National Cancer Patient Experience Survey 2022

Key Driver Analysis for a High Rating of Care

Contents

This report sets out the results from the key driver analysis only. Detailed national, alliance, system-level and trust-level results are available at www.ncpes.co.uk
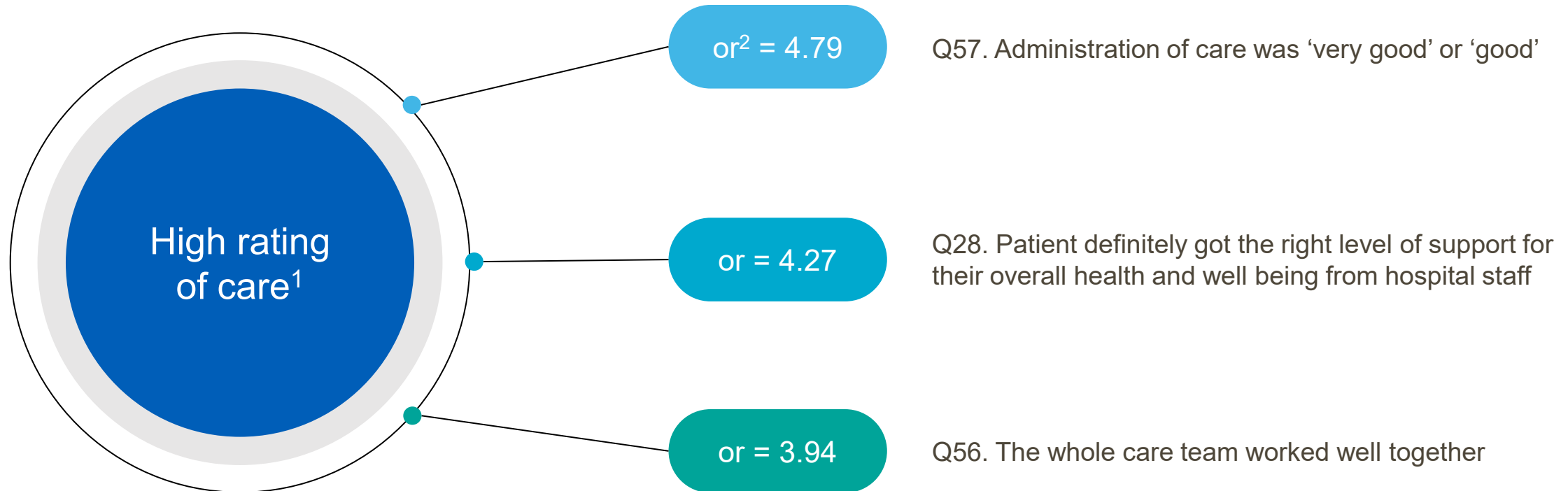
An interactive reporting tool allowing you to explore the survey data in more detail is available at www.ncpes.co.uk/interactive-results

1 Top three key drivers of a high rating of care

This national level key driver analysis looked to understand which factors are correlated with a high rating of care in the Cancer Patient Experience Survey 2022. The three questions identified as having the strongest relationship with a high rating of care, as determined by the highest odds ratios seen, are below.

High rating of care[1]

$or^2 = 4.79$ — Q57. Administration of care was 'very good' or 'good'

$or = 4.27$ — Q28. Patient definitely got the right level of support for their overall health and well being from hospital staff

$or = 3.94$ — Q56. The whole care team worked well together

For key driver analysis focused on understanding whether there are differences among patients with certain characteristics in what drives a high rating of care please see this report.

[1] A high rating of care was identified as score of 9-10 on Q59 'Overall, how would you rate your care?'
[2] The odds ratio (or) in logistic regression quantifies the relationship between the probability of the presence of an outcome and one of its predictors. It represents the odds of the outcome occurring given a unit change in the predictor variable. If the odds ratio is greater than 1, it indicates that the likelihood of the outcome increases as the predictor variable increases. Conversely, if the odds ratio is less than 1, it suggests that the likelihood of the outcome decreases as the predictor variable increases.

2 About the Cancer Patient Experience Survey

About the Cancer Patient Experience Survey

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Introduction

The National Cancer Patient Experience Survey 2022 was the twelfth iteration of the survey first undertaken in 2010. It has been designed to monitor national progress on experience of cancer care; to provide information to drive local quality improvements; to assist commissioners and providers of cancer care; and to inform the work of the various charities and stakeholder groups supporting cancer patients.

The questionnaire was reviewed in 2021 to reflect changes to cancer services and commitments to cancer care as detailed in the NHS Long Term Plan which is available at www.longtermplan.nhs.uk/online-version/.

The survey was overseen by a National Cancer Patient Experience Survey Advisory Group. This group advises on the principles and objectives of the survey programme and supports questionnaire development.

The survey was commissioned and managed by NHS England. The survey provider, Picker, was responsible for technical design, implementation and analysis of the survey.

