



Data and Business Rules – Depression Indicator Set					
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New GMS Contract QOF Implementation

Dataset and Business Rules

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Depression Indicator Set

Amendment History:

Version	Date	Amendment History
		The version number starts at 7.1 in order to coincide with existing datasets and business rules.
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	18-Feb-2006	Amended following internal & 4 Countries review
8.0	15-Mar-2006	Signed off following 4 Country review
8.1	02-May-2006	Responding to queries raised a) Amend wording for Note 3 b) Correct typo to DIAG_DAT cluster c) Add a check to exclude 'patients diagnosed with depression' from DEP1
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 Amend 'Qualifying Criteria' for DEPAS_COD
8.7	16-Nov-2006	Response to queries raised by 4 Country Review: Remove Reaven's syndrome
9.0	30-Nov-2006	Approved by NHSE
9.1	11-Apr-2007	April 2007 Read Code Release
9.2	13-Jun-2007	Following 4-Country Review: Correction in Rule 1 (Depression 2) to standardise date check
10.0	18-Jun-2007	Signed off following 4 Country review
10.1	23-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
13.1	14-Feb-2009	QOF Review 2008
13.2	09-Mar-2009	Amendments following NHSE review
13.3	27-Apr-2009	Add notes to DEP2 & DEP3 and amendments following Four-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 – Depression 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 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).

The version number starts at 7.1 in order to coincide with existing datasets and business rules.

- 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.

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 < (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 status
 - i) patient population with depression

<i>Code criteria</i>	<i>Qualifying diagnostic codes</i>		<i>Time criteria</i>
<i>Included</i>	<i>Read codes v2</i>	<i>CTV3</i>	<i>Latest first or new episode < (REF_DAT)</i>
	E0013, E0021 E112.%, E113.% E118., E11y2 E11z2, E130. E135. E2003 E291., E2B.. E2B1., Eu204 Eu251, Eu32.% (excluding Eu32A, Eu329) Eu33.%, Eu341 Eu412	X00Sb, X00SO% (excluding 62T1.% E2B0., XaCHo, XaX54, XaX53)	
	<i>(Depression diagnosis codes)</i>		
<i>Excluded</i>	<i>Read codes v2</i>	<i>CTV3</i>	<i>Latest < (REF_DAT) AND > Date of diagnostic code above</i>
	212S.	XaLGO	
	<i>(Codes for depression resolved)</i>		
<i>Excluded</i>	Age < 18 yrs at REF_DAT		

- ii) patient population with co-morbidity of diabetes or coronary heart disease
 (Note: A patient need only qualify for ONE of the disease areas to be included in the patient population)

<i>Code criteria</i>	<i>Qualifying diagnostic codes (diabetes mellitus)</i>		<i>Time criteria</i>
<i>Included</i>	<i>Read codes v2</i>	<i>CTV3</i>	<i>Latest < (REF_DAT)</i>
	C10E.%, C10F.% (Excluding C10F8)	X40J4% X40J5% X40J6	
	<i>(Diagnostic codes for diabetes mellitus)</i>		
<i>Excluded</i>	<i>Read codes v2</i>	<i>CTV3</i>	<i>Latest < (REF_DAT) AND > Date of diagnostic code above</i>
	21263 212H.	XaFsp	
	<i>(Codes for diabetes resolved)</i>		
<i>Excluded</i>	<i>Age < 17 yrs at REF_DAT</i>		

<i>Code criteria</i>	<i>Qualifying diagnostic codes (IHD)</i>		<i>Time criteria</i>
<i>Included</i>	<i>Read codes v2</i>	<i>CTV3</i>	<i>Earliest < (REF_DAT)</i>
	G3... - G309. G30B. - G330z G33z. - G3401 G342. - G366. G38.. - G3z.. Gyu3.%	XE2uV% (excluding Xa07j%, G341.%, X200B%, X200c)	

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	Patients age (years) at REF_DAT		Unconditional
4	DEPEXC_COD	<i>Read codes v2</i>	<i>CTV3</i>	Latest < REF_DAT
		9hC0. 9hC1.	XaLFq XaLFr	
		<i>(Depression exception reporting codes)</i>		
5	DEPEXC_DAT	Date of DEPEXC_COD		Chosen record
6	DEPR_COD	<i>Read codes v2</i>	<i>CTV3</i>	Latest first or new episode < REF_DAT
		E0013, E0021 E112.%, E113.% E118., E11y2 E11z2, E130. E135., E2003 E291., E2B.. E2B1., Eu204 Eu251, Eu32.% (excluding Eu32A, Eu329) Eu33.%, Eu341 Eu412	X00Sb, X00SO% (excluding 62T1.% E2B0., XaCHo, XaX54, XaX53)	
		<i>(Depression diagnosis codes)</i>		
7	DEPR_DAT	Date of DEPR_COD		Chosen record
8	DEPRQ_COD	<i>Read codes v2</i>	<i>CTV3</i>	Latest < REF_DAT

