

| Data and Business Rules – Peripheral Arterial Disease (PAD) Indicator Set | | | | | |
|--|---------------------------------|------------|------|--------------|------------|
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New GMS Contract QOF Implementation

Dataset and Business Rules

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Peripheral Arterial Disease (PAD) Indicator Set

Amendment History:

| Version | Date | Amendment History |
|--------------|------------------|--|
| 22.0 | 12-December-2011 | New Ruleset Signed off following 4 Country review 2011 The version number starts at 22.0 in order to coincide with existing datasets and business rules. |
| 23.0 | 31-May-2012 | April 2012 Read Code Release following HSCIC review |
| 24.0 | 31-October-2012 | October 2012 Read Code Release following HSCIC review |
| 25.0 | 28-March-2013 | Signed off following consultation |
| 26.0 | 01-June-2013 | April 2013 Read Code Release following HSCIC review |
| 27.0 | 25-October-2013 | October 2013 Read Code Release following HSCIC review |
| Dates_1415 | 17-January-2014 | Review of proposed date changes for QOF 2014/15 |
| Jan14_Review | 23-January-2014 | Internal review of changes for 2014/15 |
| 28.0 | 28-March-2014 | Signed off following review and negotiations. Changes made to incorporate new date terminology |
| 29.0 | 27-June-2014 | April 2014 Read Code Release following HSCIC review |
| 30.0 | 10-October-2014 | October 2014 Read Code Release following HSCIC review |

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New GMS contract Q&O framework implementation

Dataset and business rules – Peripheral Arterial Disease (PAD) indicator set

Notes

- 1) QOF has been in operation since 2003 as the landscape within the NHS and Primary Care changes, the QOF dataset and rulesets must change in accordance with that new landscape. QOF is categorised as one of many Quality Services and a Quality Service has a start date (Quality Service Start Date) and an end date (Quality Service End Date). For QOF these reflect the QOF Year (i.e. 1st April to 31st March).
- 2) 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 use of a number of dates. The dates are as follows
 - a) **ACHIEVEMENT_DAT**: The date up to which patient information is considered when determining the output for each extraction.
 - For QOF 2014/15, **ACHIEVEMENT_DAT** will vary for each extraction depending on the reporting period for that extraction, e.g. for the end of **September extraction** it would have a value of **30.09.2014**; for the end of **March extraction** it would have a value of **31.03.2015**.
 - b) **PAYMENTPERIODEND_DAT**: The end date of the period for which payments are made for a given Quality Service. For any given Quality Service there will be one or more payment periods.
 - For QOF 2014/15, **PAYMENTPERIODEND_DAT** is **31.03.2015**
 - c) **QUALITY_SERVICE_START_DAT (QSSD)**: The start of the period during which a GP Practice provides the Quality Service
 - For QOF 2014/15, **QUALITY_SERVICE_START_DAT (QSSD)** is **01.04.2014**, however it is not utilised within the QOF dataset and rulesets.
 - d) **QUALITY_SERVICE_END_DAT (QSED)**: The end of the period during which a GP Practice provides the Quality Service
 - For QOF 2014/15, **QUALITY_SERVICE_END_DAT (QSED)** is **31.03.2015**
- 3) When interpreting these dates midnight is to be taken as meaning
 - a) **for the 'start of a period'**: the midnight is at the start of that day, For example; **"If CSMOK_DAT > (PAYMENTPERIODEND_DAT – 24 months)"**
 This example is used to determine if a code has been recorded in the 24 months preceding end of the payment period. If PAYMENTPERIODEND_DAT has a value of 31.03.2015, then this condition uses a value of 31.03.2013, but to be true the recorded code must be **after** 31.03.2013 and therefore this equates to the midnight between 31.03.2013 and 01.04.2013. This means information effective on 31st March will be excluded but information effective on 1st April will be included for the extraction.
 - b) **for the 'end of a period'**: the midnight at the end of that day, For example; **"Earliest <= ACHIEVEMENT_DAT"**
 This example is used to determine if a recorded code has been recorded before the achievement date. If ACHIEVEMENT_DAT has a value of 30th September (i.e. the end of September extraction) then this condition uses a value of 30.09.2014, but to be true the recorded code must be **on or before** 30.09.2014 and therefore this equates to the midnight between 30.09.2014 and 01.10.2014. This means information effective on 30th September will be included but information effective on 1st October will be excluded from the extraction.