The 2022 survey involved 133 NHS trusts. Out of 115,662 people, 61,268 people responded to the survey, yielding a response rate of 53%.

Eligibility

The sample for the survey included all adult (aged 16 and over) NHS patients, with a confirmed primary diagnosis of cancer, discharged from an NHS trust after an inpatient episode or day case attendance for cancer related treatment in the months of April, May and June 2022.

Fieldwork

The fieldwork for the survey was undertaken between November 2022 and February 2023.

Survey methods

The survey used a mixed mode methodology. Questionnaires were sent by post, with two reminders where necessary, but also included an option to complete the questionnaire online.

A Freephone helpline and email were available for respondents to opt out, ask questions about the survey, enable them to complete their questionnaire over the phone and provide access to a translation and interpreting facility for those whose first language was not English.

For more information on the methodology and to explore results in detail visit www.ncpes.co.uk.

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Scoring methodology

Sixty-one questions from the questionnaire are scored, as these questions relate directly to patient experience. These scored questions are referred to as evaluative questions throughout this report.

For all but one question (Q59), scores are presented as the percentage of positive responses out of all scored responses. For Q59, respondents rated their overall care on a scale of 0 to 10, of which the average was calculated for this question's presented score.

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

Please note that following a review of the scoring methodology, a change was made to the scoring of Q12 such that the response option "No, I was told by letter or email" is no longer considered neutral and is now scored as negative.

Glossary of key terms and definitions

A glossary of key terms and definitions can be found in the Technical appendix.

3 Key Driver Analysis – What it is and how it works

Key Driver Analysis – What it is and how it works

What is key driver analysis?

Key driver analysis is used to identify what factors or 'drivers' are associated with a specific outcome. In this case, we wanted to carry out national level analysis to understand which factors are correlated with a high rating of care in the Cancer Patient Experience Survey 2022. A subgroup level key driver analysis, also using data from 2022, has since been carried out to understand whether there are differences among patients with certain characteristics.
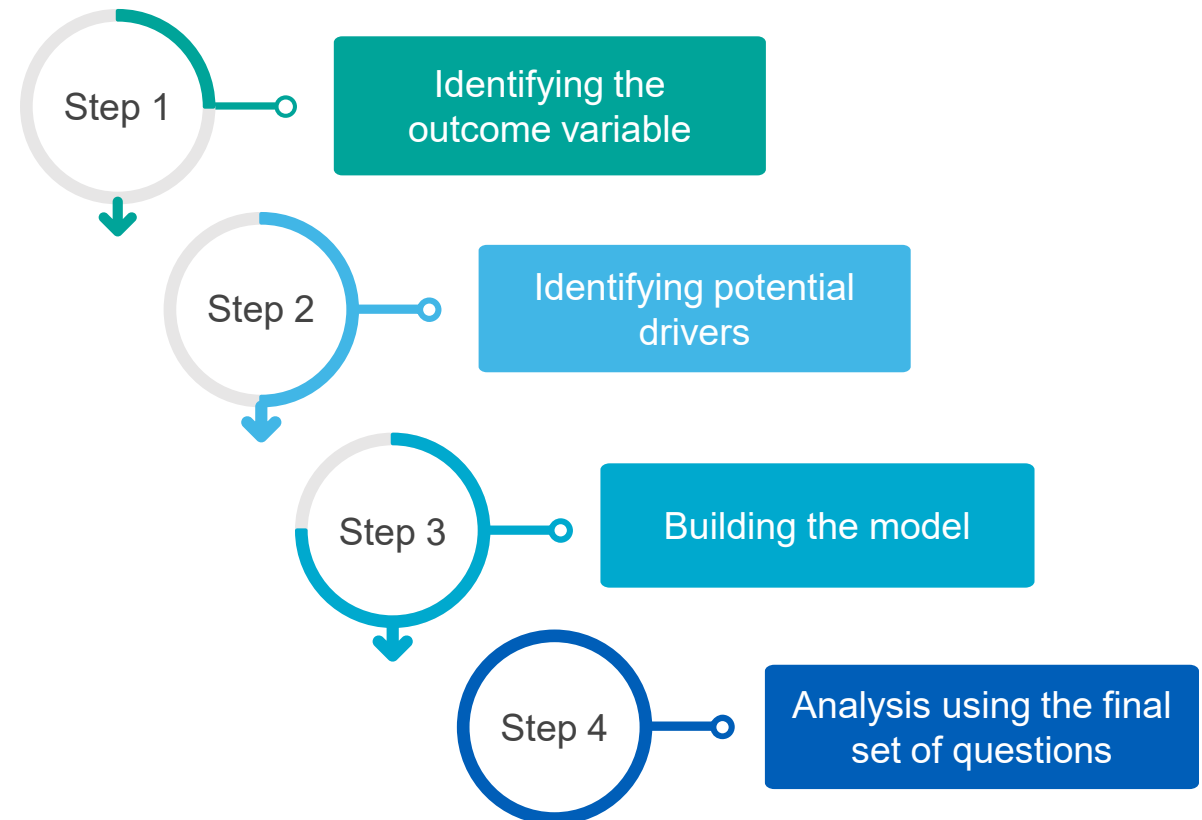
Key driver analysis is useful in guiding improvement efforts however it is important to note that this correlation does not imply causation.

