



# PRIMIS+

## Specification

Last Updated Date	Version
15 <sup>th</sup> August 2011	3.25
<a href="#">Change Log – click here</a>	

### Seasonal Influenza Vaccine Uptake Reporting Specification Collection 2011/2012

Section 1, Patient selection criteria, and Section 2, Clinical data extraction criteria, define the data that is to be processed using the Ruleset defined in Section 3 and Indicators in Section 4. CHART provides the opportunity for practices to check the information before it is submitted to PRIMIS+ and ImmForm.

This specification is also provided to GP Suppliers to enable submission of data to be standardised and quality assured nationally.

**This specification is for vaccine uptake monitoring purposes only. It is important that it is not used for recall or payment purposes. The Pregnancy groups include patients who may have been eligible for a period of time but are no longer eligible. Due to the complications around recording pregnancy, other methods should be used if practices wish to identify patients who are at risk and require vaccination. Any results should be subject to clinical review.**

## Introductory Guidance

Within this specification, we have attempted to translate the higher level subjective clinical guidance given within the Green Book, into the language of the two main Clinical Coding Terminologies currently used in Primary Care, to give a very specific and objective specification that is practical to implement for all GP IT clinical system suppliers in a consistent way.

What we know, is that of the roughly 42,000 diagnostic terms included within Read Version 2, roughly 2,000 of them would explicitly warrant the administration of the influenza vaccine. A further 2,000 are clinically ambiguous in terms of whether or not an influenza vaccine should be administered (e.g. "Congenital malformation of circulatory system, unspecified"). A perfect informatics solution would enable a practice to automatically select patients on the basis of the first group of terms and then be able to choose which of the patients with purely ambiguous terms warranted vaccination. This does not exist currently however, but is partly mitigated by the rarity of many of these conditions and their associated clinical coding terms, bearing in mind this process is for monitoring purposes only.

Further, there are limitations imposed by some of the clinical system software engines, in terms of the size of the relevant MIQUEST coding string. A small string search (such as C10% excluding Reaven's syndrome C1098 & C10F8) is easier to handle than a string listing a 100 specific terms scattered across many hierarchies and it can become a rate limiting step. As such, in some hierarchies we have had to adopt a pragmatic solution to defining hierarchies. The most difficult example of this is in the Pregnancy domain, where we have had to take the unusual step of defining a short preferred code list to support "data entry" that will be extracted (we shall however extract a slightly wider group).

There are two clinical groups in particular (Neurology & Cardiology), that contain large numbers of rarer diagnoses or conceptually ambiguous terms. Within the resource limitations available, these areas are being honed more closely each year. Both of these areas are affected by the presence of clinical conditions of variable severity that are congenital in origin and coded as such.

The concept of Immune Suppression is also a technically difficult one to represent. For many patients, especially those undergoing chemotherapy or significant radiotherapy, the indication for flu vaccination may be temporary and I feel it may be another area where coding guidance should perhaps be issued.

Within the medication hierarchies, especially immune suppressant drugs there are particular problems. The concept of "immune suppression by a daily dose of 20mg prednisolone" cannot be meaningfully represented by the current system suppliers. Again, for the reasons given above, relating to specification complexity, the drug hierarchies have been defined for brevity, but will include drugs that are obsolete or not given in Primary Care. This has no impact on who should, or should not receive influenza vaccination under current Primary Care IT systems.

This, of course, is further complicated by the use of two clinical terminologies and attempting to ensure they are aligned. (A little bit like working with three rubik cubes and ensuring that all three are solved in the same way, at the same time, when one is colour, one with numbers and one with letters!). An example of the problem here would be the use of the descriptive term "Brittle Diabetes", which is a non-diagnostic term in 5 byte (so not included), but a diagnosis in CTV3 (so is included).

Lastly, there is the recognition that this is a Vaccine Uptake Monitoring set and not a patient Recall or Payment set. There are subtle differences, not least in the tolerances. We have had a first example of a formal complaint originating from a practice using a monitoring set, for patient recall purposes, despite the headline branding and caveats.

Dr Dai Evans  
PRIMIS+ Clinical Director

## Dataset Specification

RUN\_DAT is defined as: The date of data extraction

REF\_DAT is defined as: 31/03/2012

START\_DAT is defined as 1/9/2011

### 1) Patient selection criteria:

a) Registration status:

<u>Current registration status</u>	<u>Qualifying criteria</u>
Currently registered for GMS	Most recent registration date <= (RUN_DAT)

b) Qualifying Criteria:

<u>Action</u>	<u>Criteria</u>
Include	Age >= 6 months at (RUN_DAT) AND Age <65 years at (REF_DAT) in At Risk Category
	Age >=65 years at (REF_DAT)
	((PREGDEL_COD >= 01/01/2011 AND < 01/09/ 2011)* OR ( PREG2_COD >= 01/09/2011 AND <= 31/01/2012)) <i>*This group is further filtered in the grouping and logic in sections 3 and 4</i>
	Carer <65 years at (REF_DAT)

## 2) Clinical data extraction criteria:

Codes highlighted in Yellow indicate a new code being added to the code group

<i>Field Number</i>	<i>Field name</i>	<i>Data item</i>		<i>Qualifying criteria</i>
1	PAT_ID	Patient ID number		Unconditional
Note	The Patient ID is displayed in CHART for practices at a local level. The Patient ID is not extracted.			
2	PAT_AGE	Patients age (years) at RUN_DAT		Unconditional
Note	The Patient age is used to determine the age band of the patient. The patient age is displayed in CHART for practice information.			
	PAT_ENDAGE	Patients age (years) at REF_DAT		Unconditional
Note	The Patient End age is used to determine the age band of the patient. The patient End age is displayed in CHART for practice information. The End age is defined by the age of the patient on 31 <sup>st</sup> March 2012. This is only taken into account for the upper limit of the '16 to under 65' age band and the '65 and over' age band			
3	PAT_SEX	Patients Gender		Unconditional
Note	The Patient Sex is displayed in CHART for practices at a local level. The Patient Sex is not extracted			
4	REG_DAT	Date of patient registration		Latest <= RUN_DAT
Note	The Registration date is displayed in CHART for practices at a local level. The Registration date is not extracted			
5	AST_COD	<i>Read codes v2</i>	<i>Read codes v3</i>	Earliest <= REF_DAT
		H33%	H33..% (not including H44..%, H440..%, H441.)	
		(Asthma Diagnosis code)		
Note	The presence of a diagnosis Read code is required. The patient must also have a Read code in ASTMED_COD or prescription code in ASTRX_COD to be included in the At Risk Group for Asthma			
6	AST_DAT	Date of AST_COD		Chosen Record

