too early to know if my radiotherapy is working | n/a | Yes |
| | working in a way you could understand? | 5 | I did not need any information | n/a | No |
| | During the last 12 | 1 | Yes | n/a | Yes |
| Q48 months, have you had chemotherapy at any of the hospitals named in the covering letter? | | 2 | No | n/a | Yes |
| | Beforehand, did you | 1 | Yes, completely | 1 | Yes |
| | have all of the | 2 | Yes, to some extent | 0 | Yes |
| Q49 | Information you | 3 | No | 0 | Yes |
| | chemotherapy treatment? | 4 | I did not need any information | n/a | No |
| | Once you started your | 1 | Yes, completely | 1 | Yes |
| | treatment, were you | 2 | Yes, to some extent | 0 | Yes |
| Q50 | given enough | 3 | No | 0 | Yes |
| | information about whether your | 4 | It is too early to know if my chemotherapy is working | n/a | Yes |



| Question | Question text | Answer option | Option text | Scoring | Used in suppression |
|----------|--|------------------|--|---------|---------------------|
| | chemotherapy was working in a way you could understand? | 5 | I did not need any information | n/a | No |
| | | 1 | Yes, definitely | 1 | Yes |
| | Did the doctors or | 2 | Yes, to some extent | 0 | Yes |
| | nurses give your | 3 | No | 0 | Yes |
| Q51 | family or someone close to you all the | 4 | No family or friends were involved | n/a | No |
| | needed to help care | 5 | My family or friends did not want or need information | n/a | No |
| | for you at home? | 6 | I did not want my family or friends to be involved | n/a | No |
| | During your cancer | 1 | Yes, definitely | 1 | Yes |
| | treatment, were you | 2 | Yes, to some extent | 0 | Yes |
| | given enougn care | 3 | No | 0 | Yes |
| Q52 | health or social | 4 | I did not need help from health or social services | n/a | No |
| dist | district nurses, home helps or physiotherapists)? | 5 | Don't know / can't remember | n/a | No |
| | Once your cancer | 1 | Yes, definitely | 1 | Yes |
| | treatment finished, | 2 | Yes, to some extent | 0 | Yes |
| | were you given enough care and support from health or social services (for example, district | 3 | No | 0 | Yes |
| Q53 | | 4 | I did not need help from health or social services | n/a | No |
| | | 5 | I am still having treatment | n/a | No |
| | nurses, home helps or physiotherapists)? | 6 | Don't know / can't remember | n/a | No |
| | As far as you know, | 1 | Yes | 1 | Yes |
| | was your GP given | 2 | No | 0 | Yes |
| Q54 | enough information about your condition and the treatment you had at the hospital? | 3 | Don't know / can't remember | n/a | No |
| | Do you think the GPs | 1 | Yes, definitely | 1 | Yes |
| | and nurses at your | 2 | Yes, to some extent | 0 | Yes |
| Q55 | everything they could | 3 | No, they could have done more | 0 | Yes |
| | you were having cancer treatment? | 4 | My general practice was not involved | n/a | No |
| | Did the different | 1 | Yes, always | 1 | Yes |
| 056 | people treating and | 2 | Yes, some of the time | 0 | Yes |
| Q00 | caring for you (such | 3 | No, never | 0 | Yes |
| | as GP, hospital | 4 | Don't know / can't remember | n/a | No |



| Question | Question text | Answer option | Option text | Scoring | Used in suppression |
|--------------------------------|---|------------------|--|----------|---------------------|
| | doctors, hospital nurses, specialist nurses, community nurses) work well together to give you the best possible care? | | | | |
| | | 1 | Yes | 1 | Yes |
| | Have you been given | 2 | No | 0 | Yes |
| Q57 | a care plan? | 3 | I do not know / understand what a care plan is | n/a | No |
| | | 4 | Don't know / can't remember | n/a | No |
| | Overall, how would | 1 | Very good | 1 | Yes |
| | you rate the | 2 | Good | 1 | Yes |
| | administration of your | 3 | Neither good nor bad | 0 | Yes |
| Q58 | the right time doctors | 4 | Quite bad | 0 | Yes |
| | having the right | 5 | Very bad | 0 | Yes |
| notes/tests results, etc.)? | | 6 | Don't know / can't remember | n/a | No |
| Overall, how do you | | 1 | It was much too long | 0 | Yes |
| | feel about the length | 2 | It was a little too long | 0 | Yes |
| 050 | of time you had to | 3 | It was about right | 1 | Yes |
| Q59 | appointments for your cancer treatment? | 4 | Don't know / can't remember | n/a | No |
| | | 1 | Yes | 1 | Yes |
| | Since your diagnosis, has anyone discussed with you whether you would like to take part in cancer research? | 2 | Yes, but I was not eligible to take part | 1 | Yes |
| Q60 | | 3 | No | 0 | Yes |
| | | 4 | No, but I would have liked them to | 0 | Yes |
| | | 5 | Don't know / can't remember | n/a | No |
| | | 0 | | | Yes |
| | | 1 | | | Yes |
| | | 2 | | | Yes |
| | | 3 | | | Yes |
| | Our and the second second | 4 | | Average | Yes |
| Q61 | Overall, how would | 5 | | score is | Yes |
| | you rale your care? | 6 | | used | Yes |
| | | 7 | | | Yes |
| | | 8 | | | Yes |
| | | 9 | | | Yes |
| | | 10 | | | Yes |