The main objectives of this key driver analysis were:

- Through secondary analysis of data from the Cancer Patient Experience Survey 2022, explore which questions are most strongly associated with a high rating of care.

- Using national level analysis, support local prioritisation of improvements on aspects that drive a high rating of care.

- Use the findings from the analysis to inform topics of focus by the NHS England Cancer Experience of Care Improvement Collaborative.

- Produce a national level analysis that can be built on in the future to explore how priorities may differ by subgroup.

- Update insight gathered from key driver analysis[1] carried out on data from the National Cancer Patient Experience Survey 2015.

How does key driver analysis work?

A logistic regression that evaluated the relationship between questions in the Cancer Patient Experience Survey 2022 was used. The four main steps to this process are outlined below. Further information about each of these steps is included on the next page.

Step 1 — Identifying the outcome variable

Step 2 — Identifying potential drivers

Step 3 — Building the model

Step 4 — Analysis using the final set of questions

[1] Gomez-Cano M, Lyratzopoulos G, Abel GA. Patient Experience Drivers of Overall Satisfaction With Care in Cancer Patients: Evidence From Responders to the English Cancer Patient Experience Survey. J Patient Exp. 2020 Oct;7(5):758-765. doi: 10.1177/2374373519889435. Epub 2019 Nov 25. PMID: 33294612; PMCID: PMC7705845.

Step 1. Identifying the outcome variable

Here, we chose the outcome variable (or dependent variable) from the list of questions included in the Cancer Patient Experience Survey 2022 questionnaire.

The classification for a high rating of care was also determined.

See section four for more information on the outcome variable.

Step 2. Identifying potential drivers

Here we chose an initial list of survey questions (or independent variables) that acted as our potential drivers. Selection of these questions was based on the following criteria:

- Questions should be evaluative. These are the questions that ask patients about the quality of their experience.

- Questions should have a low level of item non-response. Item non-response is where respondents miss a question. Similarly, it is important to only include questions which are applicable to the majority of respondents, as opposed to questions relevant to only a subset of people (such as those who have received a particular treatment). This both helps to ensure that there is a suitable level of data for our analysis and that where strong associations are found, we are highlighting the key drivers that are most important to the majority of people accessing cancer services.

- Questions should have a low level of neutral responses such as 'Don't know / can't remember'.

Step 3. Building the model

Once the outcome variable and the initial list of survey questions (or independent variables) was confirmed, the logistic regression model was built and tested.

Here we ran different iterations of the model to find an optimal fit. A balance needed to be struck between the number of questions included in the analysis and the number of cases included. The more cases included in the analysis the more confident we can be that the results are representative of the national picture.

This process resulted in a number of the chosen questions being excluded. One reason for exclusion was where a high p-value was found indicating no effect of the question on the outcome variable.

Step 4. Analysis using the final set of questions

Once testing of the logistic regression model was complete the final analysis was run using the questions seen in section five.

The relationship between a high rating of care and each of the drivers was presented using regression coefficients. A regression coefficient is a statistical measure of the strength of a linear relationship between two variables.
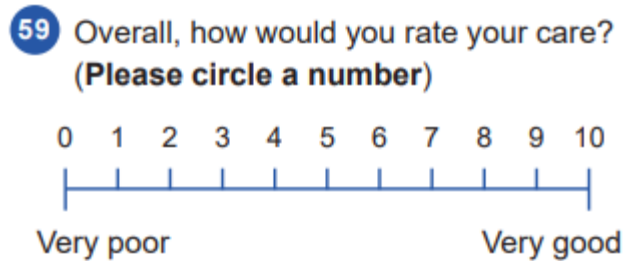
The full set of evaluative questions not selected and reasons for exclusion can be found in the technical appendix.

4

What we mean by a high rating of care

What is our outcome (or dependent) variable?

For this analysis it was decided that the outcome was a high rating of care as identified by Q59 on the questionnaire.

59 Overall, how would you rate your care?
(**Please circle a number**)

0 1 2 3 4 5 6 7 8 9 10

Very poor   Very good

The chart to the right shows the 2022 results for this question.

How to determine a high rating of care?

