Queen Mary
University of London

Clinical Effectiveness Group



APL-Imms
Childhood imms call/recall tool

User guide for EMIS Web

Version 5 - December 2025

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Contact us

If you have any questions or feedback about the tool or this user guide, please get in touch:

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About APL-Imms

Systematic call and recall: helping practices provide timely immunisations to children under six

The CEG childhood immunisations call/recall tool 'APL-Imms' is designed for use within GP practices. It displays coded information from patient records, making it easy to call and recall children for their routine immunisations on time and ensure no child is left behind.

The tool will support you to:

Prioritise

- Filter your patients aged 0-5 according to when their immunisations are due or overdue;
- Export lists in a range of formats to send appointment messages or agree actions with colleagues.

Tailor your approach to individuals

- See relevant details about each patient in your list, such as reasons for refusal or upcoming appointments, simply by clicking on their name in the tool;
- Access information on vaccine ingredients and schedules to help guide your conversations with parents.

Quality Improvement Programme

In North East London, the CEG APL-Imms tool is available as part of a wider programme of support to improve coverage and timeliness of routine childhood immunisations.

The programme includes 1:1 training and support for GP practices from CEG's team of facilitators, and data entry templates to ensure the call/recall tool has high-quality coded data to draw from. Find out more on the CEG website.



About APL-Imms

Limitations

APL-Imms is not a diagnostic tool or intended to replace clinical judgement

APL-Imms displays information coded in the patient record and can be used to highlight children whose records indicate their vaccinations are incomplete, due, missing or delayed. It does not make management recommendations – these are entirely a matter for the clinician.

Only presents coded information

The tool presents information that is **coded** in the patient health record. It is important to use it with a data entry template to ensure your activity is coded correctly. In North East London, this is the CEG data entry template '**(RP) Childhood Immunisations CEG**' (search 'CEG Child' in Resource Publisher).

In cases where the codes do not clearly describe a child's vaccination history, clinicians are advised to manually check the patient record for uncoded information which would not be picked up by the tool, and/or check the Red Book or other patient-held records.

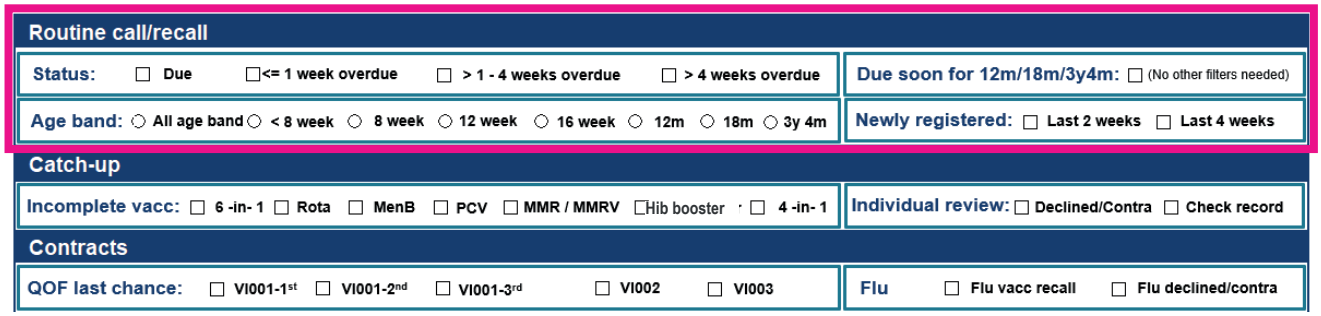
Coloured flag definitions

Due soon	One month or less to age 1y or 3y 4m
Due	Child is due a vaccine now
1w overdue	Overdue by one week
1-4w overdue	Overdue by more than a week, but less than four weeks
4+w overdue	Overdue by more than four weeks
Done too young	Vaccinated before the minimum recommended age
Done too soon	Vaccinated without the minimum recommended gap between doses
Declined/contra	There is an active recorded contraindication or refusal
Check record	Unusual data - check clinical record
Done	Vaccine already given
Not due yet	Gap from last dose not long enough yet
Too old	Child was not given this vaccine, but they are now too old to have it

Quick reference guide

With no filters selected, APL-Imms will list all children currently registered with the practice who are not yet six years old.

Routine call/recall



Status

These are additive filters - you can select more than one at the same time. For example, if you want to view children due now and children due in a week on the same list, you can tick both filters. Children with active decline codes will not appear in this list. Excludes flu, which is managed separately within the APL-Imms tool.

Due soon for 12m/18m/3y 4m

See all children who are due soon with one click. This filter will list all children who are becoming 12 months old, 18 months old, or three years four months old in a month or less. You do not need to use 'Age band' filters for this function, and you cannot use this filter with the 'Status' filters.

Age band

These are exclusive filters - you cannot select more than one age band at the same time. The '8 weeks' filter selects all children who are eight weeks but not yet 12 weeks. The '12 weeks' filter selects all children who are 12 weeks but not yet 16 weeks, and so on. For most routine tasks, you will not need to use age filters.

'**Under 8 weeks**' could be used to check:

- **Whether newly born babies are registered**. Compare the list with your list of new births. If someone is missing here, contact the parents. Note that for newly-registered patients to show, their registration needs to be accepted by PCSE by GP Links. This may take a few days.
- **If they have an appointment booked for their first primary immunisations**. This information shows in the 'Patient Information' page, visible by clicking a name in your list. To see it for all children in the list at once, export the list to Excel using the button in the top ribbon.

