



Specification

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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 1st August, there are no date changes associated with the Vaccine Uptake Monitoring set. Therefore the vaccination window starts at the 1st 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:

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

b) Qualifying Criteria:

Action	<u>Criteria</u>
	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)
Include	((PREGDEL_COD >= 01/01/2014 AND < 01/09/2014) ¹ OR
	(PREG2_COD >= 01/09/2014 AND <= 31/01/2015))
	Carer <65 years at (REF_DAT)

¹ This group is further filtered – please see <u>explanatory note</u> beneath field 55 Seasonal Influenza Query Definition Page 5 of 55

2) Clinical data extraction criteria:

PATIENT DETAILS

<u>Field</u> Number	<u>Field name</u>	<u>Data item</u>	Qualifying criteria
1	PAT_ID	Patient ID number	Unconditional
Note	The Patient ID is displayed	I in CHART for practices at a local level. The Patient ID is not extracted.	
2	PAT_AGE	Patients age (years) at RUN_DAT	Unconditional
Note	The Patient age is used to	determine the age band of the patient. The patient age is displayed in CHART for practic	e information.
3	PAT_STARTAGE	Patients age (years) at START_DAT	
Note	The Patient Start age is us	ed to determine the age for the 2 year old, 3 year old and 4 year old indicators.	
4	PAT_ENDAGE	ENDAGE Patients age (years) at REF_DAT	
Note	The Patient End age is use End age is defined by the and the '65 and over' age	ed to determine the age band of the patient. The patient End age is displayed in CHART fage of the patient on 31 st March 2015. This is only taken into account for the upper limit oband	or practice information. The f the '16 to under 65' age band
5	PAT_SEX	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 di	splayed in CHART for practices at a local level. The Registration date is not extracted	

CLINICAL RISK GROUPS

<u>Field</u> Number	<u>Field name</u>	<u>Data item</u>		Qualifying criteria	
		Read codes v2	Read codes v3		
7	AST_COD	H33%	H33% (not including H44%, H440.%, H441.)	Earliest <= AUDITEND_DAT	
		(Asthma Dia	gnosis code)	_	
Note		sis Read code is required. The patient must a ed in the At Risk Group for Asthma	also have a Read code in ASTMED_COD or	prescription code in	
8	AST_DAT	Date of A	Date of AST_COD		
	ASTMED_COD	Read codes v2	Read codes v3	1 4 4 01/00/2012	
9		663F, 663Y, 663g1 - 663g4, 8B62, 8B620	663F.,663g1,663g2,663g3,663Y.,XaZ Hv,XE0hq,XaZqH,Xa6bZ,Xa6ba,	Latest >= 01/09/2013 AND	
		(Asthma coded medication)		<= (AUDITEND_DAT)	
Note	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. 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 th 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.				
10	ASTMED_DAT	Date of AST	Chosen Record		

<u>Field</u> Number	<u>Field name</u>	<u>Data</u>	<u>item</u>	Qualifying criteria	
11	ASTRX_COD	Read codes v2 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, fe5t, fe5u, fe5v, fe5w, fe5x, fe5y, fe5z, fe63, fe6b, fe6u, fe6y, fe83, fe84, fe85, fe88, fe8u, fe8v, fe8w, fe8x, fe8y)	Read codes v3 c1D%,c1c%, c63%, c64%, c67%, c69%, c6A%, fe7%, fe9%, x00yP%, x01MW%, x01Mc%, x01Mh%, x01Na%, x01Nb%, x01Nq%, x02IG%	Latest >= 01/09/2013 AND <= (AUDITEND_DAT)	
		(Asthma Pi	rescription)		
Note	Inhaled or Oral Steroid Pro	escription codes. The same logic applies her	e as in the note to the ASTMED_COD group.		
12	ASTRX_DAT	Date of AS	TRX_COD	Chosen Record	
		Read codes v2	Read codes v3		
13	ASTADM_COD	663d, 8H2P	663d., 8H2P.	Latest <= (AUDITEND DAT)	
		(Asthma Admission codes)			
Note	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	ASTADM_DAT	Date of AST	ADM_COD	Chosen Record	

<u>Field</u> Number	Field name	<u>Data</u>	<u>item</u>	Qualifying criteria
15	RESP_COD	Read codes v2 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%	Read codes v3 C370.%, C3701, H3%, H31%, H3120, H31y0%, H32%, H34%, H35%, H444%, H440.%, H441., H46, H464.%, H46z., Hyu46, H46z0, H47y0, H4y%, H4y2.%, (not including: H4y20) H5410, H561., H57%, H571., H57y0, H57y2%, H583.%, (not including: H5830) H591.%, Hyu2., Hyu3., Hyu5., Hyu50, Hyu51, N0421%, Q3170, X100j%, X101U, X102u%, X70Qb, XE0Zf, Xa9Bw%, XaDya%, XaREX, XaX1F, XaX1J, 7450%	Earliest <= AUDITEND_DAT
		(Chronic Respi	ratory Disease)	
16	RESP_DAT	Date of RE	ESP_COD	Chosen Record
		Read codes v2	Read codes v3	
17	CHD_COD	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., 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, Xa3fS, XaB0g%, XaYYq, X00y1%, TB000, ZV421, 79012%, XaYYs, XM1Qn	Earliest <= AUDITEND_DAT
		(Chronic heart	disease codes)	

