

# **Cancer Registration Data Dictionary**

Version 10.2

Date: 3 February 2023





# **Documentation Control Sheet**

Over time, it may be necessary to issue amendments or clarifications to parts of this document. This form must be updated whenever changes are made.

| Version | Summary of<br>Change | Prepared By      | Reviewed By                      |
|---------|----------------------|------------------|----------------------------------|
| 7.0     | Initial draft        | Helen Strongman  | Rachael Williams                 |
| 7.1     | Modified             | Helen Strongman  | Eleanor Yelland                  |
| 8.0     | Modified             | Rachael Williams | Eleanor Yelland                  |
| 8.1     | Modified             | Eleanor Yelland  | Helen Booth                      |
| 9.0     | Modified             | Eleanor Yelland  | Sonia Coton                      |
| 10.0    | Modified             | Eleanor Yelland  | Hilary Shepherd                  |
| 10.1    | Modified             | Hilary Shepherd  | Eleanor Yelland/Susan<br>Hodgson |
| 10.2    | Modified             | Jessie Oyinlola  | Hilary Shepherd                  |

Version 7.0

- Cancer Registration Data dictionary separated from NCRAS documentation. No changes to data structure between set 13 (up to 2014) and set 14 (up to 2015)
- Created separate data documentation and data dictionary files

Version 7.1

• Added tumour identifier to patient file for clarity (this has been available since set 14)

#### Version 8.0

• Refreshed for set 16

#### Version 8.1

- Refreshed for set 17
- Minor updates to variable descriptions

Version 9.0

• Updated for set 18

#### Version 10.0

- Updated for set 19
- Addition of Charlson comorbidity variables
- Minor updates to variable names and re-ordering of variables
- Additional data minimisation variables available
- Addition of code description variables

Version 10.1

- Updated for set 21
- Added variables from v4.3 of the ODR
- Renamed tables in line with ODR, added vitalstatus, vitaldate, creg\_name
- Added DOIs

#### Version 10.2

 Updated list of available variables and descriptions. Removed sex, birthyear, age and fiveyearageband as routinely available as they are available in CPRD primary care data. Removed variables relating to month and year as they are derived from full date variables (diagnosisdatebestmonth, diagnosisdatebestyear from Tumour table, and eventmonth, eventyear from both Tumour and Treatment tables) • Removed set specific information

### DOI

Please cite in any publications using these data:

CPRD GOLD Cancer Registration August 2021 - https://doi.org/10.48329/541y-nh70

CPRD Aurum Cancer Registration August 2021 - https://doi.org/10.48329/5sm7-3209

# 1. Patient demographics

| Column description      | Column name   | Details   | Field<br>Type | Valid Content   |
|-------------------------|---------------|---|---------------|---|
| CPRD patient Identifier | e_patid       | Unique patient identifier based on CPRD<br>primary care data – pseudonymised. In<br>some cases, the same person may have<br>multiple patient IDs.   | NUMBER        | Number  |
| CR patient Identifier   | e_cr_patid    | Unique patient identifier based on NCRAS<br>data patient identifier – pseudonymised. In<br>some cases, the same person may have<br>multiple patient IDs. Patient IDs will be<br>retained even after two patient records are<br>found to be the same person. | NUMBER        | Number  |
| Ethnicity code          | ethnicity     | The 16+1 ethnic data categories defined in<br>the 2001 census is the national mandatory<br>standard for the collection and analysis of<br>ethnicity.  | TEXT          | A = (White) British, B =(White) Irish, C =<br>Any other White background, D = White<br>and Black Caribbean, E = White and Black<br>African, F = White and Asian, G = Any other<br>mixed background, H = Indian, J =<br>Pakistani, K = Bangladeshi, L = Any other<br>Asian background, M = Caribbean, N =<br>African, P = Any other Black background,<br>R = Chinese, S = Any other ethnic group, Z<br>= Not stated,<br>X = Not Known. |
| Ethnicity name          | ethnicityname | Description of the ethnicity variable   | TEXT          |   |

# 2. Tumour diagnosis details

| Column<br>description               | Column name       | Details   | Field Type | Valid Content  |
|-------------------------------------|-------------------|---|------------|--|
| CPRD patient<br>Identifier          | e_patid           | Unique patient identifier based on CPRD primary care<br>data – pseudonymised. In some cases, the same<br>person may have multiple patient IDs.  | NUMBER     | Number   |
| CR patient<br>Identifier            | e_cr_patid        | Unique patient identifier based on NCRAS data –<br>pseudonymised. In some cases, the same person may<br>have multiple patient IDs. Patient IDs will be retained<br>even after two patient records are found to be the<br>same person.   | NUMBER     | Number   |
| CR tumour<br>identifier             | e_cr_id           | Unique tumour identifier based on NCRAS data –<br>pseudonymised. As someone can have more than one<br>tumour a patient can have multiple unique tumour IDs.   | NUMBER     | Number   |
| Diagnosis date                      | diagnosisdatebest | Diagnosis date of the patient, as defined by the<br>UKIACR, per the recommendations from the ENCR.<br>Month and year diagnosis variables are derived from<br>this field.  | DATE       | dd/mm/yyyy   |
| Date of diagnosis<br>check flag     | diagnosisdateflag | Should be used in combination with diagnosisdatebest,<br>should the project require an understanding if the date<br>is imputed. Imputation of dates follows rules agreed by<br>UKACR DQAR sub-group (August 2010). Blank field<br>indicates that date imputation did not occur. | NUMBER     | 0 = Date fully specified, 1<br>= Month and year<br>specified, 2 = Year<br>specified, 3 = 3 = Date<br>less specific than any of<br>above.                               |
| Basis of diagnosis<br>of the tumour | basisofdiagnosis  | Basis of diagnosis of the tumour according to all the data received by the registry.  | NUMBER     | Non-microscopic:<br>0 = Death certificate.<br>1 = Clinical: Diagnosis<br>made before death without<br>(2-7).<br>2 = Clinical investigation:<br>Includes all diagnostic |