- c) **for Patient Age:** the midnight at the end of that day, For example;
"Patients age (years) at ACHIEVEMENT_DAT"
 This example is used to determine a patients age, in years, at the achievement date. If ACHIEVEMENT_DAT has a value of 30th September (i.e. the end of September extraction) then this condition determines a patient age as of 30.09.2014. Therefore this equates to the midnight between 30.09.2014 and 01.10.2014.
- 4) 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 all of the dates (described in point 2 above) are specified prior to extraction of data and are available for computation in the data extraction routine. The dates are required to be included in the data extraction to support processing of rules that are dependent upon them. 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.
- 5) Clinical codes quoted are (where known) from the October 2014 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 it's 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).
- 6) 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, unless the operator "ALL" is used.

The "ALL" statement is used within the Qualifying Criteria for the Clinical data extraction criteria. Typically the selection for a READCODE_COD cluster field is based on a date of "LATEST" or "EARLIEST". The "ALL" statement is used to select all occurrences of any of the codes within the READCODE_COD cluster. It selects an array of instances, of which there may be more than one for each patient.

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.

- 7) 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
- 8) 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) | |
- 9) Where date criteria are specified with intervals of multiples of months or years these should be interpreted as calendar months or calendar years.

Dataset Specification

1) Patient selection criteria

a) Registration status

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

b) Diagnostic code status

| <i>Code Criteria</i> | <i>Qualifying diagnostic codes</i> | | <i>Time criteria</i> |
|----------------------|--|--|----------------------------------|
| Included | <i>Read codes v2</i> | <i>CTV3</i> | Earliest <= (ACHIEVEMENT_DAT) |
| | G73.. G73z.% (Excluding G73z1) Gyu74 G734. G73y. | Xa0IV XE0VP G73z. XE0VR Gyu74 XaZJa | |
| | <i>(PAD diagnostic codes)</i> | | |

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 <= (ACHIEVEMENT_DAT) |
| 3 | PAD_COD | <i>Read code v2</i> | <i>CTV3</i> | Earliest <= (ACHIEVEMENT_DAT) |
| | | G73.. G73z.% (Excluding G73z1) Gyu74 G734. G73y. | Xa0IV XE0VP G73z. XE0VR Gyu74 XaZJa | |
| | | <i>(PAD diagnostic codes)</i> | | |
| 4 | PAD_DAT | Date of PAD_COD | | Chosen record |
| 5 | PADEXC_COD | <i>Read code v2</i> | <i>CTV3</i> | Latest <= (ACHIEVEMENT_DAT) |
| | | 9hS.. 9hS0. 9hS1. | XaZ02 XaZ04 XaZ06 | |
| | | <i>(PAD exception codes)</i> | | |
| 6 | PADEXC_DAT | Date of PADEXC_COD | | Chosen record |
| 7 | BP_COD | <i>Read code v2</i> | <i>CTV3</i> | Latest <= (ACHIEVEMENT_DAT) |
| | | 246..% (excluding 2460., 2468. 246H., 246I., 246K., 246L., 246M., 246h., 246i., 246j., 246k.) | X773t% (excluding XaI9f, XaI9g, X779b, X779R, X779T, X779W, XaYai, XaYg8, XaYg9) | |