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18	CHD_DAT	Date of CI	HD_COD	Chosen Record
19	CKD_COD	Read codes v2 7B00%, 7B012, 7B015, 7B019, 7B063, 7B0F3, 8L50, G7520, G7521, K01%, K02%, K0320, K0325, K05, K050, K08yA, K0A1%, K0A3%, K0A8, K0D,	Read codes v3 7B00.%, 7B012, 7B063, K01%, K01x4, K05, K0A3.%, Kyu21, TB001, X30J0%, X30MN%, XE0Fv%, XE0db%, XE0df%, XaB9D%, XaM41, ZV420, G7520%, X30I8%, X30Km%,	Earliest <=AUDITEND_DAT
		K0E, Kyu21, SP083, TB001, ZV420 (Chronic kidney disea	8L50.	
Note	If a patient has any Chroni separately	c Kidney disease Read code, they are includ	led in the CKD At Risk Group. CKD stage 3	– 5 codes are handled
20	CKD_DAT	DATE of C	CKD_COD	Chosen Record
21	CKD4E COD	Read codes v2 1Z1%, K051, K052, K053, K054, K055	Read codes v3 XaLHG%, XaLHH%, XaLHI%, XaLHJ%, XaLHK%	Latest <=
	CKD15_COD	(Chronic kidney disea	se codes - all stages)	AUDITEND_DAT
Note	Read code is a Stage 3 -	t captures all patients with any stage of CKD r 5. If so, the patient is entered into the CKD r e group by having a CKD code from field 19 a	isk group. If their most recent code is a $1-2$	
22	CKD15_DAT	Date of CK	D15_COD	Chosen Record
		Read codes v2	Read codes v3	
23	CKD35_COD	1Z12, 1Z13, 1Z14, 1Z15, 1Z16, 1Z1B, 1Z1C, 1Z1D, 1Z1E, 1Z1F, 1Z1G, 1Z1H, 1Z1J, 1Z1K, 1Z1L, K053, K054, K055	XaLHI%, XaLHJ%, XaLHK%	Latest <= AUDITEND_DAT
		(Chronic kidney diseas	se codes-stages 3 - 5)	
24	CKD35 DAT	Date of CKD35_COD		Chosen Record
<u> </u>				

	CLD_COD	A707%, AyuB1, AyuB2, J6, J61% (not including: J611, J61y9, J61y1), J623 - J62z, J6353 - J6356, J63A, J63B, J6617, J671%, Jyu71, Jyu84, P861%, P863%, (not including: P8630, P8631, P8632, P8633), P86y1, SP086, SP143, J62, 7800% (Chronic Liver	,	Earliest <= AUDITEND_DAT
26	CLD_DAT	Date of C	LD_COD	Chosen Record
27	DIAB_COD	Read codes v2 C10% (not including C1098, C10F8) Cyu2%, L1805, L1806, L1807, L180X, Lyu29	Read codes v3 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	Earliest<= AUDITEND_DAT
	(Diabetes diagnosis codes)			
Note	The patient is included if any Diabetes diagnosis Read code is recorded			
28	DIAB_DAT	Date of D	IAB_COD	Chosen Record

<u>Field</u> Number	<u>Field name</u>	<u>Data</u>	<u>item</u>	Qualifying criteria
29	IMMDX_COD	Read codes v2 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	Read codes v3 43C3., B623.%, B625.%, B620., 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	Latest< =AUDITEND_DAT
		(Immunosuppressio	•	
Note	The patient included if any	immunosuppressant Read code is recorded		
30	IMMDX_DAT	Date of IMI	MDX_COD	Chosen Record
		Read codes v2	Read codes v3	
31	IMMRX_COD	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, hhO - 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, x03lf, h36%, h3A%, h3B%, h4%, h41%, h5, h51%, h52%, h57%, h58%, h59%, h5B%, h5F%, h5F%, h5H%, h5H%, hH%, hH%, hHJ%, hhM%, hhH%, hhG%, hhK%, hhH%, hhM%, hhN1., hhN2., hhO%, hhP%, hhQ%, hhR%,	Latest >= 01/03/2014 AND <= (AUDITEND_DAT)

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		hhS%, hhT%, hhU%, hhV%, hhW%, hhX%, hhY%, hhY%, hhZ%, hha%, hhb%, hhc%, hhd%, hhb%, hkl%, hal%, hkl%, hkll%,	
Note	The patient is included if a prescription code is recorded in the last six months. The timeframe is limited to six months to increase the specificity of capturing patients that are currently immunosuppressed. For brevity purposes, this group includes some immunosuppressant medication that may only be issued in hospital 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 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 th 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.		
32	IMMRX_DAT	Date of IMMRX_COD	Chosen Record

