Barcoded Flu Clinics

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Introduction

The barcoded flu clinic system was introduced in 2012 and has been used successfully over a number of years in several practices. It involves sending each patient an invitation letter with a barcoded, tear off ticket which they subsequently present at the practice flu clinic. The tickets are used to populate a list of patients, to which vaccination data is added as a batch process. The system is highly efficient and has the following benefits:

- No appointment booking is necessary
- Invitation letters can provide detail about the vaccine and the vaccination process
- Invitation letters can be formatted so that patients can update their contact details
- Patient transit through clinics is rapid
- Face to face contact is minimal
- Data entry is highly efficient
- No IT hardware is required on site
- Can be used for clinics where patients from multiple GP practices attend

General Overview

Pre-Clinic Process

Letters are sent inviting patients to attend open (unbooked) clinics.

Clinic Process

Patient brings the tear off ticket to clinic and hands it to the clinician administering the vaccination

Post-Clinic Process

Tear off ticket is scanned, adding the patient's NHS number to a list

The list is imported into EMIS Web and the flu vaccination details are added as a batch process

Creating the letter

The letter should be created in Word, accessed via Template Manager/Resource Publisher in EMIS Web.

It should comprise of an invitation and a tear-off ticket:

Invitation

The top section of the letter should detail:

- Patient name
- Patient address
- The importance of vaccination
- Advice about side effects
- Reassurance e.g. infection control measures during COVID-19 pandemic
- Advice to contact the practice if allergic to hens' eggs
- Clinic Dates and venues
- Advice about how to prepare e.g. what to wear

Ticket

The bottom section of the letter is the "ticket" which the patient will take to the vaccination clinic. This should detail:

- Name
- Patient number
- NHS number
- Barcoded NHS Number x2
- Current contact details with space for the patient to update their details

	Starts Hill Road, Farnbo www.summ	prough, Kent, BR6 7AR ercroft.net	
PRIVATE & CONFIDENTI/ Full Name Home Full Address (stacked)	L.		
Dear Full Name, We write to invite y a serious and pot vaccinated agains	ou to attend one of the flu va entially life threatening infec t it.	ccination clinics being held a tion and it is highly recomm	t the surgery. Flu ended that you a
Please be assure system and strict i 19.	d that we will be operating a nfection control measures to	socially distanced queuing reduce the risk of COVID-	appointment needed
Satu Satu Satu	rday 8 th October 8.30 rday 15 th October 8.30 rday 12 th November 8.30	am – 11.00 am am – 11.00 am am – 11.00 am	Wear suitable clothes Car park
Vaccination will no with significant m telephone to make	t be available outside of the obility problems e.g. when alternative arrangements.	se clinics except for people elchair users who should	closed Update your details
No appointment i slip below and br	s necessary but it is impo ing it with you as proof of el	rtant that you tear off the igibility for the vaccination.	Don't forget to bring you slip
Please wear cloth your shoulders.	es which will make it easy	for you to expose one of	Observe social distancing
We look forward to	seeing you at one of the cl	inics,	rules
Drs.Bailey, Brenn	an, Daxis, Essop, Palin, Ti	rdey & White.	
⊁ IMI	PORTANT - YOU MUST E	RING THIS SLIP WITH Y	
Please check the Ifyour home addr	details we have for you be ess has changed please as	low and update them if they sk for a change of address f	are incorrect. form.
Home Number Mobile Number	Recorded Details Patient Home Telephone Patient Mobile Telephone Mobile]	Update your details	here
Email Address	Patient E-mail Address		
<u>For Office Use Onl</u> Forename: Given N NHS Number: NHS	y ame Surname: <mark>Surname</mark> Number Vaccine Site: Left	DOB: Date of Birth Arm. / Right Arm Batch.	
lunter	X	IIIIIIII	nber IIX

Adding the Barcode

How barcodes are constructed

A barcode is merely a font but must have asterisk at each end for barcode scanner to recognise it.