7	<a href="#">ASTMED_COD</a>	<i>Read codes v2</i>	<i>Read codes v3</i>	Latest >= (RUN_DAT – 12 months)
		663F, 663g1, 663g2, 663g3, 663Y	663F., 663g1, 663g2, 663g3, 663Y.	
		(Asthma coded medication)		
Note	Read codes indicating that the patient is currently taking 'oral or inhaled steroids'. The Read code must be in the last 12 months and the patient must also have a diagnosis code in AST_COD			
8	ASTMED_DAT	Date of ASTMED_COD		Chosen Record
9	<a href="#">ASTRX_COD</a>	<i>Read codes v2</i>	<i>Read codes v3</i>	Latest >= (RUN_DAT – 12 months)
		c1D%, c6% fe%, (not including) fe13, fe1z, fe34, fe35, fe38, fe39, fe3p, fe3q, fe3w, fe3x, fe3z, fe46, fe47, fe48, fe49, fe4a, fe4b, fe4c, fe4d, fe54, fe55, fe56, fe57, fe58, fe59, fe5a, fe5b, fe5c, fe5d, fe5e, fe5g, fe5h, fe5q, fe5r, fe5s, fe5t, fe5u, fe5v, fe5w, fe5x, fe5y, fe5z, fe63, fe6b, fe6u, fe6y, fe83, fe84, fe85, fe88, fe8u, fe8v, fe8w, fe8x, fe8y	c1D.%, c61U., c63.%, c64.%, c67.%, c69.%, c6A.%, fe7.%, fe9.%, x00yP%, x01Mw%, x01Mc%, x01Mh%, x01Na%, x01Nb%, x01Nq%, x02IG%	
		(Asthma Prescription)		
Note	Inhaled or Oral Steroid Prescription codes. A prescription code is classed as current, if issued in the last 12 months. The patient must also have a diagnosis code in AST_COD			
10	ASTRX_DAT	Date of ASTRX_COD		Chosen Record

11	ASTADM_COD	<i>Read codes v2</i>	<i>Read codes v3</i>	Latest >= (RUN_DAT - 12 months)
		663d, 8H2P	663d., 8H2P.	
		<i>(Asthma Admission codes)</i>		
Note	The presence of an Emergency Asthma Admission to hospital Read code in the last 12 months includes the patient in the Asthma At Risk Group, regardless of the presence of a diagnosis (AST_COD), or medication, (ASTMED_COD), or prescription code, (ASTRX_COD)			
12	ASTADM_DAT	Date of ASTADM_COD		Chosen Record
13	<a href="#">RESP_COD</a>	<i>Read codes v2</i>	<i>Read codes v3</i>	Earliest <= REF_DAT
		A115, C370%, (not including: C3706) H3%, (not including: H30%, H3101, H33%) H40 - H45, H46, H460z, H464%, H46z%, H47y0, H48 - H4z, H5410, H55, H561, H563%, H57%, H582, H583, H591 - H593, H5y12, H5y13, Hy02, Hyu3%, Hyu40, Hyu41, Hyu48, Hyu5%, N0421, P861, Q3170	C370.%, H3...%, H31..%, H3120, H31y0%, H32..%, H34..%, H35..%, H44..%, H440.%, H441., H46.., H464.%, H46z., Hyu46, H46z0, H47y0, H4y..%, H4y2., H4y21, H5410, H561., H57..%, H571., H57y0, H57y2%, H583., H583z, X102F, X102G, X102H, Xa0kb, H591.%, Hy02., Hyu3., Hyu5., Hyu50, Hyu51, Hyu52, N0421%, Q3170, X100j%, X101U, X102u%, X70Qb, XE0Zf, Xa9Bw%, XaDya%	
		<i>(Chronic Respiratory Disease)</i>		
14	RESP_DAT	Date of RESP_COD		Chosen Record
	<a href="#">CHD_COD</a>	<i>Read codes v2</i>	<i>Read codes v3</i>	Earliest <= REF_DAT

15		33BA, G1%, G21%, G220, G222, G23%, G3%, G41%, G54%, G55%, G58%, G5y1, G5y3%, G5y4%, G5y6 - G5y8, G5yy2, G5yy6, G5yy9, G5yyA, Gyu1%, Gyu3%, Gyu4%, Gyu55 - Gyu5D, Gyu5M - Gyu5T, L1280, L1281, P5%, P60 - P6X, P6y, P6y0 - P6y3, P6y63 - P6y6z, P6yy%, P6z., P6z2 - P6zz	G1...%, G1y0., G21..%, G220., G222., G310., G36..%, G55..%, G553., G58..%, Gyu4., Gyu41, X201f%, X202p%, X202q%, X2033%, (not including : X203J) X777T, X77tW%, XE0Ua, XE0VA%, XE0VB%, XE2Qh%, XE2uV%, XaB0g%, XM0r0% (not including: G40..%)	
		(Chronic heart disease codes)		
16	CHD_DAT	Date of CHD_COD		Chosen Record
17	CKD_COD	Read codes v2 7B00%, 7B012, 7B015, 7B063, 7B0F3, 8L50, K01%, K02%, K0320, K0325, K05%, K0A3%, K0D, K0E, Kyu21, SP083, TB001, ZV420	Read codes v3 7B00., 7B012, 7B063, K01..%, K01x4, K0A3., Kyu21, TB001, X30Iz, X30J0%, X30MN%, XaB9D%, XE0db%, XE0Fv%, XaM41, ZV420	Earliest <=REF_DAT
		(Chronic kidney disease diagnostic codes)		
Note	If a patient has any Chronic Kidney disease Read code, they are included in the CKD At Risk Group. CKD stage 3 – 5 codes are handled separately			
18	CKD_DAT	DATE of CKD_COD		Chosen Record
19	CKD15_COD	Read codes v2 1Z1%	Read codes v3 XaLHG%, XaLHH%, XaLHI%, XaLHJ%, XaLHK%	Latest <= REF_DAT
		(Chronic kidney disease codes - all stages)		
Note	This Read code group first captures all patients with any stage of CKD recorded. The patient record is then checked to see if the latest Read code is a Stage 3 – 5. This eliminates any patient that has had a previous Stage 3 – 5 Read code recorded that has been superseded by a CKD Read code Stage 1 or 2			