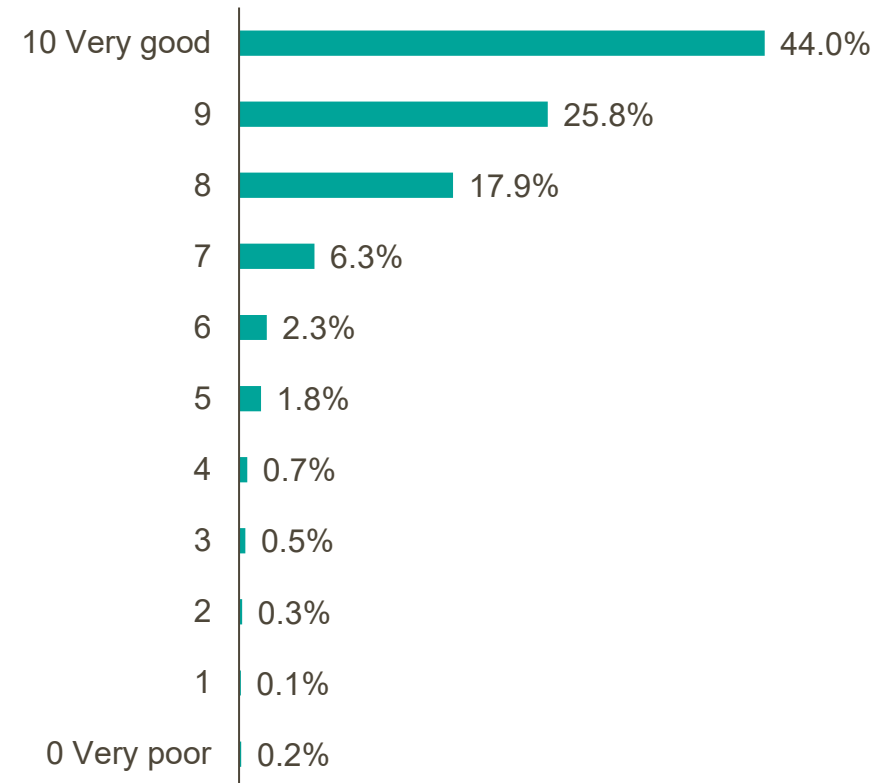To determine the classification of a high rating of care we were informed by:

• A review of the results from the 2022 survey for Q59

• Secondary analysis carried out on content of Cancer Patient Experience Survey free text comments in relation to scores provided to the overall rating of care question

• The approach taken by other validated national patient experience surveys that use the same or a similar question (such as the CQC NHS Patient Survey Programme)

• The net promoter score used across customer experience

The high rating of care classification used in this analysis

As a result of this review, it was agreed that a high rating of care would be classified by a **score of 9-10** on the response scale.

A binary version of Q59 with the groups 0-8 and 9-10 was derived and used as the outcome variable in the analysis.

Q59 'Overall, how would you rate your care? (scale from 0 to 10)'

Score	Percentage
10 Very good	44.0%
9	25.8%
8	17.9%
7	6.3%
6	2.3%
5	1.8%
4	0.7%
3	0.5%
2	0.3%
1	0.1%
0 Very poor	0.2%

5 Independent variables used in the final analysis

Included evaluative questions

In total, 10 evaluative questions out of 60 were included in the final analysis.

The tables on the next few pages provide detail of each of the included questions, the questionnaire section they feature in, whether they are a routed question (that is a question that is not applicable to all due to an earlier filter question), and the reason for inclusion.

Proportion of evaluative questions within each questionnaire section included in the final analysis

The table on the right shows the proportion of evaluative questions within each questionnaire section included in the final analysis.

Due to the selection process outlined in section 3, some questionnaire sections had higher coverage than others. For example, 50% of evaluative questions in section 'Care from your GP practice' were included in the analysis whereas no questions from section 'Diagnostic tests' were included.

Excluded evaluative questions

The full set of evaluative questions not selected and reasons for exclusion can be found in the technical appendix.

Questionnaire section	Number of questions in each section included	% of section included
01. Support from your GP practice	0	0%
02. Diagnostic tests	0	0%
03. Finding out you had cancer	2	40%
04. Support from a main contact person	1	33%
05. Deciding on the best treatment	1	25%
06. Care Planning	0	0%
07. Support from hospital staff	1	33%
08. Hospital care	0	0%
09. Your treatment	1	9%
10. Immediate and long term side effects	1	20%
11. Support while at home	0	0%
12. Care from your GP practice	1	50%
13. Living with and beyond cancer	0	0%
14. Your overall NHS care	2	67%

Independent variables used in the final analysis

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Evaluative questions selected and reasons for inclusion

Question number	Question reporting text	Questionnaire section	Routed question?	Reason for inclusion
Q13	Patient was definitely told sensitively that they had cancer	03. Finding out you had cancer	No	Question asked to all respondents. Over 90% scored variable response. Observed odds ratio seen as statistically significant indicating that the question has a significant effect on the outcome variable.
Q14	Cancer diagnosis explained in a way the patient could completely understand	03. Finding out you had cancer	No	Question asked to all respondents. Over 90% scored variable response. Observed odds ratio seen as statistically significant indicating that the question has a significant effect on the outcome variable.
Q17	Patient had a main point of contact within the care team	04. Support from a main contact person	No	Question asked to all respondents. Over 90% scored variable response. Observed odds ratio seen as statistically significant indicating that the question has a significant effect on the outcome variable.
Q21	Patient was definitely involved as much as they wanted to be in decisions about their treatment	05. Deciding on the best treatment	No	Question asked to all respondents. Over 90% scored variable response. Observed odds ratio seen as statistically significant indicating that the question has a significant effect on the outcome variable.
Q28	Patient definitely got the right level of support for their overall health and well being from hospital staff	07. Support from hospital staff	No	Question asked to all respondents. Over 90% scored variable response. Observed odds ratio seen as statistically significant indicating that the question has a significant effect on the outcome variable.