| | | | | |
|----|-----------|--|---|--------------------------------|
| | | | 246..% (excluding 2460., 2468., XaCFN, XaCFO, XaZvo, XaZxj) | |
| | | <i>(BP recording codes)</i> | | |
| 8 | BP_DAT | Date of BP_COD | | Chosen record |
| 9 | BP_SYS | Value 1 of BP_COD <i>(Systolic BP value)</i> | | Chosen record |
| 10 | BP_DIA | Value 2 of BP_COD <i>(Diastolic BP value)</i> | | Chosen record |
| 11 | BPEX_COD | <i>Read code v2</i> | <i>CTV3</i> | Latest <= (ACHIEVEMENT_DAT) |
| | | 8I3Y. | XaJkR | |
| | | <i>(BP recording exception codes)</i> | | |
| 12 | BPEX_DAT | Date of BPEX_COD | | Chosen record |
| 13 | HTMAX_COD | <i>Read code v2</i> | <i>CTV3</i> | Latest <= (ACHIEVEMENT_DAT) |
| | | 8BL0. | XaJ5h | |
| | | <i>(Code for maximal BP therapy)</i> | | |
| 14 | HTMAX_DAT | Date of HTMAX_COD | | Chosen record |
| 15 | SAL_COD | <i>Read code v2</i> | <i>CTV3</i> | Latest <= (ACHIEVEMENT_DAT) |
| | | bu2..% di1..% j11..% blm..% bu4..% | bu2..% x04tL% blm..% bu4..% | |

| | | | | |
|----|----------|---|-------------------------------------|--------------------------------|
| | | <i>(Salicylate prescription codes)</i> | | |
| 16 | SAL_DAT | Date of SAL_COD | | Chosen record |
| 17 | CLO_COD | <i>Read code v2</i> | <i>CTV3</i> | Latest <= (ACHIEVEMENT_DAT) |
| | | bu5..% 8B6P. | bu5..% XaJd8 | |
| | | <i>(Clopidogrel prescription codes)</i> | | |
| 18 | CLO_DAT | Date of CLO_COD | | Chosen record |
| 19 | OSAL_COD | <i>Read code v2</i> | <i>CTV3</i> | Latest <= (ACHIEVEMENT_DAT) |
| | | 67I8. 8B63. 8B3T. | XaFsi XaF7N XE0hr% | |
| | | <i>(OTC salicylate codes)</i> | | |
| 20 | OSAL_DAT | Date of OSAL_COD | | Chosen record |
| 21 | WAR_COD | <i>Read code v2</i> | <i>CTV3</i> | Latest <= (ACHIEVEMENT_DAT) |
| | | bs...% 8B2K. | x01O3% x01O5% XaKAK bs...% | |
| | | <i>(Warfarin prescription codes)</i> | | |
| 22 | WAR_DAT | Date of WAR_COD | | Chosen record |
| 23 | XSAL_COD | <i>Read code v2</i> | <i>CTV3</i> | Latest <= (ACHIEVEMENT_DAT) |
| | | 14LK. ZV148 | XaIpk Xa5FM% | |

| | | | | |
|----|-----------|--|------------------------------------|--------------------------------|
| | | U6051 TJ53. | XE22E% Xa5dp% XaDzd U6051 | |
| | | <i>(Salicylate contra-indications: persistent)</i> | | |
| 24 | XSAL_DAT | Date of XSAL_COD | | Chosen record |
| 25 | TXSAL_COD | <i>Read code v2</i> | <i>CTV3</i> | Latest <= (ACHIEVEMENT_DAT) |
| | | 8I24. 8I38. 8I66. 8I70. | XaDvH XaFsE XaIii XaJ5a | |
| | | <i>(Salicylate contra-indications: expiring)</i> | | |
| 26 | TXSAL_DAT | Date of TXSAL_COD | | Chosen record |
| 27 | XCLO_COD | <i>Read code v2</i> | <i>CTV3</i> | Latest <= (ACHIEVEMENT_DAT) |
| | | 14LQ. U6048 ZV14B | XaJ8V XaJ3e XaJ5v | |
| | | <i>(Clopidogrel contraindications: persistent)</i> | | |
| 28 | XCLO_DAT | Date of XCLO_COD | | Chosen record |
| 29 | TXCLO_COD | <i>Read code v2</i> | <i>CTV3</i> | Latest <= (ACHIEVEMENT_DAT) |
| | | 8I2K. 8I3R. 8I6B. 8I72. | XaJ6Y XaJ6Z XaJ5l XaJ5c | |
| | | <i>(Clopidogrel contraindications: expiring)</i> | | |

| | | | |
|----|-----------|-------------------|---------------|
| 30 | TXCLO_DAT | Date of TXCLO_COD | Chosen record |
|----|-----------|-------------------|---------------|

Indicator rulesets

- 1 Indicator PAD001: The contractor establishes and maintains a register of patients with peripheral arterial disease.

