

Data and Business Rules – Stroke and Transient Ischaemic Attack (STIA) Indicator Set					
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New GMS Contract QOF Implementation

Dataset and Business Rules

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Stroke and Transient Ischaemic Attack (STIA)

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	28-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
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	10-Sept-2007	April 2007 Release
10.2	23-Sep-2007	October 2007 Read Code Release October 2007 SNOMED CT Release
10.3	27-Nov-2007	Following 4-Country Review: '%' added to 319357003 in SAL_COD
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 (Replace STROKE11 with STROKE13)
11.2	30-Jun-2008	Following 4-Country Review: Remove ETIA_COD/DAT cluster and merge with STR_COD/DAT cluster Remove DIAG_DAT cluster Denominator Rule 2 and Numerator Rule 1 (for Stroke 13) corrected Denominator Rule 6 (for Stroke 13) amended to

		a 1 month window Denominator Rule 6 (for Stroke 13) amended to use STRT_DAT
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 Application of v12.0 Addendum 2 corrections to SCAN_COD & SCEXC_COD STRTIA_COD
13.0	05-Dec-2008	Signed off following 4 Country review
13.2	09-Mar-2009	QOF Review 2008
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	Signed off following 4 Country review
15.1	12-October-2009	October 2009 Clinical Codes Release
15.2	28-October-2009	October 2009 Clinical Codes Release review
16.0	02-December-2009	Sign off following 4 Country 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.
21.0	10-November-2011	October 2011 Read Code Release following NHS IC review.
22.0	12-December-2011	Signed off following 4 Country review
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. Document name changed from 'Stroke and Transient Ischaemic Attacks (TIA)' to 'Stroke and Transient Ischaemic Attack (STIA)'.
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
27.1	02-December-2013	Update to SCAN_COD, FLU_COD and TXFLU_COD
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 – Stroke and transient ischaemic attack (STIA) 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.

- 10) The new GMS contract requires that influenza vaccinations should be given between 1st August and 31st March of any given contract year in order to qualify for the relevant indicators. Hence in the contract year 2014 – 2015 the relevant dates will be 1st August 2014 and 31st March 2015 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

<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

Code criteria	Qualifying diagnostic codes		Time criteria
<i>Included</i>	<i>Read codes v2</i>	<i>CTV3</i>	<i>Earliest <=</i> <i>(ACHIEVEMENT_DAT)</i>
	G61..% (excluding G617.) G63y0 - G63y1 G64..% G66..% (excluding G669.) G6760 G6W.. G6X.. Gyu62 – Gyu66 Gyu6F Gyu6G G619.	X00D1% (Excluding XE1Xs%, F21y2) G660. G661. G662. Gyu6F G641. Xa6YV Gyu62 Gyu65 Gyu66	
	<i>(Stroke disease codes)</i>		
	<i>Read codes v2</i>	<i>CTV3</i>	
	G65.- G654. G656.- G65zz ZV12D Fyu55	XE0VK% (Excluding F4236, G660., G661., G662.) XaX16 G65z0 G65z1	
<i>(TIA 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	STREXC_COD	<i>Read codes v2</i>	<i>CTV3</i>	Latest <= (ACHIEVEMENT_DAT)
		9h2..%	XaJ40%	
		<i>(Stroke exception reporting codes)</i>		
4	STREXC_DAT	Date of STREXC_COD		Chosen record
5	STRT_COD	<i>Read codes v2</i>	<i>CTV3</i>	Earliest <= (ACHIEVEMENT_DAT)
		G61..% (excluding G617.) G63y0 - G63y1 G64..% G66..% (excluding G669.) G6760 G6W.. G6X.. G65..- G654. G656.- G65zz Gyu62 - Gyu66 Gyu6F Gyu6G ZV12D Fyu55 G619.	X00D1% (Excluding XE1Xs%, F21y2) XE0VK% (Excluding F4236) XaX16 G65z0 G65z1 Gyu6F G641. Xa6YV Gyu62 Gyu65 Gyu66	
		<i>(Stroke or TIA codes)</i>		
6	STRT_DAT	Date of STRT_COD		Chosen record
7	TIA_COD	<i>Read codes v2</i>	<i>CTV3</i>	Earliest <=