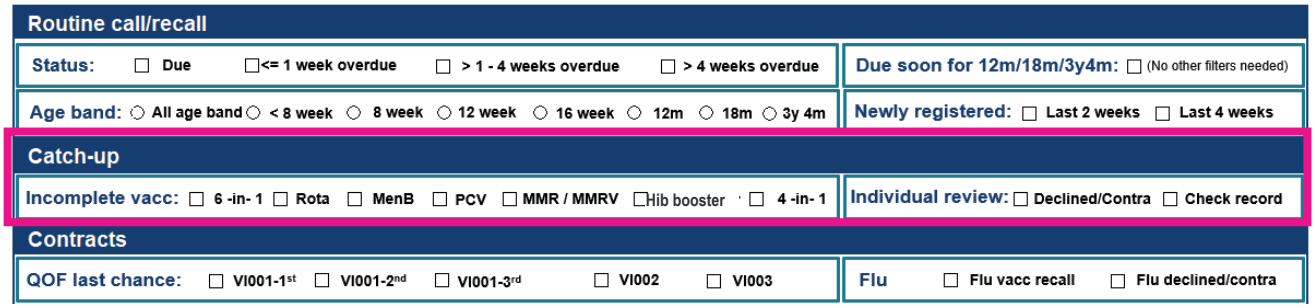
Newly registered

These filters list children registered within the **'Last 2 weeks'** or **'Last four weeks'** - use either filter depending on how often you want to review the cohort. This is useful for finding out if you need to chase vaccination histories for newly registered children, if they are due vaccinations, and whether they have an appointment booked already or not.

Visit the CEG website for more in-depth guidance on this topic, including screenshots and examples:
How to manage newly registered children using APL-Imms

Quick reference guide

Catch-up



Incomplete vacc

Use these additive filters to focus on a particular vaccination; say, for example, that you want to do a pertussis catch-up campaign, you would tick both the '6-in-1' and the '4-in-1' checkboxes at the same time. Children with active declined codes will not appear on this list.

Individual review

'**Decline/contra**' will list all children with an active refusal or contraindication code in their record who are still eligible for vaccination. You can then examine their history and determine the best course of action. The decline could relate to any vaccination - if you want to refine the list further you will need to export it to Excel and do it there.

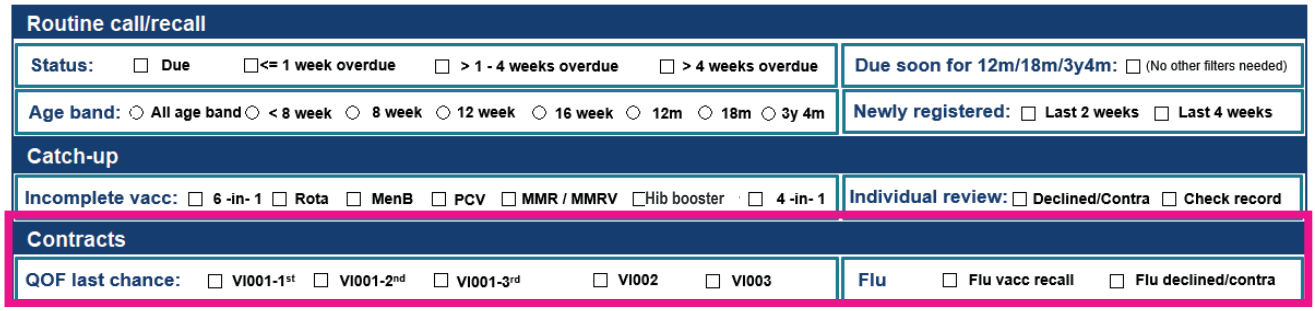
Decline codes become inactive one month before the ages of one year, and three years four months, so that parents are given the chance to change their minds. If they still decline, you will need to code it in their record again for them to appear in this list instead of recall lists.

'**Check record**' will highlight children whose history merits in-depth review because of an anomaly. An example of this is a second dose of MMR recorded with no record of a first one (either because there isn't a first one recorded, or because the first one was given before their first birthday). It will also highlight children who have had a vaccine too early. Children with the 'Check record' flag will not appear in recall lists.

Visit the CEG website for additional guidance on how to code and review vaccine declines:
How to code and manage vaccine hesitancy

Quick reference guide

Contracts



QOF last chance

While it is always worthwhile to vaccinate a child at any time, QOF criteria is very tight. You will not be able to catch up at the end of the year as you may do with other indicators. The 'QOF last chance' filters are designed to focus your attention on children where you are about to lose your chance to get QOF points if you do not vaccinate them now.

- **'VI001 - 1st', 'VI001 2nd' & 'VI001 3rd'** list children who are approaching the QOF deadline for their first, second and third polio-containing vaccine doses. You must administer three doses by 8 months - if you do not administer the first dose by 6 months, and the second dose by 7 months, you will not be able to fulfil the QOF criteria.
- **'VI002'** lists children who are approaching the 18 months of age deadline for receiving a first dose of MMR.
- **'VI003'** lists children who are approaching the fifth birthday deadline for receiving two MMR vaccinations plus the 4-in-1 pre-school booster that contains polio.

More information on QOF is available on the CEG website **'GP Contract Guidance' page**.

Flu

Use the flu filters to manage routine flu vaccination for 2-3 year olds during the campaign from September to March - at other times of the year the patient count will be zero. For children at risk, please use the CEG seasonal flu call/recall searches as you do with adults.

Flu is managed separately from other vaccinations in this tool, so children due a flu vaccine will only show when using the flu filters. They will not not appear in 'due soon' or other recall lists.