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 PAD002: The percentage of patients with peripheral arterial disease in whom the last blood pressure reading (measured in the preceding 12 months) is 150/90 mmHg or less.

Overview

This indicator has been developed to measure the effectiveness of the provision of a clinical care component for patients on the PAD register.

The aspect that is being measured is that of blood pressure control.

Disease register

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

Patients who have a diagnosis of PAD (i.e. there is evidence in the patient's electronic health record of a PAD diagnosis code)

Numerator and Denominator

The success criteria for this indicator (**numerator**) are achieved for those patients in the denominator who achieve the target blood pressure. Specifically:

The most recent blood pressure reading must be 150/90 or less.

and

This recording must have occurred in the preceding 12 months.

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 no exclusions.

Exceptions

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

For this indicator the exceptions are:

- any patient that has a valid blood pressure recording exception code recorded within the preceding 12 months (e.g. the patient refused a recording in the time period)
- any patient who has been registered within the preceding 9 months of the qualifying year (new patient). This indicator is about achieving good blood pressure control – it has been agreed that to do this requires a certain amount of time. New patients may be regarded as exceptions if they have only been registered within the preceding 9 months and have not achieved the target blood pressure.
- any patient that has a valid general PAD exception code recorded within the preceding 12 months.

- any patient has been diagnosed with PAD within the preceding 9 months of the year (new diagnosis of PAD). This indicator is about achieving good blood pressure control – it has been agreed that to do this requires a certain amount of time. Newly diagnosed patients may be regarded as exceptions if they have only been diagnosed within the preceding 9 months and have not achieved the target blood pressure.
- any patient who is coded as already on maximum tolerated dose for hypertension (patient can't be given any more medication to reduce the blood pressure)

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

Indicator PAD002: The percentage of patients with peripheral arterial disease in whom the last blood pressure reading (measured in the preceding 12 months) is 150/90 mmHg or less.

a) Denominator ruleset

| <i>Rule number</i> | <i>Rule</i> | <i>Action if true</i> | <i>Action if false</i> |
|--------------------|---|-----------------------|------------------------|
| 1 | If (BP_SYS <= 150 AND If BP_DIA <= 90 AND If BP_DAT > (PAYMENTPERIODEND_DAT – 12 months)) | Select | Next rule |
| 2 | If BPEX_DAT > (PAYMENTPERIODEND_DAT – 12 months) | Reject | Next rule |
| 3 | If REG_DAT > (PAYMENTPERIODEND_DAT – 9 months) | Reject | Next rule |
| 4 | If PADEXC_DAT > (PAYMENTPERIODEND_DAT – 12 months) | Reject | Next rule |
| 5 | If PAD_DAT > (PAYMENTPERIODEND_DAT – 9 months) | Reject | Next rule |
| 6 | If HTMAX_DAT > (PAYMENTPERIODEND_DAT – 12 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 (BP_SYS <= 150 AND If BP_DIA <= 90 AND If BP_DAT > (PAYMENTPERIODEND_DAT – 12 months)) | Select | Reject |

Additional Notes:

Denominator

Success

Rule 1: The aim of this rule is to immediately identify patients who have successfully achieved the criteria of the indicator and select them into the denominator (and as we shall see below into the numerator).

Firstly that the latest systolic blood pressure is less than or equal to 150 mm Hg, and secondly that the latest diastolic blood pressure is less than or equal to 90mm Hg and finally, that this recording has been made within the preceding 12 months.

If these are all true the patient is selected.

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 reason to be excepted from the denominator and consequently doesn't affect the achievement of the indicator.

Exceptions

It is worth remembering at this point that if a patient's last blood pressure recording within the preceding 12 months is 150/90 or less they will already have been selected into the denominator in Rule 1.