Independent variables used in the final analysis

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Evaluative questions selected and reasons for inclusion

Question number	Question reporting text	Questionnaire section	Routed question?	Reason for inclusion
Q43	Patient felt the length of waiting time at clinic and day unit for cancer treatment was about right	09. Your treatment	No	Question asked to all respondents. Over 90% scored variable response. Observed odds ratio seen as statistically significant indicating that the question has a significant effect on the outcome variable.
Q44	Possible side effects from treatment were definitely explained in a way the patient could understand	10. Immediate and long term side effects	No	Question asked to all respondents. Over 90% scored variable response. Observed odds ratio seen as statistically significant indicating that the question has a significant effect on the outcome variable.
Q52	Patient has had a review of cancer care by GP practice	12. Care from your GP practice	No	Question asked to all respondents. Over 90% scored variable response. Observed odds ratio seen as statistically significant indicating that the question has a significant effect on the outcome variable.
Q56	The whole care team worked well together	14. Your overall NHS care	No	Question asked to all respondents. Over 90% scored variable response. Observed odds ratio seen as statistically significant indicating that the question has a significant effect on the outcome variable.
Q57	Administration of care was very good or good	14. Your overall NHS care	No	Question asked to all respondents. Over 90% scored variable response. Observed odds ratio seen as statistically significant indicating that the question has a significant effect on the outcome variable.

6   Results

Results

Each of the ten questions included in the analysis had an observed odds ratio (or)[1] greater than one and that was statistically significant. This tells us that as the positive score on one of these questions increases the likelihood of a high rating of care also increases.

The three questions identified as having the strongest relationship with a high rating of care, as determined by the highest odds ratios seen, are below. The results for the full set of questions included in the analysis can be found in the rest of this section.

Q57 Administration of care was 'very good' or 'good' (or = 4.79)

Q28 Patient definitely got the right level of support for their overall health and well being from hospital staff (or = 4.27)

Q56 The whole care team worked well together (or = 3.94)

As noted previously, this study updates insight gathered from key driver analysis carried out on data from the National Cancer Patient Experience Survey 2015. Whilst the questionnaire has since been updated, the 2015 analysis also found questions focussed on care administration and team working to be strong predictors of a positive overall care rating.

[1] The odds ratio (or) in logistic regression quantifies the relationship between the probability of the presence of an outcome and one of its predictors. It represents the odds of the outcome occurring given a unit change in the predictor variable. If the odds ratio is greater than 1, it indicates that the likelihood of the outcome increases as the predictor variable increases. Conversely, if the odds ratio is less than 1, it suggests that the likelihood of the outcome decreases as the predictor variable increases.

Results

Question number	Question reporting text	Questionnaire section	P value[1]	Odds ratios[1]	Lower 95% Confidence Interval[2]	Upper 95% Confidence Interval[2]
Q57	Administration of care was very good or good	14. Your overall NHS care	0.00	4.79	4.42	5.19
Q28	Patient definitely got the right level of support for their overall health and well being from hospital staff	07. Support from hospital staff	0.00	4.27	4.03	4.53
Q56	The whole care team worked well together	14. Your overall NHS care	0.00	3.94	3.61	4.31
Q43	Patient felt the length of waiting time at clinic and day unit for cancer treatment was about right	09. Your treatment	0.00	2.05	1.93	2.17
Q44	Possible side effects from treatment were definitely explained in a way the patient could understand	10. Immediate and long term side effects	0.00	1.96	1.84	2.07

[1] The p-value associated with the odds ratio indicates whether the observed odds ratio is statistically significant or not. It tests the null hypothesis that the true odds ratio is equal to 1 (indicating no effect of the predictor variable on the outcome variable). A low p-value typically less than 0.05 at a confidence level of 95% suggests that the observed odds ratio is statistically significant, meaning that there is evidence to reject the null hypothesis and conclude that the predictor variable has a significant effect on the outcome variable.