How to manage your flu campaign:

- **'Flu vacc recall'** lists children whose parents have not yet declined the flu vaccine this winter.
  1. Select this filter and export the list by clicking 'Export for Accurx' in the top ribbon;
  2. Find and open the csv file the tool has exported. Delete the rows for any children you consider inappropriate to send text messages to;
  3. The file is now ready for you to use in Accurx, where you can send a batch text to all of the children using the Batch Messaging function.
- **'Flu Declined/Contra'** lists all declines for the current campaign so you can review them. Declines for flu are only ever applied to the current campaign, so if a parent declined last winter, the child will not appear in the declined list for this year unless a decline code is re-added.

Step-by-step: Downloading the tool

You only need to do this once

Step 1: Download

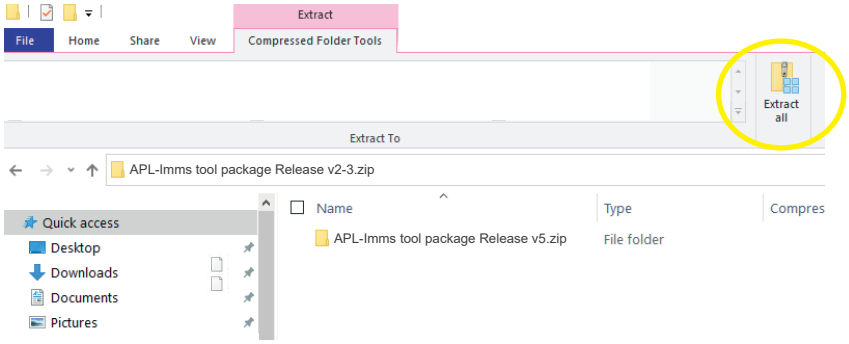
1.1 Download the APL-Imms zip file.

1.2 Double click the zipped file, then double click again.



Step 2: Extract

Click '**Extract all**' to extract the files.



Step 3: Save

Save the files somewhere that is easily accessible and **appropriately secure** because you will be using patient data. This will usually be the practice's shared drive. Don't bury it under too many folders or you might experience issues.

Step 4: Unblock macros

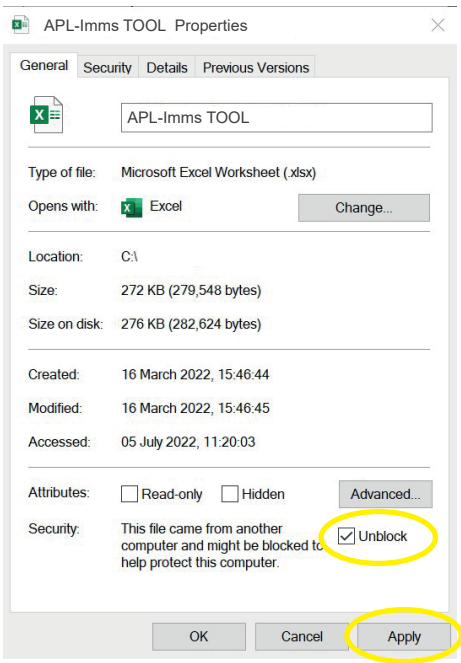
Microsoft has introduced a security feature that blocks Excel macros by default. Macros are automated actions that the tool uses to run - without them, it will not work.

4.1 Right click on the '**APL-Imms TOOL**' XLSM file and select '**Properties**'.

4.2 In the 'General' tab, **tick the box to** '**Unblock**'

4.3 Click '**Apply**'. You must click 'Apply' before 'OK', otherwise the change won't take effect.

If you accidentally click 'OK' without clicking 'Apply', the option will no longer be visible and you will need to download the file again.



Troubleshooting

If you unblocked macros but still find some of the tool functions do not work, add the folder you saved it into as a 'trusted location'. Also see our more detailed guide: How to troubleshoot Excel macro-enabled (xlsm) files. **If you have any problems installing or using the tool, contact your local CEG facilitator for help.**