Rule 2: The aim of this rule is to identify any patient that has a valid blood pressure recording exception code recorded within the preceding 12 months. If this has been recorded in the preceding 12 months, the patient can be excepted and is not included in the denominator. Otherwise they are passed on to the next rule.

Rule 3: The aim of this rule is to identify any patient that 'recently registered' at the practice. If the patient has registered at the practice in the preceding 9 months of the qualifying year, the patient should not be included in the denominator. If the patient was not registered in the last 9 months they are passed on to the next rule.

Rule 4: The aim of this rule is to identify any patient that has a valid PAD exception code recorded. If this has been recorded in the preceding 12 months, the patient can be excepted and is not included in the denominator. Otherwise they are passed on to the next rule.

Rule 5: The aim of this rule is to identify whether the patient has been diagnosed with PAD within the preceding 9 months of the qualifying year. If the patient has been diagnosed with PAD within the preceding 9 months of the qualifying year the patient can be excepted and the patient should not be included in the denominator. Otherwise they are passed on to the next rule.

Rule 6: The aim of this rule is to identify whether the patient is already on maximum tolerated dose for hypertension. If the patient is currently on maximum tolerated dose for hypertension in the preceding 12 months the patient can be excepted and the patient should not be included in the denominator. Otherwise the patient is selected into the denominator.

Numerator

The success criterion for this indicator is as per Denominator Rule 1.

Indicator PAD004: The percentage of patients with peripheral arterial disease with a record in the preceding 12 months that aspirin or an alternative anti-platelet is being taken.

Overview

This indicator has been developed to measure the effectiveness of the provision of a clinical care component for patients on the PAD register.

The aspect that is being measured is relating to provision of aspirin or an alternative anti-platelet therapy.

Disease register

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

Patients who have a diagnosis of a PAD (i.e. there is evidence in the patient's electronic health record of a PAD diagnosis code)

Numerator and Denominator

The success criteria for this indicator (**numerator**) are achieved for those patients in the denominator who have a record of aspirin or an alternative anti-platelet therapy in the preceding 12 months.

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 is one exclusion.

- Consideration has to be made for those patients being treated with anticoagulant for a pre-existing condition. Any patient with a record of anticoagulant treatment in the preceding 12 months is excluded.

Exceptions

Patients that don't achieve the success criteria of the indicator are also 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 received aspirin or an alternative anti-platelet therapy maybe because there hasn't been an opportunity in the qualifying year to arrange this.
- any patient that has a relevant PAD exception code recorded within the preceding 12 months.
- any patient that has been diagnosed with PAD within the last 3 months of the year (new PAD patient). Newly diagnosed patients may be regarded as exceptions if they fulfil the criteria of the indicator but have not yet received aspirin or an alternative

anti-platelet therapy maybe because there hasn't been an opportunity in the qualifying year to arrange this.

- any patient with a record of a contraindication (persisting or expiring) to aspirin **and** a record of a contraindication (persisting or expiring) to the alternative anti-platelet therapy.

Please note that a persisting contraindication can be recorded once anywhere in the record whereas an expiring contraindication must be recorded within the last 12 months i.e. ([PAYMENTPERIODEND DAT](#) – 12 months)

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

Indicator PAD004: The percentage of patients with peripheral arterial disease with a record in the preceding 12 months that aspirin or an alternative anti-platelet is being taken.