20	CKD15_DAT	Date of CKD15_COD		Chosen Record
21	CKD35_COD	<i>Read codes v2</i>	<i>Read codes v3</i>	Latest <= REF_DAT
		1Z12, 1Z13, 1Z14, 1Z15, 1Z16, 1Z1B, 1Z1C, 1Z1D, 1Z1E, 1Z1F, 1Z1G, 1Z1H, 1Z1J, 1Z1K, 1Z1L	XaLHI%, XaLHJ%, XaLHK%	
		<i>(Chronic kidney disease codes-stages 3 - 5)</i>		
22	CKD35_DAT	Date of CKD35_COD		Chosen Record
Note	The patient is included if the latest Read code recorded is Stage 3 – 5. This eliminates any patient that has had a previous Stage 3 – 5 Read code recorded, that has been superseded by a Read code Stage 1 or 2. The patient will be included if there is a Chronic Kidney diagnosis code in CKD			
23	<a href="#">CLD_COD</a>	<i>Read codes v2</i>	<i>Read codes v3</i>	Earliest <= REF_DAT
		A707%, J6, J61%, J623, J624, J625, J62y, J62z, J6353, J6354, J6355, J6356, J63A, J63B, J6617, J671%, Jyu71, Jyu84, PB61%, PB63%, PB6y1, SP086, SP143	J614.%, J61y.%, J61z., J62.%, J624.%, J6353, J6354, J6355, J6356, J63A, J671.%, Jyu71, PB61.%, PB63.%, PB6y1, X3072, X3073, X3076, X307C, X307J%, X307L%, X307x%, XaBE3, XaREa, XE0b4, XE0bC	
		<i>(Chronic Liver disease codes)</i>		
24	CLD_DAT	Date of CLD_COD		Chosen Record
25	<a href="#">DIAB_COD</a>	<i>Read codes v2</i>	<i>Read codes v3</i>	Earliest<= REF_DAT
		C10% (not including C1098, C10F8) Cyu2%, L1805, L1806, L1807, L180X, Lyu29	C10.% (not including L1808, X40JE, XaOPu)	
		<i>(Diabetes diagnosis codes)</i>		
Note	The patient is included if any Diabetes diagnosis Read code is recorded			

26	DIAB_DAT	Date of DIAB_COD		Chosen Record
27	<a href="#">IMMDX_COD</a>	<i>Read codes v2</i>	<i>Read codes v3</i>	Latest <= REF_DAT
		14N7, 2J30, 43C3, 7840% (not including 78402), A788%, A789%, AyuC%, B6%, ByuD%, C332, C332z, C333%, D4154, D4156, D41y1, D41y2, F38% (not including: F382), Fyu8, Fyu80, Fyu83 - Fyu85, G74y6, PK01, PK06	14N7., 43C3., 7840.%, 78403, B623.%, B625.%, B6z0., D4154, D4156, F38.% (not including: X00Cs, F382.%), PK06., X70M6%, X78e1% (not including: X78Pn%), XE1Mi, Xa0h0, Xa9D7	
		<i>(Immunosuppression diagnosis codes)</i>		
Note	The patient included if any immunosuppressant Read code is recorded			
28	IMMDX_DAT	Date of IMMDX_COD		Chosen Record
29	<a href="#">IMMRX_COD</a>	<i>Read codes v2</i>	<i>Read codes v3</i>	Latest >= (RUN_DAT - 6 months)
		h1 - h8, (not including: h323, h324, h38, h5L%), hh%, j51%, j52%, j59%	j59.%, x005B%, x01AQ% (not including: h324.%, h9...%, h5L.%, hg...%, x01AZ%, x01Ah%, x03jY%, x05GP%, x05cl%), x02MQ%	
		<i>(Immunosuppression medication codes)</i>		
Note	The patient is included if a prescription code is recorded in the last six months. The timeframe is limited to six months to increase the specificity of capturing patients that are currently immunosuppressed. For brevity purposes, this group includes some immunosuppressant medication that may only be issued in hospital			
30	IMMRX_DAT	Date of IMMRX_COD		Chosen Record
31	NOCONS_COD	<i>Read codes v2</i>	<i>Read codes v3</i>	Latest < REF_DAT
		68NE	68NE.	

		<i>(No Consent codes)</i>		
Note	A no consent Read code is displayed in CHART for practices at a local level. The no consent Read code is not extracted			
32	NOCONS_DAT	Date of NOCONS_COD		Chosen Record
33	<a href="#">CNS1_COD</a>	<i>Read codes v2</i>	<i>Read codes v3</i>	Earliest <= REF_DAT
		F1%, (Not including F131%, F132, F1320, F1321, F1323, F132y, F132z, F133, F1351, F1352, F1372, F138%, F139%, F13B, F13C, F13z%, F1630, F1632, F16y0, F170%, F171%, F172, F173, F17z) Part 1	F1...%, (not including: F1630, F1632, F16y0), F100.%, F1000, F1003%, F101., F1014%, F1030, F10y1, F11z., F13.., F1306, F1322, F1350, F137., F14.., F143., F160.%, F1600, F1601 Part 1	
		The conditions identified by V2 and V3 in this section are not intended to be identical	The conditions identified by V2 and V3 in this section are not intended to be identical	
		<i>(Chronic neurological disease, including Stroke/Tia, Cerebral Palsy and MS codes)</i>		
Note	Part 1 of three code groups to be merged			
34	CNS1_DAT	Date of CNS1_COD		Chosen Record
35	<a href="#">CNS2_COD</a>	<i>Read codes v2</i>	<i>Read codes v3</i>	Earliest<= REF_DAT
		F20 - F24 (not including: F243, F244, F245, F246%, F24y1), F281%, F283, F2A%, F3902, F3904, F391%, (not including: F3915, F3916), F3920, F39B, F4236	F2...%, F24..%, F240.%, F241.%, F24yz, F38..%, Fyu1.%, Fyu14, Fyu15, Fyu23, Fyu3.%, Fyu9., PKy92, X002U%, X002Y%, X003Z%, X003o%, F136.%, X004V, XE15L%, X0051%, X005K, X005L%, X005N%, X005S, X005b%, X00AZ% (not Including: F3741, F3742, F3745, F3747, Fyu76, X00Ab, X00Ac, X00Ad,	

