



| Data and Business Rules – Epilepsy Indicator Set | | | | | |
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| Author | NHS IC - QOF Business Rules team | Version No | 20.0 | Version Date | 13/05/2011 |

New GMS Contract QOF Implementation

Dataset and Business Rules

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Epilepsy Indicator Set

Amendment History:

| Version | Date | Amendment History |
|----------------|--------------|--|
| Draft 0.3 | 21-Jun-2003 | From Peter Horsfield |
| 1.0 | 24-Sep-2003 | Standard Headers and footers Applied and set to approved. |
| 1.1 | 03-Nov-2003 | Added headers and footers to Version 0.4 received from Pete Horsfield on 03/11/03. |
| 2.0 | 12-Nov-2003 | Amended following 4 Country review |
| 3.0 | 20-Jan-2004 | Amended following January READ Code Release |
| 4.0 | 04-Feb-2004 | Amended following 4 Country, GPSS and internal review |
| 4.1 | 09-Apr-2004 | SNOMED-CT codes added, 4-byte Read codes removed |
| 4.2 | 09-Jul-2004 | Amended following July READ code release |
| 5.0 | 27-Sep-2004 | Amended following 4 country review |
| 5.1 | 18-Jan-2005 | Amended following January READ Code Release |
| 5.2 | 21-Jun-2005 | Amended following 4 Country review |
| 6.0 | 21-July-2005 | Signed off following 4 Country review |
| 6.1 | 21-July-2005 | Amended following July 2005 Read Code release and January 2005 SNOMED CT release |
| 6.2 | 21-Aug-2005 | Amended following 4 Country review |
| 7.0 | 23-Sep-2005 | Signed off following 4 Country review |
| 7.1 | 21-Nov-2005 | From Phil Brown |
| 7.2 | 22-Nov-2005 | Amended following review by Peter Horsfield |
| 7.3 | 3-Dec-2005 | Draft revised for internal review |
| 7.4 | 26-Feb-2006 | Amended following internal & 4 Countries review |
| 8.0 | 15-Mar-2006 | Signed off following 4 Country review |
| 8.1 | 18-May-2006 | Responding to queries raised Amend wording for Note 3 |
| 8.5 | 18-May-2006 | Approved by NHSE |
| 8.6 | 20-Oct-2006 | April Read Code Release April SNOMED CT Release October Read Code Release Corrections and amendments following feedback |
| 8.7 | 30-Nov-2006 | Response to 4 Country Review: Typo: Missing bracket in 'diagnostic codes' and EPIL_COD cluster |
| 9.0 | 30-Nov-2006 | Approved by NHSE |
| 9.1 | 11-Apr-2007 | April 2007 Read Code Release |
| 10.0 | 18-Jun-2007 | Signed off following 4 Country review |
| 10.1 | 24-Aug-2007 | April 2007 SNOMED CT Release |
| 10.2 | 23-Sep-2007 | October 2007 Read Code Release October 2007 SNOMED CT Release |
| 11.0 | 28-Nov-2007 | Signed off following 4 Country review |
| 11.1 | 30-Jun-2008 | April 2008 Read Code Release April 2008 SNOMED CT Release QOF Review 2007 |
| 12.0 | 24-Jul-2008 | Signed off following 4 Country review |
| 12.1 | 06-Oct-2008 | October 2008 Read Code Release October 2008 SNOMED CT Release |
| 13.0 | 05-Dec-2008 | Signed off following 4 Country review |
| 14.0 | 01-May-2009 | Signed off following 4 Country review |
| 14.1 | 25-June-2009 | April 2009 Read Code Release |

| | | |
|------|------------------|---|
| 15.0 | 17-August-2009 | Sign off following 4 Country review |
| 15.1 | 12-October-2009 | October 2009 Clinical Code Release |
| 15.2 | 28-October-2009 | October 2009 Clinical Code Release review |
| 16.0 | 02-December-2009 | Sign off following 4 Country review |
| 16.1 | 05-May-2010 | Internal NHS IC review. |
| 17.0 | 07-May-2010 | April 2010 Read Code Release following NHS IC review. |
| 18.0 | 29-October-2010 | October 2010 Read Code Release following NHS IC review. |
| 19.0 | 13-December-2010 | Signed off following 4 Country review |
| 20.0 | 13-May-2011 | April 2011 Read Code Release following NHS IC review. |