<u>Field</u> Number	<u>Field name</u>	<u>Dat</u>	ra item	Qualifying criteria
33	CNSGROUP_COD	C3510, E004%, E011%, Eu00 - Eu02, Eu814, Eu815, F036%, F1, F10 - F12, F13, F130%, F1322, F134, F135, F1350, F1352, F136%, F137, F1370, F1371, F137y, F137z, F13A, F13X, F14%, F15%, F16, F160 - F162, F163, F1631, F169, F1691, F16yz, F16z, F17, F174, F19%, F1z, F20%, F21, F210 - F212, F21X - F21z, F22%, F23%, F24, F240%, F241%, F24y, F24y0, F24y2, F24yz, F24z, F281%, F283, F2A%, F28%, F371%, F373, F3749, F380%, F3902, F3904, F391, F3910 - F3914, F3917 - F391z, F3920, F398, F4236, Fyu1, Fyu10 - Fyu14, Fyu16, Fyu2, Fyu21 - Fyu23, Fyu26 - Fyu29, Fyu28, 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	Read codes v3 Eu02.%, F1, F16, F161.%, F163., F1631, F1691, 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, X00Cd, X00Cd, F3812%, Xa0Ku%, X00Cn, X00Cq%, F380.%, X00Cw, F3810, X00Cy, F381.%, F383., F38z., Fyu8.%, XE150, 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%, X0030, 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%, X00Ar, X00Ar, X00As, X00Af, X00Ag, X00Ar, X00Ar, X00Ar, X00As, X00Af, X00Ag, X00Ar, X0	Earliest <= AUDITEND_DAT

		(Chronic neurological disease, including	F3917, F391y, F391z, X708J%, X708h%, X708p, XE15p, Xa0s2, Xa0s3%, Xa1GB%, Xa3fA, XaB4V%, XaB4W, XaI9b, XaPws, XaQZ4, XaREu, XaX16, XaX9w Stroke/Tia, Cerebral Palsy and MS codes)	
Note	The above used to be rep	presented by 3 separate code groups, but hav	e now been merged	
34	CNSGROUP_DAT	Date of CNS	GROUP_COD	Chosen Record
35	PNSPLEEN_COD	Read codes v2 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 (Asplenia or Dysfunction	Read codes v3 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, XE131, XE13m, X20Cj, XE13n, Xa0Yy, XE1Mi, Xa0h0, Xa9Ax, Xa9D7 on of the Spleen codes)	Earliest <= AUDITEND_DAT
36	PNSPLEEN_DAT	Date of PNS	PLEEN_COD	Chosen Record

VACCINATIONS

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

CONTRAINDICATIONS, DECLINED, NO CONSENT, ALLERGIES

<u>Field</u> Number	Field name	Data	<u>item</u>	Qualifying criteria
		Read codes v2	Read codes v3	_
43	CONTRA_COD	812F, 812F0	XaIOT, XaZ0j	Latest <= AUDITEND DAT
		(Influenza vaccination contrain	ndication or intolerance codes)	NobiteNb_biti
Note	This information is not tal	ken into account for the Uptake survey and is	presented in CHART for information to praction	ces
44	CONTRA_DAT	Date of CO	NTRA_COD	Chosen Record
		Read codes v2	Read codes v3	
45	DECL_COD	90X5, 90X51, 90X52, 90X53, 90X54, 90X56	XaIBI, XaZ0i, XaaDp, XaaDq, XaadS, XaadU	Latest <= AUDITEND_DAT
		(Influenza vacci	nation declined)	_
Note	Declined is extracted for the new 2014/2015 patient refused/declined vaccination indicators			
46	DECL_DAT	Date of Di	ECL_COD	Chosen Record
		Read codes v2	Read codes v3	_
47	NOCONS_COD	68NE%	68NE., Xaa9f	Latest < AUDITEND DAT
		(No Cons	ent codes)	NODITEND_DITT
Note	No consent is extracted f	or the new 2014/2015 patient refused/declined	I vaccination indicators	
48	NOCONS_DAT	Date of NO	CONS_COD	Chosen Record
		Read codes v2	Read codes v3	
49	ALLERG_COD	14LJ, U60K4, ZV14F	Xa5um%, Xa5WJ%, XaIAA, XaJ8X, XaJ7u	Latest<= AUDITEND DAT
		(Influenza vaco	ination allergy)	
Note	This information is not ta	ken into account for the Uptake survey and is	presented in CHART for information to praction	ces
50	ALLERG_DAT	Date of ALL	.ERG_COD	Chosen Record

CARERS

<u>Field</u> <u>Number</u>	<u>Field name</u>	<u>Data</u>	<u>item</u>	Qualifying criteria
		Read codes 2	Read codes v3	
51	CARER_COD	13HH, 918A%, 918G, 918H, 918W, 918X, 918Y, 918a, 918b, 918c, 918d, 918m, 918y	Ua0bE, Ua0VL%, Ub1ju, Ua0bD	Latest<= AUDITEND_DAT
		(Carer	codes)	
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	CARER_DAT	Date of CA	RER_COD	Chosen Record
		Read codes v2	Read codes v3	Latest<=
53	NOTCARER_COD	918f, 918r	XaL1Y, XaQVL	AUDITEND_DAT
		(No longer a carer codes)		
Note	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	NOTCARER_DAT	Date of NOTO	CARER_COD	Chosen Record