		G65.- G654. G656.- G65zz ZV12D Fyu55	XE0VK% (excluding F4236, G660., G661., G662.) XaX16 G65z0 G65z1	(ACHIEVEMENT_DAT)
		<i>(TIA codes)</i>		
8	TIA_DAT	Date of TIA_COD		Chosen record
		<i>Read codes v2</i>	<i>CTV3</i>	
9	OSTR_COD	G63y0 - G63y1 G64..% G665. G666. G6760 G6W.. G6X.. Gyu63 - Gyu66 Gyu6G	Xa0kZ% (excluding XE1Xs%) G640.% (excluding G663., G664.) X00D3, G641., Gyu65, Gyu66	Earliest <= (ACHIEVEMENT_DAT)
		<i>(Non-haemorrhagic stroke codes)</i>		
10	OSTR_DAT	Date of OSTR_COD		Chosen record
		<i>Read codes v2</i>	<i>CTV3</i>	
11	SCAN_COD	567.. - 5673. 569.. - 5693. 5675. 567C. 5694. 569F. 5C00. 5C12. 8HQ3.	5671., 5672. 5673., 5691. 5692. 5693. XaJEi XaJEh X70oK% 5675. XaKao	Earliest <= (ACHIEVEMENT_DAT) AND >= (DIAG_DAT - 3 months)

		8HQ4. 8HBJ. 8HTQ. 569K0	XaJIF XaO4U 8HQ3. 8HQ4. XaJkS XaJYc XaXOh 567.. X70oI	
		<i>(MRI / CT scan codes)</i>		
12	SCAN_DAT	Date of SCAN_COD		Chosen record
13	SCEXC_COD	<i>Read codes v2</i>	<i>CTV3</i>	Earliest <= (ACHIEVEMENT_DAT) AND >= (DIAG_DAT)
		5695. 56F0.	XaJHY XaJIE	
		<i>(Codes for MRI / CT declined)</i>		
14	SCEXC_DAT	Date of SCEXC_COD		Chosen record
15	BP_COD	<i>Read codes 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>		
16	BP_DAT	Date of BP_COD		Chosen record
17	BP_SYS	Value 1 of BP_COD <i>(Systolic BP value)</i>		Chosen record
18	BP_DIA	Value 2 of BP_COD <i>(Diastolic BP value)</i>		Chosen record

19	BPEX_COD	<i>Read codes v2</i>	<i>CTV3</i>	Latest <= ACHIEVEMENT_DAT
		8I3Y.	XaJkR	
		<i>(BP recording exception codes)</i>		
20	BPEX_DAT	Date of BPEX_COD		Chosen record
21	HTMAX_COD	<i>Read codes v2</i>	<i>CTV3</i>	Latest <= ACHIEVEMENT_DAT
		8BL0.	XaJ5h	
		<i>(Code for maximal BP therapy)</i>		
22	HTMAX_DAT	Date of HTMAX_COD		Chosen record
23	XSAL_COD	<i>Read codes v2</i>	<i>CTV3</i>	Latest <= ACHIEVEMENT_DAT
		14LK. ZV148 U6051 TJ53.	XaIpk Xa5FM% XE22E% Xa5dp% XaDzd U6051	
		<i>(Salicylate contra-indications: persistent)</i>		
24	XSAL_DAT	Date of XSAL_COD		Chosen record
25	TXSAL_COD	<i>Read codes 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	XWAR_COD	<i>Read codes v2</i>	<i>CTV3</i>	Latest <= ACHIEVEMENT_DAT
		14LP. TJ42.% (excluding TJ420)	XaJ60 TJ42.% (excluding TJ420)	

