

# PRIMIS

## Specification

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9 <sup>th</sup> June 2014	6.2.0
Change Log – <a href="#">click here</a>	

**Seasonal Influenza**

**Vaccine Uptake**

**Reporting Specification**

**Collection 2014/2015**

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.**

**The University of Nottingham cannot take any responsibility or liability for use of this specification for any purpose other than its intended use for the Seasonal Influenza Vaccine Uptake Monitoring Programme.**

## 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 [pregnancy 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. 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).

The specification has been updated each year to ensure appropriate handling of the biannual READ code updates and obvious anomalies have also been corrected.

For the 2014-15 season, children aged 2 years, 3 years or 4 years on the 01/9/2014 will also be vaccinated and they will appear in a numerator/denominator group whether they are in a clinical risk group or not.

It should be noted that whilst the vaccination window associated with the Quality and Outcomes Framework programme runs from 1<sup>st</sup> August, there are no date changes associated with the Vaccine Uptake Monitoring set. Therefore the vaccination window starts at the 1<sup>st</sup> September 2014. Also the reference dates for pregnancy and age banding within the current influenza season remain as before.

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 an example of a formal complaint originating from a practice using a monitoring set, for patient recall purposes, despite the headline branding and caveats.

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## **Dataset Specification**

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

REF\_DAT is defined as: 31/03/2015

START\_DAT is defined as 01/09/2014

AUDITEND\_DAT is defined as:

- 31/10/2014 for the October submission in November 2014
- 30/11/2014 for the November submission in December 2014
- 31/12/2014 for the December 2014 submission in January 2015
- 31/01/2015 for the January submission in February 2015

### **1) Patient selection criteria:**

a) Registration status:

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

b) Qualifying Criteria:

<b><u>Action</u></b>	<b><u>Criteria</u></b>
Include	Age >= 6 months at (RUN_DAT) AND Age <65 years at (REF_DAT) in At Risk Category
	Age >=65 years at (REF_DAT)
	Age>=2 years AND Age <5 years at (START_DATE)
	((PREGDEL_COD >= 01/01/2014 AND < 01/09/2014) <sup>1</sup> OR ( PREG2_COD >= 01/09/2014 AND <= 31/01/2015))
	Carer <65 years at (REF_DAT)

<sup>1</sup> This group is further filtered – please see [explanatory note](#) beneath field 55

## 2) Clinical data extraction criteria:

### PATIENT DETAILS

<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	<a href="#">PAT_AGE</a>	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.		
3	<a href="#">PAT_STARTAGE</a>	Patients age (years) at START_DAT	
Note	The Patient Start age is used to determine the age for the 2 year old, 3 year old and 4 year old indicators.		
4	<a href="#">PAT_ENDAGE</a>	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 2015. 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		
5	<a href="#">PAT_SEX</a>	Patients Gender	Unconditional
Note	Patient sex is extracted for the new 2014/2015 gender indicator		
6	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		

## CLINICAL RISK GROUPS

<i>Field Number</i>	<i>Field name</i>	<i>Data item</i>		<i>Qualifying criteria</i>
7	AST_COD	<i>Read codes v2</i>	<i>Read codes v3</i>	Earliest <= AUDITEND_DAT
		H33%, H3120	H33..% (not including H44..%, H440.%, H441.),X1020	
		(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			
8	<u>AST_DAT</u>	Date of AST_COD		Chosen Record
9	ASTMED_COD	<i>Read codes v2</i>	<i>Read codes v3</i>	Latest >= 01/09/2013 AND <= (AUDITEND_DAT)
		663F, 663Y, 663g1 - 663g4, 8B62, 8B620	663F.,663g1,663g2,663g3,663Y.,XaZ Hv,XE0hq,XaZqH,Xa6bZ,Xa6ba,	
		(Asthma coded medication)		
Note	<p>Read codes indicating that the patient is currently taking 'oral or inhaled steroids'. The Read code should be in the last 12 months. However to prevent patients from dropping out of the audit as the vaccination campaign progresses, where their latest asthma medication issue was originally within the 12 month timescale but then subsequently exceeds it, we look back for medications from 01/09/2013.</p> <p>Eg. If we only looked back 12 months from the Audit date, an asthma patient whose last medication was in November 2013 would be included in the October 31st 2014 results (as their latest medication is within the last 12 months), but would then drop out of the November 30<sup>th</sup> 2014 results (as their latest medication would now be over 12 months ago). By fixing the date we look back for medications to 01/09/2013, we prevent this happening.</p>			
10	<u>ASTMED_DAT</u>	Date of ASTMED_COD		Chosen Record

<i>Field Number</i>	<i>Field name</i>	<i>Data item</i>		<i>Qualifying criteria</i>
11	ASTRX_COD	<i>Read codes v2</i>	<i>Read codes v3</i>	Latest >= 01/09/2013 AND <= (AUDITEND_DAT)
		c1D%,c1c%, c6% (not including: c61U), 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..%,c1c%, c63..%, c64..%, c67..%, c69..%, c6A..%, fe7..%, fe9..%, x00yP%, x01MW%, x01Mc%, x01Mh%, x01Na%, x01Nb%, x01Nq%, x02IG%	
		<i>(Asthma Prescription)</i>		
Note	Inhaled or Oral Steroid Prescription codes. The same logic applies here as in the note to the ASTMED_COD group.			
12	<u>ASTRX_DAT</u>	Date of ASTRX_COD		Chosen Record
13	ASTADM_COD	<i>Read codes v2</i>	<i>Read codes v3</i>	Latest <= (AUDITEND_DAT)
		663d, 8H2P	663d., 8H2P.	
		<i>(Asthma Admission codes)</i>		
Note	The presence of an Emergency Asthma Admission to hospital Read code at any time 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)			
14	<u>ASTADM_DAT</u>	Date of ASTADM_COD		Chosen Record



<i>Field Number</i>	<i>Field name</i>	<i>Data item</i>		<i>Qualifying criteria</i>
15	RESP_COD	<i>Read codes v2</i>	<i>Read codes v3</i>	Earliest <= AUDITEND_DAT
		A115, AD50, AD52, 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, H58y6, H58y7, H591 - H593, H5y12, H5y13, Hy02, Hyu3%, Hyu40, Hyu41, Hyu48, Hyu5%, N0421, N04y0, P861, Q3170, 7450%	C370.%, C3701, H3...%, H31...%, H3120, H31y0%, H32...%, H34...%, H35...%, H44...%, H440.%, H441., H46.., H464.%, H46z., Hyu46, H46z0, H47y0, H4y...%, H4y2.%, (not including: H4y20) H5410, H561., H57...%, H571., H57y0, H57y2%, H583.%, (not including: H5830) H591.%, Hy02., Hyu3., Hyu5., Hyu50, Hyu51, N0421%, Q3170, X100j%, X101U, X102u%, X70Qb, XE0Zf, Xa9Bw%, XaDya%, XaREX, XaX1F, XaX1J, 7450%	
		(Chronic Respiratory Disease)		
16	RESP_DAT	Date of RESP_COD		Chosen Record
17	CHD_COD	<i>Read codes v2</i>	<i>Read codes v3</i>	Earliest <= AUDITEND_DAT
		33BA, 7900%, 7901%, F391B, G1%, G21%,G220, G222, G23%, G3%, G41%, G54%, G55%, G573%, G58%, G5y1, G5y3%, G5y4%, G5y6 - G5y8, G5yy2, G5yy6, G5yy9 - G5yyE, Gyu1%, Gyu3%, Gyu4%, Gyu55 - Gyu5D, Gyu5M - Gyu5T, GA, H5410, L1280, L1281, P5%, P60 - P6X, P6y, P6y0 - P6y3, P6y63 - P6y6z, P6yy%, P6z, P6z2 - P6zz, PKy5M, SP084, SP085, SP111, TB000, ZV421	G1...%, G1y0., G21...%, G220., G222., G310., G36...%, G55...%, G553., G573%, G5730%, G5731%, G58...%, Gyu4., Gyu41, H5410, X201f%, X202p%, X202q%, X202u%, X2033, G41y0, X2034%, X203F%, X203G, X203H, X203I, XE0WK, Xa0Cy, Xa0Cz, X777T, X77tW%, XE0Ua, XE0VA%, XE0VB%, XE2Qh%, XE2uV%, XM0rN, XM0rO, G41...%, G411., Gyu40, XaaJL, Xa3fR, XaDyG, Xa3fS, XaB0g%, XaYYq, X00y1%,TB000,ZV421,79012%, XaYYs, XM1Qn	

		<i>(Chronic heart disease codes)</i>		
18	CHD_DAT	Date of CHD_COD		Chosen Record
19	CKD_COD	<i>Read codes v2</i>	<i>Read codes v3</i>	Earliest ≤AUDITEND_DAT
		7B00%, 7B012, 7B015, 7B019, 7B063, 7B0F3, 8L50, G7520, G7521, K01%, K02%, K0320, K0325, K05, K050, K08yA, K0A1%, K0A3%, K0A8, K0D, K0E, Kyu21, SP083, TB001, ZV420	7B00.%, 7B012, 7B063, K01.%, K01x4, K05., K0A3.%, Kyu21, TB001, X30J0%, X30MN%, XE0Fv%, XE0db%, XE0df%, XaB9D%, XaM41, ZV420, G7520%, X30I8%, X30Km%, 8L50.	
		<i>(Chronic kidney disease diagnostic codes)</i>		
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			
20	<a href="#">CKD_DAT</a>	DATE of CKD_COD		Chosen Record
21	CKD15_COD	<i>Read codes v2</i>	<i>Read codes v3</i>	Latest ≤ AUDITEND_DAT
		1Z1%, K051, K052, K053, K054, K055	XaLHG%, XaLHH%, XaLHI%, XaLHJ%, XaLHK%	
		<i>(Chronic kidney disease codes - all stages)</i>		
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 most recent Read code is a Stage 3 – 5. If so, the patient is entered into the CKD risk group. If their most recent code is a 1 – 2, they are not (unless they have been brought into the group by having a CKD code from field 19 above)			
22	<a href="#">CKD15_DAT</a>	Date of CKD15_COD		Chosen Record
23	CKD35_COD	<i>Read codes v2</i>	<i>Read codes v3</i>	Latest ≤ AUDITEND_DAT
		1Z12, 1Z13, 1Z14, 1Z15, 1Z16, 1Z1B, 1Z1C, 1Z1D, 1Z1E, 1Z1F, 1Z1G, 1Z1H, 1Z1J, 1Z1K, 1Z1L, K053, K054, K055	XaLHI%, XaLHJ%, XaLHK%	
		<i>(Chronic kidney disease codes-stages 3 - 5)</i>		
24	<a href="#">CKD35_DAT</a>	Date of CKD35_COD		Chosen Record

25	CLD_COD	<i>Read codes v2</i>	<i>Read codes v3</i>	Earliest <= AUDITEND_DAT
		A707%, AyuB1, AyuB2, J6, J61% (not including: J611, J61y9, J61y1 ), J623 - J62z, J6353 - J6356, J63A, J63B, J6617, J671%, Jyu71, Jyu84, PB61%, PB63%, (not including: PB630, PB631, PB632, PB633), PB6y1, SP086, SP143, J62, 7800%	J6..., J610., J613., J614.%, J61y.%, J61y0, J61y2%, J61y3, J61y7, J61z., J62.%, J623., J62y., J6353, J6354, J6355, J6356, J63A., J671.%, Jyu71, PB61.%, PB610, PB612%, PB615, PB616, PB63.%, PB634, PB6y1, X306T, AyuB1, AyuB2, J6143, X306r, XaBE3, XaQIT, X3072, X3073, X3076, J624.%, X3077, X3078, X307C, X307J%, X307L%, X307x%, XE0bC, XE0dD, XE1L0, XaREa, 7800%	
		(Chronic Liver disease codes)		
26	CLD_DAT	Date of CLD_COD		Chosen Record
27	DIAB_COD	<i>Read codes v2</i>	<i>Read codes v3</i>	Earliest<= AUDITEND_DAT
		C10% (not including C1098, C10F8) Cyu2%, L1805, L1806, L1807, L180X, Lyu29	C10.., Xaagf, Xaage, XaOPu, XaOPt, X40J4%, X40J5%, X40J6, X40J7%, X40JA%, Q441.%, X40JG%, X40Ja%, X40JZ, XSETp, C100., C100z, C103y, C105.%, C108y, C108z, C10y.%, C10yy, C10z.%, Cyu20, Cyu23, L180.%, Lyu29, XE10E, XE10F, XE10G%, XE10H%, XE10I%, XE12M, XM1Qx, XM1Xk%, 66AJ1, C1000, C1001, C104., C107., XE128, XE12A, XE12C	
		(Diabetes diagnosis codes)		
Note	The patient is included if any Diabetes diagnosis Read code is recorded			
28	DIAB_DAT	Date of DIAB_COD		Chosen Record