[2] The 95% confidence interval (CI) is used to estimate the precision of the odds ratio. A large CI indicates a low level of precision of the odds ratio, whereas a small CI indicates a higher precision of the odd ratio

Question number	Question reporting text	Questionnaire section	P value[1]	Odds ratios[1]	Lower 95% Confidence Interval[2]	Upper 95% Confidence Interval[2]
Q21	Patient was definitely involved as much as they wanted to be in decisions about their treatment	05. Deciding on the best treatment	0.00	1.79	1.68	1.91
Q17	Patient had a main point of contact within the care team	04. Support from a main contact person	0.00	1.46	1.33	1.6
Q14	Cancer diagnosis explained in a way the patient could completely understand	03. Finding out you had cancer	0.00	1.41	1.32	1.5
Q13	Patient was definitely told sensitively that they had cancer	03. Finding out you had cancer	0.00	1.35	1.27	1.44
Q52	Patient has had a review of cancer care by GP practice	12. Care from your GP practice	0.00	1.14	1.07	1.22

[1] The p-value associated with the odds ratio indicates whether the observed odds ratio is statistically significant or not. It tests the null hypothesis that the true odds ratio is equal to 1 (indicating no effect of the predictor variable on the outcome variable). A low p-value typically less than 0.05 at a confidence level of 95% suggests that the observed odds ratio is statistically significant, meaning that there is evidence to reject the null hypothesis and conclude that the predictor variable has a significant effect on the outcome variable.

[2] The 95% confidence interval (CI) is used to estimate the precision of the odds ratio. A large CI indicates a low level of precision of the odds ratio, whereas a small CI indicates a higher precision of the odd ratio

7 Technical appendix

Glossary

Evaluative questions: These are questions that ask patients about the quality of their experience. They are also referred to as scored questions.

Independent variables: The independent variables in this analysis are the evaluative questions selected as potential drivers. Key driver analysis measures the relative importance of independent variables (the evaluative questions) in contributing to the outcome variable (a high rating of care).

Key driver analysis: Key driver analysis is a statistical technique that is used to identify what factors or 'drivers' are associated with a specific outcome. This report covers work to understand key drivers of a high rating of care at a national level. Following this, subgroup level key driver analysis was carried out to understand whether there are differences among patients with certain characteristics in what drives a high rating of care.

Missing data: Missing data in this analysis included responses classed as non-specific or neutral (such as where "not applicable" or "Don't know / can't remember" are used) and item non-response (the proportion of missing responses to a question) for example where a question is skipped.

95% confidence interval: The 95% confidence interval (CI) is used to estimate the precision of the odds ratio. A large CI indicates a low level of precision of the odds ratio, whereas a small CI indicates a higher precision of the odd ratio.

Outcome variable: This is also referred to as the dependent variable and was the focus of analysis. We wanted to understand which factors were correlated with the outcome variable a high rating of care.

P value: The p-value associated with the odds ratio indicates whether the observed odds ratio is statistically significant or not. It tests the null hypothesis that the true odds ratio is equal to 1 (indicating no effect of the predictor variable on the outcome variable). A low p-value typically less than 0.05 at a confidence level of 95% suggests that the observed odds ratio is statistically significant, meaning that there is evidence to reject the null hypothesis and conclude that the predictor variable has a significant effect on the outcome variable.

The odds ratio: The odds ratio (or) in logistic regression quantifies the relationship between the probability of the presence of an outcome and one of its predictors. It represents the odds of the outcome occurring given a unit change in the predictor variable.

If the odds ratio is greater than 1, it indicates that the likelihood of the outcome increases as the predictor variable increases. Conversely, if the odds ratio is less than 1, it suggests that the likelihood of the outcome decreases as the predictor variable increases.

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Considerations and limitations

Correlation vs Causation: Key driver analysis provides insights into variable relationships, helping identify factors for positive care ratings. However, its crucial to note that correlation does not imply causation and establishing direct causation is challenging.

Assumption of linearity: The model used assumes linearity, implying that a change in an individual question score corresponds to a constant change in the overall care score. Caution is needed when inferring causation and linearity solely from key drivers, as improvements in highlighted areas may not consistently guarantee a positive impact on overall care ratings.

Confounding factors: Confounding variables, such as cancer type or English not being a patient's first language, may lead to biased or misleading results, hindering accurate insights into patient care improvements.

Guided quality improvement: Despite the challenge in establishing causation, key driver analysis can help design targeted quality improvement strategies by suggesting that improving closely related areas may have a beneficial effect on overall care ratings.

Level of reporting: The aim of this work was to produce a national level analysis focussed on key drivers of a high rating of care. Regional and sub-group differences were not explored. How priorities may differ by region or sub-group are areas for potential future exploration.

Evaluative questions not selected

The full set of evaluative questions not selected and reasons for exclusion can be found on the following pages.

Excluding certain questions introduces the risk of **omitted variable bias**, potentially skewing or biasing the relationships among included variables. This lack of completeness in the model may lead to overestimation or underestimation of coefficients, affecting the accuracy of results.

Whilst a number of questions were not included in the analysis it does not mean that they cover topics that are of less importance to people with cancer. It is important to remember that the questionnaire for the Cancer Patient Experience Survey has been designed to measure what matters to people and to deliver actionable insights for quality improvement, service evaluation and assessment, and for supporting patient choice.