PREGNANCY

<u>Field</u> Number	<u>Field name</u>	<u>Data</u>	<u>item</u>	Qualifying criteria
55	PREGDEL_COD	Read codes v2 62%, (not including: 6214, 6219, 621%, 623%, 629%, 62X%) 633%, 7E060, 7E066, 7E070, 7E071, 7E08%, 7E08%, 7F02%, 7F1%, 7F20 - 7F24, L0%, L20%, L3%, L4%, Ly0, Ly1,Lyu0 - Lyu6, ZV22 - ZV24, (not including: ZV233), ZV27%, ZV28% (not including: ZV283, ZV285)	Read codes v3 621, 62N%, 63%, 7E088, 7E0B%, L0% (not including: L163., L1630, L163z), L264.%, X4038%, X404x%, X40Ar, X74V6%, X74V7, X76Qk, X76Ql, X76Qt, XE06i%, XE06j, XE1SI%, Xa1qM%, Xa36H%, Xa4SO%, Xa4SU, Xa4SV, Xa4SW%, Xa7Yj, Xa85V%, XaI09, XaLQl, ZV22.%, ZV23.%, (not including: ZV233) ZV24.%, ZV27.%, ZV28.% (not including: ZV283, ZV285)	Latest >= 01/01/2014 AND < START_DAT
		2014 (inc		
Note	patient has been, or is cur determine if the patient is	pregnancy ,delivery, miscarriage and termina rently pregnant. This group of patients are ch still pregnant on 31st August 2014. A proxy t entry of any pregnancy code is likely to be en	necked to see if the latest code is a pregnance eight month period has been used before the	y code in PREG_COD to e Start date of 1st September.
56	PREGDEL_DAT	Date of PRE	GDEL_COD	Chosen Record
		Read Codes v2	Read Codes v3	
57	PREG_COD	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, X76Ql, X76Qt, Xa4SO% (not including: Xa41N), Xa4SU, Xa4SV,Xa7Yj, Xa85V%, XaIO9, XaLQl, ZV22.%, ZV23.% (not including: ZV233), ZV28.%,(not including: ZV283, ZV285)	Latest >= 01/01/2014 AND < START_DATE

Note		(Pregnancy codes recorded by 31st August 20 combination with PREGDEL above to detern _COD is PREG_COD, then the patient is reg	014 (inclusive)) nine if the patient is still pregnant on 31 st Aug	gust 2014. If the latest code
58	PREG_DAT	Date of PREG_COD Chosen record		
		Read Codes v2	Read Codes v3	Latest >= START_DATE
59	PREG2_COD	Code string as PREG_COD	Code string as PREG_COD	AND < 31/01/2015 AND
	(Pregnancy codes recorded between 1 st September 2014 and 31 st January 2015 (inclusive))		<= (AUDITEND_DAT)	
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 st 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	PREG2_DAT	Date of PR	EG2_COD	Chosen record

ETHNICITY

EIHNIC	7111				
<u>Field</u> <u>Number</u>	<u>Field name</u>	<u>Data</u>	<u>item</u>	Qualifying criteria	
		Read codes v2	Read codes v3	_	
61	ETH2001_WHIBRIT_COD	9i00	XaQEa	Latest<= AUDITEND_DAT	
		White Britis	ch Ethnicity	TIODITE (D_DIT	
62	ETH2001_WHIBRIT_DAT	Date of ETH2001	_WHIBRIT_COD		
		Read codes v2	Read codes v3		
63	ETH2001_WHIIRISH_COD	9i1%	XaJQw%	Latest<= AUDITEND DAT	
		White Irish	Ethnicity	MODITEND_DIXI	
64	ETH2001_WHIIRISH_DAT	Date of ETH2001	_WHIIRISH_COD		
		Read codes v2	Read codes v3		
65		ETH2001_WHIOTHER_ COD	9i2%	XaJQx%	Latest<= AUDITEND_DAT
		White – Any other White background Ethnicity		_ NODITEND_DAT	
66	ETH2001_WHIOTHER_ DAT	Date of ETH2001_	WHIOTHER_COD		
		Read codes v2	Read codes v3		
67	ETH2001_MXDWHIBLK CAR COD	9i3	XaJQy	Latest<= AUDITEND DAT	
	51 W <u>_</u> 5 5 2	Mixed – White and Bla	ck Caribbean Ethnicity		
68	ETH2001_MXDWHIBLK CAR_DAT	Date of ETH2001_MXDWHIBLKCAR_COD			
		Read codes v2	Read codes v3		
69	69 ETH2001_MXDWHIBLK AFR COD	914	XaJQz	Latest<= AUDITEND DAT	
		Mixed – White and B	lack African Ethnicity	TODITE (D_DIT	

70	ETH2001_MXDWHIBLK AFR_DAT	Date of ETH2001_MXDWHIBLKAFR_COD		
		Read codes v2	Read codes v3	
71	ETH2001_MXDWHIASN _COD	915	XaJR0	Latest<= AUDITEND_DAT
		Mixed – White an	d Asian Ethnicity	NODITEND_DIT
72	ETH2001_MXDWHIASN _DAT	Date of ETH2001_N	/IXDWHIASN_COD	
		Read codes v2	Read codes v3	
73	ETH2001_MXDOTHER_COD	9i6%	XaJR1%	Latest<= AUDITEND_DAT
		Mixed – Any other mixe	d background Ethnicity	
74	ETH2001_MXDOTHER_DAT	Date of ETH2001_MXDOTHER_COD		
		Read codes v2	Read codes v3	•
75	ETH2001_ASNINDIAN_COD	9i7	XaJR2	Latest<= AUDITEND DAT
		Asian or Asian British – Indian Ethnicity		
76	ETH2001_ASNINDIAN_DAT	Date of ETH2001_	ASNINDIAN_COD	
		Read codes v2	Read codes v3	_
77	ETH2001_ASNPAK_COD	918	XaJR3	Latest<= AUDITEND_DAT
	Asian or Asian British – Pakistani Ethnicity		– Pakistani Ethnicity	
78	ETH2001_ASNPAK_DAT	Date of ETH2001	_ASNPAK_COD	
		Read codes v2	Read codes v3	•
79	ETH2001_ASNBANG_COD	9i9	XaJR4	Latest<= AUDITEND_DAT
		Asian or Asian British – Bangladeshi Ethnicity		
80	ETH2001_ASNBANG_DAT	Date of ETH2001_ASNBANG_COD		