<i>Field Number</i>	<i>Field name</i>	<i>Data item</i>		<i>Qualifying criteria</i>
29	IMMDX_COD	<i>Read codes v2</i>	<i>Read codes v3</i>	Latest< =AUDITEND_DAT
		2J30, 2J31, 43C3, A788%, A789%, AyuC%, B6%, B937W, ByuD%, ByuH6 - ByuH8, ByuHD, C332, C332z, C333%, C37yE, D41y1, D41y2, F38, F380%, F381%, F383 - F38z, Fyu8, Fyu80, Fyu83 - Fyu85	43C3., B623.%, B625.%, B6z0., F38.., X00Cb%, F3812%, Xa0Ku%, X00Cn, X00Cq%, F380., X00Ct, X00Cv%, F3800, F3801, F380z, Fyu83, Fyu84, Fyu85, X00Cw, F3810, X00Cy, F381.%, F383., F38z., Fyu8.%, XE15o, XaB9K, XE18V, Ua14c, Ua19z, X70M6%, X78e1, ByuH6, ByuH7, ByuH8, X20Fr, X78e6%, XE1vo%, XE20P, Xa0Sr%, Xa0Ty, Xaan6	
		<i>(Immunosuppression diagnosis codes)</i>		
Note	The patient included if any immunosuppressant Read code is recorded			
30	<a href="#">IMMDX_DAT</a>	Date of IMMDX_COD		Chosen Record
31	IMMRX_COD	<i>Read codes v2</i>	<i>Read codes v3</i>	Latest >= 01/03/2014 AND <= (AUDITEND_DAT)
		h1%, h2%, h3, h31%, h32, h321, h322, h325 - h32C, h32v - h32z, h33 - h36, h39 - h3G, h3I%, h4%, h5, h51 - h5K, h5M%, h7%, h8%, hh, hh1 - hhM, hhN1, hhN2, hh0 - hhi, j51%, j52%, j59%	j59.%, x005B%, x01AQ, h8...%, x01AR, h1...%, h2...%, h3..., h3D.%, h3E.%, h3F.%, h3G.%, h3I.%, x01Aa%, x01Ab%, x01Ac, h31.%, h32., h325., h326., h327., h328.%, h32A., h32B.%, h32x.%, h32y.%, h32z., x00Nu, x00Nv, x031f, h36.%, h3A.%, h3B.%, h4...%, h41.%, h5..., h51.%, h52.%, h53.%, h55.%, h57.%, h58.%, h59.%, h5B.%, h5C.%, h5E.%, h5H.%, h5I.%, h5K.%, hh..., hhF.%, hhJ.%, hhK.%, hhI.%, hhH.%, hhG.%, hhL.%, hhM.%, hhN1., hhN2.,	

		hh0..%, hhP..%, hhQ..%, hhR..%, hhS..%, hhT..%, hhU..%, hhV..%, hhW..%, hhX..%, hhY..%, hhZ..%, hha..%, hhb..%, hhc..%, hhd..%, hhe..%, hhf..%, hhg..%, hhh..%, hh1..%, hh2..%, hh3..%, hh5..%, hh6..%, hh7..%, hh8..%, hh9..%, hhA..%, hhB..%, hhD..%, hhE..%, x01Ai%, x031P%, x05Zz%, x01An, h7... , h81..%, h82..%, h83.., h83B., h83C., h83D., h83E., h83F., h83G., h83H., h83I., h83J., h83t., h83u., h83v., x05cm%, x05cn%, h84..%, h85..%, h86..%, h87..%, h88..%, h8A..%, h8B..%, h8C..%, ha5..%, n8...%, x004B%, x0083%, x00AR%, x02MI%, x04wS%, x05sE%, x02MQ%	
		<i>(Immunosuppression medication codes)</i>	
Note	<p>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</p> <p>The Read code should be in the last 6 months. However to prevent patients from dropping out of the audit as the vaccination campaign progresses, where their latest immunosuppressant medication issue was originally within the 6 month timescale but then subsequently exceeds it, we look back for medications from 01/03/2014</p> <p>Eg. If we only looked back 6 months from the Audit date, an immunosuppression patient whose last medication was in May 2014 would be included in the October 31st 2014 results (as their latest medication is within the last 6 months), but would then drop out of the November 30<sup>th</sup> 2014 results (as their latest medication would now be over 6 months ago). By fixing the date we look back for medications to 01/03/2014, we prevent this happening.</p>		
32	<a href="#">IMMRX_DAT</a>	Date of IMMRX_COD	Chosen Record

<i>Field Number</i>	<i>Field name</i>	<i>Data item</i>		<i>Qualifying criteria</i>
33	CNSGROUP_COD	<i>Read codes v2</i>	<i>Read codes v3</i>	Earliest <= AUDITEND_DAT
		C3510, E004%, E011%, Eu00 - Eu02, Eu815, Eu817, F036%, F1, F10 - F12, F13, F130%, F1322, F134, F135, F1350, F135z, F136%, F137, F1370, F1371, F137y, F137z, F13A, F13X, F14%, F15%, F16, F160 - F162, F163, F1631, F16y, F16y1, F16yz, F16z, F17, F174, F1y%, F1z, F20%, F21, F210 - F212, F21X - F21z, F22%, F23%, F24, F240%, F241%, F24y, F24y0, F24y2, F24yz, F24z, F281%, F283, F2A%, F2B%, F371%, F373, F3749, F380%, F3902, F3904, F391, F3910 - F3914, F3917 - F391z, F3920, F39B, F4236, Fyu1, Fyu10 - Fyu14, Fyu16, Fyu2, Fyu21 - Fyu23, Fyu26 - Fyu29, Fyu2B, Fyu3%, Fyu4%, Fyu55, Fyu74, Fyu77, Fyu83 - Fyu85, Fyu8A, Fyu9%, FyuA1, FyuA3 - FyuA5, G61, G610 - G616, G618 - G61z, G63y0, G63y1, G64%, G65, G650 - G654, G656 - G65z, G66%, G6760, G6W, G6X, Gyu62 - Gyu66, Gyu6C, Gyu6F, Gyu6G, P23%, Pyu01, SP100, SP101, ZV12D	Eu02.%, F1..., F16.., F161.%, F163., F1631, F16y., F16y1, F16yz, XE15Q%, F16z., F1y.., F1z.., XE17d, F100.%, F1000, F1003%, F101., F1010, F1011, F1012, F1014%, F1015, F1030, F1031, F10y1, F11x8, F11z., F13.., F1322, F1350, F136.%, F137., F14.., F143., F160.%, F1600, F1601, F212., F24..%, F240.%, F241.%, F24yz, F283., F38.., X00Cb, X00Cc%, X00Ce%, X00Cg%, X00Ci, X00Cj, X00Ck, X00Cl, F3812%, Xa0Ku%, X00Cn, X00Cq%, F380.%, X00Cw, F3810, X00Cy, F381.%, F383., F38z., Fyu8.%, XE15o, XaB9K, XE18V, F3902%, F3904, F3920%, Fyu1.%, Fyu14, Fyu23, Fyu3.%, Fyu8A, Fyu9., G641., G65z0, G65z1, Gyu62, Gyu65, Gyu66, Gyu6C, Gyu6F, P234.%, PKy92, X002U%, X002Y%, X002x, X0030, X003Z%, X003o, F134.%, F1301, X003s, X003t%, X003y, X003z, X0040, C3510, X0042, X0043, G02.%, X0045, X0046, X0047, X0048, X0049, X004A%, F135.%, Fyu26, X004V, X0051%, X005K, X005L%, X005N%, X005S, X005b%, X00AZ, F371.%, F373.%, F3748, F3749, Fyu13, Fyu66, X00Aa, F162.%, X00Af, X00Ag%, X00Aq, X00Ar, X00As, X00At, X00Au, X00Av, Xa9BG%, X00B1, X00B2, XE151%, X00D1%, X00E7, X00EG%, X76n9%, XE0VK%, XE15G, F130.%, F1300, F13z0, F13zz, Fyu2., Fyu27, Fyu28, XE15L%, XE150%, XE15T%, XE17f, XE17j, XE17r, XE17t, XE183, XE2Q8%, Xa0ZX%, Xa01L, F391., F3911, F3912, F3913, F3914,	

		F3917, F391y, F391z, X708J%, X708h%, X708p, XE15p, Xa0s2, Xa0s3%, Xa1GB%, Xa3fA, XaB4V%, XaB4W, XaI9b, XaPws, XaQZ4, XaREu, XaX16, XaX9w		
		<i>(Chronic neurological disease, including Stroke/Tia, Cerebral Palsy and MS codes)</i>		
Note	The above used to be represented by 3 separate code groups, but have now been merged			
34	<a href="#">CNSGROUP_DAT</a>	Date of CNSGROUP_COD		Chosen Record
35	PNSPLEEN_COD	<i>Read codes v2</i>	<i>Read codes v3</i>	Earliest <= AUDITEND_DAT
		14N7, 7840, 78400, 78401, 78403 - 7840z, 7841, 7841y, 7841z, 78420, 78421, D104, D1040, D1042, D1043, D1046, D1047, D1049 - D104z, D106%, D414, D4154, D4156, D4157, D415A, Dyu12, G74y6, J690%, PK01, PK06, S7504, S7514	14N7., 7840.%, 78403, 7841.%, 78420, 78421, D106.%, D1063, D1064, D1065, D414., D4154, D4156, D4157, Dyu12, G74y6, PK06., S7504, S7514, X20D1, X20Fm, XE0bK%, XE13k, X20Cn, D1046, D1047, X20Co, X20Cp, X20Cq, X20Cs, X20Ct, XE13l, XE13m, X20Cj, XE13n, Xa0Yy, XE1Mi, Xa0h0, Xa9Ax, Xa9D7	
		<i>(Asplenia or Dysfunction of the Spleen codes)</i>		
36	PNSPLEEN_DAT	Date of PNSPLEEN_COD		Chosen Record

**VACCINATIONS**

<i>Field Number</i>	<i>Field name</i>	<i>Data item</i>		<i>Qualifying criteria</i>
37	FLUVAX_COD	<i>Read codes v2</i>	<i>Read codes v3</i>	Latest > 31/08/2014 and <= AUDITEND_DAT
		65E, 65E2%, 65ED%, 65EE%, ZV048	65E.., Xaa9G%, XaLK4, XaZ0d%, XaZfY, XaPyT%, XaaZp, ZV048	
		<i>(Influenza vaccination codes)</i>		
38	<a href="#">FLUVAX_DAT</a>	Date of FLUVAX_COD		Chosen Record
Note	A Flu Read code recorded in the timeframe is counted as a Seasonal Influenza vaccination given			
39	FLURX_COD	<i>Read codes v2</i>	<i>Read codes v3</i>	Latest >31/8/2014 and <= AUDITEND_DAT
		n47% (not including: n47A, n47B, n47r, n47s, n47t)	n47..% (not including: n47A., n47B., n47r., n47s., n47t.)	
		<i>(Influenza vaccination medication codes)</i>		
40	<a href="#">FLURX_DAT</a>	Date of FLURX_COD		Chosen Record
Note	A Flu Prescription Read code recorded in the timeframe is counted as a Seasonal Influenza vaccination given			
41	FLUVAXOHP_COD	<i>Read codes v2</i>	<i>Read codes v3</i>	Latest >31/8/2014 and <= AUDITEND_DAT
		65E2%, 65ED0, 65ED2	XaPyT%, XaZfY, XaaZp	
		<i>Influenza vaccination by other health care provider codes</i>		
42	<a href="#">FLUVAXOHP_DAT</a>	DATE OF FLUVAXOHP_COD		Chosen Record
Note	These codes are a subset of the above FLUVAX code group			



**CONTRAINDICATIONS, DECLINED, NO CONSENT, ALLERGIES**

<i>Field Number</i>	<i>Field name</i>	<i>Data item</i>		<i>Qualifying criteria</i>
43	CONTRA_COD	<i>Read codes v2</i>	<i>Read codes v3</i>	Latest <= AUDITEND_DAT
		8I2F, 8I2F0	XaI0T, XaZ0j	
		<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			
44	CONTRA_DAT	Date of CONTRA_COD		Chosen Record
45	DECL_COD	<i>Read codes v2</i>	<i>Read codes v3</i>	Latest <= AUDITEND_DAT
		90X5, 90X51, 90X52, 90X53, 90X54, 90X56	XaIBI, XaZ0i, XaaDp, XaaDq, XaadS, XaadU	
		<i>(Influenza vaccination declined)</i>		
Note	Declined is extracted for the new 2014/2015 patient refused/declined vaccination indicators			
46	<a href="#">DECL_DAT</a>	Date of DECL_COD		Chosen Record
47	NOCONS_COD	<i>Read codes v2</i>	<i>Read codes v3</i>	Latest < AUDITEND_DAT
		68NE%	68NE. , Xaa9f	
		<i>(No Consent codes)</i>		
Note	No consent is extracted for the new 2014/2015 patient refused/declined vaccination indicators			
48	<a href="#">NOCONS_DAT</a>	Date of NOCONS_COD		Chosen Record
49	ALLERG_COD	<i>Read codes v2</i>	<i>Read codes v3</i>	Latest <= AUDITEND_DAT
		14LJ, U60K4, ZV14F	Xa5um%, Xa5WJ%, XaIAA, XaJ8X, XaJ7u	
		<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			
50	ALLERG_DAT	Date of ALLERG_COD		Chosen Record