a) Denominator ruleset

| <i>Rule number</i> | <i>Rule</i> | <i>Action if true</i> | <i>Action if false</i> |
|--------------------|---|-----------------------|------------------------|
| 1 | If WAR_DAT > (PAYMENTPERIODEND_DAT – 12 months) | Reject | Next rule |
| 2 | If SAL_DAT > (PAYMENTPERIODEND_DAT – 12 months) OR If CLO_DAT > (PAYMENTPERIODEND_DAT – 12 months) OR If OSAL_DAT > (PAYMENTPERIODEND_DAT – 12 months) | Select | Next rule |
| 3 | If REG_DAT > (PAYMENTPERIODEND_DAT – 3 months) | Reject | Next rule |
| 4 | If PADEXC_DAT > (PAYMENTPERIODEND_DAT – 12 months) | Reject | Next rule |
| 5 | If PAD_DAT > (PAYMENTPERIODEND_DAT – 3 months) | Reject | Next rule |
| 6 | If XSAL_COD = Null AND If TXSAL_DAT = Null | Select | Next rule |
| 7 | If XSAL_COD = Null AND If TXSAL_DAT <= (PAYMENTPERIODEND_DAT – 12 months) | Select | Next rule |
| 8 | If XCLO_COD = Null AND If TXCLO_DAT = Null | Select | Next rule |
| 9 | If XCLO_COD = Null AND If TXCLO_DAT <= (PAYMENTPERIODEND_DAT – 12 months) | Select | Reject |

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 SAL_DAT > (PAYMENTPERIODEND_DAT – 12 months) OR If CLO_DAT > (PAYMENTPERIODEND_DAT – 12 months) OR If OSAL_DAT > (PAYMENTPERIODEND_DAT – 12 months) | Select | Reject |

Additional Notes:

Denominator

Exclusions

Rule 1: The aim of this rule is to identify any patient with a record of anticoagulant treatment in the preceding 12 months.

If there is a record of anticoagulant treatment in the preceding 12 months, the patient can be excluded from the denominator. Otherwise they are passed on to the next rule.

Success

Rule 2: The aim of this rule is to identify any patient with a record of aspirin or an alternative anti-platelet therapy in the preceding 12 months.

If the patient has a record of aspirin or an alternative anti-platelet therapy within the appropriate timescale then the patient is selected into the denominator. If this is not recorded then they are passed on to the next rule.

Exceptions

It is worth remembering at this point that if a patient has a record of aspirin or an alternative anti-platelet therapy in the preceding 12 months they will already have been selected into the denominator in Rule 2.

Rule 3: The aim of this rule is to identify any patient that 'recently registered' at the practice. If the patient has registered at the practice in the last 3 months of the qualifying year, the patient should not be included in the denominator. If the patient was not registered in the last 3 months they are passed on to the next rule.

Rule 4: The aim of this rule is to identify any patient that has a valid PAD exception code recorded. If this has been recorded in the preceding 12 months, the patient can be excepted and is not included in the denominator. Otherwise they are passed on to the next rule.

Rule 5: The aim of this rule is to identify whether the patient has been diagnosed with PAD within the last 3 months of the qualifying year. If the patient has been diagnosed with PAD within the last 3 months of the qualifying year the patient can be excepted and the patient should not be included in the denominator. Otherwise they are passed on to the next rule.

Rule 6: The aim of this rule is to identify any patient with a contraindication (persistent or expiring) to Salicylate treatment. If a patient **does not** have a record of either an expiring or persistent contraindication to Salicylate treatment they are selected into the denominator. Otherwise they are passed on to the next rule.

Rule 7: The aim of this rule is to identify any patient without a persisting contraindication to Salicylate treatment who has an expiring contraindication to Salicylate treatment recorded **outside** the appropriate time frame.

If a patient without a persisting contraindication to Salicylate treatment has an expiring contraindication to Salicylate treatment recorded outside the appropriate time frame they are selected into the denominator. Otherwise they are passed on to the next rule.

Rule 8: The aim of this rule is to identify any patient with a contraindication (persistent or expiring) to Clopidogrel treatment.

If a patient **does not** have a record of either an expiring or persistent contraindication to Clopidogrel treatment they are selected into the denominator. Otherwise they are passed on to the next rule.

Rule 9: The aim of this rule is to identify any patient without a persisting contraindication to Clopidogrel treatment who has an expiring contraindication to Clopidogrel treatment recorded **outside** the appropriate time frame.

If a patient without a persisting contraindication to Clopidogrel treatment has an expiring contraindication to Clopidogrel treatment recorded outside the appropriate time frame they are selected into the denominator.

All remaining records can be excepted and are not included in the denominator.

Numerator

The success criterion for this indicator is as per Denominator Rule 2.