		6896.	XaLlc	
		<i>(Depression question codes)</i>		
9	DEPRO_DAT	Date of DEPRO_COD		Chosen record
10	DEPAS_COD	<i>Read codes v2</i>	<i>CTV3</i>	Earliest (>= DEPR_DAT) AND (< REF_DAT)
		388f. 388g. 388P.	XaLDN XaLLG Xalwf	
		<i>(Depression assessment tool codes)</i>		
11	DEPAS_DAT	Date of DEPAS_COD		Chosen record
12	IHD_COD	<i>Read codes v2</i>	<i>CTV3</i>	Earliest < REF_DAT
		G3... - G309. G30B. - G330z G33z. - G3401 G342. - G366. G38.. - G3z.. Gyu3.%	XE2uV% (excluding Xa07j%, G341.%, X200B%, X200c)	
		<i>(Ischaemic heart disease codes)</i>		
13	IHD_DAT	Date of IHD_COD		Chosen record
14	DM_COD	<i>Read codes v2</i>	<i>CTV3</i>	Earliest < (REF_DAT)
		C10E.% C10F.% (Excluding C10F8)	X40J4% X40J5% X40J6	
		<i>(Codes for diabetes)</i>		
15	DM_DAT	Date of DM_COD		Chosen record

16	DMRES_COD	<i>Read codes v2</i>	<i>CTV3</i>	Latest < (REF_DAT) AND > (DM_DAT)
		21263 212H.	XaFsp	
		<i>(Codes for diabetes resolved)</i>		
17	DMRES_DAT	Date of DMRES_COD		Chosen record
18	DIAG_DAT	The earliest diagnosis date of disease for inclusion in the co-morbidity register		Earliest of DM_DAT (where (DMRES_DAT = Null) AND (PAT_AGE >= 17)), IHD_DAT
19	DEPAS2_COD	<i>Read codes v2</i>	<i>CTV3</i>	Earliest (>= DEPAS_DAT + 4 weeks) AND (<= DEPAS_DAT + 12 weeks) AND < (REF_DAT)
		388f. 388g. 388P.	XaLDN XaLLG Xalwf	
		<i>(Depression assessment tool codes)</i>		
20	DEPAS2_DAT	Date of DEPAS2_COD		Chosen record

Indicator rulesets

- 1 Indicator DEP 1: The percentage of patients on the diabetes register and/or the CHD register for whom case finding for depression has been undertaken on one occasion during the preceding 15 months using two standard screening questions.
- a) Denominator ruleset: To be applied to the patient population with diabetes and/or CHD

<i>Rule number</i>	<i>Rule</i>	<i>Action if true</i>	<i>Action if false</i>
1	If <u>DEPRQ_DAT</u> >= (<u>REF_DAT</u> – 15 months)	Select	Next rule
2	If <u>DEPR_DAT</u> >= (<u>REF_DAT</u> – 15 months)	Reject	Next rule
3	If <u>REG_DAT</u> >= (<u>REF_DAT</u> – 3 months)	Reject	Next rule
4	If <u>DEPEXC_DAT</u> >= (<u>REF_DAT</u> – 15 months)	Reject	Next rule
5	If <u>DIAG_DAT</u> < (<u>REF_DAT</u> – 3 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 <u>DEPRQ_DAT</u> >= (<u>REF_DAT</u> – 15 months)	Select	Reject

Please note: any reference to depression diagnosis relates only to a patients first or new episode.

Rule 1: The aim of this rule is to identify those patients for whom case finding for depression has been undertaken within 15 months from the end of the QOF Financial year end.

True: If the patient has been asked about depression within 15 months from the end of the QOF Financial year end then the patient is selected.

False: If the patient has not been asked about depression within 15 months from the end of the QOF Financial year end then the patient is further considered.

Rule 2: The aim of this rule is to identify those patients who have had a diagnosis of depression within 15 months from the end of the QOF Financial year end.