**CARERS**

<i>Field Number</i>	<i>Field name</i>	<i>Data item</i>		<i>Qualifying criteria</i>
51	CARER_COD	<i>Read codes 2</i>	<i>Read codes v3</i>	Latest<= AUDITEND_DAT
		13HH, 918A%, 918G, 918H, 918W, 918X, 918Y, 918a, 918b, 918c, 918d, 918m, 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.			
52	<a href="#">CARER_DAT</a>	Date of CARER_COD		Chosen Record
53	NOTCARER_COD	<i>Read codes v2</i>	<i>Read codes v3</i>	Latest<= AUDITEND_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.			
54	<a href="#">NOTCARER_DAT</a>	Date of NOTCARER_COD		Chosen Record

**PREGNANCY**

<i>Field Number</i>	<i>Field name</i>	<i>Data item</i>		<i>Qualifying criteria</i>
55	PREGDEL_COD	<i>Read codes v2</i>	<i>Read codes v3</i>	Latest >= 01/01/2014 AND < START_DAT
		62%, (not including: 6214, 6219, 62I%, 62J%, 62P%, 62X%) 633%, 7E060, 7E066, 7E070, 7E071, 7E08%, 7E0B%, 7F02%, 7F1%, 7F20 - 7F24, L0%, L20%, L3%, L4%, Ly0, Ly1, Lyu0 - Lyu6, ZV22 - ZV24, (not including: ZV233), ZV27%, ZV28% (not including: ZV283, ZV285)	621.., 62N..%, 63...%, 7E088, 7E0B%, L0...% (not including: L163., L1630, L163z), L264.%, X4038%, X404x%, X40Ar, X74V6%, X74V7, X76Qk, X76Q1, X76Qt, XE06i%, XE06j, XE1SI%, Xa1qM%, Xa36H%, Xa450%, Xa4SU, Xa4SV, Xa4SW%, Xa7Yj, Xa85V%, XaI09, XaLQ1, ZV22.%, ZV23.%, (not including: ZV233) ZV24.%, ZV27.%, ZV28.% (not including: ZV283, ZV285)	
		(Pregnancy or Delivery codes recorded between 1 <sup>st</sup> January 2014 and 31st August 2014 (inclusive))		
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 2014. 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			
56	<a href="#">PREGDEL_DAT</a>	Date of PREGDEL_COD		Chosen Record
57	PREG_COD	<i>Read Codes v2</i>	<i>Read Codes v3</i>	Latest >= 01/01/2014 AND < START_DATE
		62, 621 - 62H, (not including 6214, 6219%), 62K - 62O, 62U - 62W, 62Y - 62c, L2A - L2z, Lyu2 - Lyu3, ZV22%, ZV23%, (not including ZV233) ZV28% (not including ZV283, ZV285)	621.., 62N..%, X40Ar, X74V6%, X74V7, X76Qk, X76Q1, X76Qt, Xa450% (not including: Xa41N), Xa4SU, Xa4SV, Xa7Yj, Xa85V%, XaI09, XaLQ1, ZV22.%, ZV23.% (not including: ZV233), ZV28.%, (not including: ZV283, ZV285)	

		<i>(Pregnancy codes recorded between 1<sup>st</sup> January 2014 and 31st August 2014 (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 2014. If the latest code recorded out of PREGDEL_COD is PREG_COD, then the patient is regarded as still pregnant			
58	<a href="#">PREG_DAT</a>	Date of PREG_COD		Chosen record
59	PREG2_COD	<i>Read Codes v2</i>	<i>Read Codes v3</i>	Latest >= START_DATE AND < 31/01/2015 AND <= (AUDITEND_DAT)
		<i>Code string as PREG_COD</i>	<i>Code string as PREG_COD</i>	
		<i>(Pregnancy codes recorded between 1<sup>st</sup> September 2014 and 31<sup>st</sup> January 2015 (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 2014. 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.			
60	<a href="#">PREG2_DAT</a>	Date of PREG2_COD		Chosen record

**ETHNICITY**

<i>Field Number</i>	<i>Field name</i>	<i>Data item</i>		<i>Qualifying criteria</i>
61	ETH2001_WHIBRIT_COD	<i>Read codes v2</i>	<i>Read codes v3</i>	Latest<= AUDITEND_DAT
		9i00	XaQEa	
		<i>White British Ethnicity</i>		
62	<a href="#">ETH2001_WHIBRIT_DAT</a>	Date of ETH2001_WHIBRIT_COD		
63	ETH2001_WHIIRISH_COD	<i>Read codes v2</i>	<i>Read codes v3</i>	Latest<= AUDITEND_DAT
		9i1%	XaJQw%	
		<i>White Irish Ethnicity</i>		
64	<a href="#">ETH2001_WHIIRISH_DAT</a>	Date of ETH2001_WHIIRISH_COD		
65	ETH2001_WHIOOTHER_COD	<i>Read codes v2</i>	<i>Read codes v3</i>	Latest<= AUDITEND_DAT
		9i2%	XaJQx%	
		<i>White – Any other White background Ethnicity</i>		
66	<a href="#">ETH2001_WHIOOTHER_DAT</a>	Date of ETH2001_WHIOOTHER_COD		
67	ETH2001_MXDWHIBLK_CAR_COD	<i>Read codes v2</i>	<i>Read codes v3</i>	Latest<= AUDITEND_DAT
		9i3	XaJQy	
		<i>Mixed – White and Black Caribbean Ethnicity</i>		
68	<a href="#">ETH2001_MXDWHIBLK_CAR_DAT</a>	Date of ETH2001_MXDWHIBLK_CAR_COD		
69	ETH2001_MXDWHIBLK_AFR_COD	<i>Read codes v2</i>	<i>Read codes v3</i>	Latest<= AUDITEND_DAT
		9i4	XaJQz	
		<i>Mixed – White and Black African Ethnicity</i>		

70	<a href="#">ETH2001_MXDWHIBLK_AFR_DAT</a>	Date of ETH2001_MXDWHIBLKAFR_COD		
71	ETH2001_MXDWHIASN_COD	<i>Read codes v2</i>	<i>Read codes v3</i>	Latest<= AUDITEND_DAT
		9i5	XaJR0	
		<i>Mixed – White and Asian Ethnicity</i>		
72	<a href="#">ETH2001_MXDWHIASN_DAT</a>	Date of ETH2001_MXDWHIASN_COD		
73	ETH2001_MXDOTHER_COD	<i>Read codes v2</i>	<i>Read codes v3</i>	Latest<= AUDITEND_DAT
		9i6%	XaJR1%	
		<i>Mixed – Any other mixed background Ethnicity</i>		
74	<a href="#">ETH2001_MXDOTHER_DAT</a>	Date of ETH2001_MXDOTHER_COD		
75	ETH2001_ASNINDIAN_COD	<i>Read codes v2</i>	<i>Read codes v3</i>	Latest<= AUDITEND_DAT
		9i7	XaJR2	
		<i>Asian or Asian British – Indian Ethnicity</i>		
76	<a href="#">ETH2001_ASNINDIAN_DAT</a>	Date of ETH2001_ASNINDIAN_COD		
77	ETH2001_ASNPAK_COD	<i>Read codes v2</i>	<i>Read codes v3</i>	Latest<= AUDITEND_DAT
		9i8	XaJR3	
		<i>Asian or Asian British – Pakistani Ethnicity</i>		
78	<a href="#">ETH2001_ASNPAK_DAT</a>	Date of ETH2001_ASNPAK_COD		
79	ETH2001_ASNBANG_COD	<i>Read codes v2</i>	<i>Read codes v3</i>	Latest<= AUDITEND_DAT
		9i9	XaJR4	
		<i>Asian or Asian British – Bangladeshi Ethnicity</i>		
80	<a href="#">ETH2001_ASNBANG_DAT</a>	Date of ETH2001_ASNBANG_COD		

81	ETH2001_ASNOTHER_COD	<i>Read codes v2</i>	<i>Read codes v3</i>	Latest<= AUDITEND_DAT
		9iA%	XaJR5%	
		<i>Asian or Asian British – Any other Asian background Ethnicity</i>		
82	<a href="#">ETH2001_ASNOTHER_DAT</a>	Date of ETH2001_ASNOTHER_COD		
83	ETH2001_BLKCARIB_COD	<i>Read codes v2</i>	<i>Read codes v3</i>	Latest<= AUDITEND_DAT
		9iB	XaJR6	
		<i>Black or Black British – Caribbean Ethnicity</i>		
84	<a href="#">ETH2001_BLKCARIB_DAT</a>	Date of ETH2001_BLKCARIB_COD		
85	ETH2001_BLKAFRIC_COD	<i>Read codes v2</i>	<i>Read codes v3</i>	Latest<= AUDITEND_DAT
		9iC	XaJR7	
		<i>Black or Black British – African Ethnicity</i>		
86	<a href="#">ETH2001_BLKAFRIC_DAT</a>	Date of ETH2001_BLKAFRIC_COD		
87	ETH2001_BLKOTH_COD	<i>Read codes v2</i>	<i>Read codes v3</i>	Latest<= AUDITEND_DAT
		9iD%	XaJR8%	
		<i>Black or Black British – Any other Black background Ethnicity</i>		
88	<a href="#">ETH2001_BLKOTH_DAT</a>	Date of ETH2001_BLKOTH_COD		
89	ETH2001_CHINESE_COD	<i>Read codes v2</i>	<i>Read codes v3</i>	Latest<= AUDITEND_DAT
		9iE	XaJR9	
		<i>Other ethnic groups – Chinese Ethnicity</i>		
90	<a href="#">ETH2001_CHINESE_DAT</a>	Date of ETH2001_CHINESE_COD		
91	ETH2001_OTHER_COD	<i>Read codes v2</i>	<i>Read codes v3</i>	Latest<= AUDITEND_DAT
		9iF%	XaJRA%	

		<i>Other ethnic groups – Any other ethnic group Ethnicity</i>		
92	<a href="#">ETH2001_OTHER_DAT</a>	Date of ETH2001_OTHER_COD		
93	ETH2001_NOTSTATED D_COD	<i>Read codes v2</i>	<i>Read codes v3</i>	Latest<= AUDITEND_DAT
		9iG	XaJRB	
		<i>Ethnicity not stated</i>		
94	<a href="#">ETH2001_NOTSTATED_D AT</a>	Date of ETH2001_NOTSTATEDD_COD		
95	ETH2001_NORECORD _COD	<i>Read codes v2</i>	<i>Read codes v3</i>	Latest<= AUDITEND_DAT
		9SE	XaE4C	
		<i>Ethnicity not recorded</i>		
96	<a href="#">ETH2001_NORECORD _DAT</a>	Date of ETH2001_NORECORD_COD		
97	ETH2001_NOTGIVPTR EF_COD	<i>Read codes v2</i>	<i>Read codes v3</i>	Latest<= AUDITEND_DAT
		9SD	XaE4B	
		<i>Ethnicity not given – patient refused</i>		
98	<a href="#">ETH2001_NOTGIVPTR EF_DAT</a>	Date of ETH2001_NOTGIVPTREF_COD		



## Indicator Rulesets

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

1	Age Bands	
	Band 1	PAT_AGE >=65 and <120 at REF_DAT
	Band 2	PAT_AGE >= 6months < 2 at RUN_DAT
	Band 3	PAT_AGE >=2 and <5 at RUN_DAT
	Band 4	PAT_AGE >=5 and <16 at RUN_DAT
	Band 5	PAT_AGE >=16 at RUN_DAT and <65 at REF_DAT*
	Band 6	PAT_AGE >= 2 AND <3 at START_DATE*
	Band 7	PAT_AGE >= 3 AND <4 at START_DATE*
	Band 8	PAT_AGE >= 4 AND <5 at START_DATE*

**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 2015 (this fits with the policy

i.e. all those aged 65 years or older by the 31 March 2015 are eligible to receive vaccine in the 2014/15 vaccination programme).

For those in the 'aged 2', 'aged 3' and 'aged 4' age bands they are defined by their age at 1<sup>st</sup> September 2014.