|                  |               |   |      | techniques without a tissue<br>diagnosis.<br>4 = Specific tumour<br>markers: Includes<br>biochemical and/or<br>immunological markers<br>which are site specific.  |
|------------------|---------------|---|------|---|
|                  |               |   |      | Microscopic:<br>5 = Cytology: Examination<br>of cells whether from a<br>primary or secondary site,<br>including fluids aspirated<br>using endoscopes or<br>needles. Also including<br>microscopic examination<br>of peripheral blood films<br>and trephine bone marrow<br>aspirates.<br>6 = Histology of a<br>metastases: Includes<br>autopsy specimens.<br>7 = Histology of a primary<br>tumour: Includes all cutting<br>and bone marrow biopsies.<br>Also includes autopsy<br>specimens of a primary<br>tumour.<br>9 = Unknown, e.g. PAS or |
|                  |               |   |      | HISS record only.   |
| Site of neoplasm | site_icd10_o2 | Describes site of origin of the neoplasm. | TEXT | Valid 4 digit ICD-10 codes  |

| (4-character ICD-<br>10-O2 code)                        |                     |   |        | in the range C00-D48 plus<br>D76, E85, O01, Q85 or<br>blank.   |
|---|---------------------|---|--------|--|
| Site of neoplasm<br>(3-character ICD-<br>10-O2 code)    | site_icd10_o2_3char | Describes site of origin of the neoplasm.   | TEXT   | Valid 3 digit ICD-10 codes<br>in the range C00-D48 plus<br>D76, E85, O01, Q85 or<br>blank.   |
| Morphology of the cancer, in the ICD-<br>10-O2 system   | morph_icd10_o2      | Morphology of cancer mapped to ICD-10-O2.   | NUMBER | Number 8000-9990 or<br>blank   |
| Behaviour of the<br>cancer, in the ICD-<br>10-O2 system | behaviour_icd10_o2  | Behaviour of cancer mapped to ICD-10-O2   | TEXT   | 0 = Benign, 1 = Uncertain,<br>2 = In Situ, 3 = Malignant,<br>5 = Micro-Invasive, 6 =<br>Malignant, Metastatic /<br>Secondary Site, 9 =<br>Malignant, Uncertain<br>whether primary or<br>metastatic, X = Unknown /<br>Inapplicable. |
| Site of the cancer                                      | site_coded          | Site code of the cancer, in the coding system that the<br>tumour was originally coded in. The coding system it is<br>coded in is specified in coding_system/_desc. This<br>variable (or site_coded_3char) should be selected if<br>data prior to 1995 are being requested. Site_coded,<br>site_coded_desc, site_coded_3char, coding_system,<br>coding_system_desc, morph_coded,<br>behaviour_coded, behaviour_coded_desc,<br>histology_coded and histology_coded_desc can be<br>provided together to ensure correct interpretation. | TEXT   |  |
| Site coded  | site_coded_desc     | Description of the site code of the cancer  | TEXT   |  |
| 3 digit version of                                      | site_coded_3char    | Three digit version of SITE_CODED. This variable (or  | TEXT   |  |

| site_coded   |                    | site_coded) should be selected if data prior to 1995<br>are being requested. Site_coded, site_coded_desc,<br>site_coded_3char, coding_system,<br>coding_system_desc, morph_coded,<br>behaviour_coded, behaviour_coded_desc,<br>histology_coded and histology_coded_desc can be<br>provided together to ensure correct interpretation. |        |  |
|--|--------------------|---|--------|--|
| The coding<br>system used to<br>register the<br>tumour | coding_system      | The coding system used to register the tumour (e.g.<br>ICD10/O-2). Site_coded, site_coded_desc,<br>site_coded_3char, coding_system,<br>coding_system_desc, morph_coded,<br>behaviour_coded, behaviour_coded_desc,<br>histology_coded and histology_coded_desc can be<br>provided together to ensure correct interpretation.           | NUMBER | 1 = ICD-8,<br>2 = ICD-9,<br>3 = ICD-10/O-2,<br>4 = ICD-10/O-3,<br>5 = ICD-O-3,<br>6 = ICD-7,<br>7 = ICD-8pre1971,<br>8 = ICD-O-2,<br>9 = ICD-O,<br>10 = ICD-O-3 (2011),<br>11 = ICD-10rev4/O-2,<br>12 = MOTNAC,<br>14 = SNOMED/O(TCR),<br>15 = SNOMED/O-1,<br>16 = SNOMED/O-2,<br>17 = SNOMED/O-3. |
| Text description of site of the cancer                 | coding_system_desc | Description of the coding system. Site_coded,<br>site_coded_desc, site_coded_3char, coding_system,<br>coding_system_desc, morph_coded,<br>behaviour_coded, behaviour_coded_desc,<br>histology_coded and histology_coded_desc can be<br>provided together to ensure correct interpretation.  | TEXT   |  |
| Morphology   | morph_coded        | Morphology of the cancer, in the coding system that<br>the tumour was originally coded in, describing the cell<br>type of malignant disease determined before the start   | TEXT   |  |