True: If the patient has been diagnosed with depression within 15 months from the end of the QOF Financial year end then the patient is disregarded and not included in the denominator.

False: If the patient has been diagnosed with depression outside 15 months from the end of the QOF Financial year end, then the patient is further considered.

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, the patient should not be included in the denominator.

Rule 4: The aim of this rule is to identify any patient that has an accepted 'Depression Exception' Read Code recorded. If the patient has an accepted 'Depression Exception' Read Code recorded in the last 15 months, the patient should not be included in the denominator.

Rule 5: The aim of this rule is to identify any patient that has been 'recently diagnosed' as either a diabetes or IHD patient. If the patient has been diagnosed with either disease in the last 3 months, the patient should not be included in the denominator.

- 2 Indicator DEP 4: In those patients with a new diagnosis of depression, recorded between the preceding 1 April to 31 March, the percentage of patients who have had an assessment of severity at the time of diagnosis using an assessment tool validated for use in primary care.

For the purposes of QOF measurement 'at the time of diagnosis' is defined as within 28 days of initial diagnosis

- a) Denominator ruleset: To be applied to patient population with depression

<i>Rule number</i>	<i>Rule</i>	<i>Action if true</i>	<i>Action if false</i>
1	If <u>DEPR_DAT</u> < (<u>REF_DAT</u> – 15 months)	Reject	Next rule
2	If <u>DEPR_DAT</u> >= (<u>REF_DAT</u> – 28 days) AND If <u>DEPAS_DAT</u> = Null	Reject	Next rule
3	If <u>DEPAS_DAT</u> < (<u>REF_DAT</u> – 12 months)	Reject	Next rule
4	If <u>DEPAS_DAT</u> <= (<u>DEPR_DAT</u> + 28 days)	Select	Next rule
5	If <u>REG_DAT</u> >= (<u>REF_DAT</u> – 3 months)	Reject	Next rule
6	If <u>DEPEXC_DAT</u> >= (<u>REF_DAT</u> – 15 months)	Reject	Next rule
7	If <u>DEPR_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>DEPAS_DAT</u> <= (<u>DEPR_DAT</u> + 28 days)	Select	Reject

Please note: any reference to depression diagnosis relates only to a patients first or new episode.

Rule 1: The aim of this rule is to identify those patients that have been diagnosed with depression outside 15 months from the end of the current QOF Financial year end.
True: If the patient has been diagnosed 15 months outside the end of the current QOF Financial year end then the patient is disregarded and not included in the denominator.
False: If the patient has not been diagnosed 15 months outside the end of the current QOF Financial year end then the patient is further considered.

Rule 2: The aim of this rule is to identify if the depression diagnosis is within 28 days of the reference date and the depression assessment is null.
True: If the patient has a recording of depression within 28 days from the end of the QOF financial year end and the depression assessment date is null the patient is disregarded and not included in the denominator.

False: If the patient has a recording of depression within 28 from the end of the QOF financial year end and the depression assessment date is not null then the patient is further considered.

Rule 3: The aim of this rule is to identify those patients that have had an assessment for depression outside 12 months from the end of the current QOF financial year end.

True: If the patient has had an assessment for depression outside 12 months from the end of the current QOF financial year end then the patient is disregarded and not included in the denominator.

False: : If the patient has had not had an assessment for depression outside 12 months from the end of the current QOF financial year end then the patient is further considered.

Rule 4: The aim of this rule is to identify those patients who have had a depression assessment within 28 days from the depression diagnosis date.

True: If the assessment for depression has taken place within 28 days from the depression diagnosis date then the patient is selected.

False: If the patient has not had a depression assessment within 28 days from the depression diagnosis date then the patient is further considered.

Rule 5: 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, the patient should not be included in the denominator.

Rule 6: The aim of this rule is to identify any patient that has an accepted 'Depression Exception' Read Code recorded. If the patient has an accepted 'Depression Exception' Read Code recorded in the last 15 months, the patient should not be included in the denominator.

Rule 7: The aim of this rule is to identify any patient that has been 'recently diagnosed' with depression. If the patient has been diagnosed with either disease in the last 3 months, the patient should not be included in the denominator.