New GMS contract Q&O framework implementation

Dataset and business rules – Epilepsy indicator set

Notes

- 1) The specified dataset and rulesets are to support analysis of extracted data to reflect the status at a specified point in time of patient records held by the practice. In the context of this document that specified time point is designated the 'Reference date' and identified by the abbreviation 'REF_DAT'. In interpreting the specification REF_DAT should be taken to mean midnight of the preceding day (i.e. a REF_DAT of 01.04.2003 equates to midnight on 31.03.2003).
- 2) To support accurate determination of the population of patients to which the indicators should relate (the denominator population) these rulesets have been compiled with a prior assumption that the reference date is specified prior to extraction of data and is available for computation in the data extraction routine. The reference date will also be required to be included in the data extraction to support processing of rules that are dependent upon it. It is possible that an alternative approach could be adopted in which rules to determine the denominator population by registration status would be applied as a component of rule processing. If this second approach were to be adopted it would be essential to specify default time criteria for determining the registration characteristics of the denominator population during the data extraction process. Additionally there would be a requirement to supplement the dataset and rulesets to support identification of the appropriate denominator population.
- 3) Clinical codes quoted are (where known) from the April 2011 release of Read codes version 2 and clinical terms version 3 (CTV3). The codes are shown within the document as a 5 character value to show that the Read Code is for a 5-Byte system.
 - i) Where a '%' wildcard is displayed, the Read Code is filled to 5 characters with full-stops. When implementing a search for the Read Code, only the non full-stop values should be used in the search, For example, a displayed Read Code of c1...% should be implemented as a search for c1%, i.e. should find c1 and any of its children.
 - ii) Where a range of read codes are displayed, the Read Code is filled to 5 characters with full-stops. When implementing the search, only the non full-stop values should be used in the search, For example, a displayed Read Code range of G342. – G3z.. should find all codes between G342 and G3z (including any children where applicable).
- 4) Datasets comprise a specification of two elements:
 - a) Patient selection criteria. These are the criteria used to determine the patient population against whom the indicators are to be applied.
 - i) Registration status. This determines the current patient population at the practice
 - ii) Diagnostic code status. This determines the current patient population (register size) for a given clinical condition

There are three scenarios within the diagnostic code status, these are where

- There is a single morbidity patient population (disease register) required (e.g. within CHD). Where this occurs, a single set of rules for identifying the patient population is provided.

- There is a single co-morbidity patient population (disease register) required (e.g. within Smoking). Where this occurs, a set of rules for *each* morbidity is provided. A patient *must* only be included in the patient population (register size) *once*.
- There are multiple patient populations (disease registers) required (e.g. within Heart Failure). Where this occurs, a single set of rules for *each* patient population is provided.
N.B. where there are multiple patient populations (disease registers), it is possible that one or more will also be a co-morbidity patient population (e.g. within Depression)

Where this occurs, details of which register population applies to which indicator(s) are provided. Where the register size applies to an indicator, this is the base denominator population for that indicator.

- b) Clinical data extraction criteria. These are the data items to be exported from the clinical system for subsequent processing to calculate points allocations. They are expressed in the form of a MIQUEST 'Report-style' extract of data.

The record of each patient that satisfies the appropriate selection criteria for a given indicator will be interrogated against the clinical data criteria (also appropriate to that indicator). A report of the data contained in the selected records will be exported in the form of a fixed-format tabular report. Each selected patient will be represented by a single row in the report. Rows will contain a fixed number of fields each containing a single data item. The number of fields in each row and their data content will be determined by the clinical data criteria. Data items that match the clinical data criteria will be exported in the relevant field of the report. Where there is no data to match a specific clinical criterion a null field will be exported.

- 5) Rulesets are specified as multiple rules to be processed sequentially. Processing of rules should terminate as soon as a 'Reject' or 'Select' condition is encountered
- 6) Rules are expressed as logical statements that evaluate as either 'true' or 'false'. The following operators are required to be supported:
- | | |
|---------------------|--------|
| a) > (greater than) | e) AND |
| b) < (less than) | f) OR |
| c) = (equal to) | g) NOT |
| d) ≠ (not equal to) | |
- 7) Where date criteria are specified with intervals of multiples of months or years these should be interpreted as calendar months or calendar years.
- 8) The new GMS contract requires that influenza vaccinations should be given between 1st September and 31st March of any given contract year in order to qualify for the relevant indicators. Hence in the contract year 2004 – 2005 the relevant dates will be 1st September 2004 and 31st March 2005 inclusive. In this document these dates are expressed as variable parameters FLU_COM and FLU_END respectively. For the purposes of data extraction these variables will be required to be specified prior to processing the relevant rules.