		Read codes v2	Read codes v3	
81	ETH2001_ASNOTHER_COD	9iA%	XaJR5%	Latest<= AUDITEND DAT
		Asian or Asian British – Any oth	ner Asian background Ethnicity	TODITEND_DITT
82	ETH2001_ASNOTHER_DAT	Date of ETH2001_/	ASNOTHER_COD	
		Read codes v2	Read codes v3	_
83	ETH2001_BLKCARIB_COD	9iB	XaJR6	Latest<= AUDITEND_DAT
		Black or Black British	– Caribbean Ethnicity	
84	ETH2001_BLKCARIB_DAT	Date of ETH2001_	BLKCARIB_COD	
		Read codes v2	Read codes v3	
85	ETH2001_BLKAFRIC_COD	9iC	XaJR7	Latest<= AUDITEND_DAT
		Black or Black British – African Ethnicity		
86	ETH2001_BLKAFRIC_DAT	Date of ETH2001_	BLKAFRIC_COD	
		Read codes v2	Read codes v3	
87	ETH2001_BLKOTH_COD	9iD%	XaJR8%	Latest<= AUDITEND DAT
		Black or Black British – Any oth	ner Black background Ethnicity	TIODITE (D_DIT
88	ETH2001_BLKOTH_DAT	Date of ETH2001	_BLKOTH_COD	
		Read codes v2	Read codes v3	_
89	ETH2001_CHINESE_COD	9iE	XaJR9	Latest<= AUDITEND_DAT
		Other ethnic groups – Chinese Ethnicity		
90	ETH2001_CHINESE_DAT	Date of ETH2001_CHINESE_COD		
91	ETH2001_OTHER_COD	Read codes v2	Read codes v3	Latest<=

		9iF%	XaJRA%	AUDITEND_DAT
		Other ethnic groups – Any o	other ethnic group Ethnicity	
92	ETH2001_OTHER_DAT	Date of ETH200°	1_OTHER_COD	
		Read codes v2	Read codes v3	
93	ETH2001_NOTSTATED D COD	9iG	XaJRB	Latest<= AUDITEND DAT
	_	Ethnicity r	not stated	TIODITE (D_DIT
94	ETH2001_NOTSTATED_D AT	Date of ETH2001_N	OTSTATEDD_COD	
		Read codes v2	Read codes v3	
95	ETH2001_NORECORD _COD	9SE	XaE4C	Latest<= AUDITEND DAT
	_	Ethnicity not recorded		
96	ETH2001_NORECORD _DAT	Date of ETH2001_N	NORECORD_COD	
		Read codes v2	Read codes v3	
97	ETH2001_NOTGIVPTR EF_COD	9SD	XaE4B	Latest<= AUDITEND DAT
	_	Etnnicity not given	– patient refused	
98	ETH2001_NOTGIVPTR EF_DAT	Date of ETH2001_N	OTGIVPTREF_COD	

Indicator Rulesets

3) Ruleset to Define grouping of data extraction criteria

	Age Band	s
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		PAT_AGE >=65 and <120 at REF_DAT
		PAT_AGE >= 6months < 2 at RUN_DAT
		PAT_AGE >=2 and <5 at RUN_DAT
1	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 1st September 2014.

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

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.

3	ETHNICITY BANDS	True	False
Rule 1	ETH2001_WHIBRIT_DAT >= DATES OF ETHNICITY CATEGORIES IN BOX B	Band =	Next
Rule 2	ETH2001_WHIIRISH_DAT >= DATES OF ETHNICITY CATEGORIES IN BOX B	Band = 2	Next
Rule 3	ETH2001_WHIOTHER_DAT >= DATES OF ETHNICITY CATEGORIES IN BOX B	Band =	Next
Rule 4	ETH2001_MXDWHIBLKCAR_DAT >= DATES OF ETHNICITY CATEGORIES IN BOX B	Band =	Next
Rule 5	ETH2001_MXDWHIBLKAFR_DAT >= DATES OF ETHNICITY CATEGORIES IN BOX B	Band = 5	Next
Rule 6	ETH2001_MXDWHIASN_DAT DATES OF ETHNICITY CATEGORIES IN BOX B	Band = 6	Next
Rule 7	ETH2001_MXDOTHER_DAT >= DATES OF ETHNICITY CATEGORIES IN BOX B	Band = 7	Next
Rule 8	ETH2001_ASNINDIAN_DAT >= DATES OF ETHNICITY CATEGORIES IN BOX B	Band = 8	Next
Rule 9	ETH2001_ASNPAK_DAT >= DATES OF ETHNICITY CATEGORIES IN BOX B	Band = 9	Next
Rule 10	ETH2001_ASNBANG_DAT >= DATES OF ETHNICITY CATEGORIES IN BOX B	Band = 10	Next
Rule 11	ETH2001_ASNOTHER_DAT >= DATES OF ETHNICITY CATEGORIES IN BOX B	Band = 11	Next
Rule 12	ETH2001_BLKCARIB_DAT >= DATES OF ETHNICITY CATEGORIES IN BOX B	Band = 12	Next
Rule 13	ETH2001_BLKAFRIC_DAT >= DATES OF ETHNICITY CATEGORIES IN BOX B	Band = 13	Next
Rule 14	ETH2001_BLKOTH_DAT >= DATES OF ETHNICITY CATEGORIES IN BOX B	Band = 14	Next
Rule 15	ETH2001_CHINESE_DAT >= DATES OF ETHNICITY CATEGORIES IN BOX B	Band = 15	Next
Rule 16	ETH2001_OTHER_DAT >= DATES OF ETHNICITY CATEGORIES IN BOX B	Band = 16	Next
Rule 17	ETH2001_NOTGIVPTREF_DAT <> NULL	Band = 17	Next
Rule 18	ETH2001_NOTSTATED_DAT <> NULL	Band = 18	Band = 19