		U6042 ZV14A	U6042 XaJ8B Xa5yP%	
		<i>(Warfarin contraindications: persistent)</i>		
28	XWAR_DAT	Date of XWAR_COD		Chosen record
29	TXWAR_COD	Read codes v2	CTV3	Latest <= ACHIEVEMENT_DAT
		8I25. 8I3E. 8I65. 8I71. 8I2R. 8I3d. 8I6N. 8I7A. 8I2o. 8IES. 8I611 8I7R. 8I2u. 8IH1. 8I6s. 8I7V.	XaFsz XaIIn XaIIh XaJ5b XaKAB XaKAD XaKA7 XaKA0 XaZbj XaZZI XaZbl XaZbr XabEn XabEe XabEp XabEo	
		<i>(Warfarin contraindications: expiring)</i>		
30	TXWAR_DAT	Date of TXWAR_COD		Chosen record
31	XCLO_COD	Read codes v2	CTV3	Latest <= ACHIEVEMENT_DAT
		14LQ. U6048 ZV14B	XaJ8V XaJ3e XaJ5v	
		<i>(Clopidogrel contraindications: persistent)</i>		
32	XCLO_DAT	Date of XCLO_COD		Chosen record

33	TXCLO_COD	Read codes v2	CTV3	Latest <= ACHIEVEMENT_DAT
		8I2K. 8I3R. 8I6B. 8I72.	XaJ6Y XaJ6Z XaJ5I XaJ5c	
		<i>(Clopidogrel contraindications: expiring)</i>		
34	TXCLO_DAT	Date of TXCLO_COD		Chosen record
35	XDIPY_COD	Read codes v2	CTV3	Latest <= ACHIEVEMENT_DAT
		14LX. TJC44 U60C3	TJC44 Xa5d6 Xa61Z	
		<i>(Dipyridamole contraindications: persistent)</i>		
36	XDIPY_DAT	Date of XDIPY_COD		Chosen record
37	TXDIPY_COD	Read codes v2	CTV3	Latest <= ACHIEVEMENT_DAT
		8I2b. 8I3n. 8I6a. 8I7J.	XaLFv XaLFw XaLFx XaLFy	
		<i>(Dipyridamole contraindications: expiring)</i>		
38	TXDIPY_DAT	Date of TXDIPY_COD		Chosen record
39	OSAL_COD	Read codes v2	CTV3	Latest <= (ACHIEVEMENT_DAT)
		67I8. 8B63. 8B3T.	XaFsi XaF7N XE0hr%	
		<i>(OTC salicylate codes)</i>		
40	OSAL_DAT	Date of OSAL_COD		Chosen record
41	SAL_COD	Read codes v2	CTV3	Latest <=

		bu2..% di1..% j11..% blm..% bu4..%	bu2..% x04tL% blm..% bu4..%	(ACHIEVEMENT_DAT)
		<i>(Salicylate prescription codes)</i>		
42	SAL_DAT	Date of SAL_COD		Chosen record
43	CLO_COD	Read codes v2	CTV3	Latest <= (ACHIEVEMENT_DAT)
		bu5..% 8B6P.	bu5..% XaJd8	
		<i>(Clopidogrel prescription codes)</i>		
44	CLO_DAT	Date of CLO_COD		Chosen record
45	WAR_COD	Read codes v2	CTV3	Latest <= (ACHIEVEMENT_DAT)
		bs...% 8B2K.	x01O3% x01O5% XaKAK bs...%	
		<i>(Warfarin prescription codes)</i>		
46	WAR_DAT	Date of WAR_COD		Chosen record
47	DIPY_COD	Read codes v2	CTV3	Latest <= (ACHIEVEMENT_DAT)
		bu1..% (excluding bu13., bu1z.) bu4..%	bu1..% (excluding bu1z.) bu4..%	
		<i>(Dipyridamole prescription codes)</i>		
48	DIPY_DAT	Date of DIPY_COD		Chosen record
49	XFLU_COD	Read codes v2	CTV3	Latest <= (ACHIEVEMENT_DAT)
		14LJ. U60K4	XaIAA XaJ7u	