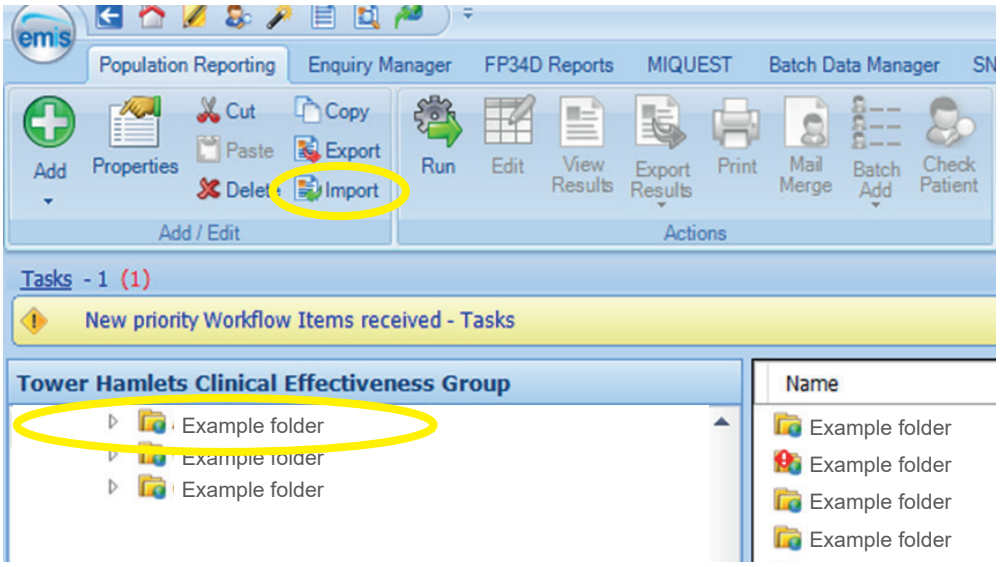
Step-by-step: Using the tool

We recommend doing this weekly

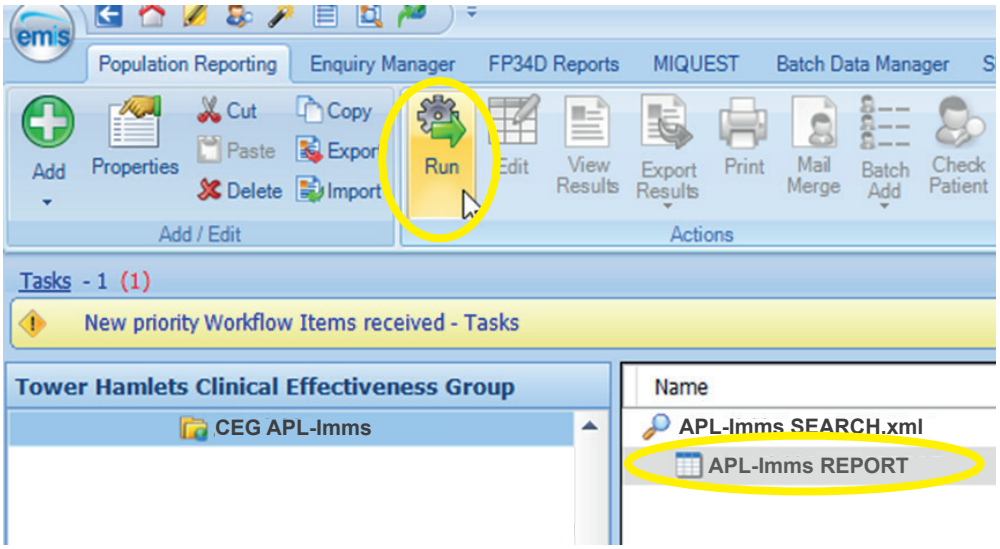
Step 1: Run the search in EMIS

1.1 Open EMIS Web and click '**Population Reporting**' in the Quick Launch Menu.

1.2 Choose a destination folder and click '**Import**':



1.3 Navigate to **APL-Imms SEARCH.xml (EMIS file)**, select the **REPORT** and click '**Run**':

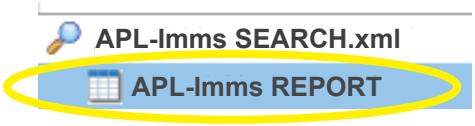


Step-by-step: Using the tool

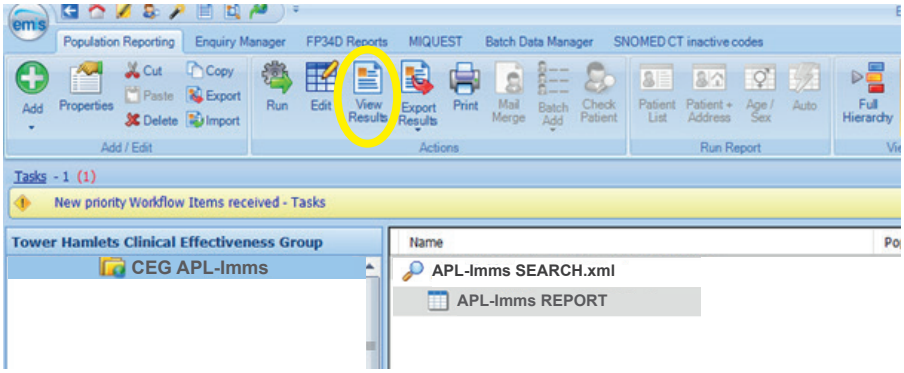
We recommend doing this weekly

Step 2: Export the search results

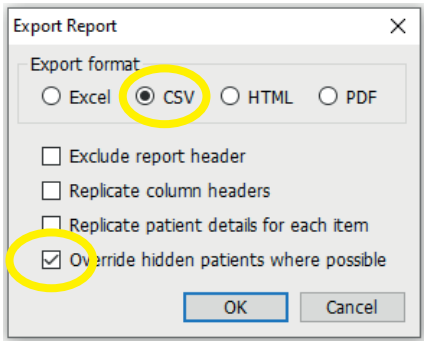
2.1 When the run is complete, select the **APL-Imms Report** (it has a grid icon rather than a magnifying glass):



2.2 Click '**View Results**' in the top ribbon. When the table of patients has loaded, click '**Export**'.



2.3 Choose to export it as a **CSV** and tick the bottom checkbox: '**Override hidden patients where possible**':



2.4 Save your export in a location where you can find it easily and include the export date in the file name.

The APL-Imms download includes a set of empty folders that you can use to organise your files if you wish. It includes one labelled 'csv files from EMIS'.

Important: Patient identifiable data should always be stored on a secure device or network.