BOX B
ETH2001_WHIBRIT_DAT
ETH2001_WHIIRISH_DAT
ETH2001_WHIOTHER_DAT
ETH2001_MXDWHIBLKCAR_DAT
ETH2001_MXDWHIBLKAFR_DAT
ETH2001_MXDWHIASN_DAT
ETH2001_MXDOTHER_DAT
ETH2001_ASNINDIAN_DAT
ETH2001_ASNPAK_DAT
ETH2001_ASNBANG_DAT
ETH2001_ASNOTHER_DAT
ETH2001_BLKCARIB_DAT
ETH2001_BLKAFRIC_DAT
ETH2001_BLKOTH_DAT
ETH2001_CHINESE_DAT
ETH2001_OTHER_DAT

Note – Band 19 represents "Ethnicity not recorded". The rules will allocate a patient to this band if they have no ethicity 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.

4	Patients with Immunosuppression		True	False
	IMMUNO CROUD	IF IMMRX_DAT <> NULL	Select	Next
	IMMUNO_GROUP	IF IMMDX_DAT <> NULL	Select	Reject

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

	Patients with CKD		True	False
5		IF CKD_DAT <> NULL (diagnoses)	Select	Next
5	CKD_GROUP	IF CKD15_DAT = NULL (NO STAGES)	Reject	Next
		IF CKD35_DAT>=CKD15_DAT	Select	Reject

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.

6	Patients with Ast	Patients with Asthma		False
		IF ASTADM_DAT <> NULL	Select	Next
	AST_GROUP	(IF AST_DAT <> NULL) AND ((IF ASTMED_DAT <> NULL) OR (IF ASTRX_DAT <> NULL))	Select	Reject

<u>Note:</u> 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

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

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.

8	Patients who have Chronic Respiratory Disease		True	False
	DESD CDOUD	IF AST_GROUP <> NULL	Select	Next
	RESP_GROUP	IF RESP_DAT <> NULL	Select	Reject

	Patients in Any Cl	Patients in Any Clinical Risk Group		False
		IF IMMUNOGROUP <> NULL	Select	Next
		IF CKD_GROUP <> NULL	Select	Next
		IF RESP_GROUP <> NULL	Select	Next
9 ATRISK_	ATRICK CROUD	IF DIAB_DAT <> NULL	Select	Next
	ATRISK_GROUP	IF CLD_DAT <>NULL	Select	Next
		IF CNS_GROUP <> NULL	Select	Next
		IF CHD_DAT <> NULL	Select	Next
		IF PNSPLEEN_DAT <> NULL	Select	Reject

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

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

<u>Note:</u> Combine any Influenza Vaccination Read code given with any Influenza prescription code issues

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

 $\underline{\text{Note:}}$ We are looking for any patient who has $\underline{\text{not}}$ 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

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

b) Demographic status

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

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

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:

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

2a	Seasonal Influenza vaccination given from 01/09/2014	True	False
2a	IF FLUVAX_GROUP <> NULL	Select	Reject
2b	Seasonal Influenza vaccination refused/declined for flu program starting 01/09/2014	True	False
25	IF FLUDECLINED_GROUP <> NULL	Select	Reject
	·		
2c	Seasonal Influenza vaccination given by other healthcare provider from 01/09/2014	True	False
20	IF FLUVAXOHP_DAT <> NULL	Select	Reject

Indicator 3a, 3b and 3c

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

3 DENOMINATOR:

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

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

Indicator 4a, 4b and 4c

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

4 DENOMINATOR:

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

40	Seasonal Influenza vaccination given from 01/09/2014	True	False
4a	IF FLUVAX_GROUP <> NULL	Select	Reject
	·	•	•
4b	Seasonal Influenza vaccination refused/declined for flu program starting 01/09/2014	True	False
40	IF FLUDECLINED_GROUP <> NULL	Select	Reject
	·	•	•
4c	Seasonal Influenza vaccination given by other healthcare provider from 01/09/2014	True	False
	IF FLUVAXOHP_DAT <> NULL	Select	Reject