		<p><b>Part 2</b> The conditions identified by V2 and V3 in this section are not intended to be identical</p> <p><i>(Chronic neurological disease, including Stroke/Tia, Cerebral Palsy and MS codes)</i></p>	<p>X00Ae, X00Ao, X00Ap, X00Aw, X00Ax, X00B0, Fyu78, Fyu79, Fyu68, Fyu75) <b>Part 2</b> The conditions identified by V2 and V3 in this section are not intended to be identical</p>	
Note	Part 2 of three code groups to be merged			
36	CNS2_DAT	Date of CNS2_COD		Chosen Record
37	<a href="#">CNS3_COD</a>	<i>Read codes v2</i>	<i>Read codes v3</i>	Earliest<=REF_DAT
		Fyu1 - Fyu4 (Not including: Fyu15, Fyu20, Fyu25) Fyu55, Fyu8% (Not including: Fyu86), Fyu9%, FyuA1, G61% (Not including: G617), G63y0, G63y1, G64 - G66 (Not including: G655), G6760, G6W, G6X, Gyu62 - Gyu66, Gyu6C, Gyu6F, Gyu6G, P23%	X00D1%, X00EG%, X76n9%, XE0VK%, XE15G%, XE150%, XE15T%, XE17f, XE17j, XE17r, XE17t, XE183, XE2Q8%, XM03s%, Xa0ZX%, Xa0s2, Xa0s3%, Xa1GB%, Xa3fA, XaB4V%, XaB4W, XaPws, XaX9w	
		<b>Part 3</b> The conditions identified by V2 and V3 in this section are not intended to be identical	<b>Part 3</b> The conditions identified by V2 and V3 in this section are not intended to be identical	
	<i>(Chronic neurological disease, including Stroke/Tia, Cerebral Palsy and MS codes)</i>			
Note	Part 3 of three code groups to be merged			
38	CNS3_DAT	Date of CNS3_DAT		Chosen Record
39	<a href="#">CARER_COD</a>	<i>Read codes 2</i>	<i>Read codes v3</i>	Latest<= REF_DAT
		13HH, 918A%, 918a, 918b, 918c, 918d, 918G, 918H, 918m, 918W, 918X, 918Y	Ua0bE, Ua0VL%, Ub1ju, Ua0bD	

		<i>(Carer codes)</i>		
Note	The patient is only classed as a carer, if the latest code is CARER. A NOTCARER code may be added to the record when the patient is no longer a carer.			
40	CARER_DAT	Date of CARER_COD		Chosen Record
41	NOTCARER_COD	<i>Read codes v2</i>	<i>Read codes v3</i>	Latest<=REF_DAT
		918f, 918r	XaL1Y, XaQVL	
		<i>(No longer a carer codes)</i>		
Note	The patients is only classed as a carer, if the latest code is CARER . A NOTCARER code may be added to the record when the patient is no longer a carer.			
42	NOTCARER_DAT	Date of NOTCARER_COD		Chosen Record
43	<a href="#">FLUVAX_COD</a>	<i>Read codes v2</i>	<i>Read codes v3</i>	Latest > 31/08/2011 and <= REF_DAT
		65E, 65E2, ZV048	65E., XaPyT, ZV048	
		<i>(Influenza vaccination codes)</i>		
44	FLUVAX_DAT	Date of FLUVAX_COD		Chosen Record
Note	A Flu Read code recorded in the timeframe is counted as a Seasonal Influenza vaccination given			
45	<a href="#">FLURX_COD</a>	<i>Read codes v2</i>	<i>Read codes v3</i>	Latest >31/8/2011 and <= REF_DAT
		n47% (not including: n47A, n47B, n47r, n47s, n47t)	n47..% (not including: n47A., n47B., n47r., n47s., n47t.)	
		<i>(Influenza vaccination medication codes)</i>		
46	FLURX_DAT	Date of FLURX_COD		Chosen Record
Note	A Flu Prescription Read code recorded in the timeframe is counted as a Seasonal Influenza vaccination given			
47	CONTRA_COD	<i>Read codes v2</i>	<i>Read codes v3</i>	Latest <= REF_DAT
		8I2F	8I2F., XaI0T	

		<i>(Influenza vaccination contraindication or intolerance codes)</i>		
Note	This information is not taken into account for the Uptake survey and is presented in CHART for information to practices			
48	CONTRA_DAT	Date of CONTRA_COD		Chosen Record
49	DECL_COD	<i>Read codes v2</i>	<i>Read codes v3</i>	Latest <= REF_DAT
		90X5	90X5., XaIBI	
		<i>(Influenza vaccination declined)</i>		
Note	This information is not taken into account for the Uptake survey and is presented in CHART for information to practices			
50	DECL_DAT	Date of DEC_COD		Chosen Record
51	ALLERG_COD	<i>Read codes v2</i>	<i>Read codes v3</i>	Latest<= REF_DAT
		14LJ, U60K4, ZV14F	Xa5um%, Xa5WJ%, XaIAA, XaJ8X	
		<i>(Influenza vaccination allergy)</i>		
Note	This information is not taken into account for the Uptake survey and is presented in CHART for information to practices			
52	ALLERG_DAT	Date of ALLERG_COD		Chosen Record
53	<a href="#">PREGDEL_COD</a>	<i>Read codes v2</i>	<i>Read codes v3</i>	Latest >= 01/01/2011 AND < START_DAT
		62% (not including: 6219, 62I%, 62J%, 62X%), 633%, 7E060, 7E066, 7E070, 7E071, 7E08%, 7E0B%, 7F02%, 7F1%, 7F20 - 7F24, L% (not including: L163%), ZV22%, ZV23% (not including:ZV233), ZV24%, ZV27%, ZV28% (not including:ZV283, ZV285)	1514., 621.., 62N..%, 63...%, L0...%, (not including: L163%), L264., X4038%, X404x%, X40Ar, X74V6%, X74V7, X76Qk, X76Ql, X76Qt, XE1SI%, Xa1qM%, Xa36H%, Xa4S0%, Xa4SU, Xa4SV, Xa4SW%, Xa7Yj, Xa85V%, XaIO9, XaLQ1, ZV22.%, ZV23.% (not including:ZV233), ZV24.%, ZV27.%, ZV28.% (not including:ZV283, ZV285)	