- 3 Indicator DEP 5: In those patients with a new diagnosis of depression and assessment of severity recorded between the preceding 1 April to 31 March, the percentage of patients who have had a further assessment of severity 4-12 weeks (inclusive) after the initial recording of the assessment of severity. Both assessments should be completed using an assessment tool validated for use in primary care.

a) Denominator ruleset: to be applied to patient population with depression

<i>Rule number</i>	Rule	<i>Action if true</i>	<i>Action if false</i>
1	If <u>DEPR_DAT</u> < 01.04.09	Reject	Next rule
2	If <u>DEPR_DAT</u> <= (<u>REF_DAT</u> – 68 weeks)	Reject	Next rule
3	If <u>DEPAS_DAT</u> = Null	Reject	Next rule
4	If <u>DEPR_DAT</u> >= (<u>REF_DAT</u> – 16 weeks) AND If <u>DEPAS2_DAT</u> = Null	Reject	Next rule
5	If <u>DEPAS2_DAT</u> < (<u>REF_DAT</u> – 12 months)	Reject	Next rule
6	If <u>DEPAS_DAT</u> <= (<u>DEPR_DAT</u> + 28 days) AND If <u>DEPAS2_DAT</u> ≠ Null	Select	Next rule
7	If <u>REG_DAT</u> >= (<u>REF_DAT</u> – 3 months)	Reject	Next rule
8	If <u>DEPEXC_DAT</u> >= (<u>REF_DAT</u> – 15 months)	Reject	Next rule
9	If <u>DEPR_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>	Rule	<i>Action if true</i>	<i>Action if false</i>
1	If <u>DEPAS_DAT</u> <= (<u>DEPR_DAT</u> + 28 days) AND If <u>DEPAS2_DAT</u> ≠ Null	Select	Reject

Please note: any reference to depression diagnosis relates only to a patients first or new episode.

Rule 1: The aim of this rule is to only identify those patients that have been diagnosed with depression before the 01.04.2009

True: If the patient has been diagnosed before the 01.04.2009 then the patient is disregarded and not included in the denominator.

False: If the patient has not been diagnosed before the 01.04.2009 then the patient is further considered.

Rule 2: The aim of this rule is to identify those patients who have been diagnosed with depression outside 68 weeks from the end of the current QOF financial year end.

True: If the patient has been diagnosed with depression outside 68 weeks from the end of the current QOF financial year end then the patient is disregarded and not included in the denominator.

False: If the patient has not been diagnosed with depression outside 68 weeks from the end of the current QOF financial year end then the patient is further considered.

Rule 3: The aim of this rule is to identify those patients who have no record of a depression assessment.

True: Those patients with no record of a depression assessment will be disregarded and not included in the denominator.

False: Patients who do have a record of a depression assessment will be further considered.

Rule 4: The aim of this rule is to identify those patients that have been diagnosed with depression within 16 weeks from the end of the current QOF financial year end and do not have a second depression assessment.

The second depression assessment is as follows:

Searches for the earliest recording of a depression assessment that has occurred within 4 to 12 weeks from the initial depression assessment, this must take place within the end of the current QOF financial year end.

True: If the patient has been diagnosed with depression within 16 weeks from the end of the current QOF financial year end and do not have a recording of a second depression assessment then the patient is disregarded and not included in the denominator.

False: If the patient has not been diagnosed with depression within 16 weeks from the end of the current QOF financial year end then they are further considered.

Rule 5: The aim of this rule is to identify that the patient has had a second depression assessment outside 12 months from the end of the current QOF financial year end.

True: If the patient has had a second depression assessment outside 12 months from the end of the current QOF financial year end then the patient is disregarded and not included in the denominator.

False: If the patient has not had a second depression assessment outside 12 months from the end of the current QOF financial year end then the patient is further considered.

Rule 6: The aim of this rule is to identify those patients that have had a depression assessment within 28 days of the depression diagnosis where there is a recording of a second assessment that has occurred within 4-12 weeks after the first assessment.

True: If the patient has had a depression assessment within 28 days from the depression diagnosis and a second assessment within 4-12 weeks after the first assessment then the patient is selected.

False: If the patient has not had a depression assessment within 28 days of the depression diagnosis, or the patient has not had a second assessment within 4-12 weeks after the first assessment then the patient is further considered.

Rule 7: 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, the patient should not be included in the denominator.

Rule 8: The aim of this rule is to identify any patient that has an accepted 'Depression Exception' Read Code recorded. If the patient has an accepted 'Depression Exception' Read Code recorded in the last 15 months, the patient should not be included in the denominator.

Rule 9: The aim of this rule is to identify any patient that has been 'recently diagnosed' with depression. If the patient has been diagnosed with either disease in the last 3 months, the patient should not be included in the denominator.