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	True	False
5	IF START_AGE = 2	Select	Reject

_			
5a	Seasonal Influenza vaccination given from 01/09/2014	True	False
Ja	IF FLUVAX_GROUP <> NULL	Select	Reject
5b	Seasonal Influenza vaccination refused/declined for flu program starting 01/09/2014	True	False
O.D	IF FLUDECLINED_GROUP <> NULL	Select	Reject
5c	Seasonal Influenza vaccination given by other healthcare provider from 01/09/2014	True	False
	IF FLUVAXOHP_DAT <> NULL	Select	Reject

Indicator 6a, 6b, and 6c

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

6 DENOMINATOR:

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

6a	Seasonal Influenza vaccination given from 01/09/2014	True	False
	IF FLUVAX_GROUP <> NULL	Select	Reject
6b	Seasonal Influenza vaccination refused/declined for flu program starting 01/09/2014	True	False
OD	IF FLUDECLINED_GROUP <> NULL	Select	Reject
	•		
6c	Seasonal Influenza vaccination given by other healthcare provider from 01/09/2014	True	False
	IF FLUVAXOHP_DAT <> NULL	Select	Reject

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

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
75	IF FLUDECLINED_GROUP <> NULL	Select	Reject
	•	•	
7c	Seasonal Influenza vaccination given by other healthcare provider from 01/09/2014	True	False
. 0	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:

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

0.0	Seasonal Influenza vaccination given from 01/09/2014	True	False
8a	IF FLUVAX_GROUP <> NULL	Select	Reject
8b	Seasonal Influenza vaccination refused/declined for flu program starting 01/09/2014	True	False
OD	IF FLUDECLINED_GROUP <> NULL	Select	Reject
8c	Seasonal Influenza vaccination given by other healthcare provider from 01/09/2014	True	False
	IF FLUVAXOHP_DAT <> NULL	Select	Reject

Indicator 9a, 9b, and 9c

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

9 DENOMINATOR:

0	Aged 4 at START_DATE	True	False
9	IF START_AGE = 4	Select	Reject

Г		,	,
9a	Seasonal Influenza vaccination given from 01/09/2014	True	False
Ja	IF FLUVAX_GROUP <> NULL	Select	Reject
9b	Seasonal Influenza vaccination refused/declined for flu program starting 01/09/2014	True	False
OD	IF FLUDECLINED_GROUP <> NULL	Select	Reject
9c	Seasonal Influenza vaccination given by other healthcare provider from 01/09/2014	True	False
	IF FLUVAXOHP_DAT <> NULL	Select	Reject

Indicator 10a, 10b, and 10c

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

10 DENOMINATOR:

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

10a	Seasonal Influenza vaccination given from 01/09/2014	True	False
TUa	IF FLUVAX_GROUP <> NULL	Select	Reject
10b	Seasonal Influenza vaccination refused/declined for flu program starting 01/09/2014	True	False
100	IF FLUDECLINED_GROUP <> NULL	Select	Reject
	·		
10c	Seasonal Influenza vaccination given by other healthcare provider from 01/09/2014	True	False
100	IF FLUVAXOHP_DAT <> NULL	Select	Reject

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	Patients with Chronic Heart Disease	True	False
''	IF CHD_DAT <> NULL	Select	Reject

			T
11a	Seasonal Influenza vaccination given from 01/09/2014	True	False
TTA	IF FLUVAX_GROUP <> NULL	Select	Reject
			T
11b	Seasonal Influenza vaccination refused/declined for flu program starting 01/09/2014	True	False
115	IF FLUDECLINED_GROUP <> NULL	Select	Reject
11c	Seasonal Influenza vaccination given by other healthcare provider from 01/09/2014	True	False
110	IF FLUVAXOHP_DAT <> NULL	Select	Reject

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

40-	Seasonal Influenza vaccination given from 01/09/2014	True	False
12a	IF FLUVAX_GROUP <> NULL	Select	Reject
12b	Seasonal Influenza vaccination refused/declined for flu program starting 01/09/2014	True	False
120	IF FLUDECLINED_GROUP <> NULL	Select	Reject
12c	Seasonal Influenza vaccination given by other healthcare provider from 01/09/2014	True	False
120	IF FLUVAXOHP_DAT <> NULL	Select	Reject

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:

12	Patients with Chronic Kidney Disease	True	False
13	IF CKD_GROUP <> NULL	Select	Reject

13a	Seasonal Influenza vaccination given from 01/09/2014	True	False
ısa	IF FLUVAX_GROUP <> NULL	Select	Reject
13b	Seasonal Influenza vaccination refused/declined for flu program starting 01/09/2014	True	False
100	IF FLUDECLINED_GROUP <> NULL	Select	Rejec
		•	
13c	Seasonal Influenza vaccination given by other healthcare provider from 01/09/2014	True	False
100	IF FLUVAXOHP_DAT <> NULL	Select	Rejec

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

	Seasonal Influenza vaccination given from 01/09/2014	True	False
14a	IF FLUVAX_GROUP <> NULL	Select	Reject
14b	Seasonal Influenza vaccination refused/declined for flu program starting 01/09/2014	True	False
140	IF FLUDECLINED_GROUP <> NULL	Select	Reject
14c	Seasonal Influenza vaccination given by other healthcare provider from 01/09/2014	True	False
140	IF FLUVAXOHP_DAT <> NULL	Select	Reject