2	Gender Bands	
	Band 1 (male)	PAT_SEX = M
	Band 2 (female)	PAT_SEX = F
	Band 3 (unspecified)	PAT_SEX = U OR PAT_SEX = NULL
Band 4 (unknown)	<i>Please see note below</i>	

Note – The above gender roles have been written from a MIQUEST perspective where gender can only be M, F, U or NULL. The MIQUEST manual states that U represents "unspecified or unknown". Therefore MIQUEST cannot distinguish between bands 3 and 4 above, and so only band 3 is populated.

If, when reporting flu figures, system suppliers are able to distinguish between unspecified genders and unknown genders, then they should use both bands 3 and 4.

<b>3</b>	<b>ETHNICITY BANDS</b>	<b>True</b>	<b>False</b>	<b>BOX B</b>
Rule 1	ETH2001_WHIBRIT_DAT >= DATES OF ETHNICITY CATEGORIES IN BOX B	Band = 1	<i>Next</i>	ETH2001_WHIBRIT_DAT
Rule 2	ETH2001_WHIIRISH_DAT >= DATES OF ETHNICITY CATEGORIES IN BOX B	Band = 2	<i>Next</i>	ETH2001_WHIIRISH_DAT
Rule 3	ETH2001_WHIOOTHER_DAT >= DATES OF ETHNICITY CATEGORIES IN BOX B	Band = 3	<i>Next</i>	ETH2001_WHIOOTHER_DAT
Rule 4	ETH2001_MXDWHIBLKCAR_DAT >= DATES OF ETHNICITY CATEGORIES IN BOX B	Band = 4	<i>Next</i>	ETH2001_MXDWHIBLKCAR_DAT
Rule 5	ETH2001_MXDWHIBLKAFR_DAT >= DATES OF ETHNICITY CATEGORIES IN BOX B	Band = 5	<i>Next</i>	ETH2001_MXDWHIBLKAFR_DAT
Rule 6	ETH2001_MXDWHIASN_DAT DATES OF ETHNICITY CATEGORIES IN BOX B	Band = 6	<i>Next</i>	ETH2001_MXDWHIASN_DAT
Rule 7	ETH2001_MXDOTHER_DAT >= DATES OF ETHNICITY CATEGORIES IN BOX B	Band = 7	<i>Next</i>	ETH2001_MXDOTHER_DAT
Rule 8	ETH2001_ASNINDIAN_DAT >= DATES OF ETHNICITY CATEGORIES IN BOX B	Band = 8	<i>Next</i>	ETH2001_ASNINDIAN_DAT
Rule 9	ETH2001_ASNPAK_DAT >= DATES OF ETHNICITY CATEGORIES IN BOX B	Band = 9	<i>Next</i>	ETH2001_ASNPAK_DAT
Rule 10	ETH2001_ASNBANG_DAT >= DATES OF ETHNICITY CATEGORIES IN BOX B	Band = 10	<i>Next</i>	ETH2001_ASNBANG_DAT
Rule 11	ETH2001_ASNOTHER_DAT >= DATES OF ETHNICITY CATEGORIES IN BOX B	Band = 11	<i>Next</i>	ETH2001_ASNOTHER_DAT
Rule 12	ETH2001_BLKCARIB_DAT >= DATES OF ETHNICITY CATEGORIES IN BOX B	Band = 12	<i>Next</i>	ETH2001_BLKCARIB_DAT
Rule 13	ETH2001_BLKAFRIC_DAT >= DATES OF ETHNICITY CATEGORIES IN BOX B	Band = 13	<i>Next</i>	ETH2001_BLKAFRIC_DAT
Rule 14	ETH2001_BLKOTH_DAT >= DATES OF ETHNICITY CATEGORIES IN BOX B	Band = 14	<i>Next</i>	ETH2001_BLKOTH_DAT
Rule 15	ETH2001_CHINESE_DAT >= DATES OF ETHNICITY CATEGORIES IN BOX B	Band = 15	<i>Next</i>	ETH2001_CHINESE_DAT
Rule 16	ETH2001_OTHER_DAT >= DATES OF ETHNICITY CATEGORIES IN BOX B	Band = 16	<i>Next</i>	ETH2001_OTHER_DAT
Rule 17	ETH2001_NOTGIVPTREF_DAT <> NULL	Band = 17	<i>Next</i>	
Rule 18	ETH2001_NOTSTATED_DAT <> NULL	Band = 18	Band = 19	

Note – Band 19 represents “Ethnicity not recorded”. The rules will allocate a patient to this band if they have no ethnicity code at all, or if they only have an “Ethnicity not recorded” code on their record.

The above rules ensure that if a patient has given their ethnicity, then at a later date, has either a “refused”, “not stated” or “not known” ethnicity code, the earlier ethnicity code will be used.

In the unlikely event that a patient has two of the ethnicity codes in box B on the same day, the code that appears highest up box B will be used.

Where a patient has a “Refused” code, this is used even if there are later dated “Not stated” or “Not known” codes. Similarly if a patient has a “Not stated” code, this is used even if there is a later dated “not known” code.

<b>4</b>	<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

<b>5</b>	<b>Patients with CKD</b>		<b>True</b>	<b>False</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. However if just the latter, then the latest Stage code must be Stage 3 to 5 .

<b>6</b>	<b>Patients with Asthma</b>		<b>True</b>	<b>False</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

<b>7</b>	<b>Patients with CNS Disease (including Stroke/TIA)</b>		<b>True</b>	<b>False</b>
	CNS_GROUP	IF CNSGROUP_DAT <> NULL	<i>Select</i>	<i>Reject</i>

**Note:** This group contains a large number of codes which was previously split into three groups for MIQUEST. PRIMIS+ have now merged the three groups but have retained the logical grouping's name.

<b>8</b>	<b>Patients who have Chronic Respiratory Disease</b>		<b>True</b>	<b>False</b>
	RESP_GROUP	IF AST_GROUP <> NULL	<i>Select</i>	<i>Next</i>
		IF RESP_DAT <> NULL	<i>Select</i>	<i>Reject</i>

9	Patients in Any Clinical Risk Group		True	False
	ATRISK_GROUP	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	Next
IF PNSPLEEN_DAT <> NULL		Select	Reject	

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

10	Pregnant on 31/08/2014 or becoming pregnant between 01/09/2014 and 31/01/2015 (inclusive)		True	False
	PREG_GROUP	IF PREG2<> NULL	Select	Next
		(IF PREGDEL_DAT<> NULL) AND ((IF PREG_DAT <> NULL) AND (PREG_DAT >= PREGDEL_DAT))	Select	Reject

**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 2014 to 31st January 2015.
- Group 2 is any patient with a pregnancy, delivered, miscarriage or termination code where the latest code recorded between 01/01/2014 and 31/08/2014 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

11	Patients who have received Influenza Vaccination		True	False
	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

<b>12</b>	<b>Patients who have not had a vaccination due to refusal/declining</b>		<b>True</b>	<b>False</b>
	FLUDECLINED_GROUP	IF FLUVAX_DAT <> NULL OR FLURX_DAT <> NULL	<i>Reject</i>	<i>Next</i>
		IF DECL_DAT <> NULL OR NOCONS_DAT <> NULL	<i>Select</i>	<i>Reject</i>

**Note:** We are looking for any patient who has not had a vaccination in the current flu campaign and who has either a declined or a no consent Read code on their medical record.

## Indicator 1a, 1b and 1c

### Vaccination status of Practice Population.

Output to be broken down by Age bands 1 – 5.

#### DENOMINATOR:

a) Registration status

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

b) Demographic status

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

#### NUMERATORS:

1a	Seasonal Influenza vaccination given from 01/09/2014	<b>True</b>	<b>False</b>
	IF FLUVAX_GROUP <> NULL	<i>Select</i>	<i>Reject</i>
1b	Seasonal Influenza vaccination refused/declined for flu program starting 01/09/2014	<b>True</b>	<b>False</b>
	IF FLUDECLINED_GROUP <> NULL	<i>Select</i>	<i>Reject</i>
1c	Seasonal Influenza vaccination given by other healthcare provider from 01/09/2014	<b>True</b>	<b>False</b>
	IF FLUVAXOHP_DAT <> NULL	<i>Select</i>	<i>Reject</i>

## **Indicator 2a, 2b and 2c**

### **Vaccination status of patients in one or more Risk Groups**

Output to be broken down by Age bands 2-5

#### **DENOMINATOR:**

2	<b>Summary of Patients in one or more Risk Groups</b>	<b>True</b>	<b>False</b>
	IF PAT_ENDAGE < 65	<i>Select</i>	<i>Reject</i>
	IF ATRISK_GROUP <> NULL	<i>Select</i>	<i>Reject</i>

#### **NUMERATORS:**

2a	Seasonal Influenza vaccination given from 01/09/2014	<b>True</b>	<b>False</b>
	IF FLUVAX_GROUP <> NULL	<i>Select</i>	<i>Reject</i>

2b	Seasonal Influenza vaccination refused/declined for flu program starting 01/09/2014	<b>True</b>	<b>False</b>
	IF FLUDECLINED_GROUP <> NULL	<i>Select</i>	<i>Reject</i>

2c	Seasonal Influenza vaccination given by other healthcare provider from 01/09/2014	<b>True</b>	<b>False</b>
	IF FLUVAXOHP_DAT <> NULL	<i>Select</i>	<i>Reject</i>

## Indicator 3a, 3b and 3c

### Vaccination status of pregnant women who are not in a clinical risk group

#### 3 DENOMINATOR:

3	<b>Pregnant on 31/08/2014 or pregnant between 01/09/2014 and 31/01/2015 (inclusive) with no risk category</b>	<b>True</b>	<b>False</b>
	IF ATRISK_GROUP <> NULL	<i>Reject</i>	<i>Next</i>
	IF PREG_GROUP <> NULL	<i>Select</i>	<i>Reject</i>

#### NUMERATORS:

3a	Seasonal Influenza vaccination given from 01/09/2014	<b>True</b>	<b>False</b>
	IF FLUVAX_GROUP <> NULL	<i>Select</i>	<i>Reject</i>
3b	Seasonal Influenza vaccination refused/declined for flu program starting 01/09/2014	<b>True</b>	<b>False</b>
	IF FLUDECLINED_GROUP <> NULL	<i>Select</i>	<i>Reject</i>
3c	Seasonal Influenza vaccination given by other healthcare provider from 01/09/2014	<b>True</b>	<b>False</b>
	IF FLUVAXOHP_DAT <> NULL	<i>Select</i>	<i>Reject</i>



## Indicator 4a, 4b and 4c

### Vaccination status of pregnant women who are in a clinical risk group

#### 4 DENOMINATOR:

4	<b>Pregnant on 31/08/2014 or pregnant between 01/09/2014 and 31/01/2015 (inclusive) in a risk category</b>	<b>True</b>	<b>False</b>
	IF ATRISK_GROUP = NULL	<i>Reject</i>	<i>Next</i>
	IF PREG_GROUP <> NULL	<i>Select</i>	<i>Reject</i>

#### NUMERATORS:

4a	Seasonal Influenza vaccination given from 01/09/2014	<b>True</b>	<b>False</b>
	IF FLUVAX_GROUP <> NULL	<i>Select</i>	<i>Reject</i>

4b	Seasonal Influenza vaccination refused/declined for flu program starting 01/09/2014	<b>True</b>	<b>False</b>
	IF FLUDECLINED_GROUP <> NULL	<i>Select</i>	<i>Reject</i>

4c	Seasonal Influenza vaccination given by other healthcare provider from 01/09/2014	<b>True</b>	<b>False</b>
	IF FLUVAXOHP_DAT <> NULL	<i>Select</i>	<i>Reject</i>

## Indicator 5a, 5b, and 5c

Vaccination status of two year olds regardless of whether in an at risk category or not

### 5 DENOMINATOR:

5	Aged 2 at START_DATE	<b>True</b>	<b>False</b>
	IF START_AGE = 2	<i>Select</i>	<i>Reject</i>

### NUMERATORS:

5a	Seasonal Influenza vaccination given from 01/09/2014	<b>True</b>	<b>False</b>
	IF FLUVAX_GROUP <> NULL	<i>Select</i>	<i>Reject</i>

5b	Seasonal Influenza vaccination refused/declined for flu program starting 01/09/2014	<b>True</b>	<b>False</b>
	IF FLUDECLINED_GROUP <> NULL	<i>Select</i>	<i>Reject</i>

5c	Seasonal Influenza vaccination given by other healthcare provider from 01/09/2014	<b>True</b>	<b>False</b>
	IF FLUVAXOHP_DAT <> NULL	<i>Select</i>	<i>Reject</i>

## Indicator 6a, 6b, and 6c

### Vaccination status of two year olds who are in an at risk category

#### 6 DENOMINATOR:

6	Aged 2 at START_DATE and in an at risk category	<b>True</b>	<b>False</b>
	IF START_AGE = 2	<i>Next</i>	<i>Reject</i>
	IF ATRISK_GROUP = NULL	<i>Reject</i>	<i>Select</i>