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Evaluative questions not selected and reasons for exclusion

Question number	Question reporting text	Questionnaire section	Routed question?	Reason for exclusion
Q02	Patient only spoke to primary care professional once or twice before cancer diagnosis	01. Support from your GP practice	Yes	Only answered by those that contacted GP practice when they first thought something might be wrong.
Q03	Referral for diagnosis was explained in a way the patient could completely understand	01. Support from your GP practice	Yes	Only answered by those that contacted GP practice when they first thought something might be wrong.
Q05	Patient received all the information needed about the diagnostic test in advance	02. Diagnostic tests	Yes	Only answered by those who had a diagnostic test in the last 12 months.
Q06	Diagnostic test staff appeared to completely have all the information they needed about the patient	02. Diagnostic tests	Yes	Only answered by those who had a diagnostic test in the last 12 months.
Q07	Patient felt the length of time waiting for diagnostic test results was about right	02. Diagnostic tests	Yes	Only answered by those who had a diagnostic test in the last 12 months.

Evaluative questions not selected and reasons for exclusion

Question number	Question reporting text	Questionnaire section	Routed question?	Reason for exclusion
Q08	Diagnostic test results were explained in a way the patient could completely understand	02. Diagnostic tests	Yes	Only answered by those who had a diagnostic test in the last 12 months.
Q09	Enough privacy was always given to the patient when receiving diagnostic test results	02. Diagnostic tests	Yes	Only answered by those who had a diagnostic test in the last 12 months..
Q12	Patient was told they could have a family member, carer or friend with them when told diagnosis	03. Finding out you had cancer	No	Observed odds ratio not seen as statistically significant. Indicates that the question does not have a significant effect on the outcome variable.
Q15	Patient was definitely told about their diagnosis in an appropriate place	03. Finding out you had cancer	No	Observed odds ratio not seen as statistically significant. Indicates that the question does not have a significant effect on the outcome variable
Q16	Patient was told they could go back later for more information about their diagnosis	03. Finding out you had cancer	No	Observed odds ratio not seen as statistically significant. Indicates that the question does not have a significant effect on the outcome variable

Evaluative questions not selected and reasons for exclusion

Question number	Question reporting text	Questionnaire section	Routed question?	Reason for exclusion
Q18	Patient found it very or quite easy to contact their main contact person	04. Support from a main contact person	Yes	Only answered by those with a main contact person
Q19	Patient found advice from main contact person was very or quite helpful	04. Support from a main contact person	Yes	Only answered by those with a main contact person
Q20	Treatment options were explained in a way the patient could completely understand	05. Deciding on the best treatment	No	Observed odds ratio not seen as statistically significant. Indicates that the question does not have a significant effect on the outcome variable
Q22	Family and/or carers were definitely involved as much as the patient wanted them to be in decisions about treatment options	05. Deciding on the best treatment	No	Observed odds ratio not seen as statistically significant. Indicates that the question does not have a significant effect on the outcome variable
Q23	Patient could get further advice or a second opinion before making decisions about their treatment options	05. Deciding on the best treatment	No	Asked of all respondents but high level of missing data.

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Evaluative questions not selected and reasons for exclusion

Question number	Question reporting text	Questionnaire section	Routed question?	Reason for exclusion
Q24	Patient was definitely able to have a discussion about their needs or concerns prior to treatment	06. Care Planning	No	Asked of all respondents but high level of missing data.
Q25	A member of their care team helped the patient create a care plan to address any needs or concerns	06. Care Planning	Yes	Only answered by those that before treatment had a discussion with a member of the team looking after them about needs or concerns.
Q26	Care team reviewed the patient's care plan with them to ensure it was up to date	06. Care Planning	Yes	Only answered by those that before treatment had a discussion with a member of the team looking after them about needs or concerns.
Q27	Staff provided the patient with relevant information on available support	07. Support from hospital staff	No	Observed odds ratio not seen as statistically significant. Indicates that the question does not have a significant effect on the outcome variable
Q29	Patient was offered information about how to get financial help or benefits	07. Support from hospital staff	No	Asked of all respondents but high level of missing data.

Evaluative questions not selected and reasons for exclusion

Question number	Question reporting text	Questionnaire section	Routed question?	Reason for exclusion
Q31	Patient had confidence and trust in all of the team looking after them during their stay in hospital	08. Hospital care	Yes	Only answered by those who had an overnight stay at hospital.
Q32	Patient's family, or someone close, was definitely able to talk to a member of the team looking after the patient in hospital	08. Hospital care	Yes	Only answered by those who had an overnight stay at hospital.
Q33	Patient was always involved in decisions about their care and treatment whilst in hospital	08. Hospital care	Yes	Only answered by those who had an overnight stay at hospital.
Q34	Patient was always able to get help from ward staff when needed	08. Hospital care	Yes	Only answered by those who had an overnight stay at hospital.
Q35	Patient was always able to discuss worries and fears with hospital staff	08. Hospital care	Yes	Only answered by those who had an overnight stay at hospital.