e.g. 123456789 must be changed to *123456789*

Also any standard keyboard character should be added at the end to prevent the empty space after the number from being read as a "return key" e.g. *123456789*x

Both the number and the asterisks should be highlighted and the font changed to "Free 3 of 9" barcode font (note that the "x" is not highlighted)

*123456789*x → ₩₩₩₩₩₩₩

Tip: It is worthwhile to experiment using different sizes of font to see which works best with your barcode scanner

Adding the Free 3 of 9 Barcode Font to Your Computer

The Free 3 of 9 font must be installed on your computer. It can be downloaded from: <u>https://fonts2u.com/free-3-of-9-regular.font</u>

• Open the downloaded file and click "Install" in the top left corner of the window. Contact your local IT Department if the installation is blocked by security software.

Barcoding the NHS Number Merge Field in EMIS Web

Following the convention described above:

• Insert the NHS Number merge field and remove any spaces at the end.

NHS Number

• Add an asterisk to each end of the merge field

NHS Number

• Add any keyboard character, immediately after the right-hand asterisk

*NHS Number*x

- Highlight the asterisks and merge field but not the additional character
- Change the font to "free 3 of 9"

The end result looks a little odd due to the presence of lower case characters in the merge field which are not bar code compatible; do not be perturbed by this. When the document is merged, the EMIS merge field will be replaced by numbers and the barcode will appear as expected

Intermediate the set of the set

Print, Test, Embed Font & Save

- Test merge the document for a single patient and print it
- Open Notepad and scan the barcode on the printed document
- Compare the scanned NHS Number with the patient's NHS number
- Depending on your method of printing and dispatch, you may need to embed the fonts used in the document. The barcode font is not common to all computers so if the font is not embedded, the NHS number may be converted back to a standard text font when the final merge document is opened for printing. It is therefore recommended that the font is embedded:
 - With the document open, click the Office Button ⁽¹⁾ (note this is next to the Home tab and partially obscured by the document title):
 - Click "Word Options"
 - Click "Save" (in left hand column)
 - Tick "Embed Fonts in the File"
 - Save the change
- Save the document template in the usual way



Mail Merge

You should use the mail merge function within EMIS web in the usual way.

Printing and Dispatch

It is highly recommended that a mailing service is used to print and dispatch the letters. These services usually offer postage at a competitive price and save considerably on the physical and human resources required to print and post. Docmail also, very helpfully, provides a print server which, once installed, enables the process to be completed by simply printing to the Docmail Print Server.

Important: You should check any proof letters carefully using a barcode scanner to ensure that the NHS number barcode has been created successfully. Any mistakes at this stage could be extremely costly!

Clinic Procedure

- Patient joins queue of patients Signage and staff ensure that the patient has ticket ready and has removed outer layers of clothing. A verbal check about allergies etc. can also be carried out at this stage.
- Patient hands ticket to clinician at time of vaccination
- Ticket placed in one of two containers (left arm / right arm)
- Vaccination given

Note: If more than one batch of vaccine is used, an appropriately labelled container of right and left arm tickets will need to be created for each batch.

Creating Lists of Patients

The aim is to create two lists for each batch of vaccine administered:

- Patients vaccinated in the left arm
- Patient vaccinated in the right arm

The following procedure for patients vaccinated in the right arm, should be repeated for patients vaccinated in the left arm:

- Open a new document in Notepad
- Insert the cursor at the start of the document and scan the first ticket
- Each time a barcode is scanned the cursor should automatically move down to the next line in the document, ready for the next barcode to be scanned
- Scan all of the tickets of patients vaccinated in the right arm

Once all of the tickets have been scanned a column of NHS numbers will have been created

Barcode Scanning Tips

If you are unsure if you have scanned a ticket, scan it again. EMIS will remove duplicates automatically when you import the list so this will do no harm.

