



Queen Mary
University of London



APL-NDPP
**Diabetes prevention
invitation and referral tool**

User guide for EMIS Web



Clinical Effectiveness Group
Queen Mary University of London

About

Systematic invitation and referral

APL-NDPP is designed for use within GP practices. It identifies patients who are eligible for behaviour change programmes through the [NHS Diabetes Prevention Programme](#). Using the tool, practice teams can quickly list eligible patients and prepare a prioritised list to invite. The tool will support you to:



Prioritise

- Rank patients according to the number and importance of their relevant risk factors,
- Filter patients according to whether they have already been referred or not, or have declined referral,
- Re-import the filtered list into your clinical system to batch add codes or send appointment messages.



Tailor your approach to individuals

- See relevant details for each patient in your list - including overall risk factor score, BMI, ethnicity, age and vulnerabilities - simply by clicking on their name in the tool.

How risk is calculated

The tool displays coded information from patient records and assigns a simple weighting (1 or 2) to a set of risk factors, calculating a total score for each person (maximum score = 9):

- Age: ≥ 65 years = 1
- Area-based Index of Multiple Deprivation (IMD) score Q4/5 = 1
- BMI: 35-39 = 1, 40+ = 2
- Ethnicity: Black or South Asian = 1
- Hypertension = 1
- Pre-existing cardiovascular disease: Ischemic heart disease, stroke/TIA, Atrial Fibrillation = 2
- Vulnerability: Learning disability or severe mental illness = 1

Referral eligibility

APL-NDPP uses the following criteria to identify patients as eligible for referral:

- Aged 18 years or over;
- 'Non-diabetic hyperglycaemia' (NDH), defined as having an HbA1c of 42 – 47 mmol/mol or a fasting plasma glucose (FPG) of 5.5 – 6.9 mmol/l. The blood result indicating NDH must be within the last 12 months to be eligible for referral and only the most recent blood reading can be used;
- Previous gestational diabetes and latest HbA1c <42 mmol/L.

Excludes patients who have:

- Blood results confirming a diabetes diagnosis, i.e. HbA1c of 48mmol/mol or greater or FPG of 7mmols/L or greater, or a previous diagnosis of diabetes (excluding diabetes resolved);
- A pregnancy-related code within the last 10 months;
- Palliative care;
- Eating disorders;
- Severe/moderate frailty;
- Bariatric surgery within the last two years.

About

Supporting elements

APL-NDPP is part of a wider programme of support that CEG provides to GP practices in the North East London NHS region, including 1:1 training and guidance from our team of facilitators. The tool is best used with these supporting elements in place.



Limitations

No replacement for clinical judgement

APL-NDPP is **not a diagnostic tool or intended to replace clinical judgement**. The tool displays information coded in the patient record and can be used to highlight patients who have non-diabetic hyperglycaemia. It does not make management recommendations – these are entirely a matter for the clinician.

Only presents coded information

The tool only presents information that is **coded** in the patient health record. It is important to use it with data entry templates to ensure your activity is coded correctly. In cases where the codes do not clearly describe a patient's risk factors or referral status, clinicians are advised to manually check the patient record for uncoded information which would not be picked up by the tool.

Contact us

If you have any questions or feedback about our diabetes prevention invitation and referral tool, or this user guide, please get in touch:

CEG-feedback@qmul.ac.uk

qmul.ac.uk/ceg

Our postal address is:

Clinical Effectiveness Group
Queen Mary University of London
Yvonne Carter Building
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London E1 2AB

Step-by-step: Downloading APL-NDPP

You only need to do this once

Step 1: Download

Download the APL-NDPP zip file.



Step 2: Extract

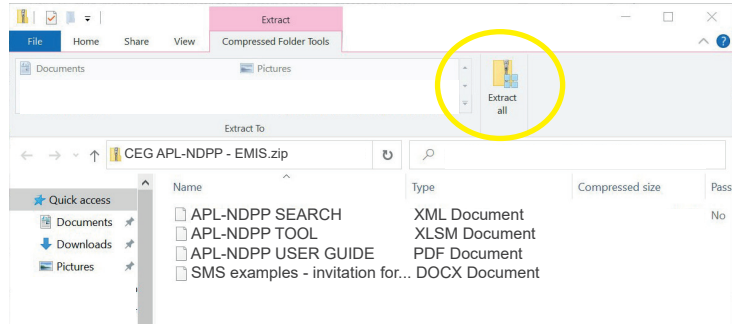
Extract the files:

APL-NDPP SEARCH.xml (EMIS file)

APL-NDPP TOOL.xlsm (Excel file)

APL-NDPP USER GUIDE.pdf

SMS examples (Word document)



Step 3: Save

Save the files in a shared folder so they are accessible to other practice staff, including clinicians reviewing your work. Choose a secure device or network if you intend to save exports of patient identifiable data in the same place.