#### NUMERATORS:

6a	Seasonal Influenza vaccination given from 01/09/2014	<b>True</b>	<b>False</b>
	IF FLUVAX_GROUP <> NULL	<i>Select</i>	<i>Reject</i>

6b	Seasonal Influenza vaccination refused/declined for flu program starting 01/09/2014	<b>True</b>	<b>False</b>
	IF FLUDECLINED_GROUP <> NULL	<i>Select</i>	<i>Reject</i>

6c	Seasonal Influenza vaccination given by other healthcare provider from 01/09/2014	<b>True</b>	<b>False</b>
	IF FLUVAXOHP_DAT <> NULL	<i>Select</i>	<i>Reject</i>

## Indicator 7a, 7b, and 7c

Vaccination status of three year olds regardless of whether in an at risk category or not

### 7 DENOMINATOR:

7	Aged 3 at START_DATE	True	False
	IF START_AGE = 3	Select	Reject

### NUMERATORS:

7a	Seasonal Influenza vaccination given from 01/09/2014	True	False
	IF FLUVAX_GROUP <> NULL	Select	Reject

7b	Seasonal Influenza vaccination refused/declined for flu program starting 01/09/2014	True	False
	IF FLUDECLINED_GROUP <> NULL	Select	Reject

7c	Seasonal Influenza vaccination given by other healthcare provider from 01/09/2014	True	False
	IF FLUVAXOHP_DAT <> NULL	Select	Reject

## Indicator 8a, 8b, and 8c

### Vaccination status of three year olds who are in an at risk category

#### 8 DENOMINATOR:

8	<b>Aged 3 at START_DATE and in an at risk category</b>	<b>True</b>	<b>False</b>
	IF START_AGE = 3	<i>Next</i>	<i>Reject</i>
	IF ATRISK_GROUP = NULL	<i>Reject</i>	<i>Select</i>

#### NUMERATORS:

8a	Seasonal Influenza vaccination given from 01/09/2014	<b>True</b>	<b>False</b>
	IF FLUVAX_GROUP <> NULL	<i>Select</i>	<i>Reject</i>

8b	Seasonal Influenza vaccination refused/declined for flu program starting 01/09/2014	<b>True</b>	<b>False</b>
	IF FLUDECLINED_GROUP <> NULL	<i>Select</i>	<i>Reject</i>

8c	Seasonal Influenza vaccination given by other healthcare provider from 01/09/2014	<b>True</b>	<b>False</b>
	IF FLUVAXOHP_DAT <> NULL	<i>Select</i>	<i>Reject</i>

## Indicator 9a, 9b, and 9c

**Vaccination status of four year olds regardless of whether in an at risk category or not**

### 9 DENOMINATOR:

9	Aged 4 at START_DATE	<b>True</b>	<b>False</b>
	IF START_AGE = 4	<i>Select</i>	<i>Reject</i>

### NUMERATORS:

9a	Seasonal Influenza vaccination given from 01/09/2014	<b>True</b>	<b>False</b>
	IF FLUVAX_GROUP <> NULL	<i>Select</i>	<i>Reject</i>

9b	Seasonal Influenza vaccination refused/declined for flu program starting 01/09/2014	<b>True</b>	<b>False</b>
	IF FLUDECLINED_GROUP <> NULL	<i>Select</i>	<i>Reject</i>

9c	Seasonal Influenza vaccination given by other healthcare provider from 01/09/2014	<b>True</b>	<b>False</b>
	IF FLUVAXOHP_DAT <> NULL	<i>Select</i>	<i>Reject</i>

## **Indicator 10a, 10b, and 10c**

### **Vaccination status of four year olds who are in an at risk category**

#### **10 DENOMINATOR:**

10	<b>Aged 4 at START_DATE and in an at risk category</b>	<b>True</b>	<b>False</b>
	IF START_AGE = 4	<i>Next</i>	<i>Reject</i>
	IF ATRISK_GROUP = NULL	<i>Reject</i>	<i>Select</i>

#### **NUMERATORS:**

10a	Seasonal Influenza vaccination given from 01/09/2014	<b>True</b>	<b>False</b>
	IF FLUVAX_GROUP <> NULL	<i>Select</i>	<i>Reject</i>

10b	Seasonal Influenza vaccination refused/declined for flu program starting 01/09/2014	<b>True</b>	<b>False</b>
	IF FLUDECLINED_GROUP <> NULL	<i>Select</i>	<i>Reject</i>

10c	Seasonal Influenza vaccination given by other healthcare provider from 01/09/2014	<b>True</b>	<b>False</b>
	IF FLUVAXOHP_DAT <> NULL	<i>Select</i>	<i>Reject</i>

## **Indicator 11a, 11b, and 11c**

### **Vaccination status of patients with Chronic Heart Disease**

Output to be broken down by Age bands 2-5

#### **11 DENOMINATOR:**

11	<b>Patients with Chronic Heart Disease</b>	<b>True</b>	<b>False</b>
	IF CHD_DAT <> NULL	<i>Select</i>	<i>Reject</i>

#### **NUMERATORS:**

11a	Seasonal Influenza vaccination given from 01/09/2014	<b>True</b>	<b>False</b>
	IF FLUVAX_GROUP <> NULL	<i>Select</i>	<i>Reject</i>

11b	Seasonal Influenza vaccination refused/declined for flu program starting 01/09/2014	<b>True</b>	<b>False</b>
	IF FLUDECLINED_GROUP <> NULL	<i>Select</i>	<i>Reject</i>

11c	Seasonal Influenza vaccination given by other healthcare provider from 01/09/2014	<b>True</b>	<b>False</b>
	IF FLUVAXOHP_DAT <> NULL	<i>Select</i>	<i>Reject</i>



## **Indicator 12a, 12b, and 12c**

### **Vaccination status of patients with Chronic Respiratory Disease**

Output to be broken down by Age bands 2-5

#### **12 DENOMINATOR:**

12	<b>Patients with Chronic Respiratory Disease</b>	<b>True</b>	<b>False</b>
	IF RESP_GROUP <> NULL	<i>Select</i>	<i>Reject</i>

#### **NUMERATORS:**

12a	Seasonal Influenza vaccination given from 01/09/2014	<b>True</b>	<b>False</b>
	IF FLUVAX_GROUP <> NULL	<i>Select</i>	<i>Reject</i>

12b	Seasonal Influenza vaccination refused/declined for flu program starting 01/09/2014	<b>True</b>	<b>False</b>
	IF FLUDECLINED_GROUP <> NULL	<i>Select</i>	<i>Reject</i>

12c	Seasonal Influenza vaccination given by other healthcare provider from 01/09/2014	<b>True</b>	<b>False</b>
	IF FLUVAXOHP_DAT <> NULL	<i>Select</i>	<i>Reject</i>

## **Indicator 13a, 13b, and 13c**

### **Vaccination status of patients with Chronic Kidney Disease**

Output to be broken down by Age bands 2-5

#### **13 DENOMINATOR:**

13	<b>Patients with Chronic Kidney Disease</b>	<b>True</b>	<b>False</b>
	IF CKD_GROUP <> NULL	<i>Select</i>	<i>Reject</i>

#### **NUMERATORS:**

13a	Seasonal Influenza vaccination given from 01/09/2014	<b>True</b>	<b>False</b>
	IF FLUVAX_GROUP <> NULL	<i>Select</i>	<i>Reject</i>

13b	Seasonal Influenza vaccination refused/declined for flu program starting 01/09/2014	<b>True</b>	<b>False</b>
	IF FLUDECLINED_GROUP <> NULL	<i>Select</i>	<i>Reject</i>

13c	Seasonal Influenza vaccination given by other healthcare provider from 01/09/2014	<b>True</b>	<b>False</b>
	IF FLUVAXOHP_DAT <> NULL	<i>Select</i>	<i>Reject</i>

## **Indicator 14a, 14b, and 14c**

### **Vaccination status of patients with Chronic Liver Disease**

Output to be broken down by Age bands 2-5

#### **14 DENOMINATOR:**

14	<b>Patients with Chronic Liver Disease</b>	<b>True</b>	<b>False</b>
	IF CLD_DAT <> NULL	<i>Select</i>	<i>Reject</i>

#### **NUMERATORS:**

14a	Seasonal Influenza vaccination given from 01/09/2014	<b>True</b>	<b>False</b>
	IF FLUVAX_GROUP <> NULL	<i>Select</i>	<i>Reject</i>

14b	Seasonal Influenza vaccination refused/declined for flu program starting 01/09/2014	<b>True</b>	<b>False</b>
	IF FLUDECLINED_GROUP <> NULL	<i>Select</i>	<i>Reject</i>

14c	Seasonal Influenza vaccination given by other healthcare provider from 01/09/2014	<b>True</b>	<b>False</b>
	IF FLUVAXOHP_DAT <> NULL	<i>Select</i>	<i>Reject</i>

## **Indicator 15a, 15b, and 15c**

### **Vaccination status of patients with Diabetes**

Output to be broken down by Age bands 2-5

#### **15 DENOMINATOR:**

15	<b>Patients with Diabetes</b>	<b>True</b>	<b>False</b>
	IF DIAB_DAT <> NULL	<i>Select</i>	<i>Reject</i>

#### **NUMERATORS:**

15a	Seasonal Influenza vaccination given from 01/09/2014	<b>True</b>	<b>False</b>
	IF FLUVAX_GROUP <> NULL	<i>Select</i>	<i>Reject</i>

15b	Seasonal Influenza vaccination refused/declined for flu program starting 01/09/2014	<b>True</b>	<b>False</b>
	IF FLUDECLINED_GROUP <> NULL	<i>Select</i>	<i>Reject</i>

15c	Seasonal Influenza vaccination given by other healthcare provider from 01/09/2014	<b>True</b>	<b>False</b>
	IF FLUVAXOHP_DAT <> NULL	<i>Select</i>	<i>Reject</i>

## **Indicator 16a, 16b, and 16c**

### **Vaccination status of patients with Immunosuppression**

Output to be broken down by Age bands 2-5

#### **16 DENOMINATOR:**

16	<b>Patients with Immunosuppression</b>	<b>True</b>	<b>False</b>
	IF IMMUNO_GROUP <> NULL	<i>Select</i>	<i>Reject</i>

#### **NUMERATORS:**

16a	Seasonal Influenza vaccination given from 01/09/2014	<b>True</b>	<b>False</b>
	IF FLUVAX_GROUP <> NULL	<i>Select</i>	<i>Reject</i>

16b	Seasonal Influenza vaccination refused/declined for flu program starting 01/09/2014	<b>True</b>	<b>False</b>
	IF FLUDECLINED_GROUP <> NULL	<i>Select</i>	<i>Reject</i>

16c	Seasonal Influenza vaccination given by other healthcare provider from 01/09/2014	<b>True</b>	<b>False</b>
	IF FLUVAXOHP_DAT <> NULL	<i>Select</i>	<i>Reject</i>

## Indicator 17a, 17b, and 17c

### Vaccination status of patients with Chronic Neurological Disease (including Stroke/TIA, Cerebral Palsy or MS)

Output to be broken down by Age bands 2-5

#### 17 DENOMINATOR:

17	<b>Patients with Chronic Neurological Disease (including Stroke/TIA, Cerebral Palsy or MS)</b>	<b>True</b>	<b>False</b>
	IF CNS_GROUP <> NULL	<i>Select</i>	<i>Reject</i>

#### NUMERATORS:

17a	Seasonal Influenza vaccination given from 01/09/2014	<b>True</b>	<b>False</b>
	IF FLUVAX_GROUP <> NULL	<i>Select</i>	<i>Reject</i>

17b	Seasonal Influenza vaccination refused/declined for flu program starting 01/09/2014	<b>True</b>	<b>False</b>
	IF FLUDECLINED_GROUP <> NULL	<i>Select</i>	<i>Reject</i>

17c	Seasonal Influenza vaccination given by other healthcare provider from 01/09/2014	<b>True</b>	<b>False</b>
	IF FLUVAXOHP_DAT <> NULL	<i>Select</i>	<i>Reject</i>

## **Indicator 18a, 18b, and 18c**

### **Vaccination status of patients with Asplenia or Dysfunction of the Spleen**

Output to be broken down by Age bands 2-5

#### **18 DENOMINATOR:**

18	<b>Patients with Asplenia or Dysfunction of the Spleen</b>	<b>True</b>	<b>False</b>
	IF PNSPLEEN_DAT <> NULL	<i>Select</i>	<i>Reject</i>

#### **NUMERATORS:**

18a	Seasonal Influenza vaccination given from 01/09/2014	<b>True</b>	<b>False</b>
	IF FLUVAX_GROUP <> NULL	<i>Select</i>	<i>Reject</i>