Some of the tickets will be creased etc and the barcode unclear. It is still often possible to scan the barcode. However to ensure accuracy, you should cross reference the number which scans into Notepad with the backup NHS number printed in standard font. You should include a second barcode on the ticket as it is rare for both of these to be unusable due to wear.

Saving the List in the Correct Format

EMIS requires the Notepad document to be saved as a .txt file (the default file type for Notepad).

In Notepad:

- Click "File" > "Save As" and select a secure drive/folder
- Name the file so that you can differentiate between the right arm list and the left arm lists (and between different batches if applicable) e.g. "Flu Vaccination 20th Sept RIGHT ARM – Batch 123.txt"

Save As			×
\leftarrow \rightarrow \checkmark \uparrow \blacksquare \Rightarrow This PC \Rightarrow Desktop \Rightarrow Flu Vaccination 2020		ע ט ג Search	Flu Vaccination 2020
Organise 👻 New folder			H • 🕐
SP Dropbox ^ Name	Date modified Type	Size	
 OneDrive 	No items match your search.		
📃 This PC			
3D Objects			
Desktop			
Documents			
🖶 Downloads			
Music			
Pictures			
🗑 Videos			
Local Disk (C:)			
🔿 Network 👻			
File name: Flu Vaccination 20th Sept RIGHT ARM.txt			~
Save as type: Text Documents (*.txt)			~
∧ Hide Folders	Encoding: UTF-8	✓ Save	Cancel
			3

Importing the List of Patients into EMIS Web (Single Practice Clinic) In EMIS Web:

- Click "Reporting" → "Population Reporting"
- Create or navigate to an existing folder on the left window pane, in which to save the list of patients
- Once the target folder is selected, click "Add" \rightarrow "List of Patients" and a new window will open.
- Assign a name to the list you wish to create and add a description e.g. "Flu Vaccination 20th Sept RIGHT ARM – Batch 123"
- Click "Import" and a new window will open to enable you to browse to the txt file containing the list of NHS numbers
- Select the saved txt file and click "Open"

EMIS Web will analyse the list of NHS numbers and match them to patients. This may take a moment or two to complete.

The imported list will appear in the selected folder, in the same way that a search population is usually displayed. The vaccination data can be added to all the patients on the list as a batch process.

Data should be entered on the databases of all practices involved as soon as possible after the vaccination clinic. This will prevent difficulties, should any patients leave the practice soon after being administered the vaccination.

Importing the List of Patients for Multiple Practice Clinics

The barcoded system can be used when vaccinating patients from multiple practices at a single site/clinic. The list of patients should be created and imported as described for single practice clinics above. During the importation process, EMIS Web will recognise patients who are, *or have been*, registered at the practice where the list is imported; all other NHS Numbers will be ignored. If a patient has been registered at one of the practices and subsequently registered at another, EMIS web *will* recognise the NHS number and *will* add the data even though the patient is no longer registered, which is clearly undesirable. To manage this issue, a further step is required to filter out these patients before batch adding the data. The following process should be carried out at each participating practice.

- Import the list of NHS Numbers as described in the previous section (Importing the List of Patients into EMIS Web (Single Practice Clinic))
- Download the search "Flu Clinic Own Practice Filter" using the link below, and import it into folder containing the imported list – This search identifies patients who are currently registered at the practice with regular registration type. <u>https://www.dropbox.com/s/8ff29knxvgw2g7l/Flu%20Clinic%20Own%20Practice%20Filter.xml?dl=0</u>
- Select "Properties" for the imported search file
- In the "Based on" section, select the "Results from" radio button
- Click the magnifying glass to browse to the imported list of patients
- Click OK
- Run the "Flu Clinic Own Practice Filter" search

Flu Clinic Own Practice Filter Properties ?									
Details Sch	edule								
Name	Flu Clinic Own Practice Filter								
Description	This search must be used in conjunction with imported lists of patient / NHS numbers from multiple practices - see document "Barcoded Flu Clinics" by Mark Essop								
Identifies patients at this practice to which the seasonal influenza data should be added.									
			~						
Based on:									
O Current	ly registered patients								
🔿 All pati	ents (including deducted and deceased)								
Results	from Flu Vaccination 20th Sept RIGHT ARM	P							
	ОК	Cance	el						