		<i>(Pregnancy or Delivery codes recorded between 1<sup>st</sup> January 2011 and 31st August 2011 (inclusive))</i>		
Note	This code group contains pregnancy ,delivery, miscarriage and termination Read codes. A presence of one of these codes indicates that the patient has been, or is currently pregnant. This group of patients are checked to see if the latest code is a pregnancy code in PREG_COD to determine if the patient is still pregnant on 31st August 2011. A proxy eight month period has been used before the Start date of 1st September. This assumes that the first entry of any pregnancy code is likely to be entered, at the earliest, when the patient is at least four weeks pregnant			
54	PREGDEL_DAT	Date of PREGDEL_COD		Chosen Record
55	<a href="#">PREG_COD</a>	<i>Read Codes v2</i>	<i>Read Codes v3</i>	Latest >= 01/01/2011 AND < START_DATE
		62% (not including: 6219, 62I%, 62J%, 62P%, 62Q%, 62R%, 62S%, 62T%, 62X%), L2A - L2z, Lyu1 - Lyu3, ZV22%, ZV23% (not including: ZV233), ZV28% (not including:ZV283, ZV285)	1514., 621., 62N.%, X40Ar, X74V6%, X74V7, X76Qk, X76Q1, X76Qt, Xa4S0%, (not including: Xa41N), Xa4SU, Xa45V, Xa7Yj, Xa85V%, XaI09, XaLQ1,ZV22.%, ZV23.% (not including:ZV233), ZV28.% (not including:ZV283, ZV285)	
		<i>(Pregnancy codes recorded between 1<sup>st</sup> January 2011 and 31st August 2011 (inclusive))</i>		
Note	This code group is used in combination with PREGDEL above to determine if the patient is still pregnant on 31 <sup>st</sup> August 2011. If the latest code recorded out of PREGDEL_COD is PREG_COD, then the patient is regarded as still pregnant			
56	PREG_DAT	Date of PREG_COD		Chosen record
57	<a href="#">PREG2_COD</a>	<i>Read Codes v2</i>	<i>Read Codes v3</i>	Latest >= START_DATE AND < 31/01/2012
		<i>Code string as PREG_COD</i>	<i>Code string as PREG_COD</i>	
		<i>(Pregnancy codes recorded between 1<sup>st</sup> September 2011 and 31<sup>st</sup> January 2012 (inclusive))</i>		
Note	This code group is the same as PREG_COD. A read code recorded within the timeframe indicates that the patient is pregnant or has been pregnant at some point from 1 <sup>st</sup> September 2011. The patient has therefore been eligible at some point during the stated timeframe. For this reason, there is no requirement to check if the patient has a record of a delivery, miscarriage or termination Read code.			
	PREG2_DAT	Date of PREG2_COD		Chosen record

## Indicator Rulesets

### 3) Ruleset to Define grouping of data extraction criteria

1	<b>Patients with Immunosuppression</b>		<b>True</b>	<b>False</b>
	IMMUNO_GROUP	IF IMMRX_DAT <> NULL	<i>Select</i>	<i>Next</i>
		IF IMMDX_DAT <> NULL	<i>Select</i>	<i>Reject</i>

**Note:** The patient can have either a prescription code or a diagnosis code to be included in the At Risk Group

2	<b>Patients with CKD</b>			
	CKD_GROUP	IF CKD_DAT <> NULL (diagnoses)	<i>Select</i>	<i>Next</i>
		IF CKD15_DAT = NULL (NO STAGES)	<i>Reject</i>	<i>Next</i>
		IF CKD35_DAT >= CKD15_DAT	<i>Select</i>	<i>Reject</i>

**Note:** The patient can have a Chronic Kidney disease code recorded or a Chronic Kidney disease Stage code. The latest Stage code must be Stage 3 to 5

3	<b>Patients with Asthma</b>			
	AST_GROUP	IF ASTADM_DAT <> NULL	<i>Select</i>	<i>Next</i>
		(IF AST_DAT <> NULL) AND ((IF ASTMED_DAT <> NULL) OR (IF ASTRX_DAT <> NULL))	<i>Select</i>	<i>Reject</i>

**Note:** The patient can have an Emergency Asthma admission code only to be included in the At Risk Group. Otherwise, the patient must have an Asthma diagnosis code AND either a prescription code or a Read code indicating the patient is on medication for oral or inhaled steroids

4	<b>Pregnant on 31/08/2011 or becoming pregnant between 01/09/2011 and 31/01/2012 (inclusive)</b>			
		IF PREG2<> NULL	<i>Select</i>	<i>Next</i>
	<a href="#">PREG_GROUP</a>	(IF PREGDEL_DAT<> NULL) AND ((IF PREG_DAT <> NULL) AND (PREG_DAT >= PREGDEL_DAT))	<i>Select</i>	<i>Reject</i>

**Note:** There are two different groups that are combined here.

Group 1 is any patient that has a pregnancy Read code recorded from 1st September to 31st January 2012.

Group 2 is any patient with a pregnancy, delivered, miscarriage or termination code where the latest code recorded between 01/01/2011 and 31/08/2011 is a pregnancy code

Both of these groups are then combined to capture patients that are pregnant at a specified point in time or become Pregnant from a specified point

5	<b>Age Bands</b>	
	1	PAT_AGE >=65 and <120 at REF_DAT
	2	PAT_AGE >= 6months < 2 at RUN_DAT
	3	PAT_AGE >=2 and <16 at RUN_DAT
	4	PAT_AGE >=16 at RUN_DAT and <65 at REF_DAT*

**Note:** Denominators should be defined by their age on date of extraction, but for the upper limit of the '16 to under 65' age band and for the 'aged 65 and over' age band, they should be defined by their age at 31 March 2012 (this fits with the policy i.e. all those aged 65 years or older by the 31 March 2012 are eligible to receive vaccine in the 2011/12 vaccination programme)

6	<b>Patients with CNS Disease (including Stroke/TIA)</b>			
	<a href="#">CNS_GROUP</a>	IF CNS1_DAT <> NULL	Select	Next
		IF CNS2_DAT <> NULL	Select	Next
		IF CNS3_DAT <> NULL	Select	Reject

**Note:** As this group contains a large number of codes, PRIMIS+ have retained the two existing CNS groups and have added a third CNS group. The groups have been separated due to limitations of MIQUEST, but are brought together to produce one final CNS group. GP Suppliers may use one code group for CNS.

7	<b>Patients who have Chronic Respiratory Disease</b>			
	RESP_GROUP	IF AST_GROUP <> NULL	Select	Next
		IF RESP_DAT <> NULL	Select	Reject

**Note:** Patients in the Asthma or Respiratory At Risk group combined.

8	<b>Patients in Any Clinical Risk Group</b>			
	<a href="#">ATRISK_GROUP</a>	IF IMMUNOGROUP <> NULL	Select	Next
		IF CKD_GROUP <> NULL	Select	Next
		IF RESP_GROUP <> NULL	Select	Next
		IF DIAB_DAT <> NULL	Select	Next
		IF CLD_DAT <> NULL	Select	Next
		IF CNS_GROUP <> NULL	Select	Next
		IF CHD_DAT <> NULL	Select	Reject

**Note:** Patients who are in the pregnant , Carer or 65 and over At Risk Group are not included here unless they also fall into one of the above At Risk Group

Patients who have received Influenza Vaccination				
9	FLUVAX_GROUP	IF FLUVAX_DAT <> NULL	Select	Next
		IF FLURX_DAT <> NULL	Select	Reject

**Note:** Combine any Influenza Vaccination Read code given with any Influenza prescription code issues

**Indicator 1**

Vaccination status of Practice Population.

Output to be broken down by Age bands 1 – 4.