|                                  |                      | of treatment. The relevance of tumour morphology<br>differs across tumour site. Site_coded,<br>site_coded_desc, site_coded_3char, coding_system,<br>coding_system_desc, morph_coded,<br>behaviour_coded, behaviour_coded_desc,<br>histology_coded and histology_coded_desc can be<br>provided together to ensure correct interpretation. |        |   |
|----------------------------------|----------------------|--|--------|---|
| Numeric<br>behaviour code        | behaviour_coded      | Behaviour of the cancer. Site_coded,<br>site_coded_desc, site_coded_3char, coding_system,<br>coding_system_desc, morph_coded,<br>behaviour_coded, behaviour_coded_desc,<br>histology_coded and histology_coded_desc can be<br>provided together to ensure correct interpretation.  | NUMBER | 0 = Benign,<br>1 = Uncertain,<br>2 = In Situ,<br>3 = Malignant,<br>5 = Micro-Invasive,<br>6 = Malignant, Metastatic /<br>Secondary Site,<br>9 = Malignant, Uncertain<br>whether primary or<br>metastatic,<br>X = Unknown /<br>Inapplicable. |
| Description of<br>behaviour code | behaviour_coded_desc | Description of behaviour code. Site_coded,<br>site_coded_desc, site_coded_3char, coding_system,<br>coding_system_desc, morph_coded,<br>behaviour_coded, behaviour_coded_desc,<br>histology_coded and histology_coded_desc can be<br>provided together to ensure correct interpretation.  | TEXT   |   |
| Histology                        | histology_coded      | Histology code. Site_coded, site_coded_desc,<br>site_coded_3char, coding_system,<br>coding_system_desc, morph_coded,<br>behaviour_coded, behaviour_coded_desc,<br>histology_coded and histology_coded_desc can be<br>provided together to ensure correct interpretation.   | TEXT   | Histology code - combines<br>the morphology and<br>behaviour codes.<br>Name for the histology<br>type, for example clear cell<br>meningioma.  |

| Description of<br>Histology Code            | histology_coded_desc | Description for the coding system for histology.<br>Site_coded, site_coded_desc, site_coded_3char,<br>coding_system, coding_system_desc, morph_coded,<br>behaviour_coded, behaviour_coded_desc,<br>histology_coded and histology_coded_desc can be<br>provided together to ensure correct interpretation. | TEXT   |   |
|---|----------------------|---|--------|---|
| Grade of tumour                             | grade                | Records the grade of the tumour, for tumours that are<br>graded on a simple numeric 1-3 or 1-4 scale. In<br>tumours containing several areas of different grade,<br>the grade of the predominant component is recorded.   | TEXT   | GX = Grade of<br>differentiation is not<br>appropriate or cannot be<br>assessed,<br>G0 = Borderline<br>malignancy,<br>G1 = Well differentiated,<br>G2 = Moderately<br>differentiated,<br>G3 = Poorly differentiated,<br>G4 = Undifferentiated /<br>anaplastic,<br>G5 = T Cell,<br>G6 = B Cell,<br>G7 = Null cell. |
| Size of the largest dimension of the tumour | tumoursize           | Diameter of a tumour in mm, largest if more than one.   | NUMBER | Number or blank   |
| Number of nodes<br>excised                  | nodesexcised         | The number of local and regional nodes reported as being positive.  | NUMBER | Number or blank   |
| Number of nodes involved                    | nodesinvolved        | The number of local and regional nodes examined.  | NUMBER | Number or blank   |
| Tumour count                                | tumourcount          | Count of every tumour associated with this e_cr_patid   | NUMBER | Number  |