Dataset Specification**1) Patient selection criteria:**

a) Registration status

| <i><u>Current registration status</u></i> | <i><u>Qualifying criteria</u></i> |
|---|---|
| Currently registered for GMS | Most recent registration date < (REF_DAT) |
| Previously registered for GMS | Any sequential pairing of registration date and deregistration date where both of the following conditions are met: registration date < (REF_DAT); and deregistration date >= (REF_DAT) |

b) Diagnostic code and demographic status

| <i>Code criteria</i> | <i>Qualifying diagnostic codes</i> | | <i>Time criteria</i> |
|----------------------|--|---|---|
| <i>* Required</i> | <i>Read codes v2</i> | <i>CTV3</i> | <i>Latest < (REF_DAT)</i> |
| | F25..% (excluding F2501, F2504, F2511 F2516, F256.% F258. – F25A., F25y4) F1321 SC200 | F25..% (excluding X006g%, X006n, Q480.%, XaEIJ%, XaOIJ% X006G%, XaBM2) SC200 THEN ADD F257. | |
| | <i>(Diagnostic codes for epilepsy)</i> | | |
| <i>Excluded</i> | <i>Read codes v2</i> | <i>CTV3</i> | <i>Latest < (REF_DAT) AND > Date of diagnostic code above</i> |
| | 21260 212J. | 21260 | |
| | <i>(Codes for epilepsy resolved)</i> | | |
| <i>* Required</i> | dn...% d26..% | x000i% d26.. | <i>Date >= (REF_DAT – 6 months) AND < REF_DAT</i> |
| | <i>(Drug treatment for epilepsy)</i> | | |
| <i>Required</i> | Age >= 18 yrs at REF_DAT | | |

** Note: Both a diagnosis code and a treatment code are required to be present for the patient to be selected for inclusion in the denominator population.*

2) Clinical data extraction criteria

| <u>Field Number</u> | <u>Field name</u> | <u>Data item</u> | | <u>Qualifying criteria</u> |
|---------------------|-------------------|--|---|----------------------------|
| 1 | PAT_ID | Patient ID number | | Unconditional |
| 2 | REG_DAT | Date of patient registration | | Latest < REF_DAT |
| 3 | PAT_AGE | Patient age (years) at REF_DAT | | Unconditional |
| 4 | PAT_SEX | Patient sex (gender) at REF_DAT | | Unconditional |
| 5 | EPILEXC_COD | <i>Read codes v2</i> | <i>CTV3</i> | Latest < REF_DAT |
| | | 9h6..% | XaJ4S% | |
| | | <i>(Epilepsy exception reporting codes)</i> | | |
| 6 | EPILEXC_DAT | Date of EPILEXC_COD | | Chosen record |
| 7 | EPIL_COD | <i>Read codes v2</i> | <i>CTV3</i> | Earliest < REF_DAT |
| | | F25..% (excluding F2501, F2504, F2511 F2516, F256.% F258. – F25A., F25y4) F1321 SC200 | F25..% (excluding X006g%, X006n, Q480.%, XaEIJ%, XaOIJ% X006G%, XaBM2) SC200 THEN ADD F257. | |
| | | <i>(Epilepsy diagnosis codes)</i> | | |

| | | | | |
|----|-----------|--|--|------------------|
| 8 | EPIL_DAT | Date of EPIL_COD | | Chosen record |
| 9 | SZFR_COD | <i>Read codes v2</i> | <i>CTV3</i> | Latest < REF_DAT |
| | | 6675. 667F. 667P.-667V. | 6675. XaJ7s XaJBc XaJBd XaJBe XaJBf XaJBg XaJBh | |
| | | <i>(Code for seizure frequency)</i> | | |
| 10 | SZFR_DAT | Date of SZFR_COD | | Chosen record |
| 11 | MAXEP_COD | <i>Read codes v2</i> | <i>CTV3</i> | Latest < REF_DAT |
| | | 8BL3. | XaJ5k | |
| | | <i>(Code for maximal anticonvulsant therapy)</i> | | |
| 12 | MAXEP_DAT | Date of MAXEP_COD | | Chosen record |