- Batch add the vaccination data (described in the next section) to the records of patients included in this search result
- Repeat the filtering process for each imported list

Batch Adding the Vaccination Data

- Select "Batch Data Manager" from the tabs in the Population Reporting screen.
- Click "Add" \rightarrow "Clinical Code" and the "Add Batch Data" window will open.

Add Batch Data			×
Define the data that th	is batch will add to the Patient	Record(s)	
Clinical code to Ad	ld to Patient Record		
* Batch Add			\sim
* Description			
List of Patients to	Add Data to		
List Type	Please select	~	1
*			P
Batch Scheduling			
Run Batch	 Immediately 		2
	O Schedule	02-Jul-2020	\$
			Cancel

- Click on the magnifying glass next to the "Batch Add" field to select the seasonal influenza vaccination code. The "Add a Code" window will open
- Browse to the correct code and double-click it. A pane will appear at the bottom of the "Add a Code" window, enabling the entry of the flu vaccination details

Add a Code									×
Find code									
Search sea	asonal influenza v	accination							
Filter All	I codes Finding	as Disor	ders Observations	Procedures	Family history	Allergies &	eactions	Referrals Admin	
45 search re	esults						Related c	des Resources	
Did not a	attend first intrana	sal seasonal	influenza vaccination			^			^
Did not a	attend second intra	inasal seasor	nal influenza vaccination				- Influ	enza vaccination	
Seasona	al influenza vaccina	tion						Seasonal influenza vaccination (procedure)	
Seasona	al influenza vaccina	tion declined						Concept ID: 822851000000102	
Seasona	al influenza vaccina	tion not indic	ated				L	Description ID: 2142081000000112	
No cons	sent for seasonal in	luenza vacci	nation					- Administration of adjuvanted trivalent (aTIV) inactivated seasonal influenza vaccination	
Seasona	al influenza vaccina	tion contrain	dicated					Administration of first inactivated seasonal influenza vaccination	
Seasona	al influenza vaccina	tion given in	school					 Administration of first intranasal seasonal influenza vaccination 	
Seasona	al influenza vaccina	ion given by	midwife			\sim		- Administration of second inactivated seasonal influenza vaccination	\sim
Selected code	e								X
Code	Sea	sonal influe	enza vaccination						
Qualifiers	Man	ufacturer	Pharmacash			×			
	Expi	ry Date	10-Jun-2021		111	×			
	Bato	h Number	8989XW			×			
	GMS		GMS		~	×			
	Inje	ction site	Right arm		~	*			
	Add	qualifier 🚽							
Date of ent	try 17-	Jun-2020							
Descriptive	e text Adr	ninistered at	flu clinic						
Options								OK Ca	incel

- Complete the details ensuring that the "Date of Entry" field contains the *date that the vaccinations were actually administered* rather than today's date
- Click "OK" and you will return to the "Add Batch Data" window
- Complete the description field (this will appear only in the Batch Data Manager screen and not in the patient record)
- In the "List Type" field select "Search Population (Included)"
- In the "Search Population Included" field, browse to the folder containing the imported list of patients. *It is critical that you make the correct selection at this point*
- Click "OK"

Add Batch Data				×
Define the data that this b	atch will add to the Patient Record(s)			
Clinical code to Add	to Patient Record			
* Batch Add	Seasonal influenza vaccination			
* Description	Flu Vaccination (Right Arm)			
List of Patients to A	dd Data to			
List Type	Search Population (Included)	~		
 Search Population (Included) 	Flu Vaccination 20th Sept RIGHT AR	М		
	Batch Data Manager will add th	ne Clinical code to ${f 3}$ patients.		
Batch Scheduling				
Run Batch	 Immediately 			
	○ Schedule	30-Jun-2020	22:00	\$
				OK Cancel