18b	Seasonal Influenza vaccination refused/declined for flu program starting 01/09/2014	<b>True</b>	<b>False</b>
	IF FLUDECLINED_GROUP <> NULL	<i>Select</i>	<i>Reject</i>

18c	Seasonal Influenza vaccination given by other healthcare provider from 01/09/2014	<b>True</b>	<b>False</b>
	IF FLUVAXOHP_DAT <> NULL	<i>Select</i>	<i>Reject</i>

## Indicator 19a, 19b, and 19c

Vaccination status of patients who are carers, aged under 65 at Ref\_Date, and who are not in an at risk category (including pregnant women)

### 19 DENOMINATOR:

19	Patients meeting Carer Criteria	True	False
	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>

### NUMERATORS:

19a	Seasonal Influenza vaccination given from 01/09/2014	<b>True</b>	<b>False</b>
	IF FLUVAX_GROUP <> NULL	<i>Select</i>	<i>Reject</i>
19b	Seasonal Influenza vaccination refused/declined for flu program starting 01/09/2014	<b>True</b>	<b>False</b>
	IF FLUDECLINED_GROUP <> NULL	<i>Select</i>	<i>Reject</i>
19c	Seasonal Influenza vaccination given by other healthcare provider from 01/09/2014	<b>True</b>	<b>False</b>
	IF FLUVAXOHP_DAT <> NULL	<i>Select</i>	<i>Reject</i>



## **Indicator 20a, 20b, and 20c**

### **Vaccination status of patients by gender**

Output to be broken down by Gender bands 1-4

#### **20 DENOMINATOR:**

20	<b>Patients aged 6 months or over at RUN_DAT</b>	<b>True</b>	<b>False</b>
	IF AGE >= 6 MONTHS	<i>Select</i>	<i>Reject</i>

#### **NUMERATORS:**

20a	Seasonal Influenza vaccination given from 01/09/2014	<b>True</b>	<b>False</b>
	IF FLUVAX_GROUP <> NULL	<i>Select</i>	<i>Reject</i>

20b	Seasonal Influenza vaccination refused/declined for flu program starting 01/09/2014	<b>True</b>	<b>False</b>
	IF FLUDECLINED_GROUP <> NULL	<i>Select</i>	<i>Reject</i>

20c	Seasonal Influenza vaccination given by other healthcare provider from 01/09/2014	<b>True</b>	<b>False</b>
	IF FLUVAXOHP_DAT <> NULL	<i>Select</i>	<i>Reject</i>

## **Indicator 21a, 21b, and 21c**

### **Vaccination status of patients by ethnicity**

Output to be broken down by Ethnicity bands 1-19

#### **21 DENOMINATOR:**

21	<b>Patients aged 6 months or over at RUN_DAT</b>	<b>True</b>	<b>False</b>
	IF AGE >= 6 MONTHS	<i>Select</i>	<i>Reject</i>

#### **NUMERATORS:**

21a	Seasonal Influenza vaccination given from 01/09/2014	<b>True</b>	<b>False</b>
	IF FLUVAX_GROUP <> NULL	<i>Select</i>	<i>Reject</i>

21b	Seasonal Influenza vaccination refused/declined for flu program starting 01/09/2014	<b>True</b>	<b>False</b>
	IF FLUDECLINED_GROUP <> NULL	<i>Select</i>	<i>Reject</i>

21c	Seasonal Influenza vaccination given by other healthcare provider from 01/09/2014	<b>True</b>	<b>False</b>
	IF FLUVAXOHP_DAT <> NULL	<i>Select</i>	<i>Reject</i>

## Change Log

Version	Date	Author	Change summary
6.1.0	22 <sup>nd</sup> May 2014	TM	<p>Following new fields added: <a href="#">PAT_STARTAGE</a>, <a href="#">PNSPLEEN_COD</a>, <a href="#">PNSPLEEN_DAT</a>, <a href="#">FLUVAXOHP_COD</a>, <a href="#">FLUVAXOHP_DAT</a>, <a href="#">19 ETHNICITY CODE GROUPS AND DATES</a>.</p> <p><a href="#">Age banding group altered to include 4 year olds.</a>  <a href="#">Gender banding rules added</a>  <a href="#">Ethnicity banding rules added</a>  <a href="#">Asplenia added to "Patient in any clinical risk group"</a>  <a href="#">ATRISK_GROUP logic</a>  <a href="#">"Patients not had vaccination and refused/declined" logic added</a></p> <p>New Indicators added: <a href="#">Four year olds</a>, <a href="#">four year olds at risk</a>, <a href="#">Patients with asplenia</a>, <a href="#">Vaccinations by gender</a>, <a href="#">Vaccinations by ethnicity</a>.</p> <p>All indicators to now also report vaccinations by other health care providers, and patients who have not had a vaccination in this campaign because they have declined/not consented.</p> <p><a href="#">ASTMED</a> and <a href="#">ASTRX</a> fields now looking back to 01/09/2013 rather than last 12 months.</p> <p><a href="#">IMMRX</a> now looking back to 01/03/2014 rather than last 6 months.</p> <p>All date ranges being examined are cut off at <a href="#">AUDITEND_DAT</a> (except <a href="#">PREG_COD</a> and <a href="#">PREGDEL_COD</a> which continue to look up to 31<sup>st</sup> August 2014)</p>
6.2.0	9 <sup>th</sup> June 2014	DE	<p><a href="#">AST_COD</a> changes (H3120 in V2, X1020 in CTV3)  Confirmation of change of name of <a href="#">CNS_ALL</a> to <a href="#">CNS_GROUP</a>  In <a href="#">CNS_GROUP</a> V2, change of code from Eu814 to Eu817  In <a href="#">CHD_COD</a> reinsertion of missing codes from V2 specification (previously present) and missing new codes from CTV3 specification</p>

### 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.

## **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 01/09/13 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

## Indicator Rulesets

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

1	Age Bands	
	Band 1	PAT_AGE >=65 and <120 at REF_DAT
	Band 2	PAT_AGE >= 6months < 2 at RUN_DAT
	Band 3	PAT_AGE >=2 and <5 at RUN_DAT
	Band 4	PAT_AGE >=5 and <16 at RUN_DAT
	Band 5	PAT_AGE >=16 at RUN_DAT and <65 at REF_DAT*
	Band 6	PAT_AGE >= 2 AND <3 at START_DATE*
	Band 7	PAT_AGE >= 3 AND <4 at START_DATE*
	Band 8	PAT_AGE >= 4 AND <5 at START_DATE*

**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 2015 (this fits with the policy

i.e. all those aged 65 years or older by the 31 March 2015 are eligible to receive vaccine in the 2014/15 vaccination programme).

For those in the 'aged 2', 'aged 3' and 'aged 4' age bands they are defined by their age at 1<sup>st</sup> September 2014.

2	Gender Bands	
	Band 1 (male)	PAT_SEX = M
	Band 2 (female)	PAT_SEX = F
	Band 3 (unspecified)	PAT_SEX = U OR PAT_SEX = NULL
Band 4 (unknown)	<i>Please see note below</i>	

Note – The above gender roles have been written from a MIQUEST perspective where gender can only be M, F, U or NULL. The MIQUEST manual states that U represents “unspecified or unknown”. Therefore MIQUEST cannot distinguish between bands 3 and 4 above, and so only band 3 is populated.

If, when reporting flu figures, system suppliers are able to distinguish between unspecified genders and unknown genders, then they should use both bands 3 and 4.

<b>3</b>	<b>ETHNICITY BANDS</b>	<b>True</b>	<b>False</b>	<b>BOX B</b>
Rule 1	ETH2001_WHIBRIT_DAT >= DATES OF ETHNICITY CATEGORIES IN BOX B	Band = 1	<i>Next</i>	ETH2001_WHIBRIT_DAT
Rule 2	ETH2001_WHIRISH_DAT >= DATES OF ETHNICITY CATEGORIES IN BOX B	Band = 2	<i>Next</i>	ETH2001_WHIRISH_DAT
Rule 3	ETH2001_WHIOOTHER_DAT >= DATES OF ETHNICITY CATEGORIES IN BOX B	Band = 3	<i>Next</i>	ETH2001_WHIOOTHER_DAT
Rule 4	ETH2001_MXDWHIBLKCAR_DAT >= DATES OF ETHNICITY CATEGORIES IN BOX B	Band = 4	<i>Next</i>	ETH2001_MXDWHIBLKCAR_DAT
Rule 5	ETH2001_MXDWHIBLKAFR_DAT >= DATES OF ETHNICITY CATEGORIES IN BOX B	Band = 5	<i>Next</i>	ETH2001_MXDWHIBLKAFR_DAT
Rule 6	ETH2001_MXDWHIASN_DAT DATES OF ETHNICITY CATEGORIES IN BOX B	Band = 6	<i>Next</i>	ETH2001_MXDWHIASN_DAT
Rule 7	ETH2001_MXDOTHER_DAT >= DATES OF ETHNICITY CATEGORIES IN BOX B	Band = 7	<i>Next</i>	ETH2001_MXDOTHER_DAT
Rule 8	ETH2001_ASNINDIAN_DAT >= DATES OF ETHNICITY CATEGORIES IN BOX B	Band = 8	<i>Next</i>	ETH2001_ASNINDIAN_DAT
Rule 9	ETH2001_ASNPAK_DAT >= DATES OF ETHNICITY CATEGORIES IN BOX B	Band = 9	<i>Next</i>	ETH2001_ASNPAK_DAT
Rule 10	ETH2001_ASNBANG_DAT >= DATES OF ETHNICITY CATEGORIES IN BOX B	Band = 10	<i>Next</i>	ETH2001_ASNBANG_DAT
Rule 11	ETH2001_ASNOTHER_DAT >= DATES OF ETHNICITY CATEGORIES IN BOX B	Band = 11	<i>Next</i>	ETH2001_ASNOTHER_DAT
Rule 12	ETH2001_BLKCARIB_DAT >= DATES OF ETHNICITY CATEGORIES IN BOX B	Band = 12	<i>Next</i>	ETH2001_BLKCARIB_DAT
Rule 13	ETH2001_BLKAFRIC_DAT >= DATES OF ETHNICITY CATEGORIES IN BOX B	Band = 13	<i>Next</i>	ETH2001_BLKAFRIC_DAT
Rule 14	ETH2001_BLKOTH_DAT >= DATES OF ETHNICITY CATEGORIES IN BOX B	Band = 14	<i>Next</i>	ETH2001_BLKOTH_DAT
Rule 15	ETH2001_CHINESE_DAT >= DATES OF ETHNICITY CATEGORIES IN BOX B	Band = 15	<i>Next</i>	ETH2001_CHINESE_DAT
Rule 16	ETH2001_OTHER_DAT >= DATES OF ETHNICITY CATEGORIES IN BOX B	Band = 16	<i>Next</i>	ETH2001_OTHER_DAT
Rule 17	ETH2001_NOTGIVPTREF_DAT <> NULL	Band = 17	<i>Next</i>	
Rule 18	ETH2001_NOTSTATED_DAT <> NULL	Band = 18	Band = 19	

Note – Band 19 represents “Ethnicity not recorded”. The rules will allocate a patient to this band if they have no ethnicity code at all, or if they only have an “Ethnicity not recorded” code on their record.

The above rules ensure that if a patient has given their ethnicity, then at a later date, has either a “refused”, “not stated” or “not known” ethnicity code, the earlier ethnicity code will be used.

In the unlikely event that a patient has two of the ethnicity codes in box B on the same day, the code that appears highest up box B will be used.

Where a patient has a “Refused” code, this is used even if there are later dated “Not stated” or “Not known” codes. Similarly if a patient has a “Not stated” code, this is used even if there is a later dated “not known” code.

<b>4</b>	<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

<b>5</b>	<b>Patients with CKD</b>		<b>True</b>	<b>False</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. However if just the latter, then the latest Stage code must be Stage 3 to 5 .

<b>6</b>	<b>Patients with Asthma</b>		<b>True</b>	<b>False</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

<b>7</b>	<b>Patients with CNS Disease (including Stroke/TIA)</b>		<b>True</b>	<b>False</b>
	CNS_GROUP	IF CNSGROUP_DAT <> NULL	<i>Select</i>	<i>Reject</i>

**Note:** This group contains a large number of codes which was previously split into three groups for MIQUEST. PRIMIS+ have now merged the three groups but have retained the logical grouping's name.