| Question | Question text | Answer option | Option text | Scoring | Used in suppression |
|----------|---------------|------------------|-------------|---------|---------------------|
| | | not valid* | | n/a | No |



Appendix B

The table below shows the detailed mapping of 3-digit ICD codes to tumour groups. This has been used throughout the national and local-level reporting of the 2019 results and is an identical mapping to previous years.

| Tumour group | Cancer type (for case mix adjustment) | ICD code | Description |
|------------------|---|-------------------------------------|---|
| Brain / CNS | Brain | C71 | Malignant neoplasm of brain |
| Breast | Breast | C50 | Malignant neoplasm of breast |
| | DCIS | D05 | Carcinoma in situ of breast |
| Colorectal / LGT | Rectal | C19, C20 | Malignant neoplasm of recto-sigmoid junction (C19) and of rectum (C20) |
| | Colon | C18 | Malignant neoplasm of colon |
| | Anal | C21 | Malignant neoplasm of anus and anal canal (C21) |
| | Small intestine | C17 | Malignant neoplasm of small intestine |
| Gynaecological | Ovarian | C56 | Malignant neoplasm of ovary |
| | Endometrial | C54, C55 | Malignant neoplasm of corpus uteri (C54) and of uterus, part unspecified (C55) |
| | Cervical | C53 | Malignant neoplasm of cervix uteri |
| | Vulva / vaginal | C51, C52 | Malignant neoplasm of vulva (C51) and vagina (C52) |
| Haematological | Non-Hodgkins lymphoma | C82, C83, C85 | Follicular [nodular] non-Hodgkin's lymphoma (C82), diffuse non-Hodgkin's lymphoma (C83), other and unspecified types of non-Hodgkin's lymphoma (C85) |
| | Multiple myeloma | C90 | Multiple myeloma and malignant plasma cell neoplasms |
| | Leukaemia | C91, C92, C93, C94, C95 | Lymphoid (C91), myeloid (C92), monocytic (C93), and other leukaemia of specified (C94) and unspecified (C95) cell type |
| | Hodgkins Iymphoma | C81 | Hodgkin's disease |

| Tumour | Cancer type | | |
|------------|------------------------------|-----------------------|---|
| group | (for case mix adjustment) | ICD code | Description |
| Head and | Thyroid | C73 | Malignant neoplasm of thyroid gland |
| Neck | Laryngeal | C32 | Malignant neoplasm of larynx |
| | Oropharyngeal | C01, C09, C10 | Malignant neoplasm of base of tongue (C01), tonsil (C09) and oropharynx (C10) |
| | Oral | C02, C03, C04, C06 | Malignant neoplasm of other / unspecified parts of tongue (C02), gum (C03), floor of mouth (C04) and other parts of mouth (C06) |
| | Parotid | C07, C08 | Malignant neoplasm of parotid gland (C07) and other / unspecified major salivary gland (C08) |
| Lung | Lung | C33, C34 | Malignant neoplasm of trachea (C33) and bronchus and lung (C34) |
| | Mesothelioma | C45 | Mesothelioma |
| Prostate | Prostate | C61 | Malignant neoplasm of prostate |
| Sarcoma | Soft tissue sarcoma | C46, C48, C49 | Karposi's sarcoma (C46). Malignant neoplasm of retroperitoneum and peritoneum (C48) and other connective and soft tissue (C49) |
| | Bone sarcoma | C40, C41 | Malignant neoplasm of bone and articular cartilage of limbs (C40) and of bones and articular cartilage of other and unspecified sites (C41) |
| Skin | Melanoma | C43 | Malignant melanoma of skin |
| Upper | Oesophageal | C15 | Malignant neoplasm of oesophagus |
| Gastro | Stomach | C16 | Malignant neoplasm of stomach |
| | Pancreatic | C25 | Malignant neoplasm of pancreas |
| | Liver | C22 | Malignant neoplasm of liver and intrahepatic bile ducts |
| | Gall bladder | C23 | Malignant neoplasm of gall bladder |
| Urological | Bladder | C67 | Malignant neoplasm of bladder |
| | Renal | C64 | Malignant neoplasm of kidney, except renal pelvis |
| | Penile | C60 | Malignant neoplasm of penis |
| | Testicular | C62 | Malignant neoplasm of testis |
| | Ureteric | C65, C66 | Malignant neoplasm of renal pelvis (C65) and ureter (C66) |