| Big tumour count                                       | bigtumourcount | Count of every tumour associated with this e_cr_patid in range C00-97 excluding C44  | NUMBER | Number   |
|--|----------------|--|--------|--|
| Route to diagnosis code                                | route_code     | The code assigned to a route for the purpose of the algorithm. Note: available for cancers diagnosed in 2006-2014. See BJC publication.  | TEXT   |  |
| Finalised route to<br>diagnosis code                   | final_route    | The published route with all dataset types accounted<br>for. Note: available for cancers diagnosed in 2006-<br>2014. See BJC publication.  | TEXT   | Options: DCO, Emergency<br>Presentation, GP Referral,<br>Screening, TWW, Other<br>Outpatient, Inpatient<br>Elective, Unknown   |
| Best 'registry'<br>stage at diagnosis<br>of the tumour | stage_best     | <ul> <li>STAGE_BEST is an NCRAS derived field using a combination of best T, N and M in "t_best", "n_best" and "m_best". Includes Ann Arbor staging for lymphomas. NB: It is not guaranteed that data from the individual t_best, n_best and m_best variables have been combined into this variable, so they should be used in parallel.</li> <li>2013 onwards: updated method that includes some site specific staging e.g. FIGO for gynaecological tumours; Ann Arbor for lymphomas; Rai and/or Binet for Chronic Lymphocytic Leukaemia (CLL), and; ISS for myeloma where available</li> <li>Pre-2013: original stage_best based on TNM staging information</li> </ul> | TEXT   | 0, 0A, 0B, 0C, 0IS = Stage<br>0.<br>1, 1A, 1A1, 1A2, 1A3,<br>1AE, 1AES, 1AEX,<br>1AEXS, 1AS, 1AX, 1B,<br>1B1, 1B2, 1BE, 1BES,<br>1BEX, 1BS, 1BX, 1C, 1C1,<br>1C2, IC3, 1E, 1ES, 1EX,<br>1S, 1X, 1XS = Stage 1.<br>2, 2A, 2A1, 2A2, 2AE,<br>2AES, 2AEX, 2AS, 2AX,<br>2B, 2BE, 2BEX, 2BS, 2BX,<br>2C, 2E, 2ES, 2EX, 2S, 2X<br>= Stage 2.<br>3, 3A, 3A1, 3A1i, 3A1ii,<br>3A2, 3AE, 3AES, 3AEX,<br>3AS, 3AX, 3B, 3BE, 3BES,<br>3BEX, 3BEXS, 3BS, 3BX,<br>3BXS, 3C, 3C1, 3C2, 3D,<br>3E, 3ES, 3EX, 3S, 3X,<br>3XS = Stage 3.<br>4, 4A, 4AE, 4AES, 4AEX, |

| T stage (Best)         | t_best            | Local size of the tumour. T stage flagged by the  | TEXT | 4AEXS, 4AS, 4AX, 4AXS,<br>4B, 4BE, 4BES, 4BEX,<br>4BEXS, 4BS, 4BX, 4BXS,<br>4BS, 4BX, 4BXS, 4C, 4E,<br>4ES, 4EX, 4EXS, 4S, 4X =<br>Stage 4.<br>A, B, C = RaiBinet stage<br>5 = Outdated or invalid<br>code<br>6 = not stageable.<br>? = insufficient information.<br>U = unstageable.<br>X = not staged.<br>UICC code |
|------------------------|-------------------|---|------|---|
|                        |                   | registry as the best.   |      |   |
| N stage (Best)         | n_best            | How far the tumour has grown through local tissues<br>and distant spread of disease with involvement of<br>lymph nodes. N stage flagged by the registry as the<br>best. | TEXT | UICC code   |
| M stage (Best)         | m_best            | Metastases to other organs. M stage flagged by the registry as the best.  | TEXT | UICC code   |
| Stage system<br>(Best) | stage_best_system | Version of the TNM classification of malignant cancers<br>used to stage the tumour for the best TNM values.<br>Staging system associated with stage_best.               | TEXT | 5th, 6th, 7th, 8th,<br>UICC5, UICC6, UICC7,<br>UICC8<br>AJCC7, AJCC8,<br>ENETS 2007,<br>ANNARBOR,<br>FIGO,<br>ISS,<br>RaiBinet,<br>UNKNOWN  |

| T stage (pre-<br>treatment)                            | t_img            | The UICC code which classifies the size and extent of the primary tumour before treatment.   | TEXT   | UICC code  |
|--|------------------|--|--------|--|
| N stage (pre-<br>treatment)                            | n_img            | The UICC code which classifies the absence or<br>presence and extent of regional lymph node<br>metastases before treatment   | TEXT   | UICC code<br>+, 0, 1, 1a, 1b, 1c, 1mi, 2,<br>2a, 2b, 2c, 3, 3a, 3b, 3c, X  |
| M stage (pre-<br>treatment)                            | m_img            | The UICC code which classifies the absence or presence of distant metastases pre-treatment   | TEXT   | 0 = no distant metastasis<br>1, 1a, 1b, 1c, 1e = distant<br>metastasis<br>X = unknown  |
| Stage at diagnosis<br>(derived from<br>imaging)        | stage_img        | Combination of imaging T, N and M in "t_img", "n_img"<br>and "m_img". Includes Ann Arbor staging for<br>lymphomas. NB: It is not guaranteed that data from the<br>individual t_img, n_img and m_img variables have<br>been combined into this variable, so they should be<br>used in parallel. | TEXT   | 0, 1, 1A, 1A1, 1A2, 1B,<br>1B1, 1B2, 1C, 1E, 2, 2A,<br>2A1, 2A2, 2B, 2C, 2E, 2S,<br>3, 3A, 3B, 3C, 3E, 3S, 4,<br>4A, 4B, 4C, 4S, 6, ?<br>U, X                                    |
| System used to<br>record imaging<br>stage at diagnosis | stage_img_system | Version of the TNM classification of malignant cancers<br>used to stage the tumour for the imaging TNM values  | NUMBER | 5 = 5th,<br>6 = 6th,<br>7 = 7th,<br>8 = 8th,<br>20 = UICC 5,<br>21 = UICC 6,<br>22 = UICC 7,<br>23 = AJCC 7,<br>24 = Unknown,<br>25 = UICC 8,<br>26 = AJCC 8,<br>27 = ENETS 2007 |
| T stage<br>(pathology)                                 | t_path           | The UICC code which classifies the size and extent of<br>the primary tumour based on the evidence from a<br>pathological examination   | TEXT   | 0, 1, 1A, 1B, 1C, 1a, 1a1,<br>1a2, 1b, 1b1, 1b2, 1c, 1d,<br>1mi, 2, 2A, 2B, 2a, 2a1,<br>2a2, 2b, 2c, 2d, 2s, 3, 3A,<br>3a, 3b, 3c, 3d, 3s, 4, 4B,                                |