Evaluative questions not selected and reasons for exclusion

Question number	Question reporting text	Questionnaire section	Routed question?	Reason for exclusion
Q36	Hospital staff always did everything they could to help the patient control pain	08. Hospital care	Yes	Only answered by those who had an overnight stay at hospital.
Q37	Patient was always treated with respect and dignity while in hospital	08. Hospital care	Yes	Only answered by those who had an overnight stay at hospital.
Q38	Patient received easily understandable information about what they should or should not do after leaving hospital	08. Hospital care	Yes	Only answered by those who had an overnight stay at hospital.
q39	Patient was always able to discuss worries and fears with hospital staff while being treated as an outpatient or day case	08. Hospital care	Yes	Asked of all respondents but high level of missing data.
Q41_1	Beforehand patient completely had enough understandable information about surgery	09. Your treatment	Yes	Only answered by those who have had surgery.

Technical appendix

Evaluative questions not selected and reasons for exclusion

Question number	Question reporting text	Questionnaire section	Routed question?	Reason for exclusion
Q41_2	Beforehand patient completely had enough understandable information about chemotherapy	09. Your treatment	Yes	Only answered by those who have had chemotherapy.
Q41_3	Beforehand patient completely had enough understandable information about radiotherapy	09. Your treatment	Yes	Only answered by those who have had radiotherapy.
Q41_4	Beforehand patient completely had enough understandable information about hormone therapy	09. Your treatment	Yes	Only answered by those who have had hormone therapy.
Q41_5	Beforehand patient completely had enough understandable information about immunotherapy	09. Your treatment	Yes	Only answered by those who have had immunotherapy.
Q42_1	Patient completely had enough understandable information about progress with surgery	09. Your treatment	Yes	Only answered by those who have had surgery.

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Evaluative questions not selected and reasons for exclusion

Question number	Question reporting text	Questionnaire section	Routed question?	Reason for exclusion
Q42_2	Patient completely had enough understandable information about progress with chemotherapy	09. Your treatment	Yes	Only answered by those who have had chemotherapy.
Q42_3	Patient completely had enough understandable information about progress with radiotherapy	09. Your treatment	Yes	Only answered by those who have had radiotherapy.
Q42_4	Patient completely had enough understandable information about progress with hormone therapy	09. Your treatment	Yes	Only answered by those who have had hormone therapy.
Q42_5	Patient completely had enough understandable information about progress with immunotherapy	09. Your treatment	Yes	Only answered by those who have had immunotherapy.
Q45	Patient was always offered practical advice on dealing with any immediate side effects from treatment	10. Immediate and long term side effects	No	Asked of all respondents but high level of missing data.

Evaluative questions not selected and reasons for exclusion

Question number	Question reporting text	Questionnaire section	Routed question?	Reason for exclusion
Q46	Patient was given information that they could access about support in dealing with immediate side effects from treatment	10. Immediate and long term side effects	No	Asked of all respondents but high level of missing data.
Q47	Patient felt possible long-term side effects were definitely explained in a way they could understand in advance of their treatment	10. Immediate and long term side effects	No	Observed odds ratio not seen as statistically significant. Indicates that the question does not have a significant effect on the outcome variable
Q48	Patient was definitely able to discuss options for managing the impact of any long-term side effects	10. Immediate and long term side effects	No	Asked of all respondents but high level of missing data.
Q49	Care team gave family, or someone close, all the information needed to help care for the patient at home	11. Support while at home	No	Asked of all respondents but high level of missing data.
Q50	During treatment, the patient definitely got enough care and support at home from community or voluntary services	11. Support while at home	No	Asked of all respondents but high level of missing data.

Evaluative questions not selected and reasons for exclusion

Question number	Question reporting text	Questionnaire section	Routed question?	Reason for exclusion
Q51	Patient definitely received the right amount of support from their GP practice during treatment	12. Care from your GP practice	No	Asked of all respondents but high level of missing data.
Q53	After treatment, the patient definitely could get enough emotional support at home from community or voluntary services	13. Living with and beyond cancer	No	Asked of all respondents but high level of missing data.
Q54	The right amount of information and support was offered to the patient between final treatment and the follow up appointment	13. Living with and beyond cancer	No	Asked of all respondents but high level of missing data.
Q55	Patient was given enough information about the possibility and signs of cancer coming back or spreading	13. Living with and beyond cancer	No	Asked of all respondents but high level of missing data.
Q58	Cancer research opportunities were discussed with patient	14. Your overall NHS care	No	Asked of all respondents but high level of missing data.

Further information

This research was carried out in accordance with the international standard for organisations conducting social research (accreditation to ISO20252:2012; certificate number GB08/74322). The 2022 survey data has been produced and published in line with the Code of Practice for Official Statistics.

For more information on the methodology and for all other outputs at national, trust, integrated care board and cancer alliance level, please see the PDF reports, Excel tables and dashboards at www.ncpes.co.uk.

For frequently asked questions (FAQs) about the survey, go to www.ncpes.co.uk/faqs/.

This report sets out the results from the key driver analysis only. Detailed national, alliance, system-level and trust-level results are available at www.ncpes.co.uk

An interactive reporting tool allowing you to explore the survey data in more detail is available at www.ncpes.co.uk/interactive-results