DENOMINATOR:

a) Registration status

<u>Action</u>	<u>Qualifying criteria</u>
Excluded	Age < 6 months at (RUN_DAT)

b) Demographic status

<u>Current registration status</u>	<u>Qualifying criteria</u>
Currently registered for GMS	Most recent registration date <= (RUN_DAT)

NUMERATORS:

1	Seasonal Influenza vaccination from 01/09/2011		
	IF FLUVAX_GROUP <> NULL	Select	Reject

**Indicator 2**

Vaccination status of patients in one or more Risk Groups

Output to be broken down by Age bands 2-4

DENOMINATOR:

Summary of Patients in one or more Risk Groups			
1	IF AGE ON REF_DAT <65	Select	Next
	IF ATRISK_GROUP <> NULL	Select	Reject

**Note:** The patient must be aged less than 65 on 31<sup>st</sup> March 2012 and in one the At Risk Group defined in 8.

NUMERATORS:

1	Seasonal Influenza vaccination from 01/09/2011		
	IF FLUVAX_GROUP <> NULL	Select	Reject

**Indicator 3(a)**

Vaccination status of healthy pregnant women with no risk factors

DENOMINATOR:

1	<b>Pregnant on 31/08/2011 or pregnant between 01/09/2011 and 31/01/2012 (inclusive) with no risk category</b>		
IF ATRISK_GROUP <> NULL		<i>Reject</i>	<i>Next</i>
IF PREG_GROUP <> NULL		<i>Select</i>	<i>Reject</i>

**Note:** The patient must not be in the At Risk Group defined in 8, but must be in the Pregnant At Risk Group defined in 4.

NUMERATORS:

1	Seasonal Influenza vaccination from 01/09/2011		
	IF FLUVAX_GROUP <> NULL	<i>Select</i>	<i>Reject</i>

**Indicator 3 (b)**

Vaccination status of pregnant women also in a clinical risk group

DENOMINATOR:

1	<b>Pregnant on 31/08/2011 or pregnant between 01/09/2011 and 31/01/2012 (inclusive) in a risk category</b>		
	(IF PREG_GROUP <> NULL) AND (IF ATRISK_GROUP <> NULL)	Select	Reject

**Note:** The patient must be in the At Risk Group defined in 8, and must also be in the Pregnant At Risk Group defined in 4.

NUMERATORS:

1	Seasonal Influenza vaccination from 01/09/2011		
	IF FLUVAX_GROUP <> NULL	Select	Reject

**\*\*Indicator 4 removed\*\***

**Indicator 5**

Vaccination status of patients with Chronic Respiratory Disease including appropriate Asthma patients

Output to be broken down by Age bands 2-4

DENOMINATOR:

1	<b>Patients with Chronic Respiratory Disease</b>		
	IF RESP_GROUP <> NULL	Select	Reject

NUMERATORS:

1	Seasonal Influenza vaccination from 01/09/2011		
	IF FLUVAX_GROUP <> NULL	Select	Reject

**Indicator 6**

Vaccination status of patients with Chronic Heart Disease

Output to be broken down by Age bands 2-4

DENOMINATOR:

1	<b>Patients with Chronic Heart Disease</b>		
	IF CHD_DAT <> NULL	Select	Reject

NUMERATORS:

1	Seasonal Influenza vaccination from 01/09/2011		
	IF FLUVAX_GROUP <> NULL	Select	Reject

**Indicator 7**

Vaccination status of patients with Chronic Kidney Disease

Output to be broken down by Age bands 2-4

**DENOMINATOR:**

1	<b>Patients with Chronic Kidney Disease</b>		
	IF CKD_GROUP <> NULL	Select	Reject

**NUMERATORS:**

1	Seasonal Influenza vaccination from 01/09/2011		
	IF FLUVAX_GROUP <> NULL	Select	Reject

**Indicator 8**

Vaccination status of patients with Chronic Liver Disease

Output to be broken down by Age bands 2-4

**DENOMINATOR:**

1	<b>Patients with Chronic Liver Disease</b>		
	IF CLD_DAT <> NULL	Select	Reject

**NUMERATORS:**

1	Seasonal Influenza vaccination from 01/09/2011		
	IF FLUVAX_GROUP <> NULL	Select	Reject

**Indicator 9**

Vaccination status of patients with Diabetes

Output to be broken down by Age bands 2-4

DENOMINATOR:

1	<b>Patients with Diabetes</b>		
	IF DIAB_ DAT <> NULL	Select	Reject

NUMERATORS:

1	Seasonal Influenza vaccination from 01/09/2011		
	IF FLUVAX_ GROUP <> NULL	Select	Reject

**Indicator 10**

Vaccination status of patients with CNS (including Stroke/TIA)

Output to be broken down by Age bands 2-4

DENOMINATOR:

1	<b>Patients with CNS (including Stroke/TIA)</b>		
	IF CNS_GROUP <> NULL	Select	Reject

NUMERATORS:

1	Seasonal Influenza vaccination from 01/09/2011		
	IF FLUVAX_ GROUP <> NULL	Select	Reject

**\*\*Indicator 11 removed\*\***

**Indicator 12**

Vaccination status of patients who are immunosuppressed

Output to be broken down by Age bands 2-4

**DENOMINATOR:**

1	<b>Patients who are Immunosuppressed</b>		
	IF IMMUNO_GROUP <> NULL	<i>Select</i>	<i>Reject</i>

**NUMERATORS:**

1	Seasonal Influenza vaccination from 01/09/2011		
	IF FLUVAX_ GROUP <> NULL	<i>Select</i>	<i>Reject</i>

**Indicator 13**

Vaccination status of Carers who are not at risk, nor pregnant, nor 65 or over

Output: < 65\*

DENOMINATOR:

<b>Carers</b>			
1	IF AGE >=65 AT REF_DAT	<i>Reject</i>	<i>Next</i>
	IF ATRISK_GROUP <> NULL	<i>Reject</i>	<i>Next</i>
	IF PREG_GROUP <> NULL	<i>Reject</i>	<i>Next</i>
	IF CARER_DAT = NULL	<i>Reject</i>	<i>Next</i>
	IF CARER_DAT > NOTCARER_DAT	<i>Select</i>	<i>Reject</i>

**Note:** Patients are included in this group, where the latest Carer/not Carer Read code recorded is a Carer code. Patients are only included in this group, if they are not present in any other At Risk Group.