Indicator 15a, 15b, and 15c

Vaccination status of patients with Diabetes

Output to be broken down by Age bands 2-5

15 DENOMINATOR:

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

	Seasonal Influenza vaccination given from 01/09/2014	True	False
15a	IF FLUVAX_GROUP <> NULL	Select	Reject
15b	Seasonal Influenza vaccination refused/declined for flu program starting 01/09/2014	True	False
130	IF FLUDECLINED_GROUP <> NULL	Select	Reject
15c	Seasonal Influenza vaccination given by other healthcare provider from 01/09/2014	True	False
130	IF FLUVAXOHP_DAT <> NULL	Select	Reject

Indicator 16a, 16b, and 16c

Vaccination status of patients with Immunosuppression

Output to be broken down by Age bands 2-5

16 DENOMINATOR:

16	Patients with Immunosuppression	True	False
10	IF IMMUNO_GROUP <> NULL	Select	Reject

100	Seasonal Influenza vaccination given from 01/09/2014	True	False
16a	IF FLUVAX_GROUP <> NULL	Select	Reject
16b	Seasonal Influenza vaccination refused/declined for flu program starting 01/09/2014	True	False
100	IF FLUDECLINED_GROUP <> NULL	Select	Reject
16c	Seasonal Influenza vaccination given by other healthcare provider from 01/09/2014	True	False
100	IF FLUVAXOHP_DAT <> NULL	Select	Reject

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

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

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	Patients with Asplenia or Dysfunction of the Spleen	True	False
10	IF PNSPLEEN_DAT <> NULL	Select	Reject

		1	
18a	Seasonal Influenza vaccination given from 01/09/2014	True	False
Toa	IF FLUVAX_GROUP <> NULL	Select	Reject
18b	Seasonal Influenza vaccination refused/declined for flu program starting 01/09/2014	True	False
100	IF FLUDECLINED_GROUP <> NULL	Select	Reject
18c	Seasonal Influenza vaccination given by other healthcare provider from 01/09/2014	True	False
100	IF FLUVAXOHP_DAT <> NULL	Select	Reject

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:

	Patients meeting Carer Criteria	True	False
	IF AGE >=65 AT REF_DAT	Reject	Next
10	IF ATRISK_GROUP <> NULL	Reject	Next
19	IF PREG_GROUP <> NULL	Reject	Next
	IF CARER_DAT = NULL	Reject	Next
	IF CARER_DAT > NOTCARER_DAT	Select	Reject

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

Indicator 20a, 20b, and 20c

Vaccination status of patients by gender

Output to be broken down by Gender bands 1-4

20 DENOMINATOR:

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

20a	Seasonal Influenza vaccination given from 01/09/2014		False
20a	IF FLUVAX_GROUP <> NULL	Select	Reject
20b	Seasonal Influenza vaccination refused/declined for flu program starting 01/09/2014	True	False
200	IF FLUDECLINED_GROUP <> NULL	Select	Reject
20c	Seasonal Influenza vaccination given by other healthcare provider from 01/09/2014	True	False
200	IF FLUVAXOHP_DAT <> NULL	Select	Reject

Indicator 21a, 21b, and 21c

Vaccination status of patients by ethnicity

Output to be broken down by Ethnicity bands 1-19

21 DENOMINATOR:

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

24.5	Seasonal Influenza vaccination given from 01/09/2014		False
21a	IF FLUVAX_GROUP <> NULL	Select	Reject
21b	Seasonal Influenza vaccination refused/declined for flu program starting 01/09/2014	True	False
210	IF FLUDECLINED_GROUP <> NULL	Select	Reject
	·		
21c	Seasonal Influenza vaccination given by other healthcare provider from 01/09/2014	True	False
210	IF FLUVAXOHP_DAT <> NULL	Select	Reject

Change Log

Version	Date	Author	Change summary
Version 6.1.0	Date 22 nd May 2014	Author	Following new fields added: PAT_STARTAGE, PNSPLEEN_COD, PNSPLEEN_DAT, FLUVAXOHP_COD, FLUVAXOHP_DAT, 19 ETHNICITY CODE GROUPS AND DATES. Age banding group altered to include 4 year olds. Gender banding rules added Ethnicity banding rules added Asplenia added to "Patient in any clinical risk group" ATRISK_GROUP logic "Patients not had vaccination and refused/declined" logic added New Indicators added: Four year olds, four year olds at risk, Patients with asplenia, Vaccinations by gender, Vaccinations by ethnity.
			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. ASTMED and ASTRX fields now looking back to 01/09/2013 rather than last 12 months. IMMRX now looking back to 01/03/2014 rather than last 6 months. All date ranges being examined are cut off at AUDITEND_DAT (except PREG_COD and PREGDEL_COD which continue to look up to 31 st August 2014)
	<u> </u>	1	

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

Missed abortion

Ectopic pregnancy

Miscarriage

Spontaneous vertex delivery

Normal delivery

Normal delivery

XE2QS

Spontaneous breech delivery X40Cm)

Breech extraction delivery 7F14. Xa8Pq Forceps delivery 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 XM0tq Intrauterine death L264 Termination of pregnancy Xa36H **Legal Abortion** XE0vi Medical termination of pregnancy Xa361