|  |                   |  |        | 4a, 4b, 4c, 4d, 4e, A, IS, S,<br>T1, T2, T3, TA, X, a, is   |
|--|-------------------|--|--------|---|
| N stage<br>(pathology)   | n_path            | The UICC code which classifies the absence or presence and extent of regional lymph node metastases based on the evidence from a pathological examination  | TEXT   | +, -, 0, 00, 1, 11, 1B, 1a,<br>1b, 1c, 1mi, 2, 2a, 2b, 2c,<br>3, 3a, 3b, 3c, 4, 9, N0, N1,<br>N2, X   |
| M stage<br>(pathology)   | m_path            | The UICC code which classifies the absence or presence of distant metastases based on the evidence from a pathological examination   | TEXT   | 0, 1, 1a, 1b, 1c, 1e, 2, 3, 4,<br>9, X, blank.  |
| Pathological stage at diagnoses                                | stage_path        | Pathologial stage at diagnosis. Combination of<br>pathological T, N and M in "t_path", "n_path" and<br>"m_path". Includes Ann Arbor staging for lymphomas.<br>NB: It is not guaranteed that data from the individual<br>t_path, n_path and m_path variables have been<br>combined into this variable, so they should be used in<br>parallel. | TEXT   | 0, 0A, 0IS, 1, 1A, 1A1,<br>1A2, 1B, 1B1, 1B2, 1C,<br>1E, 2, 2A, 2B, 2C, 2E, 3,<br>3A, 3B, 3C, 3E, 4, 4A, 4B,<br>4C, 5, 6, ?, U, X, blank                              |
| System used to<br>record<br>pathological stage<br>at diagnosis | stage_path_system | Version of the TNM classification of malignant cancers<br>used to stage the tumour for the pathological TNM<br>values  | NUMBER | 5 = 5th<br>6 = 6th<br>7 = 7th<br>8 = 8th<br>20 = UICC 5<br>21 = UICC 6<br>22 = UICC 7<br>23 = AJCC 7<br>24 = Unknown<br>25 = UICC 8<br>26 = AJCC 8<br>27 = ENETS 2007 |

| Stage<br>(pathological pre-<br>treatment)       | stage_path_pretreated | Pathological stage at diagnosis recorded prior to treatment  | TEXT   | Y = Yes, X = No   |
|---|-----------------------|--|--------|---|
| Charlson co-<br>morbidity score<br>over 2 years | chrl_tot_27_03        | Total Charlson co-morbidity score for a 2 year period.<br>Lookback of 27 to 3 months prior to diagnosis  | NUMBER | Diagnostic data for co-<br>morbidities is derived from<br>Admitted Care HES<br>records matched at a<br>patient level to cancer<br>registration records, using<br>the methodology published<br>by Quan et al, Medical<br>Care 43 1130-1139<br>(2005).<br>Where recorded values<br>range from 0 onwards |
| Charlson co-<br>morbidity score<br>over 6 years | chrl_tot_78_06        | Total Charlson co-morbidity score for a 6 year period.<br>Lookback of 78 to 6 months prior to diagnosis, | NUMBER | Diagnostic data for co-<br>morbidities is derived from<br>Admitted Care HES<br>records matched at a<br>patient level to cancer<br>registration records, using<br>the methodology published<br>by Quan et al, Medical<br>Care 43 1130-1139<br>(2005).  |

|                                 |           |  |      | range from 0 onwards                             |
|---------------------------------|-----------|--|------|--|
| Oestrogen<br>receptor status    | er_status | Oestrogen receptor status of the tumour. These data are mainly recorded on invasive breast cancer C50x and DCIS (D05x).    | TEXT | N = negative, P = positive,<br>X = not performed |
| Oestrogen<br>receptor score     | er_score  | Oestrogen receptor score of the tumour. These data<br>are restricted to invasive breast cancer C50x and<br>DCIS (D05x)     | TEXT | ER Allred score (range 0,<br>2-8)                |
| Progesterone<br>receptor status | pr_status | Progesterone receptor status of the tumour. These data are mainly recorded on invasive breast cancer C50x and DCIS (D05x). | TEXT | N = negative, P = positive,<br>X = not performed |
| Progesterone<br>receptor score  | pr_score  | Progesterone receptor score of the tumour. These data are restricted to invasive breast cancer C50x and DCIS (D05x).       | TEXT | ER Allred score (range 0,<br>2-8)                |

| HER2 status | her2_status | Human Epidermal Growth Factor Receptor 2 status of<br>the tumour. These data are mainly recorded on<br>invasive breast cancer C50x and DCIS (D05x).   | TEXT   | N = negative, P = positive,<br>X = not performed |
|-------------|-------------|---|--------|--|
| NPI score   | npi         | Nottingham Prognostic Indicator score (not the derived<br>stage) for prognosis following surgery for breast<br>cancer. Calculated from tumour size, grade and lymph<br>node involvement.<br>Values >2 and <20 are accepted as valid. This data is<br>restricted to invasive breast cancer C50x and DCIS<br>(D05x) | NUMBER | Number (two decimal places) or blank             |