<b>8</b>	<b>Patients who have Chronic Respiratory Disease</b>		<b>True</b>	<b>False</b>
	RESP_GROUP	IF AST_GROUP <> NULL	<i>Select</i>	<i>Next</i>
		IF RESP_DAT <> NULL	<i>Select</i>	<i>Reject</i>



9	Patients in Any Clinical Risk Group		True	False
	ATRISK_GROUP	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	Next
IF PNSPLEEN_DAT <> NULL		Select	Reject	

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

10	Pregnant on 31/08/2014 or becoming pregnant between 01/09/2014 and 31/01/2015 (inclusive)		True	False
	PREG_GROUP	IF PREG2<> NULL	Select	Next
		(IF PREGDEL_DAT<> NULL) AND ((IF PREG_DAT <> NULL) AND (PREG_DAT >= PREGDEL_DAT))	Select	Reject

**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 2014 to 31st January 2015.
- Group 2 is any patient with a pregnancy, delivered, miscarriage or termination code where the latest code recorded between 01/01/2014 and 31/08/2014 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

11	Patients who have received Influenza Vaccination		True	False
	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

12	<b>Patients who have not had a vaccination due to refusal/declining</b>		<b>True</b>	<b>False</b>
	FLUDECLINED_GROUP	IF FLUVAX_DAT <> NULL OR FLURX_DAT <> NULL	<i>Reject</i>	<i>Next</i>
		IF DECL_DAT <> NULL OR NOCONS_DAT <> NULL	<i>Select</i>	<i>Reject</i>

**Note:** We are looking for any patient who has not had a vaccination in the current flu campaign and who has either a declined or a no consent Read code on their medical record.

## Indicator 1a, 1b and 1c

### Vaccination status of Practice Population.

Output to be broken down by Age bands 1 – 5.

#### DENOMINATOR:

a) Registration status

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

b) Demographic status

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

#### NUMERATORS:

1a	Seasonal Influenza vaccination given from 01/09/2014	<b>True</b>	<b>False</b>
	IF FLUVAX_GROUP <> NULL	<i>Select</i>	<i>Reject</i>
1b	Seasonal Influenza vaccination refused/declined for flu program starting 01/09/2014	<b>True</b>	<b>False</b>
	IF FLUDECLINED_GROUP <> NULL	<i>Select</i>	<i>Reject</i>
1c	Seasonal Influenza vaccination given by other healthcare provider from 01/09/2014	<b>True</b>	<b>False</b>
	IF FLUVAXOHP_DAT <> NULL	<i>Select</i>	<i>Reject</i>

## **Indicator 2a, 2b and 2c**

### **Vaccination status of patients in one or more Risk Groups**

Output to be broken down by Age bands 2-5

#### **DENOMINATOR:**

2	<b>Summary of Patients in one or more Risk Groups</b>	<b>True</b>	<b>False</b>
	IF PAT_ENDAGE < 65	<i>Select</i>	<i>Reject</i>
	IF ATRISK_GROUP <> NULL	<i>Select</i>	<i>Reject</i>

#### **NUMERATORS:**

2a	Seasonal Influenza vaccination given from 01/09/2014	<b>True</b>	<b>False</b>
	IF FLUVAX_GROUP <> NULL	<i>Select</i>	<i>Reject</i>

2b	Seasonal Influenza vaccination refused/declined for flu program starting 01/09/2014	<b>True</b>	<b>False</b>
	IF FLUDECLINED_GROUP <> NULL	<i>Select</i>	<i>Reject</i>

2c	Seasonal Influenza vaccination given by other healthcare provider from 01/09/2014	<b>True</b>	<b>False</b>
	IF FLUVAXOHP_DAT <> NULL	<i>Select</i>	<i>Reject</i>

## Indicator 3a, 3b and 3c

### Vaccination status of pregnant women who are not in a clinical risk group

#### 3 DENOMINATOR:

3	<b>Pregnant on 31/08/2014 or pregnant between 01/09/2014 and 31/01/2015 (inclusive) with no risk category</b>	<b>True</b>	<b>False</b>
	IF ATRISK_GROUP <> NULL	<i>Reject</i>	<i>Next</i>
	IF PREG_GROUP <> NULL	<i>Select</i>	<i>Reject</i>

#### NUMERATORS:

3a	Seasonal Influenza vaccination given from 01/09/2014	<b>True</b>	<b>False</b>
	IF FLUVAX_GROUP <> NULL	<i>Select</i>	<i>Reject</i>

3b	Seasonal Influenza vaccination refused/declined for flu program starting 01/09/2014	<b>True</b>	<b>False</b>
	IF FLUDECLINED_GROUP <> NULL	<i>Select</i>	<i>Reject</i>

3c	Seasonal Influenza vaccination given by other healthcare provider from 01/09/2014	<b>True</b>	<b>False</b>
	IF FLUVAXOHP_DAT <> NULL	<i>Select</i>	<i>Reject</i>

## Indicator 4a, 4b and 4c

### Vaccination status of pregnant women who are in a clinical risk group

#### 4 DENOMINATOR:

4	<b>Pregnant on 31/08/2014 or pregnant between 01/09/2014 and 31/01/2015 (inclusive) in a risk category</b>	<b>True</b>	<b>False</b>
	IF ATRISK_GROUP = NULL	<i>Reject</i>	<i>Next</i>
	IF PREG_GROUP <> NULL	<i>Select</i>	<i>Reject</i>

#### NUMERATORS:

4a	Seasonal Influenza vaccination given from 01/09/2014	<b>True</b>	<b>False</b>
	IF FLUVAX_GROUP <> NULL	<i>Select</i>	<i>Reject</i>

4b	Seasonal Influenza vaccination refused/declined for flu program starting 01/09/2014	<b>True</b>	<b>False</b>
	IF FLUDECLINED_GROUP <> NULL	<i>Select</i>	<i>Reject</i>

4c	Seasonal Influenza vaccination given by other healthcare provider from 01/09/2014	<b>True</b>	<b>False</b>
	IF FLUVAXOHP_DAT <> NULL	<i>Select</i>	<i>Reject</i>

## Indicator 5a, 5b, and 5c

Vaccination status of two year olds regardless of whether in an at risk category or not

### 5 DENOMINATOR:

5	Aged 2 at START_DATE	<b>True</b>	<b>False</b>
	IF START_AGE = 2	<i>Select</i>	<i>Reject</i>

### NUMERATORS:

5a	Seasonal Influenza vaccination given from 01/09/2014	<b>True</b>	<b>False</b>
	IF FLUVAX_GROUP <> NULL	<i>Select</i>	<i>Reject</i>

5b	Seasonal Influenza vaccination refused/declined for flu program starting 01/09/2014	<b>True</b>	<b>False</b>
	IF FLUDECLINED_GROUP <> NULL	<i>Select</i>	<i>Reject</i>

5c	Seasonal Influenza vaccination given by other healthcare provider from 01/09/2014	<b>True</b>	<b>False</b>
	IF FLUVAXOHP_DAT <> NULL	<i>Select</i>	<i>Reject</i>

## Indicator 6a, 6b, and 6c

**Vaccination status of two year olds who are in an at risk category**

### 6 DENOMINATOR:

6	<b>Aged 2 at START_DATE and in an at risk category</b>	<b>True</b>	<b>False</b>
	IF START_AGE = 2	<i>Next</i>	<i>Reject</i>
	IF ATRISK_GROUP = NULL	<i>Reject</i>	<i>Select</i>

### NUMERATORS:

6a	Seasonal Influenza vaccination given from 01/09/2014	<b>True</b>	<b>False</b>
	IF FLUVAX_GROUP <> NULL	<i>Select</i>	<i>Reject</i>

6b	Seasonal Influenza vaccination refused/declined for flu program starting 01/09/2014	<b>True</b>	<b>False</b>
	IF FLUDECLINED_GROUP <> NULL	<i>Select</i>	<i>Reject</i>

6c	Seasonal Influenza vaccination given by other healthcare provider from 01/09/2014	<b>True</b>	<b>False</b>
	IF FLUVAXOHP_DAT <> NULL	<i>Select</i>	<i>Reject</i>



## Indicator 7a, 7b, and 7c

Vaccination status of three year olds regardless of whether in an at risk category or not

### 7 DENOMINATOR:

7	Aged 3 at START_DATE	<b>True</b>	<b>False</b>
	IF START_AGE = 3	<i>Select</i>	<i>Reject</i>

### NUMERATORS:

7a	Seasonal Influenza vaccination given from 01/09/2014	<b>True</b>	<b>False</b>
	IF FLUVAX_GROUP <> NULL	<i>Select</i>	<i>Reject</i>

7b	Seasonal Influenza vaccination refused/declined for flu program starting 01/09/2014	<b>True</b>	<b>False</b>
	IF FLUDECLINED_GROUP <> NULL	<i>Select</i>	<i>Reject</i>

7c	Seasonal Influenza vaccination given by other healthcare provider from 01/09/2014	<b>True</b>	<b>False</b>
	IF FLUVAXOHP_DAT <> NULL	<i>Select</i>	<i>Reject</i>

## Indicator 8a, 8b, and 8c

### Vaccination status of three year olds who are in an at risk category

#### 8 DENOMINATOR:

8	<b>Aged 3 at START_DATE and in an at risk category</b>	<b>True</b>	<b>False</b>
	IF START_AGE = 3	<i>Next</i>	<i>Reject</i>
	IF ATRISK_GROUP = NULL	<i>Reject</i>	<i>Select</i>

#### NUMERATORS:

8a	Seasonal Influenza vaccination given from 01/09/2014	<b>True</b>	<b>False</b>
	IF FLUVAX_GROUP <> NULL	<i>Select</i>	<i>Reject</i>

8b	Seasonal Influenza vaccination refused/declined for flu program starting 01/09/2014	<b>True</b>	<b>False</b>
	IF FLUDECLINED_GROUP <> NULL	<i>Select</i>	<i>Reject</i>

8c	Seasonal Influenza vaccination given by other healthcare provider from 01/09/2014	<b>True</b>	<b>False</b>
	IF FLUVAXOHP_DAT <> NULL	<i>Select</i>	<i>Reject</i>

## Indicator 9a, 9b, and 9c

**Vaccination status of four year olds regardless of whether in an at risk category or not**

### 9 DENOMINATOR:

9	Aged 4 at START_DATE	<b>True</b>	<b>False</b>
	IF START_AGE = 4	<i>Select</i>	<i>Reject</i>

### NUMERATORS:

9a	Seasonal Influenza vaccination given from 01/09/2014	<b>True</b>	<b>False</b>
	IF FLUVAX_GROUP <> NULL	<i>Select</i>	<i>Reject</i>

9b	Seasonal Influenza vaccination refused/declined for flu program starting 01/09/2014	<b>True</b>	<b>False</b>
	IF FLUDECLINED_GROUP <> NULL	<i>Select</i>	<i>Reject</i>

9c	Seasonal Influenza vaccination given by other healthcare provider from 01/09/2014	<b>True</b>	<b>False</b>
	IF FLUVAXOHP_DAT <> NULL	<i>Select</i>	<i>Reject</i>

## **Indicator 10a, 10b, and 10c**

### **Vaccination status of four year olds who are in an at risk category**

#### **10 DENOMINATOR:**

10	<b>Aged 4 at START_DATE and in an at risk category</b>	<b>True</b>	<b>False</b>
	IF START_AGE = 4	<i>Next</i>	<i>Reject</i>
	IF ATRISK_GROUP = NULL	<i>Reject</i>	<i>Select</i>

#### **NUMERATORS:**

10a	Seasonal Influenza vaccination given from 01/09/2014	<b>True</b>	<b>False</b>
	IF FLUVAX_GROUP <> NULL	<i>Select</i>	<i>Reject</i>

10b	Seasonal Influenza vaccination refused/declined for flu program starting 01/09/2014	<b>True</b>	<b>False</b>
	IF FLUDECLINED_GROUP <> NULL	<i>Select</i>	<i>Reject</i>

10c	Seasonal Influenza vaccination given by other healthcare provider from 01/09/2014	<b>True</b>	<b>False</b>
	IF FLUVAXOHP_DAT <> NULL	<i>Select</i>	<i>Reject</i>

## **Indicator 11a, 11b, and 11c**

### **Vaccination status of patients with Chronic Heart Disease**

Output to be broken down by Age bands 2-5

#### **11 DENOMINATOR:**

11	<b>Patients with Chronic Heart Disease</b>	<b>True</b>	<b>False</b>
	IF CHD_DAT <> NULL	<i>Select</i>	<i>Reject</i>

#### **NUMERATORS:**

11a	Seasonal Influenza vaccination given from 01/09/2014	<b>True</b>	<b>False</b>
	IF FLUVAX_GROUP <> NULL	<i>Select</i>	<i>Reject</i>

11b	Seasonal Influenza vaccination refused/declined for flu program starting 01/09/2014	<b>True</b>	<b>False</b>
	IF FLUDECLINED_GROUP <> NULL	<i>Select</i>	<i>Reject</i>

11c	Seasonal Influenza vaccination given by other healthcare provider from 01/09/2014	<b>True</b>	<b>False</b>
	IF FLUVAXOHP_DAT <> NULL	<i>Select</i>	<i>Reject</i>