| | | | | |
|----|-------------|---|-------------|------------------|
| 13 | LSZ_COD | <i>Read codes v2</i> | <i>CTV3</i> | Latest < REF_DAT |
| | | 667F. | XaJ7s | |
| | | <i>(Code for 'Seizure free > 12 months')</i> | | |
| 14 | LSZ_DAT | Date of LSZ_COD | | Chosen record |
| 15 | EPILCC_COD | <i>Read codes v2</i> | <i>CTV3</i> | Latest < REF_DAT |
| | | 6110. | XaRFV | |
| | | <i>(Contraceptive counselling codes)</i> | | |
| 16 | EPILCC_DAT | Date of EPILCC_COD | | Chosen record |
| 17 | EPILPCA_COD | <i>Read codes v2</i> | <i>CTV3</i> | Latest < REF_DAT |
| | | 67IJ0 | XaRfW | |
| | | <i>(Pre-conception advice codes)</i> | | |
| 18 | EPILPCA_DAT | Date of EPILPCA_COD | | Chosen record |
| 19 | EPILPA_COD | <i>Read codes v2</i> | <i>CTV3</i> | Latest < REF_DAT |
| | | 67AF. | XaRFX | |
| | | <i>(Pregnancy advice codes)</i> | | |
| 20 | EPILPA_DAT | Date of EPILPA_COD | | Chosen record |

| | | | | |
|----|----------------|--|--|----------------------|
| 21 | EPILCCEXC_COD | <i>Read codes v2</i> | <i>CTV3</i> | Latest < REF_DAT |
| | | 8IAg. 8IB2. | XaRFa XaRFc | |
| | | <i>(Contraceptive counselling inappropriate or declined exception codes)</i> | | |
| 22 | EPILCCEXC_DAT | Date of EPILCCEXC_COD | | Chosen record |
| 23 | EPILPCAEXC_COD | <i>Read codes v2</i> | <i>CTV3</i> | Latest < REF_DAT |
| | | 8IAh. 8IB3. | XaRFb XaRFf | |
| | | <i>(Pre-Conception advice inappropriate or declined exception codes)</i> | | |
| 24 | EPILPCAEXC_DAT | Date of EPILPCAEXC_COD | | Chosen record |
| 25 | EPILPAEXC_COD | <i>Read codes v2</i> | <i>CTV3</i> | Latest < REF_DAT |
| | | 8IAi. 8IB4. | XaRFg XaRFc | |
| | | <i>(Pregnancy advice inappropriate or declined exception codes)</i> | | |
| 26 | EPILPAEXC_DAT | Date of EPILPAEXC_COD | | Chosen record |
| 27 | HYST_COD | <i>Read codes v2</i> | <i>CTV3</i> | Earliest < (REF_DAT) |
| | | 685H. 685I. 685K. 908Y. 7E05.% 7E040, 7E042 7E043 | XE1TV 685I. 685K. XaKbV XE06Z% XaC3i% XE06b% | |

| | | | | |
|----|------------|---|--|----------------------|
| | | 7E046 7E049 7E04B 7E04G 7LOA.% 26L3. | 7E046% X403D% (excluding X403F) 7LOA.% X76PO | |
| | | (Hysterectomy and equivalent codes) | | |
| 28 | HYST_DAT | Date of HYST_COD | | Chosen record |
| 29 | STERIL_COD | <i>Read codes v2</i> | <i>CTV3</i> | Earliest < (REF_DAT) |
| | | 7E10.% 7E111 7E113 7E115 7E15.% 7E160 7E162 7E1C. 7E1C3 7E1D0 159A. ZV25x ZV252 | 7E100 7E111 Xa8PW% XaB2V% Xa8PV% XaB2W% 7E1C.% 7E1D0 7E15.% 7E160 XE06s XaB3Q Xa3rJ Xa3rK Xa3xY XM1Rm ZV25x ZV252 | |
| | | (Sterilisation codes) | | |

| | | | |
|----|------------|--------------------|---------------|
| 30 | STERIL_DAT | Date of STERIL_COD | Chosen record |
|----|------------|--------------------|---------------|

Indicator rulesets

- 1 Indicator EPILEPSY 5: The practice can produce a register of patients aged 18 years and over receiving drug treatment for epilepsy.