| Dukes' stage              | dukes                 | Used for colorectal cancer. Dukes stage of disease<br>at diagnosis, based on pathological evidence but<br>upgraded to Dukes D if clinical evidence of<br>metastasis. This data is mainly recorded on<br>invasive colorectal tumours (C18-21x).   | TEXT   | <ul> <li>A = Dukes' A: Tumour confined to wall of<br/>bowel, nodes negative</li> <li>B = Dukes' B: Tumour penetrates through the<br/>muscularis propria to involve extramural<br/>tissues, nodes negative</li> <li>C1 = Dukes' C1: Metastases confined to<br/>regional lymph nodes (node/s positive but<br/>apical node negative)</li> <li>C2 = Dukes' C2: Metastases present in nodes<br/>at mesenteric artery ligature (apical node<br/>positive)</li> <li>D = Dukes D: Metastatic spread outside the<br/>operative field</li> <li>99 = Not Known</li> </ul> |
|---------------------------|-----------------------|--|--------|--|
| FIGO stage                | figo                  | Staging system for tumours of the female<br>reproductive system.<br>Stage 1 – Confined,<br>Stage 2 – Local,<br>Stage 3 – Distant,<br>Stage 4 – Involving other organs.<br>This data is mainly recorded on invasive<br>gynaecological cancers (ICD 10 C51x to C57x) or<br>retroperitoneum and peritoneum (C48x), as well as<br>neoplasm of uncertain behaviour of ovary (D39x). | TEXT   | 0, 1, 1a, 1a1, 1a2, 1b, 1b1, 1b2, 1c, 1c1, 1c2,<br>1c3, 2, 2a, 2a1, 2a2, 2b, 2c, 3, 3a, 3b, 3c, 3c1,<br>3c2, 4, 4a, 4b, I, IA, IA1, IA2, IB, IB1, IB2, IC,<br>II, IIA, IIA2, IIB, IIC, III, IIIA, IIIB, IIIC, IIIC1,<br>IIIC2, IV, IVA, IVB, blank   |
| Gleason primary pattern   | gleason_primary       | Used for prostate cancer (C61x) - the grade that comprises most of the tumour volume is called the "primary pattern"   | NUMBER | 1-5, 8 = not applicable  |
| Gleason secondary pattern | gleason_seconda<br>ry | Used for prostate cancer (C61x) - if additional grades present, the highest grade (biopsy) or the  | NUMBER | 1-5, 8 = not applicable  |

|                                |                              | second most extensive grade (TURP and radicals).<br>If none present, primary and secondary grades are<br>the same.   |        |   |
|--------------------------------|------------------------------|--|--------|---|
| Gleason tertiary<br>pattern    | gleason_tertiary             | Used for prostate cancer (C61x) - value of any different third grade in addition to the primary and secondary grades   | NUMBER | 1-5, 8 = not applicable   |
| Gleason combined               | gleason_combine<br>d         | Used for prostate cancer (C61x) - combined<br>Gleason primary and secondary scores (+/-<br>tertiary). The worst score is recorded, if both scores<br>are the same but have different primary and<br>secondary grades, the score with the highest<br>primary grade is recorded first, i.e. 4+3=7 would be<br>recorded over 3+4=7.   | NUMBER | 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, blank   |
| Screen detected                | screendetected               | Whether or not the tumour was detected by a screening programme. Applicable to cancers identified through the NHS Cancer Screening Programmes only.  | TEXT   | N = No, Y = Yes, 8 = Not applicable,<br>9 = Not known   |
| Screening status               | screeningstatusc<br>osd_code | Screening status. Applicable to cancers identified through the NHS Cancer Screening Programmes only.   | TEXT   | 1 = screen-detected, 2 = interval cancer, 4 =<br>lapsed attender, 5 = never attended, 6 = never<br>invited, 7= Other, 9 = not known, NM = not<br>mapped |
| Screening status description   | screeningstatusc<br>osd_name | Description of screening status  | TEXT   |   |
| Screening status<br>(detailed) | screeningstatusfu<br>II_code | The value of the sub-classification of the screening<br>flag. Populated when the screening status is<br>"Other". For breast screening service:<br>www.cancerscreening.nhs.uk/breastscreen/publicat<br>ions/nhsbsp62.pdf (page 4, section 2). For cervical<br>screening service see:<br>www.cancerscreening.nhs.uk/cervical/publications/<br>nhscsp28.pdf (page 37). Applicable to cancers<br>identified through the NHS Cancer Screening | TEXT   |   |