		ZV14F	XaJ8X Xa5um% Xa5WJ%	
		<i>(Flu vaccine contraindication: persistent)</i>		
50	XFLU_DAT	Date of XFLU_COD		Chosen record
51	TXFLU_COD	Read codes v2	CTV3	Latest <= ACHIEVEMENT_DAT
		68NE. 9OX51 8I2F0 8I6D0 68NE0 9OX54 9OX56	68NE. XaZ0i XaZ0j XaZ0k Xaa9f XaadS XaadU	
		<i>(Flu vaccine contraindications: expiring)</i>		
52	TXFLU_DAT	Date of TXFLU_COD		Chosen record
53	FLU_COD	Read codes v2	CTV3	Latest <= (ACHIEVEMENT_DAT)
		n47..% (Excluding n47A., n47B., n47r., n47s., n47t.) 65ED., 65E20, 65ED0, 65ED2, 65ED1, 65ED3, 65E21, 65E22	n47..% (Excluding n47A., n47B., n47r., n47s., n47t.) XaZ0d, XaZ0e, XaZfY, XaaZp, Xaac3, Xaac4, Xaac7, Xaac8	
		<i>(Flu vaccination codes)</i>		
54	FLU_DAT	Date of FLU_COD		Chosen record
55	STRK_COD	<i>Read codes v2</i>	CTV3	Latest First or New

		G61..% (excluding G617.) G63y0 - G63y1 G64..% G66..% (excluding G669.) G6760 G6W.. G6X.. Gyu62 - Gyu66 Gyu6F Gyu6G G619.	X00D1% (Excluding XE1Xs%, F21y2) G660. G661. G662. Gyu6F G641. Xa6YV Gyu62 Gyu65 Gyu66	episode <= (ACHIEVEMENT_DAT)
		<i>(Stroke diagnosis codes)</i>		
56	STRK_DAT	Date of STRK_COD		Chosen record
57	DIAG_DAT	The latest diagnosis of TIA_COD or STRK_COD		Latest of TIA_DAT STRK_DAT

Indicator rulesets

- 1 Indicator STIA001: The contractor establishes and maintains a register of patients with stroke or TIA.

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 STIA008: The percentage of patients with a stroke or TIA (diagnosed on or after 1 April 2014) who have a record of a referral for further investigation between 3 months before or 1 month after the date of the latest recorded stroke or the first TIA.

a) Denominator ruleset

<i>Rule number</i>	<i>Rule</i>	<i>Action if true</i>	<i>Action if false</i>
1	If <u>STRK DAT</u> >= 01.04.2014 OR If <u>TIA DAT</u> >= 01.04.2014	Next rule	Reject
2	If <u>SCAN DAT</u> <= (<u>DIAG DAT</u> + 1 month)	Select	Next rule
3	If <u>REG DAT</u> > (<u>PAYMENTPERIODEND DAT</u> - 3 months)	Reject	Next rule
4	If <u>STREXC DAT</u> > (<u>PAYMENTPERIODEND DAT</u> - 12 months)	Reject	Next rule
5	If <u>SCEXC DAT</u> <= (<u>DIAG DAT</u> + 1 month)	Reject	Next rule
6	If <u>STRT DAT</u> > (<u>PAYMENTPERIODEND 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>SCAN DAT</u> <= (<u>DIAG DAT</u> + 1 month)	Select	Reject

- 3 Indicator STIA003: The percentage of patients with a history of stroke or TIA 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 <u>BP_SYS</u> <= 150 AND If <u>BP_DIA</u> <= 90 AND If <u>BP_DAT</u> > (<u>PAYMENTPERIODEND_DAT</u> – 12 months)	Select	Next rule
2	If <u>BPEX_DAT</u> > (<u>PAYMENTPERIODEND_DAT</u> – 12 months)	Reject	Next rule
3	If <u>REG_DAT</u> > (<u>PAYMENTPERIODEND_DAT</u> – 9 months)	Reject	Next rule
4	If <u>STREXC_DAT</u> > (<u>PAYMENTPERIODEND_DAT</u> – 12 months)	Reject	Next rule
5	If <u>STRT_DAT</u> > (<u>PAYMENTPERIODEND_DAT</u> – 9 months)	Reject	Next rule
6	If <u>HTMAX_DAT</u> > (<u>PAYMENTPERIODEND_DAT</u> – 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 <u>BP_SYS</u> <= 150 AND If <u>BP_DIA</u> <= 90 AND If <u>BP_DAT</u> > (<u>PAYMENTPERIODEND_DAT</u> – 12 months)	Select	Reject