The terms of this indicator will be satisfied if the practice is able to produce a data extraction according to the above criteria.

No numerator or denominator determination is required.

- 2 Indicator EPILEPSY 6: The percentage of patients aged 18 years and over on drug treatment for epilepsy who have a record of seizure frequency in the preceding 15 months.

a) Denominator ruleset

| <i>Rule number</i> | <i>Rule</i> | <i>Action if true</i> | <i>Action if false</i> |
|--------------------|--|-----------------------|------------------------|
| 1 | If SZFR DAT >= (REF DAT – 15 months) | Select | Next rule |
| 2 | If REG DAT >= (REF DAT – 3 months) | Reject | Next rule |
| 3 | If EPILEXC DAT >= (REF DAT – 15 months) | Reject | Next rule |
| 4 | If EPIL DAT >= (REF DAT – 3 months) | Reject | Select |

b) Numerator ruleset: To be applied to the above denominator population

| <i>Rule number</i> | <i>Rule</i> | <i>Action if true</i> | <i>Action if false</i> |
|--------------------|---|-----------------------|------------------------|
| 1 | If SZFR DAT >= (REF DAT – 15 months) | Select | Reject |

- 3 Indicator EPILEPSY 8: The percentage of patients aged 18 years and over on drug treatment for epilepsy who have been seizure free for the last 12 months recorded in the preceding 15 months.

a) Denominator ruleset

| <i>Rule number</i> | <i>Rule</i> | <i>Action if true</i> | <i>Action if false</i> |
|--------------------|--|-----------------------|------------------------|
| 1 | If <u>LSZ_DAT</u> >= (<u>REF_DAT</u> – 15 months) | Select | Next rule |
| 2 | If <u>REG_DAT</u> >= (<u>REF_DAT</u> – 3 months) | Reject | Next rule |
| 3 | If <u>EPILEXC_DAT</u> >= (<u>REF_DAT</u> – 15 months) | Reject | Next rule |
| 4 | If <u>MAXEP_DAT</u> >= (<u>REF_DAT</u> – 15 months) | Reject | Next rule |
| 5 | If <u>EPIL_DAT</u> >= (<u>REF_DAT</u> – 3 months) | Reject | Select |

b) Numerator ruleset: To be applied to the above denominator population

| <i>Rule number</i> | <i>Rule</i> | <i>Action if true</i> | <i>Action if false</i> |
|--------------------|--|-----------------------|------------------------|
| 1 | If <u>LSZ_DAT</u> >= (<u>REF_DAT</u> – 15 months) | Select | Reject |

- 4 Indicator EPILEPSY 9: The percentage of women under the age of 55 years who are taking antiepileptic drugs who have a record of information and counselling about contraception, conception and pregnancy in the preceding 15 months

Overview

This indicator has been developed to measure the effectiveness of the provision of a clinical care component for patients with epilepsy. The aspect that is being measured is that relating to the provision of accurate information and counselling about contraception, conception, and pregnancy.

The circumstances that can arise can be summarised below.

| Scenario | Description |
|----------|--|
| A | Patient receiving all three aspects of information and counselling. |
| B | Patient has a record of being excepted from all three aspects of information and counselling. |
| C | Patient has codes in the record that show they have either received or been excepted from each aspect of information and counselling. |
| D | Patient has not received or has not been excepted from information and counselling i.e. the patient is not receiving information and counselling and has no valid reason for not receiving it. |

A) All aspects were considered by the GP and the patient was provided with all three.

B) and C) All aspects were considered, but the patient for valid reasons did not get provided with all three. For example one or more aspects were deemed unsuitable by the GP and coded as such or the patient refused one or more of the aspects.

D) Not all aspects were considered.

Disease register

The disease register is made up of patients who are eligible to receive the required care component. In this case: -

The patient has an ongoing diagnosis of epilepsy (i.e. there is evidence in the patient's electronic health record of an epilepsy diagnosis where there is no later evidence that the diagnosis has been resolved)

and

The patient has had a prescription for an epilepsy related drug treatment in the previous 6 months

and

The patient is 18 or over at the time the indicator is measured.