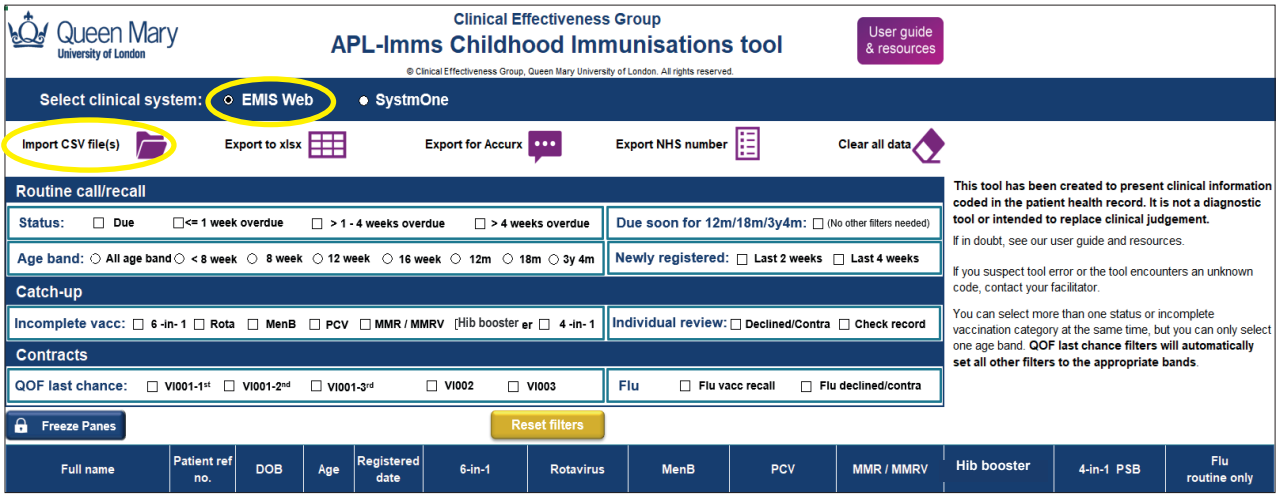
Step-by-step: Using the tool

Step 3: Import data into the tool

3.1 Open **APL-Imms TOOL.xlsm** (Excel file). If you are using MS 365, make sure that Autosave is OFF, and to open the tool in app, not in browser.

3.2 Select **EMIS Web** as your clinical system.

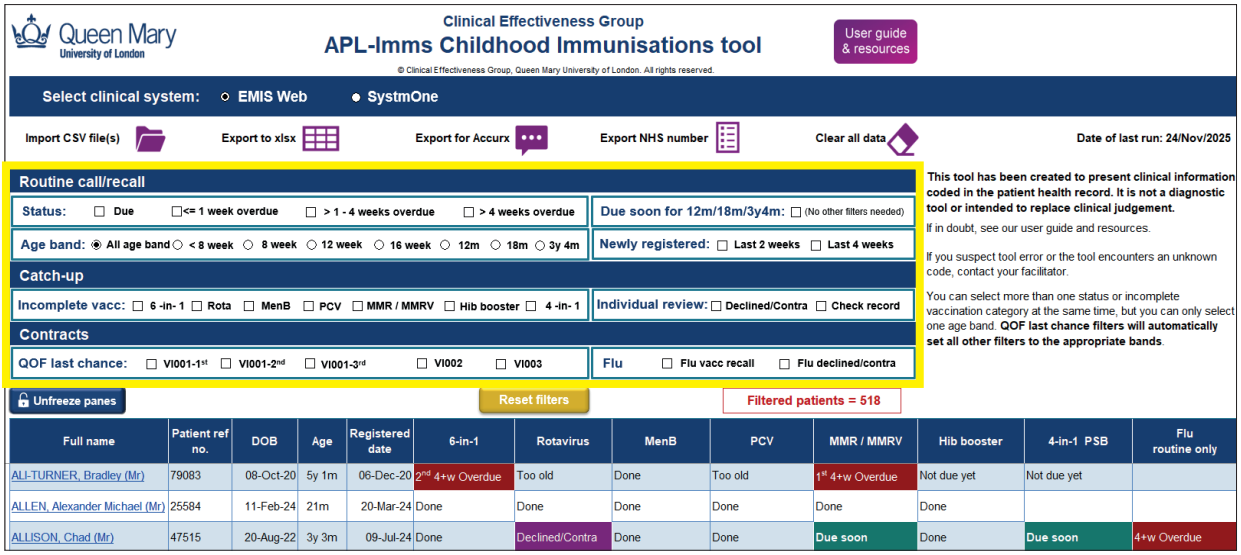
3.3 Click '**Import CSV file(s)**'. Find and select the file you just exported from EMIS Web.



Important: Each time you use the tool, run new reports and import fresh data. A warning will pop up if you try to use data that is more than two weeks old.

Step 4: Create a patient list using filters

Use the **checkboxes** to filter your list. The tool will list all patients who meet the criteria:



See the 'Quick reference guide' section of this user guide for more information about what each filter does, and how you can use them to create different cohorts.

The screenshots do not show real patients, we used a dummy dataset with randomly generated names.