|   |                              | Programmes only.  |      |  |
|---|------------------------------|---|------|--|
| Description of full<br>detailed screening<br>status | screeningstatusfu<br>II_name | Description of the full detailed screening staturs.   | TEXT |  |
| Laterality  | laterality                   | Identifies the side of the body for a tumour relating<br>to paired organs within a patient, based on the<br>evidence from a pathological examination. The<br>data field is used to differentiate tumours in paired<br>organs (and define the site of the<br>pathology/cytology specimen). For paired sites, for<br>e.g. the tonsils, if there is a tumour in one side, the<br>laterality of that side, left or right, is recorded. For<br>some paired sites, if there are tumours in both<br>sides then two tumours are registered, one a left<br>and the other a right. If there is a tumour in both<br>sides (and they have other factors such as<br>morphology the same) then only one registration is<br>made, and the laterality is coded as bilateral. If the<br>site of the primary cancer is not part of a pair, then<br>laterality is coded as not applicable. | TEXT | L = Left, R = Right, M = Midline, B = Bilateral,<br>8 = Not applicable, 9 = Not Known  |
| Diagnosis death<br>certificate only                 | dco                          | Whether the tumour was registered from a death certificate only   | TEXT | Y = Yes, N = No  |
| Vital Status  | vitalstatus                  | Records whether the patient is currently alive or deceased at the time of the snapshot.   | TEXT | A =Alive,<br>D =Dead,<br>X =Exit posting.  |
| Vital Status Date                                   | vitalstatusdate              | The last known date of vital status   | DATE | ddmmyyyy   |
| Date of first recorded hospitalisation              | first_hosp_date              | Date of first recorded hospitalisation. Available for 2008 onwards.   | DATE | ddmmyyyy   |
| Catchment area code                                 | creg_code                    | Code for the cancer registry catchment area the<br>patient was resident in when the tumour was<br>diagnosed. Note that this variable cannot be<br>provided alongside "region" variable of primary care  | TEXT | Y0801=Thames Cancer Registry<br>Y0201=Northern & Yorkshire Cancer Registry<br>& Information Service<br>Y0301=Trent Cancer Registry |

|                                  |            | (i.e. if creg_code is provided, practice region will be redacted).   |      | Y1201=West Midlands Cancer Intelligence<br>Unit<br>Y0401=Eastern Cancer Registration &<br>Information Centre<br>Y1701=North West Cancer Intelligence<br>Service<br>Y1001=South West Cancer Intelligence<br>Service<br>Y1101=Welsh Cancer Intelligence &<br>Surveillance Unit<br>Y0901=Oxford Cancer Intelligence Unit<br>Z9999=blank                                   |
|----------------------------------|------------|--|------|--|
| Catchment area<br>name           | creg_name  | Description of the code provided in creg_code.<br>Note that this variable cannot be provided<br>alongside "region" variable of primary care (i.e. if<br>creg_code is provided, practice region will be<br>redacted). | TEXT |  |
| Multifocal <sup>1</sup>          | multifocal | Multifocal tumours are defined as discrete tumours<br>apparently not in continuity with other primary<br>cancers originating in the same site or tissue.   | TEXT | N= No, Y = Yes, 8 = Not applicable, 9 = Not<br>known   |
| Clark's stage for skin<br>cancer | clarks     | Used for melanoma of the skin. Data is restricted to<br>Malignant melanoma of skin (C43x) and Other<br>malignant neoplasms of skin (C44x)  | TEXT | <ul> <li>1 = melanoma in situ: melanoma cells are only<br/>in the epidermis.</li> <li>2 = melanoma cells in the papillary dermis.</li> <li>3 = melanoma cells throughout papillary<br/>dermis and touching reticula.</li> <li>4 = melanoma has spread into the reticular or<br/>deep dermis.</li> <li>5 = melanoma has grown into the<br/>subcutaneous fat.</li> </ul> |
| Breslow thickness of             | breslow    | Breslow thickness is used in staging melanoma of   | TEXT | Number or range, x, or blank   |

<sup>&</sup>lt;sup>1</sup> variables highlighted by Public Health England as those with potential data quality issues (multifocal, clarks, breslow, exicisionmargin)

| tumour          |                | the skin and is related to thickness of the tumour.<br>Measured in millimetres to the nearest 0.01mm.<br>Can be a number or range, x, or blank (e.g. ≤1mm,<br>1-2mm). Data is restricted to Malignant melanoma<br>of skin (C43x) and Other malignant neoplasms of<br>skin (C44x) |      |   |
|-----------------|----------------|--|------|---|
| Excision margin | excisionmargin | Whether the surgical excision margin finding was clear of the tumour and if so, by how much  | TEXT | 01 = Excision margins are clear (distance from<br>margin not stated)<br>02 = Excision margins are clear (tumour<br>>5mm from the margin)<br>03 = Excision margins are clear (tumour<br>>1mm but less than or equal to 5mm from the<br>margin<br>04 = Tumour is less than or equal to 1mm<br>from excision margin, but does not reach<br>margin<br>05 = Tumour reaches excision margin<br>06 = Uncertain<br>07 = Margin not involved =>1mm<br>08 = Margin not involved <1mm<br>09 = Margin not involved 1-5mm<br>98 = Not applicable<br>99 = Not Known |

#### 3. Treatment

| Column description      | Column name       | Details  | Field<br>Type | Valid Content  |
|-------------------------|-------------------|--|---------------|--|
| CPRD patient Identifier | e_patid           | Unique patient identifier based on<br>CPRD primary care data –<br>pseudonymised.   | ID            | Number   |
| CR patient Identifier   | e_cr_patid        | Unique patient identifier based on<br>NCRAS data - pseudonymised. In<br>some cases the same person may<br>have multiple patient IDs. Patient IDs<br>will be retained even after two patient<br>records are found to be the same<br>person. | ID            | Number   |
| CR tumour identifier    | e_cr_id           | Unique tumour identifier based on NCRAS data – pseudonymised.  | ID            | Number   |
| Number of tumours       | number_of_tumours | Number of tumours affected by this event   | NUMBER        |  |
| Type of event           | eventcode         | Type of event  | TEXT          | <ul> <li>01a = Surgery - curative,</li> <li>01b = Surgery - not curative,</li> <li>01z = Surgery - type unknown,</li> <li>02 = Cytotoxic Chemotherapy,</li> <li>03 = Hormone Therapy,</li> <li>04 = Chemoradiotherapy,</li> <li>05 = RT-Teletherapy,</li> <li>06 = RT-Brachytherapy,</li> <li>07 = Specialist Palliative Care,</li> <li>08 = Active Monitoring,</li> <li>09 = Non-Specialist Palliative Care,</li> <li>14 = Anti Cancer Drug Regimen</li> <li>(other),</li> <li>15 = Immunotherapy,</li> <li>19 = Radioisotope Therapy,</li> </ul> |