Numerator and Denominator

The success criteria for this indicator (numerator) are achieved for those patients in the denominator who received all three aspects of information and counselling.

These recordings must have all occurred in the previous 15 months but not necessarily on the same day.

The patients that make up the denominator for this indicator are those patients where it is appropriate for the care component to be carried out. This is the relevant disease register adjusted for exclusions and exceptions.

Exclusions

For this indicator there are four exclusions:

- The patient must be female, so all males are excluded.
- The patient must be under 55 so all female patients 55 and over are excluded.
- A patient with a hysterectomy does not require the three aspects of information or counselling so patients with a record of a hysterectomy are excluded.
- A patient who has been sterilised does not require the three aspects of information or counselling so patients with a record of sterilisation are excluded.

Exceptions

Patients that don't achieve the success criteria of the indicator are checked for valid exceptions.

For this indicator the exceptions are:

- any patient who has been registered within the last 3 months of the qualifying year (new patient). New patients may be regarded as exceptions if they fulfil the criteria of the indicator but have not yet had the information or counselling maybe because there hasn't been an opportunity in the qualifying year to arrange a consultation.
- any patient that has a valid epilepsy exception code recorded within the previous 15 months.
- any patient that has been diagnosed with epilepsy within the last 3 months of the year (new diagnosis of epilepsy). Newly diagnosed patients may be regarded as exceptions if they fulfil the criteria of the indicator but have not yet had the information or counselling maybe because there hasn't been an opportunity in the qualifying year to arrange a consultation.
- any patient for whom all aspects of information and counselling were considered but for valid reasons not all aspects were provided.

The aspects of information or counselling (or reasons why they were not received) must have all occurred in the previous 15 months but not necessarily on the same day.

Note: For the 'new' epilepsy patient exception, this is only applicable for the first 'ever' diagnosis of epilepsy for the patient. For subsequent diagnosis, this exception rule is not considered.

Indicator EPILEPSY9: The percentage of women under the age of 55 years who are taking antiepileptic drugs who have a record of information and counselling about contraception, conception and pregnancy in the preceding 15 months

a) Denominator ruleset

| <i>Rule number</i> | <i>Rule</i> | <i>Action if true</i> | <i>Action if false</i> |
|--------------------|--|-----------------------|------------------------|
| 1 | If <u>PAT SEX</u> ≠ 'F' | Reject | Next rule |
| 2 | If <u>PAT AGE</u> ≥ 55 | Reject | Next rule |
| 3 | If <u>HYST COD</u> = Null | Next rule | Reject |
| 4 | If <u>STERIL COD</u> = Null | Next rule | Reject |
| 5 | (If <u>EPILCC DAT</u> ≥ (<u>REF DAT</u> – 15 months) AND (If <u>EPILPCA DAT</u> ≥ (<u>REF DAT</u> – 15 months) AND (If <u>EPILPA DAT</u> ≥ (<u>REF DAT</u> – 15 months)) | Select | Next rule |
| 6 | [(If <u>EPILCC DAT</u> = Null OR <u>EPILCC DAT</u> < (<u>REF DAT</u> – 15 months)) AND (If <u>EPILCCEXC DAT</u> = Null OR <u>EPILCCEXC DAT</u> < (<u>REF DAT</u> – 15 months))] OR [(If <u>EPILPCA DAT</u> = Null OR <u>EPILPCA DAT</u> < (<u>REF DAT</u> – 15 months)) AND (If <u>EPILPCAEXC DAT</u> = Null OR <u>EPILPCAEXC DAT</u> < (<u>REF DAT</u> – 15 months))] OR [(If <u>EPILPA DAT</u> = Null OR <u>EPILPA DAT</u> < (<u>REF DAT</u> – 15 months)) AND If (<u>EPILPAEXC DAT</u> = Null OR <u>EPILPAEXC DAT</u> < (<u>REF DAT</u> – 15 months))] | Next rule | Reject |
| 7 | If <u>REG DAT</u> ≥ (<u>REF DAT</u> – 3 months) | Reject | Next rule |
| 8 | If <u>EPILEXC DAT</u> ≥ (<u>REF DAT</u> – 15 months) | Reject | Next rule |
| 9 | If <u>EPIL DAT</u> ≥ (<u>REF DAT</u> – 3 months) | Reject | Select |