Step-by-step: Using the tool

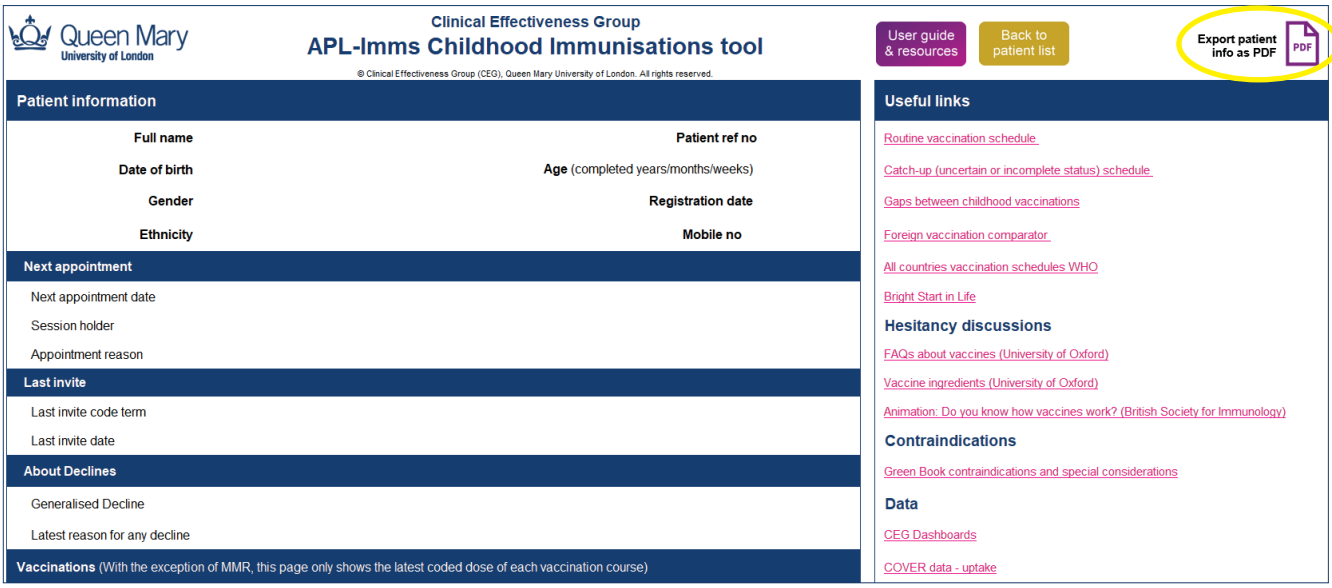
Step 5: Review individuals easily

5.1 Click a patient's name in the list to see more detail from their patient record.

The 'Patient Information' screen pulls relevant details from the patient record, including:

- Registration data
- Next booked appointment
- Vaccination dates or declines
- Last recorded reason for non-vaccination
- Any safeguarding concerns for that child - this will show in red at the top
- Flag for missing ethnicity information.

You can export all this information into a PDF file by clicking '**Export patient info as PDF**'.

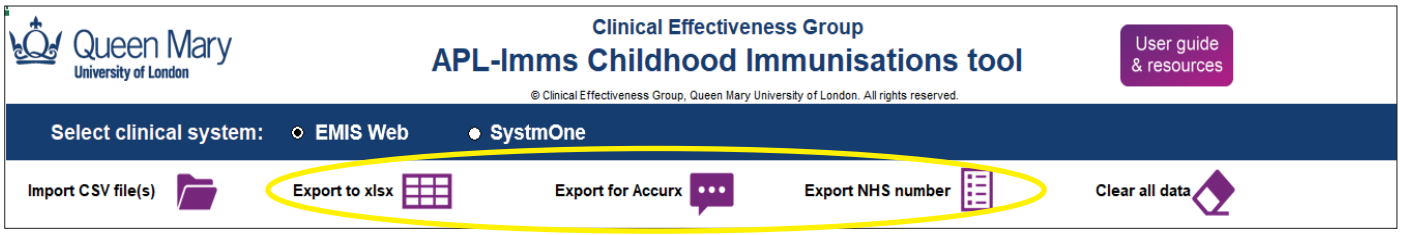


This screen also includes a comprehensive list of useful links to resources, to help with patient conversations, catch-up schedules and more.

5.2 Click '**Back to patient list**' to exit the Patient Information view and go back to your list.

Step-by-step: Using the tool

Step 6: Using your list



Option 1: Print

Click '**File**' then '**Print**'. Set the orientation to landscape and scale to fit.

Option 2: Export as an Excel file

Click '**Export to xlsx**' - You could use this file to add notes of actions taken/to be taken, but these will not go into the patient record.

Option 3: 'Export for Accurx'

To contact patients or arrange appointments.

Remember to use a template to code any actions, including invitations and declines. This will ensure every patient record has a clear, coded history that the tool will draw from next time you use it. In North East London, this is the CEG template: **(RP) Childhood Immunisations CEG**

Option 4: 'Export as NHS numbers' (for advanced users)

This will create a .txt file that you can import back into EMIS to batch add codes, letters, or run child searches or auto reports.

The APL-Imms download includes a set of empty folders that you can use to save and organise your exports. Ensure the folders are placed in a secure location, as the exports will contain patient identifiable information.

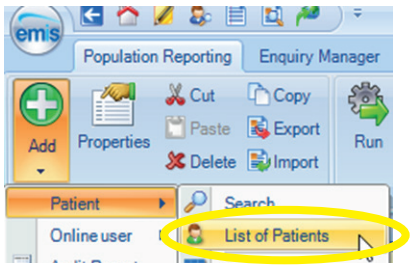
How to import NHS numbers into EMIS Web (for advanced users)

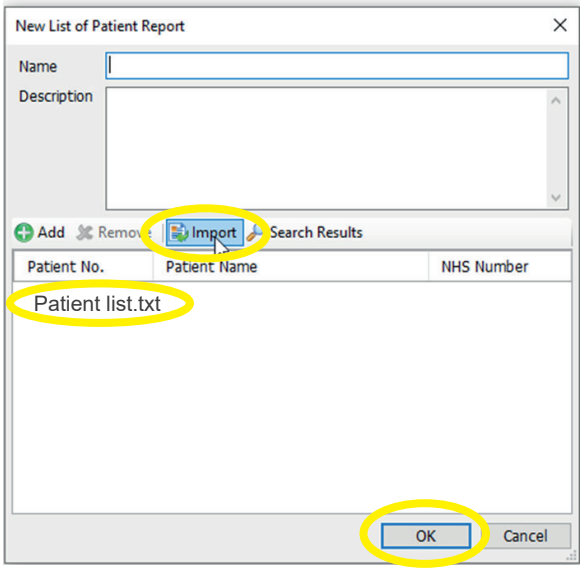
1 Follow **Option 4** above to export your list as NHS numbers.