- 4 Indicator STIA007: The percentage of patients with a stroke shown to be non-haemorrhagic, or a history of TIA, who have a record in the preceding 12 months that an anti-platelet agent, or an anti-coagulant 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 <u>OSTR_COD</u> = Null AND If <u>TIA_COD</u> = Null	Reject	Next rule
2	If <u>SAL_DAT</u> > (<u>PAYMENTPERIODEND_DAT</u> – 12 months) OR If <u>WAR_DAT</u> > (<u>PAYMENTPERIODEND_DAT</u> – 12 months) OR If <u>CLO_DAT</u> > (<u>PAYMENTPERIODEND_DAT</u> – 12 months) OR If <u>OSAL_DAT</u> > (<u>PAYMENTPERIODEND_DAT</u> – 12 months) OR If <u>DIPY_DAT</u> > (<u>PAYMENTPERIODEND_DAT</u> – 12 months)	Select	Next rule
3	If <u>REG_DAT</u> > (<u>PAYMENTPERIODEND_DAT</u> – 3 months)	Reject	Next rule
4	If <u>STREXC_DAT</u> > (<u>PAYMENTPERIODEND_DAT</u> – 12 months)	Reject	Next rule
5	If <u>OSTR_DAT</u> <= (<u>PAYMENTPERIODEND_DAT</u> – 3 months) OR If <u>TIA_DAT</u> <= (<u>PAYMENTPERIODEND_DAT</u> – 3 months)	Next rule	Reject
6	If <u>XSAL_COD</u> = Null AND If <u>TXSAL_DAT</u> = Null	Select	Next rule
7	If <u>XSAL_COD</u> = Null AND If <u>TXSAL_DAT</u> <= (<u>PAYMENTPERIODEND_DAT</u> – 12 months)	Select	Next rule
8	If <u>XWAR_COD</u> = Null AND If <u>TXWAR_DAT</u> = Null	Select	Next rule
9	If <u>XWAR_COD</u> = Null AND If <u>TXWAR_DAT</u> <= (<u>PAYMENTPERIODEND_DAT</u> – 12 months)	Select	Next rule
10	If <u>XCLO_COD</u> = Null AND If <u>TXCLO_DAT</u> = Null	Select	Next rule
11	If <u>XCLO_COD</u> = Null AND If <u>TXCLO_DAT</u> <= (<u>PAYMENTPERIODEND_DAT</u> – 12 months)	Select	Next rule
12	If <u>XDIPY_COD</u> = Null AND If <u>TXDIPY_DAT</u> = Null	Select	Next rule
13	If <u>XDIPY_COD</u> = Null AND If <u>TXDIPY_DAT</u> <= (<u>PAYMENTPERIODEND_DAT</u> – 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 WAR_DAT > (PAYMENTPERIODEND_DAT – 12 months) OR If CLO_DAT > (PAYMENTPERIODEND_DAT – 12 months) OR If OSAL_DAT > (PAYMENTPERIODEND_DAT – 12 months) OR If DIPY_DAT > (PAYMENTPERIODEND_DAT – 12 months)	Select	Reject

- 5 Indicator STIA009: The percentage of patients with stroke or TIA who have had influenza immunisation in the preceding 1 August to 31 March.

a) Denominator ruleset

<i>Rule number</i>	<i>Rule</i>	<i>Action if true</i>	<i>Action if false</i>
1	If <u>FLU_DAT</u> >= <u>FLU_COM</u> AND If <u>FLU_DAT</u> <= <u>FLU_END</u>	Select	Next rule
2	If <u>REG_DAT</u> > (<u>PAYMENTPERIODEND_DAT</u> – 3 months)	Reject	Next rule
3	If <u>STREXC_DAT</u> > (<u>PAYMENTPERIODEND_DAT</u> – 12 months)	Reject	Next rule
4	If <u>STRT_DAT</u> > (<u>PAYMENTPERIODEND_DAT</u> – 3 months)	Reject	Next rule
5	If <u>XFLU_COD</u> ≠ Null	Reject	Next rule
6	If <u>TXFLU_DAT</u> > (<u>PAYMENTPERIODEND_DAT</u> – 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 <u>FLU_DAT</u> >= <u>FLU_COM</u> AND If <u>FLU_DAT</u> <= <u>FLU_END</u>	Select	Reject