b) Numerator ruleset: To be applied to the above denominator population

| <i>Rule number</i> | <i>Rule</i> | <i>Action if true</i> | <i>Action if false</i> |
|--------------------|---|-----------------------|------------------------|
| 1 | (If <u>EPILCC DAT</u> ≥ (<u>REF DAT</u> – 15 months) AND (If <u>EPILPCA DAT</u> ≥ (<u>REF DAT</u> – 15 months) AND (If <u>EPILPA DAT</u> ≥ (<u>REF DAT</u> – 15 months)) | Select | Next rule |

Additional Notes:**Denominator****Exclusions**

Rule 1: The purpose of rule 1 is to identify whether or not the patient is female

- If the patient is identified as not female the outcome of the rule is true and the patient is **rejected** from the denominator
- If the patient is identified as female the outcome of the rule is **false** and the patient passes onto next rule

Rule 2: The purpose of rule 2 is to identify if the patient is less than 55 years old

- If the patient is identified as 55 years of age or older, the outcome of the rule is true and the patient is **rejected** from the denominator
- If the patient is identified as less than 55 years of age the outcome of the rule is **false** and the patient passes onto next rule.

Rule 3: The purpose of rule 3 is to identify if the patient has a record of a hysterectomy.

- If the patient has a record of a hysterectomy the outcome of the rule is **false** and the patient is **rejected** from the denominator
- If the patient has **no** record of a hysterectomy the outcome of the rule is **true** and the patient passes onto next rule.

Rule 4: The purpose of rule 4 is to identify if the patient has a record of sterilisation.

- If the patient has a record of a sterilisation the outcome of the rule is **false** and the patient is **rejected** from the denominator
- If the patient has **no** record of a sterilisation the outcome of the rule is **true** and the patient passes onto next rule.

Success

Rule 5: The purpose of rule 5 to establish whether the patient has received all three aspects: contraceptive, conception and pregnancy advice within the previous 15 months.

- If all three aspects of the query are true the outcome of the rule is true and the patient is **selected** for the denominator
- If any one of the aspects is false the outcome of the rule is false and the patient is passed onto next rule.

Exceptions

It is worth remembering at this point that if a patient has received **all** aspects of the information and counselling they will have already been **selected** into the denominator in Rule 5.

Rule 6: The purpose of rule 6 is to identify patients that have received any aspect and have valid reasons for not receiving the other aspects. This is an exception and the patient is rejected from the denominator.

- The rule checks that there is, for at least one of the aspects (all three parts linked by an OR) an invalid date for the aspect and an invalid date for any reason why the

patient cannot receive the aspect. If this is true the patient is passed onto the next rule.

- If the outcome of the rule is false then all three aspects have either a valid date or a valid date why the aspect was not received. This means the patient is excepted from the denominator.

If any of these criteria are not met then the patient is checked against subsequent rules. This is usually a case of checking that the patient has some other reason to be excepted from the denominator and consequently doesn't affect the achievement of the indicator.

Rule 7: The purpose of rule 7 is to identify whether the patient has been registered within the last 3 months of the qualifying year.

- If the patient has been registered within the last 3 months of the qualifying year the outcome of the rule is true and the patient is **rejected** from the denominator
- If the patient was registered before the last 3 months of the qualifying year the outcome of the rule is false and the patient will be passed onto next rule.

Rule 8: The purpose of rule 8 is to identify any patient that has a valid epilepsy exception code recorded

- If an exception code has been identified in the previous 15 months the outcome of the rule is true and the patient is **rejected** from the denominator
- If no exception codes have been identified the outcome of the rule is false and the patient will be passed onto next rule

Rule 9: The purpose of rule 9 is to identify whether the patient has been diagnosed with epilepsy within the last 3 months of the year, if true then the patient will be excluded from this year's count but will be included in next year.

- If the patient has been diagnosed with epilepsy within the last 3 months of the qualifying year the outcome of the rule is true and the patient is **rejected** from the denominator
- If the patient was diagnosed with epilepsy before the last 3 months of the qualifying year the outcome of the rule is false and the patient will be **selected** for the denominator

Numerator

The success criterion for this indicator is as per Denominator Rule 5.