| Tumour group | Cancer type (for case mix adjustment) | ICD code | Description |
|-----------------|---|------------------|--|
| Other | Secondary | C77, C78, C79 | Secondary and unspecified malignant neoplasm of lymph nodes (C77), of respiratory and digestive organs (C78) and of other and unspecified sites (C79) |
| | Any other | | All other codes C00, C05, C11, C12, C13, C14, C24, C26, C30, C31, C37, C38, C39, C47, C57, C58, C63, C68, C69, C70, C72, C74, C75, C76, C80, C86, C88, C96, C97 |



Appendix C

This table lists all questions, excluding the last section (about you) in the questionnaire. Those that were deemed comparable despite changes made have historic results presented in outputs. However these results should be interpreted with caution.

| Question | Question text | Change(s) made | Comparable to 2018 |
|----------|---|----------------------------|-----------------------|
| Q1 | Before you were told you needed to go to hospital about cancer, how many times did you see your GP (family doctor) about the health problem caused by cancer? | | Yes |
| Q2 | How do you feel about the length of time you had to wait before your first appointment with a hospital doctor? | | Yes |
| Q3 | How long was it from the time you first thought something might be wrong with you until you first saw a GP or other doctor? | | Yes |
| Q4 | In the last 12 months have you had diagnostic test(s) for cancer such as an endoscopy, biopsy, mammogram, or scan at one of the hospitals named in the covering letter? | | Yes |
| Q5 | Beforehand, did you have all the information you needed about your test? | Added a response option | No |
| Q6 | Overall, how did you feel about the length of time you had to wait for your test to be done? | | Yes |
| Q7 | Were the results of the test explained in a way you could understand? | | Yes |

| Question | Question text | Change(s) made | Comparable to 2018 |
|----------|--|----------------|-----------------------|
| Q8 | How long ago were you told that you had cancer? | New question | No |
| Q9 | Who told you that you had cancer? (Cross ALL that apply) | New question | No |
| Q10 | When you were first told that you had cancer, had you been told you could bring a family member or friend with you? | | Yes |
| Q11 | How do you feel about the way you were told you had cancer? | | Yes |
| Q12 | Did you understand the explanation of what was wrong with you? | | Yes |
| Q13 | When you were told you had cancer, were you given written information about the type of cancer you had? | | Yes |
| Q14 | Before your cancer treatment started, were your treatment options explained to you? | | Yes |
| Q15 | Were the possible side effects of treatment(s) explained in a way you could understand? | | Yes |
| Q16 | Were you offered practical advice and support in dealing with the side effects of your treatment(s)? | | Yes |

| Question | Question text | Change(s) made | Comparable to 2018 |
|----------|--|-----------------------------|-----------------------|
| Q17 | Before you started your treatment(s), were you also told about any side effects of the treatment that could affect you in the future rather than straight away? | | Yes |
| Q18 | Were you involved as much as you wanted to be in decisions about your care and treatment? | Response options changed | No |
| Q19 | Were you given the name of a Clinical Nurse Specialist who would support you through your treatment? | | Yes |
| Q20 | How easy or difficult has it been for you to contact your Clinical Nurse Specialist? | | Yes |
| Q21 | When you have had important questions to ask your Clinical Nurse Specialist, how often have you got answers you could understand? | | Yes |
| Q22 | Did hospital staff give you information about support or self-help groups for people with cancer? | | Yes |
| Q23 | Did hospital staff discuss with you or give you information about the impact cancer could have on your day to day activities (for example, your work life or education)? | | Yes |
| Q24 | Did hospital staff give you information about how to get financial help or any benefits you might be entitled to? | | Yes |
| Q25 | Did hospital staff tell you that you could get free prescriptions? | | Yes |
| Q26 | During the last 12 months, have you had an operation (such as removal of a tumour or lump) at one of the hospitals named in the covering letter? | | Yes |