A "Batch add clinical code" confirmation window will open asking you to confirm you wish to make the batch change

This batch add: • Will updat Can only b during this Are you sure the	• 3 patient care records e undone within 7 days of being run (providing the clinical code has not changed time). t you want to add this batch?
Summary of batch add:	
Term:	Seasonal influenza vaccination
Concept ID:	822851000000102
Description ID:	2142081000000112
Date of entry:	30-Jun-2020
Descriptive text:	Vaccine administered at practice flu vaccine clinic.
Patient list type:	Search Population (Included)
Search name:	Flu Vaccination 20th Sept RIGHT ARM
	(search last run on: 30/06/2020)
Include/exclude:	Include all patients found by this search
Number of patients to be updated:	3 patients
Run batch:	Immediately
	Add batch Cancel

• Ensure that you check all the details are correct as you will only have a 7 day period within which you can undo the batch addition

• Click "Add Batch" to confirm you wish to make the batch change

The batch change status will appear as "running." It may take several minutes for the process to complete and this will be confirmed by the status appearing as "Complete." (You may need to periodically click the "Refresh" button to update the status)

emis 🔄 🏠	🖉 🕹 🌶 🕍 🗄 🗎 🤱 🕷	t 🢡 🕕 🕹 🚉 🥔	-	Documents	EMIS Web Health Care Sy	rstem - NHS Br 🔔 📼 🗙
Populatio	on Reporting Enquiry Manager F	P34D Reports MIQUEST	Batch Data Manager	Document Template		🗖 😣 🌗
Add Refresh	Undo Print Report Edit	t				
Batch Type	Description	Date Actioned	Scheduled Date	Status		View Details >>
Clinical code	Seasonal influenza vaccinatio	30/06/2020 20:01:02	Immediate	Running	Туре	Clinical code
Protocol	add coral diary entry s	20/03/2019 08:20:12	Immediate	Complete	Status	Running
Protocol	add coral diary entry aljsi	20/03/2019 08:16:04	Immediate	Complete	Seasonal ini More info User Actioned Scheduled Patients Flu Vaccinatio Affected Unaltered	fluenza vaccination ESSOP, Mark (Dr) 30/06/2020 20:01:02 Immediate Search Population (Included) on 20th Sept RIGHT ARM 0 (0%) 0 (100%)
NHS Practice M	lanager (SJR004) <u>ESSOP, Mark</u>	(Dr) Location: NHS Br	omley CCG			! Alerts

• Check that the process has succeeded by viewing an included patient's Care History

emis Add	Summary Bedit Delete Sharing dd/Edit	Con	isultations Medica isultations Medica Calculations Medica Calculations Collapse	E Proble v e Text All Data	ms Invest	tigations	∓ Care H € Health Status	istory Eamily History	Diary Docu Diary Immunisations	ments F Filters	Referrals Text search	Documer Documer Print Print	t Templat	e Search Knowled		
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Date				Term					Value							
30-Jun-2	2020			Seasonal inf	uenza vaccir	nation			Vaccine administered at practice flu vaccine clinic.							
30-Jun-2	30-Jun-2020 🛛 Letter sent to patient						Stoma	Stoma patient template letter for Grey listed items								
30-Jun-2	2020			Body mass ir	ndex				50 kg/r	n2						
26-Jun-2020 Weight monitoring						Current weight 65 kg equates to 10 st ,3 lb. A 16% gain from the previou: weight is likely to be 50 - 68kg (7 st, 12 lb - 10 st, 10 lb)				previous						
26-Jun-2	2020			Checking as	sessment to	ol use			Referrals optimisation protocol initiated.							
						1. A.										

System Requirements

Microsoft Office Emis Web Notepad Free 3 of 9 font installed Docmail Print Server (recommended) USB barcode scanner

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