|                               |                        |   |        | 22 = Radiosurgery,<br>97 = Other Treatment,<br>98 = All treatment declined,<br>99 = Treatment unknown,<br>CTX = CT-Other,<br>IM = Imaging   |
|-------------------------------|------------------------|---|--------|---|
|                               |                        |   |        | RTX = RT-Other/NK.  |
| Description of event type     | eventdesc              | Description of event type   | TEXT   |   |
| Treatment date                | eventdate              | Date the treatment took place   | DATE   | ddmmyyyy  |
| Treatment within six months   | within_six_months_flag | Whether treatment was within six months of date of diagnosis            | NUMBER | 0 = No, 1 = Yes   |
| Treatment after six months    | six_months_after_flag  | Whether treatment was after six months from date of diagnosis           | NUMBER | 0 = No, 1 = Yes   |
| OPCS code                     | opcs4_code             | Operations, procedures and<br>interventions coded. Code format<br>X000. | TEXT   | OPCS4 code  |
| OPCS name                     | opcs4_name             | Name of operation, procedure or intervention                            | TEXT   |   |
| Radiotherapy code             | radiocode              | Radiotherapy type   | TEXT   | <ul> <li>1 = External Beam, 2 = Intracavity or<br/>Interstitial,</li> <li>3 = 1 + 2, 4 = Radioactive Isotopes, 5<br/>= 1 + 4,</li> <li>8 = Other, B = Brachytherapy, X =<br/>Unknown / Inapplicable.</li> </ul> |
| Radiotherapy code description | radiodesc              | Description of radiotherapy type  | TEXT   |   |
| Imaging code                  | imagingcode            | Imaging code  | TEXT   | 1 = Standard Radiography; 1A =<br>Chest X-Ray; 1B = Sinus X-Rays; 1C<br>= Mastoid Views; 1D =<br>Orthopantomogram (OPG); 1E = Skull<br>Base X-Rays; 1F = Angiography; 1G =<br>Intravenous Urography; 1H =       |

|  |  | Retrograde Urography; 1J = Inferior  |
|--|--|--|
|  |  | Vena Cavography; 1K = Bone   |
|  |  | Angiography; 1L = Soft Tissue  |
|  |  | Angiography.   |
|  |  | 2 = CT Scan with unspecified contrast;   |
|  |  | 2A = CT scan with contrast; $2B = CT$  |
|  |  | scan without contrast.   |
|  |  | 3 = MRI scan with unspecified  |
|  |  | contrast: 3A = MRI scan with contrast:   |
|  |  | 3B = MRI scan without contrast: 3C =   |
|  |  | MRI scan cholangiography.  |
|  |  | 4 = PET Scan   |
|  |  | 5 = Ultrasound: 5A = Transabdominal  |
|  |  | ultrasound: $5B = Transvaginal$  |
|  |  | ultrasound: 5C = Doppler ultrasound:   |
|  |  | 5D – Transrectal ultrasound: 5E –  |
|  |  | Endosconic ultrasound: 5E –  |
|  |  | Lanaroscopic ultrasound  |
|  |  | 6 - Nuclear medicine imaging: 6A -   |
|  |  | 0 – Nuclear medicine imaging, 0A –<br>Padia isotopa bana scop: 6B Other  |
|  |  | radio isotopo: 6C -  |
|  |  | $V_{\text{optilotion}} = V_{\text{optilotion}} = V_{o$ |
|  |  |  |
|  |  |  |
|  |  | 8 = Barium; 8A = Barium Enema; 8B =  |
|  |  | Barium Swallow.  |
|  |  | 9 = Lympnoscintigraphy.  |
|  |  | 99 = Other.  |
|  |  | C02C = Virtual Colonoscopy.  |
|  |  | C08U = Urography (IV and   |
|  |  | retrograde).   |
|  |  | C09X = Intervention radiography.   |
|  |  | CXXX = Other (COSD).   |

| Imaging code description                | imagingdesc      | Description of Imaging code   | TEXT   |   |
|---|------------------|---|--------|---|
| Imaging site                            | imagingsite      | Site on body where imaging occurred   | TEXT   | Valid four digit OPCS4 code. Code<br>Format: X000.  |
| Lesion size                             | lesionsize       | The size in mm of the diameter of a lesion, largest if more than one, if the histology of a site proves to be invasive. | NUMBER | Number or blank   |
| Chemotherapy drug name(s)               | chemo_all_drug   | Chemotherapy drug name(s)   | TEXT   |   |
| Name/acronym of known drug combinations | chemo_drug_group | Name/acronym of known drug combinations   | TEXT   | Please note this is a non-mandated<br>text field that may not be complete or<br>contain the specific drug name. |