| Question | Question text | Change(s) made | Comparable to 2018 |
|----------|---|---|-----------------------|
| Q27 | Beforehand, did you have all the information you needed about your operation? | | Yes |
| Q28 | After the operation, did a member of staff explain how it had gone in a way you could understand? | | Yes |
| Q29 | During the last 12 months, have you stayed overnight for cancer care at one of the hospitals named in the covering letter? | Question text changed | No |
| Q30 | Did hospital staff talk in front of you as if you weren't there? | Question text changed. Filter question changed (Q29) | No |
| Q31 | Did you have confidence and trust in the doctors treating you? | Filter question changed (Q29) | No |
| Q32 | If your family or someone else close to you wanted to talk to a doctor, were they able to? | Filter question changed (Q29) | No |
| Q33 | Did you have confidence and trust in the ward nurses treating you? | Filter question changed (Q29) | No |
| Q34 | In your opinion, were there enough nurses on duty to care for you in hospital? | Filter question changed (Q29) | No |
| Q35 | While you were in hospital did hospital staff ask you what name you prefer to be called by? | Question text changed. Filter question changed (Q29) | No |
| Q36 | Were you given enough privacy when discussing your condition or treatment? | Filter question changed (Q29) | No |
| Q37 | During your hospital visit, did you find someone on the hospital staff to talk to about your worries and fears? | Filter question changed (Q29) | No |

| Question | Question text | Change(s) made | Comparable to 2018 |
|----------|---|----------------------------------|-----------------------|
| Q38 | Do you think the hospital staff did everything they could to help control your pain? | Filter question changed (Q29) | No |
| Q39 | Overall, did you feel you were treated with respect and dignity while you were in the hospital? | Filter question changed (Q29) | No |
| Q40 | Were you given clear written information about what you should or should not do after leaving hospital? | Filter question changed (Q29) | No |
| Q41 | Did hospital staff tell you who to contact if you were worried about your condition or treatment after you left hospital? | Filter question changed (Q29) | No |
| Q42 | During the last 12 months, have you been treated as an outpatient or day case for cancer care at one of the hospitals named in the covering letter? | | Yes |
| Q43 | While you were being treated as an outpatient or day case, did you find someone on the hospital staff to talk to about your worries and fears? | | Yes |
| Q44 | The last time you had an outpatients appointment with a cancer doctor, did they have the right documents, such as medical notes, x-rays and test results? | | Yes |
| Q45 | During the last 12 months, have you had radiotherapy at any of the hospitals named in the covering letter? | | Yes |
| Q46 | Beforehand, did you have all of the information you needed about your radiotherapy treatment? | | Yes |
| Q47 | Once you started your treatment, were you given enough information about whether your radiotherapy was working in a way you could understand? | | Yes |

| Question | Question text | Change(s) made | Comparable to 2018 |
|----------|--|----------------|-----------------------|
| Q48 | During the last 12 months, have you had chemotherapy at any of the hospitals named in the covering letter? | | Yes |
| Q49 | Beforehand, did you have all of the information you needed about your chemotherapy treatment? | | Yes |
| Q50 | Once you started your treatment, were you given enough information about whether your chemotherapy was working in a way you could understand? | | Yes |
| Q51 | Did the doctors or nurses give your family or someone close to you all the information they needed to help care for you at home? | | Yes |
| Q52 | During your cancer treatment, were you given enough care and support from health or social services (for example, district nurses, home helps or physiotherapists)? | | Yes |
| Q53 | Once your cancer treatment finished, were you given enough care and support from health or social services (for example, district nurses, home helps or physiotherapists)? | | Yes |
| Q54 | As far as you know, was your GP given enough information about your condition and the treatment you had at the hospital? | | Yes |
| Q55 | Do you think the GPs and nurses at your general practice did everything they could to support you while you were having cancer treatment? | | Yes |

| Question | Question text | Change(s) made | Comparable to 2018 |
|----------|---|----------------------------|-----------------------|
| Q56 | Did the different people treating and caring for you (such as GP, hospital doctors, hospital nurses, specialist nurses, community nurses) work well together to give you the best possible care? | Response option removed | No |
| Q57 | Have you been given a care plan? | | Yes |
| Q58 | Overall, how would you rate the administration of your care (getting letters at the right time, doctors having the right notes/tests results, etc.)? | | Yes |
| Q59 | Overall, how do you feel about the length of time you had to wait when attending clinics and appointments for your cancer treatment? | | Yes |
| Q60 | Since your diagnosis, has anyone discussed with you whether you would like to take part in cancer research? | Added a response option | Yes |
| Q61 | Overall, how would you rate your care? | | Yes |