2 Open EMIS Web and click '**Population Reporting**'.

3 Select a folder of your choosing. Click '**Add**', '**Patient**', '**List of Patients**'.

4 Click '**Import**' and navigate to your .txt file of NHS numbers (repeat if you have multiple lists) then click '**OK**'.





FAQs

Troubleshooting

The search

I can't find the .xml file when I am trying to import the search into EMIS Web

Maybe you have not unzipped the folder. Or you have but you are navigating to the zipped folder rather than the unzipped one.

The EMIS Web search has run but the report has not

This could be because you did not select the whole folder to run, which is the simplest way to do it. If you select the search instead of the folder, you need to click on 'Advanced options' and tick 'run child searches'. Or you can select the report - that way, both the report and search will run.

When I try to export the csv file from EMIS Web, I do not get a dialogue box asking me how I want to export

It may be that you have selected the search, rather than the report. Or it might be that you have selected the report but you have forgotten that you need to 'view results' before exporting.

I have just run the EMIS Web search, but when I try to import the csv file into the tool, the tool says that I am using old data.

You are probably trying to import an old csv. Go to the APL-Imms csv files folder and delete the old files so as not to get confused.

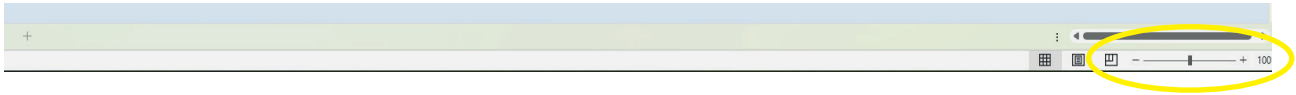
I cannot import the csv file into the tool, even though I can see it is there and has today's date.

It could be that you left EMIS Web too early, without closing the 'View results' screen. If you leave too early, you might have left a dialogue box open and the data will not export fully.

The tool

The writing in the tool is too small, I can't read it

In the bottom right of the tool there is a sliding scale where you can make it bigger:



Why are the filters not working?

Make sure you unblocked macros straight away after downloading the tool. Macros are automated actions that the tool uses to run - without them, it will not work. See Step-by-step: Downloading the tool, within this guide. We also have more detailed information on our website: How to troubleshoot Excel macro-enabled (xlsm) files.

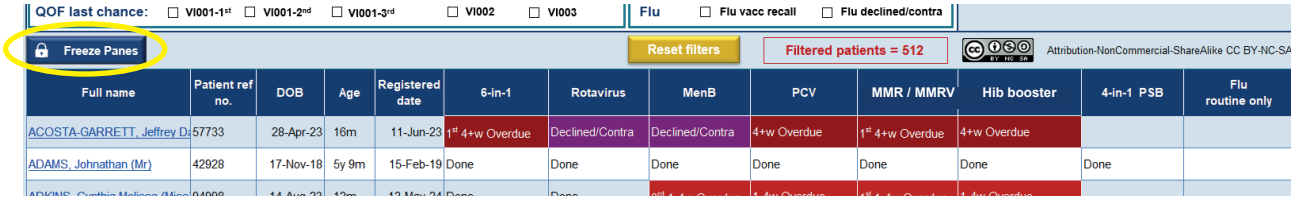
I have three babies who are registered with us and have had immunisations, but they are not appearing in the tool.

There is probably a delay in the GP Registration Links. EMIS Web does not consider a patient registered until their status moves from 'Application form FP1 submitted' to 'Notification of registration'.

FAQs

Sometimes the tool does not pick up all children who are due immunisations, why?
This should never happen if the coding in the child's record is correct and the vaccination has not been declined. If you find any cases where someone is unvaccinated and not on the calling list or on the declined list, please contact your local CEG facilitator so that we can investigate.

When I scroll down the list of patients in the tool, the table headings disappear
Click 'Freeze panes' to freeze the top row, which contains the table headings. Click again to unfreeze. From version 3, the header in the Excel output is automatically frozen.



General use

How often should I run the tool?
We recommend that you run it weekly.

Do I need to set up a relative run date when running the searches in EMIS Web?
No, because you want the most up to date data available, that is today's date.

Can more than one person in the practice use the tool?
Yes, you should keep the tool in a shared drive so that all staff involved can access the tool and the outputs that you create.

Do you recommend saving the tool when you use it?
No, there is no need to 'save' the tool, as every time you use it you need fresh data. What you can save instead is Excel outputs.

Do I have to submit the tool anywhere?
No, this is not an invoicing tool or a tool to prove that you have done something. This is a tool to help you manage childhood immunisation call and recall by generating patient lists.

Can I just use the clinical system search results directly instead of importing it into the tool?
No, the export from your clinical system will contain the details of **all** children aged 0-5. The tool will manipulate that data and allow you to filter children who need to be called in.

Will this tool help us understand foreign language immunisation records brought in by parents?
Not directly - the tool cannot translate into English. But it does include a link to the UKHSA UK and international vaccination comparator tool, which is very helpful. The CEG clinical data entry template also

has a dedicated page that allows for coding international vaccinations. The APL-Imms tool will then look at the coded data and apply an algorithm based on UKHSA guidance for vaccination of individuals with uncertain or incomplete immunisation status.

Features, filters and flags

Can I see when a child's next appointment for vaccinations is booked?

Yes, it is in the 'Patient Info' tab for each child - this is a new function for version 3. You can see when the next appointment is, who it is with, and the reason (if it has been recorded). If there is more than one appointment booked, you will only see the details of the next one.

Why would you want to export the data from the tool into Excel?