## **Indicator 12a, 12b, and 12c**

### **Vaccination status of patients with Chronic Respiratory Disease**

Output to be broken down by Age bands 2-5

#### **12 DENOMINATOR:**

12	<b>Patients with Chronic Respiratory Disease</b>	<b>True</b>	<b>False</b>
	IF RESP_GROUP <> NULL	<i>Select</i>	<i>Reject</i>

#### **NUMERATORS:**

12a	Seasonal Influenza vaccination given from 01/09/2014	<b>True</b>	<b>False</b>
	IF FLUVAX_GROUP <> NULL	<i>Select</i>	<i>Reject</i>

12b	Seasonal Influenza vaccination refused/declined for flu program starting 01/09/2014	<b>True</b>	<b>False</b>
	IF FLUDECLINED_GROUP <> NULL	<i>Select</i>	<i>Reject</i>

12c	Seasonal Influenza vaccination given by other healthcare provider from 01/09/2014	<b>True</b>	<b>False</b>
	IF FLUVAXOHP_DAT <> NULL	<i>Select</i>	<i>Reject</i>

## **Indicator 13a, 13b, and 13c**

### **Vaccination status of patients with Chronic Kidney Disease**

Output to be broken down by Age bands 2-5

#### **13 DENOMINATOR:**

13	<b>Patients with Chronic Kidney Disease</b>	<b>True</b>	<b>False</b>
	IF CKD_GROUP <> NULL	<i>Select</i>	<i>Reject</i>

#### **NUMERATORS:**

13a	Seasonal Influenza vaccination given from 01/09/2014	<b>True</b>	<b>False</b>
	IF FLUVAX_GROUP <> NULL	<i>Select</i>	<i>Reject</i>

13b	Seasonal Influenza vaccination refused/declined for flu program starting 01/09/2014	<b>True</b>	<b>False</b>
	IF FLUDECLINED_GROUP <> NULL	<i>Select</i>	<i>Reject</i>

13c	Seasonal Influenza vaccination given by other healthcare provider from 01/09/2014	<b>True</b>	<b>False</b>
	IF FLUVAXOHP_DAT <> NULL	<i>Select</i>	<i>Reject</i>

## **Indicator 14a, 14b, and 14c**

### **Vaccination status of patients with Chronic Liver Disease**

Output to be broken down by Age bands 2-5

#### **14 DENOMINATOR:**

14	<b>Patients with Chronic Liver Disease</b>	<b>True</b>	<b>False</b>
	IF CLD_DAT <> NULL	<i>Select</i>	<i>Reject</i>

#### **NUMERATORS:**

14a	Seasonal Influenza vaccination given from 01/09/2014	<b>True</b>	<b>False</b>
	IF FLUVAX_GROUP <> NULL	<i>Select</i>	<i>Reject</i>

14b	Seasonal Influenza vaccination refused/declined for flu program starting 01/09/2014	<b>True</b>	<b>False</b>
	IF FLUDECLINED_GROUP <> NULL	<i>Select</i>	<i>Reject</i>

14c	Seasonal Influenza vaccination given by other healthcare provider from 01/09/2014	<b>True</b>	<b>False</b>
	IF FLUVAXOHP_DAT <> NULL	<i>Select</i>	<i>Reject</i>



## **Indicator 15a, 15b, and 15c**

### **Vaccination status of patients with Diabetes**

Output to be broken down by Age bands 2-5

#### **15 DENOMINATOR:**

15	<b>Patients with Diabetes</b>	<b>True</b>	<b>False</b>
	IF DIAB_DAT <> NULL	<i>Select</i>	<i>Reject</i>

#### **NUMERATORS:**

15a	Seasonal Influenza vaccination given from 01/09/2014	<b>True</b>	<b>False</b>
	IF FLUVAX_GROUP <> NULL	<i>Select</i>	<i>Reject</i>

15b	Seasonal Influenza vaccination refused/declined for flu program starting 01/09/2014	<b>True</b>	<b>False</b>
	IF FLUDECLINED_GROUP <> NULL	<i>Select</i>	<i>Reject</i>

15c	Seasonal Influenza vaccination given by other healthcare provider from 01/09/2014	<b>True</b>	<b>False</b>
	IF FLUVAXOHP_DAT <> NULL	<i>Select</i>	<i>Reject</i>

## **Indicator 16a, 16b, and 16c**

### **Vaccination status of patients with Immunosuppression**

Output to be broken down by Age bands 2-5

#### **16 DENOMINATOR:**

16	<b>Patients with Immunosuppression</b>	<b>True</b>	<b>False</b>
	IF IMMUNO_GROUP <> NULL	<i>Select</i>	<i>Reject</i>

#### **NUMERATORS:**

16a	Seasonal Influenza vaccination given from 01/09/2014	<b>True</b>	<b>False</b>
	IF FLUVAX_GROUP <> NULL	<i>Select</i>	<i>Reject</i>

16b	Seasonal Influenza vaccination refused/declined for flu program starting 01/09/2014	<b>True</b>	<b>False</b>
	IF FLUDECLINED_GROUP <> NULL	<i>Select</i>	<i>Reject</i>

16c	Seasonal Influenza vaccination given by other healthcare provider from 01/09/2014	<b>True</b>	<b>False</b>
	IF FLUVAXOHP_DAT <> NULL	<i>Select</i>	<i>Reject</i>

## Indicator 17a, 17b, and 17c

### Vaccination status of patients with Chronic Neurological Disease (including Stroke/TIA, Cerebral Palsy or MS)

Output to be broken down by Age bands 2-5

#### 17 DENOMINATOR:

17	<b>Patients with Chronic Neurological Disease (including Stroke/TIA, Cerebral Palsy or MS)</b>	<b>True</b>	<b>False</b>
	IF CNS_GROUP <> NULL	<i>Select</i>	<i>Reject</i>

#### NUMERATORS:

17a	Seasonal Influenza vaccination given from 01/09/2014	<b>True</b>	<b>False</b>
	IF FLUVAX_GROUP <> NULL	<i>Select</i>	<i>Reject</i>
17b	Seasonal Influenza vaccination refused/declined for flu program starting 01/09/2014	<b>True</b>	<b>False</b>
	IF FLUDECLINED_GROUP <> NULL	<i>Select</i>	<i>Reject</i>
17c	Seasonal Influenza vaccination given by other healthcare provider from 01/09/2014	<b>True</b>	<b>False</b>
	IF FLUVAXOHP_DAT <> NULL	<i>Select</i>	<i>Reject</i>

## **Indicator 18a, 18b, and 18c**

### **Vaccination status of patients with Asplenia or Dysfunction of the Spleen**

Output to be broken down by Age bands 2-5

#### **18 DENOMINATOR:**

18	<b>Patients with Asplenia or Dysfunction of the Spleen</b>	<b>True</b>	<b>False</b>
	IF PNSPLEEN_DAT <> NULL	<i>Select</i>	<i>Reject</i>

#### **NUMERATORS:**

18a	Seasonal Influenza vaccination given from 01/09/2014	<b>True</b>	<b>False</b>
	IF FLUVAX_GROUP <> NULL	<i>Select</i>	<i>Reject</i>

18b	Seasonal Influenza vaccination refused/declined for flu program starting 01/09/2014	<b>True</b>	<b>False</b>
	IF FLUDECLINED_GROUP <> NULL	<i>Select</i>	<i>Reject</i>

18c	Seasonal Influenza vaccination given by other healthcare provider from 01/09/2014	<b>True</b>	<b>False</b>
	IF FLUVAXOHP_DAT <> NULL	<i>Select</i>	<i>Reject</i>

## **Indicator 19a, 19b, and 19c**

**Vaccination status of patients who are carers, aged under 65 at Ref\_Date, and who are not in an at risk category (including pregnant women)**

### **19 DENOMINATOR:**

19	<b>Patients meeting Carer Criteria</b>	<b>True</b>	<b>False</b>
	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>

### **NUMERATORS:**

19a	Seasonal Influenza vaccination given from 01/09/2014	<b>True</b>	<b>False</b>
	IF FLUVAX_GROUP <> NULL	<i>Select</i>	<i>Reject</i>
19b	Seasonal Influenza vaccination refused/declined for flu program starting 01/09/2014	<b>True</b>	<b>False</b>
	IF FLUDECLINED_GROUP <> NULL	<i>Select</i>	<i>Reject</i>
19c	Seasonal Influenza vaccination given by other healthcare provider from 01/09/2014	<b>True</b>	<b>False</b>
	IF FLUVAXOHP_DAT <> NULL	<i>Select</i>	<i>Reject</i>

## **Indicator 20a, 20b, and 20c**

### **Vaccination status of patients by gender**

Output to be broken down by Gender bands 1-4

#### **20 DENOMINATOR:**

20	<b>Patients aged 6 months or over at RUN_DAT</b>	<b>True</b>	<b>False</b>
	IF AGE >= 6 MONTHS	<i>Select</i>	<i>Reject</i>

#### **NUMERATORS:**

20a	Seasonal Influenza vaccination given from 01/09/2014	<b>True</b>	<b>False</b>
	IF FLUVAX_GROUP <> NULL	<i>Select</i>	<i>Reject</i>

20b	Seasonal Influenza vaccination refused/declined for flu program starting 01/09/2014	<b>True</b>	<b>False</b>
	IF FLUDECLINED_GROUP <> NULL	<i>Select</i>	<i>Reject</i>

20c	Seasonal Influenza vaccination given by other healthcare provider from 01/09/2014	<b>True</b>	<b>False</b>
	IF FLUVAXOHP_DAT <> NULL	<i>Select</i>	<i>Reject</i>

## **Indicator 21a, 21b, and 21c**

### **Vaccination status of patients by ethnicity**

Output to be broken down by Ethnicity bands 1-19

#### **21 DENOMINATOR:**

21	<b>Patients aged 6 months or over at RUN_DAT</b>	<b>True</b>	<b>False</b>
	IF AGE >= 6 MONTHS	<i>Select</i>	<i>Reject</i>

#### **NUMERATORS:**

21a	Seasonal Influenza vaccination given from 01/09/2014	<b>True</b>	<b>False</b>
	IF FLUVAX_GROUP <> NULL	<i>Select</i>	<i>Reject</i>

21b	Seasonal Influenza vaccination refused/declined for flu program starting 01/09/2014	<b>True</b>	<b>False</b>
	IF FLUDECLINED_GROUP <> NULL	<i>Select</i>	<i>Reject</i>

21c	Seasonal Influenza vaccination given by other healthcare provider from 01/09/2014	<b>True</b>	<b>False</b>
	IF FLUVAXOHP_DAT <> NULL	<i>Select</i>	<i>Reject</i>

## Change Log

Version	Date	Author	Change summary
6.1.0	22 <sup>nd</sup> May 2014	TM	<p>Following new fields added: <a href="#">PAT_STARTAGE</a>, <a href="#">PNSPLEEN_COD</a>, <a href="#">PNSPLEEN_DAT</a>, <a href="#">FLUVAXOHP_COD</a>, <a href="#">FLUVAXOHP_DAT</a>, <a href="#">19 ETHNICITY CODE GROUPS AND DATES</a>.</p> <p><a href="#">Age banding group altered to include 4 year olds.</a>  <a href="#">Gender banding rules added</a>  <a href="#">Ethnicity banding rules added</a>  <a href="#">Asplenia added to "Patient in any clinical risk group"</a>  <a href="#">ATRISK_GROUP logic</a>  <a href="#">"Patients not had vaccination and refused/declined" logic added</a></p> <p>New Indicators added: <a href="#">Four year olds</a>, <a href="#">four year olds at risk</a>, <a href="#">Patients with asplenia</a>, <a href="#">Vaccinations by gender</a>, <a href="#">Vaccinations by ethnicity</a>.</p> <p>All indicators to now also report vaccinations by other health care providers, and patients who have not had a vaccination in this campaign because they have declined/not consented.</p> <p><a href="#">ASTMED</a> and <a href="#">ASTRX</a> fields now looking back to 01/09/2013 rather than last 12 months.</p> <p><a href="#">IMMRX</a> now looking back to 01/03/2014 rather than last 6 months.</p> <p>All date ranges being examined are cut off at <a href="#">AUDITEND_DAT</a> (except <a href="#">PREG_COD</a> and <a href="#">PREGDEL_COD</a> which continue to look up to 31<sup>st</sup> August 2014)</p>
6.2.0	9 <sup>th</sup> June 2014	DE	<p><a href="#">AST_COD</a> changes (H3120 in V2, X1020 in CTV3)  Confirmation of change of name of <a href="#">CNS_ALL</a> to <a href="#">CNS_GROUP</a>  In <a href="#">CNS_GROUP</a> V2, change of code from Eu814 to Eu817  In <a href="#">CHD_COD</a> reinsertion of missing codes from V2 specification (previously present) and missing new codes from CTV3 specification</p>

### 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.



## **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 01/09/13 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