NUMERATORS:

1	Seasonal Influenza vaccination from 01/09/2011		
	IF FLUVAX_GROUP <> NULL	<i>Select</i>	<i>Reject</i>

**\*\*Indicator 14 removed\*\***

## Change Log

Version	Date	Author	Change summary
3.18	15th July 2011 Published 16 <sup>th</sup> July 2011 as Draft.	DE/MM	<ol style="list-style-type: none"> <li>1. <a href="#">REF_DAT</a> changed from 31/03/2011 to 31/03/2012</li> <li>2. <a href="#">START_DAT</a> changed from 01/09/2010 to 01/09/2011</li> <li>3. <a href="#">Qualifying Criteria</a>: Pregnancy query logic changed to account for different rules</li> <li>4. <a href="#">ASTMED_COD</a>: Code added to both V2 and CTv3: 663g3.</li> <li>5. <a href="#">ASTRX_COD</a>: Codes added to CTv3 only: c61U., c63..%, c64..%, c6A.. %, fe7..%, x01Nq%</li> <li>6. <a href="#">CHD_COD</a>: Codes added V2: L1280, L1281 Codes included due to October 2010 and April 2011 Read code release V2: G41y1, G5545, G55A. , G583. Codes removed CTv3: P5..., P603. Subsumed by multiple parents during cross map. Codes included due to October 2010 and April 2011 Read code release: XaWye, XaWyj, XaXNg</li> <li>7. <a href="#">CKD_COD</a>: Code added V2: 7B0F3 Codes included due to October Read code release V2: K024 Code added CTv3: XaM4I</li> <li>8. <a href="#">CLD_COD</a>: Code added V2: SP086 Percent added CTv3: X307x%. Codes included due to X307x% parentage: X307y, X307z, SP086. Code included due to April 2011 Read code release by X307L% parentage: XaXi9</li> <li>9. <a href="#">DIAB_COD</a>: Code added to 'not including, CTv3: 66AJ1</li> <li>10. <a href="#">CVATIA_COD</a>: Code group changed to <a href="#">CNS3_COD</a></li> <li>11. <a href="#">CARER_COD</a>: Code added CTv3: Ua0bD</li> <li>12. <a href="#">FLUVAX_COD</a>: Codes removed V2: 65E9, 65EB. Codes removed CTv3: XaQhq, XaQhm Date change from 31/08/2010 to 31/08/2011</li> <li>13. <a href="#">FLURX_COD</a>: Codes removed V2 and CTv3: n47A.</li> </ol>

			<p>Code Group changed to show include and not including Codes now included by hierarchy V2 and CTv3: n47u., n47v. Date change to 31/08/2011</p> <p>14. PREGINC_COD: V2 and CTv3: Code group removed and replaced with <a href="#">PREGDEL_COD</a> Date change to 01/01/2011</p> <p>15. PREGEXC_COD: Code group removed and replaced with: <a href="#">PREG_COD</a></p> <p>16. New Code group added : <a href="#">PREG2_COD</a></p> <p>17. SWINEVAC_COD: Code Group removed</p> <p>18. PANDEM_COD: Code Group removed</p> <p>19. Global date changes from 01/09/2010 to 01/09/2011</p> <p>20. Global change: PREG_INC to PREGDEL_COD</p> <p>21. Global change: PREG_EXC to PREG_COD</p> <p>22. SFCONTRA_COD Read code group removed (This was in the specification purely for information. If the patient has a Swine Flu contraindication recorded, this would also be relevant for Influenza)</p> <p>23. 5. <a href="#">PREG_GROUP</a>: Change to logic to account for two rules. Patients that are pregnant on 01/09/2011 and patients that become pregnant between 02/09/2011 and 31/01/2011</p> <p>24. 6. <a href="#">CNS_GROUP</a>: CNS3_DAT added to logic</p> <p>25. 8. <a href="#">ATRISK_GROUP</a>: Removed CVATIA_DAT from logic. This is now included in CNS_GROUP</p> <p>26. Indicator 4: Removed: Number of Pandemrix vaccinations administered</p> <p>27. <a href="#">Indicator 10</a>: Edited to now include CNS group. CVATIA now merged into CNS_GROUP</p> <p>28. Indicator 11: Removed: Vaccination status of patients with CNS</p>
3.19	25 <sup>th</sup> July 2011 (not published)	DE/MM	<p>1. <a href="#">ASTRX_COD</a>: Codes included due to April 2011 Read code release V2: fe77, fe78, fe79, fe7x, fe7y, fe7z</p> <p>2. <a href="#">RESP_COD</a>: Codes added to V2: H561, H5y12, H5y13, Hy02, Hyu40, N0421, P861. Codes removed from V2: H3101, H4, H460. Codes included due to October 2010 Read code release V2: C3708</p> <p>3. <a href="#">RESP_COD</a>: Codes removed from CTv3; H460., H460z, H462., Hyu44</p> <p>4. <a href="#">DIAB_COD</a>: Removed code from 'not including', CTv3: 66AJ1</p> <p>5. Font changes to Read code v2 and v3, and qualifying criteria</p> <p>6. Note row added to section 2, Clinical data extraction criteria</p> <p>7. Pregnancy date changes to include those pregnant on 31/08/2011 instead of 01/09/2011. Also pregnant from 02/09/2011 changed to 01/09/2011</p> <p>8. <a href="#">IMMDX_COD</a>: Codes added to V2: F382, C332 now not included. Codes added to CTv3: F382.%, X78Pn%</p> <p>9. <a href="#">IMMRX_COD</a>: Codes added to V2: j51%, j52%. Codes now not included in V2: h323, h324, h38, h5L%. New codes added due to April 2011 Read code release V2: h1c2,</p>
3.20	29 <sup>th</sup> July 2011 Draft 2 Published as Draft 2		