One of the main reasons is so that you can create and save a specific recall list (for example, children needing MMRV vaccination). You could save the export in the folder we have provided and alert another member of staff who is in charge of reviewing it or making phone calls to the parents.

What is the purpose of the 'Under 8 weeks' filter?

You can use it for two purposes: One, for checking that all your mothers who have delivered have registered their newborn babies. Two, to make sure they have an appointment booked for their primary immunisations.

What is the difference between 'done too young' and 'done too soon'?

'Done too young' means that the vaccine was given before the recommended age. 'Done too soon' means it was given without respecting the recommended gap between doses. In APL-Imms version 3, these flags only appear if the gap is so short, or the age so young, that the dose should be re-administered according to clinical guidance.

Will vaccinations done too young or too soon affect our payments?

A first MMR given even one day before their first birthday will not count for QOF or COVER. The Hib booster, the PCV booster and the Men B booster before their first birthday do not count for COVER. A DTP/IPV pre-school booster before three years and four months does not count for COVER either.

Does the tool look at the timeframe between vaccinations?

Yes, it does. That is why, for example, a child aged 14 weeks might show as 'next dose not due' for their second primaries, which should in theory be given at 12 weeks. It would mean that the first primaries were given late and therefore you need to wait until four weeks have passed.

I would like a way to exclude patients who have declined immunisations, and only see a list of patients who are eligible and have not declined

This is exactly how the tool works. For example, if you click the 'MMR/MMRV' filter, the tool will give you a list of all children who have an MMR/MMRV vaccine due or overdue who have not declined.

Can I see if a child is on the Child Protection register?

If a child is on the Child Protection register, a red banner will appear on their 'Patient Info' tab. The child protection entry also appears in the Excel output.

FAQs

Does the process of importing new data into the tool overwrite all the existing data?
Yes, it does.

Unexpected results

I have picked the filter 'due this week' and some children have 'overdue' warnings. Why is this?

The filter will pick up all children with at least one 'due this week' warning, but those children might also have other overdue warnings for different vaccinations.

What triggers the 'Check record' warning?

This displays when the tool encounters data that it cannot process. For example:

- There is a second dose of MMR recorded but no record of a first one (either because there isn't a first one recorded, or because the first one was given before their first birthday - MMR doses given before the first birthday should be discounted so are not picked up by the tool).
- An unusual foreign vaccine schedule does not allow the tool to work out what should happen next.
- A vaccine has been given too young (before the absolute minimum recommended age) or too soon (without waiting the minimum recommended gap). The 'Too Young' or 'Too Soon' flags in version 3 only come up if the clinical guidance advises that the vaccine should be readministered, or if there is no clinical guidance on how early would be acceptable.

When you see this warning, you need to to look at the original patient record in detail.

I have a baby registered temporarily, who is up to date with their immunisations but does not appear in the tool.

Our tools, like QOF searches and most other similar tools, only pick up 'currently registered' regular patients. So temporary patients will not be included.

There is a child who has only had their first PCV but not the second; however, the tool does not indicate that they need to be called in for their second PCV

This would be because the child was given their first PCV on or after their first birthday. In a catch-up regime for children aged one, one dose of PCV is enough.

The child is now too old to have a rotavirus (or Men B or PCV) vaccine, what should I do?

No need to code a contraindication or anything else, the tool knows it is too late to administer and they will not come up in recall lists, they will show up as 'too old':

6-in-1	Rotavirus	MenB	PCV	MMR / MMRV	Hib booster
Done	2nd Too old	Done	Done	Done	Done
2nd 4+w Overdue	Too old	Done	Too old	1st 4+w Overdue	4+w Overdue
Done	Done	Done	Done	Done	Done

FAQs

I have recorded a 5-in1 vaccine (DTaP/Hib/HepB) from abroad, which is different from the 5-in-1 we used to administer in the UK (DTaP/IPV/Hib) but it has not been picked up by the tool. Why?
Currently, QOF does not allow for a separate polio vaccination, so neither do we. The most likely reason QOF does not allow it is that in most countries where polio is given separately, it is given as OPV rather than IPV. OPVs given since 2016 are bivalent and do not protect against wild polio virus (polio virus type 2), IPV is trivalent; this is why the UKHSA does not count them and expects practices to administer IPV, which would be in the form of a 6-in-1.

I have a child whose parents declined all primary vaccinations when they were babies; they are now almost a year old and they are coming up in our recall lists rather than the declined lists. Why?
This is because we are giving the parents the chance to change their minds at two points: just before the one year vaccinations and just before the pre-school vaccinations. If they decline again and you code it, they will once again move from the recall list to the declined list.

The warning flag for the pre-school 4-in-1 for a child aged four shows as 'Not due yet'
This would be because the child has not completed their course of primary vaccinations yet or it has not yet been a year since their third hexa.

The tool says a child is missing MMR, but the clinical record says they have had it.
This is probably because the vaccine was administered before the recommended age (before their first birthday). Clinical guidance says MMR vaccines given before a child's first birthday should be discounted.

The tool is not telling me whether the child is due MMR or MMRV.
That is because all children due an MMR from January 2026 under the routine childhood immunisation schedule will receive MMRV instead.

The tool is telling me that a child aged 3 years 4 months is due a hexa under the pre-school booster header.
This would be because they missed their Hib booster when they were younger. This hexa will act both as a Hib booster and a pre-school booster.

Question not answered here?

Please **contact us**. Practices in North East London: please contact your local CEG facilitator directly, who is available to support you.

Visit our website for:

- **Additional guidance on managing childhood immunisations with APL-Imms** (including hesitancy)
- **Childhood immunisations GP contract guidance** (including QOF, Hep B and Measles)

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