			<p>h1c3, h1c4, h34V, h34W, h34X, h34Y, h34Z, h3C3, h3C4, h3G, h3G1, h3G2, h3G3, h3G4, h3G5, h3G6, h5E9, h5EA, h5EB, h5EC, h5ED, h82K, h82L, h82M, h84a, h84b, h8I1, hI82, hI83, h8I4: New codes added due to October 2010 Read code release V2: h1e, h1e1, h1e2, h1e3, h1e4, h5E5, h5E6, h5E7, h5E8, h5J7, h5J8, h83E, h83F, h83G, h856, h85u, h856, h85u, h8E3, h8E4, hhR, hhR1, hhR2, hhS, hhS1, hhS2, hhS3, hhS4. New codes added due to October 2010 Read code release Ctv3: h46., h461., h462., h463., h46x., h46y., h46z., h82H., h83I., h82j., h83C., h83D., h883t, h83u., h97., h971., h97z., h8G., h8G1., h8G2., h8H., h8H1., h8H2.</p> <p>New codes added due to April 2011 Read code release CTv3: h5J7., h5J8., h1e., h1e2., h1e3., h1e4., h5E5., h5E7., h5E8., hhR., hhR1., hhR2., hhS., hhS1., hhS2., hhS3., hhS4., h856., h85u., h83E., h83F., h83G., h8E3., h8E4.</p> <p>10. <a href="#">CNS1_COD</a>, <a href="#">CNS2_COD</a>, <a href="#">CNS3_COD</a>: The strings have been totally revised in both V2 and CTv3.</p> <p>11. Text removed from <a href="#">*NOTE</a>: that was applicable to last years specification.</p> <p>12. CARER_COD: new code added CTv3: Ua0Bd</p> <p>13. Change Log removed before Version 3.18. Now contained in a history document.</p>
3.21	1 <sup>st</sup> August 2011 Draft 3 Published as Draft 3	MM/DE	<p>1. <a href="#">PREGDEL_COD</a>: New code strings added to V2 and CTv3.</p> <p>2. <a href="#">PREG_COD</a>: New code strings added to V2 and CTv3.</p> <p>3. <a href="#">PREG2_COD</a> New code strings added to V2 and CTv3.</p>
3.22	5 <sup>th</sup> August 2011 Internal Draft	MM/DE	<p>4. Draft version number in Change Log changed from 3.12 to 3.21</p> <p>5. <a href="#">PREGDEL_COD</a>: ZV233 excluded from ZV23% in V2 and CTv3. ZV283 and ZV285 now excluded from ZV28% in V2 and CTv3.</p> <p>6. <a href="#">PREG_COD</a>: ZV233 excluded from ZV23% in V2 and CTv3. ZV283 and ZV285 now excluded from ZV28% in V2 and CTv3.</p> <p>7. <a href="#">PREG2_COD</a>: ZV233 excluded from ZV23% in V2 and CTv3. ZV283 and ZV285 now excluded from ZV28% in V2 and CTv3.</p> <p>8. <a href="#">CHD_COD</a>: New code added to V2: P6y. This was an error in generating the output file.</p> <p>9.</p>
3.23	8 <sup>th</sup> August 2011 Draft 4 Published as Draft 4	MM	<p>1. <a href="#">IMMDX_COD</a>: Code removed due to duplication in V2 : 78402. F382 moved to the appropriate parent code in V2. C332, Fyu8 added to V2.</p> <p>2. <a href="#">RESP_COD</a>: Codes removed from 'not including' in V2: H4, H460, H4600, H4601, H461, H462, H463, H47, H470%, H471%, H472, H47y, H47yz, H47z; H46 added to the specification only in V2.</p> <p>3. DEC_COD: Code group name change to DECL_COD.</p> <p>4. CNS1_COD: F1310, F1311, F1312, F131z removed from 'not including' in V2.</p> <p>5. A note has been added by DH in the circumstance that the collection is extended for a further month.</p>

			6. Introductory Guidance has been added to the beginning of the document. 7. Pregnancy guidance has been added to the end of the document.
3.24	12 <sup>th</sup> August 2011 Final Release	MM	8. <a href="#">PREG_COD</a> : Xa85U removed as subsumed by Xa85V% in CTv3. 9. <a href="#">PREGDEL_COD</a> : Logic changed from Earliest to Latest
3.25	15 <sup>th</sup> August 2011 Final Release	AM	1. Removed Draft watermark

**Please note:**

Should the survey be extended for a further month, as was the case in the 2010/11 flu season when significant numbers of seasonal flu vaccinations continued into February, the end date for the pregnancy category would need to be revised. Any decision to extend the survey to include a fifth collection (i.e. on vaccinations up to 29 February 2012) will be made in January 2012.

### CONSULTATION PERIOD

**GP SUPPLIER QUESTIONS AND COMMENTS WILL BE COLLATED AND ADDED TO THE FOLLOWING WEB PAGE:**

[http://www.primis.nottingham.ac.uk/Seasonal\\_Flu\\_QA/index.php](http://www.primis.nottingham.ac.uk/Seasonal_Flu_QA/index.php)

Login and Password details have been emailed to GP Suppliers.

**The consultation period closed on 12<sup>th</sup> August 2011. Any further comments will be logged and taken into account for next year.**

**Any further queries should be forwarded to: [Information.team@primis.nottingham.ac.uk](mailto:Information.team@primis.nottingham.ac.uk)**

## **Advice on READ Code Recording Around Pregnancy for Clinical Users**

This advice has been constructed in the context of attempting to identify pregnant women, in support of the administration and monitoring of Influenza Vaccination programmes from Autumn 2010.

The advice, at time of writing, is that women who are pregnant on or after 1/9/11 would form the basis of this at risk subgroup. It is known that the completeness and consistency of history recording using READ codes concerning pregnancy is highly variable between practices. Further, the nature of the READ terms applicable to pregnancy related topics include many that are ambiguous when trying to identify if a woman is pregnant or has delivered and are often embedded in mixed hierarchies. This makes construction of a definitive query set almost impossible in the context of this vaccination programme.

To this end, we recommend that any query results are subject to professional review, possibly including any associated midwifery staff, to avoid recalling patients inappropriately.

To assist in the process, we are recommending the use of core sets of READ terms for both Version 2 (5 byte) and CTV3. The actual query set design will however look at a broader set of terms including those known to be more frequently used, but will not include *all* possible terms. For a small number of terms we have included both the “operation” term and the “clinical finding” or “diagnostic term”.

It should also be recognised that the concept “delivered” also refers to “miscarriage” and “termination of pregnancy” within this guidance.

Version 2 (5 byte) terms

Patient pregnant	62...
Missed abortion	L02..
Ectopic pregnancy	L03..
Spontaneous abortion	L04..
Normal delivery in a completely normal case	L20...
Spontaneous breech delivery	Ly1, 7F150
Spontaneous vertex delivery	Ly0..
Normal delivery	7F19
Breech extraction delivery	7F14.
Forceps delivery	L395.
Forceps cephalic delivery	7F16.
Vacuum extractor delivery	L396.
Vacuum delivery	7F17.
Delivery by elective caesarean section	L3983
Elective caesarean section	7F12.
Delivery by emergency caesarean section	L3984
Emergency caesarean section	7F133
Intrauterine death	L264
Termination of pregnancy	7E086

(There is no term to represent “medical termination of pregnancy” per se).

CTV3 Terms

Patient currently pregnant	621..
Missed abortion	XE0ve
Ectopic pregnancy	L03.
Miscarriage	L04..
Spontaneous vertex delivery	XaBsU
Normal delivery	7F19.
Normal delivery	XE2QS
Spontaneous breech delivery	7F150 (*? Breech delivery X40Cm)
Breech extraction delivery	7F14.
Forceps delivery	Xa8Pq
Deliveries by vacuum extractor	XE0xG
Vacuum delivery	7F17.
Delivery by elective caesarean section	L3983
Elective caesarean section	7F12.
Delivery by emergency caesarean section	L3984
Emergency caesarean section	XM0tg
Intrauterine death	L264
Termination of pregnancy	Xa36H
Legal Abortion	XE0vi
Medical termination of pregnancy	Xa36I