Our files are saved:

Step 4: Unblock macros

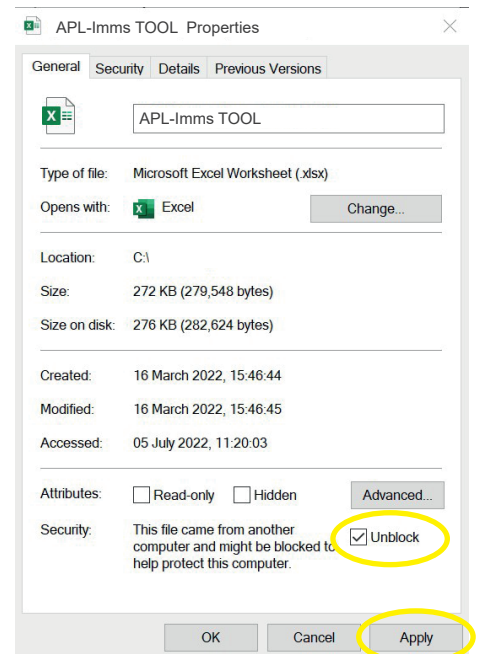
Microsoft has introduced a security feature that blocks Excel macros by default. Macros are automated actions that the tool uses to run - without them, it will not work.

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 affect.

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

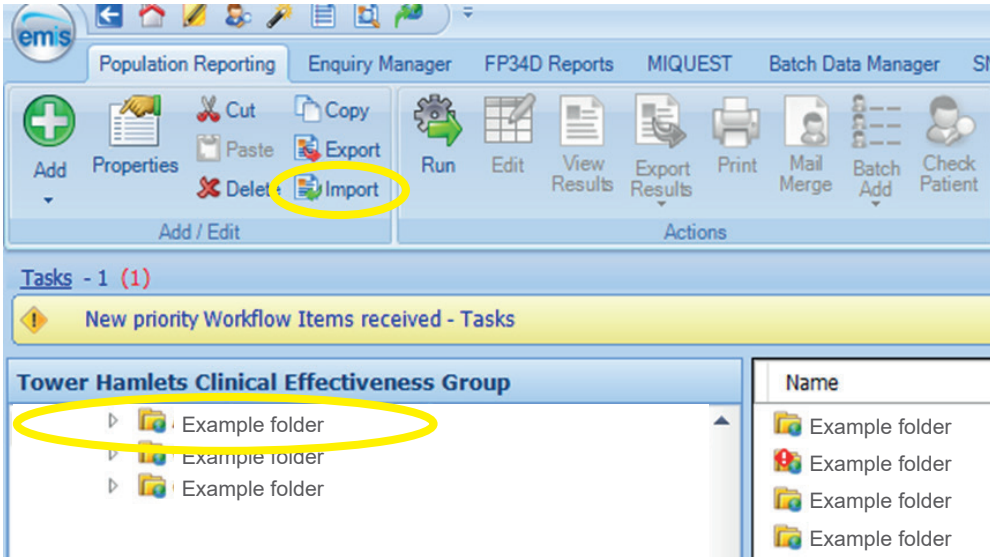
If you unblocked macros but still find that some of the tool functions do not work, add the folder you saved it into as a 'trusted location'. In Excel, click 'File', 'Options', then 'Trust Center', then follow [Microsoft's instructions](#). If you have any problems installing or using the tool, contact your local CEG facilitator for help.

Step-by-step: Listing patients for invitation

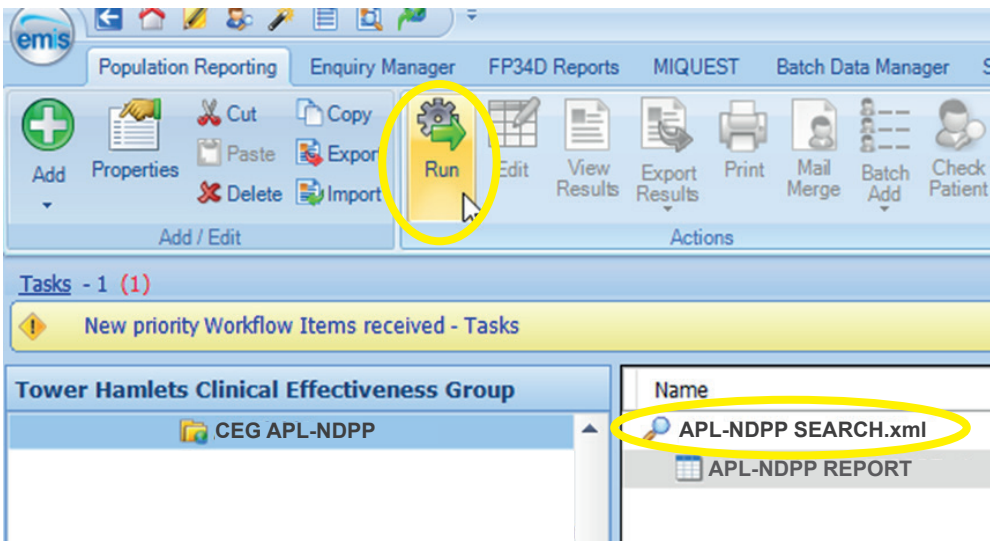
Step 1: Run the search in EMIS

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-NDPP SEARCH.xml (EMIS file) and click 'Run':



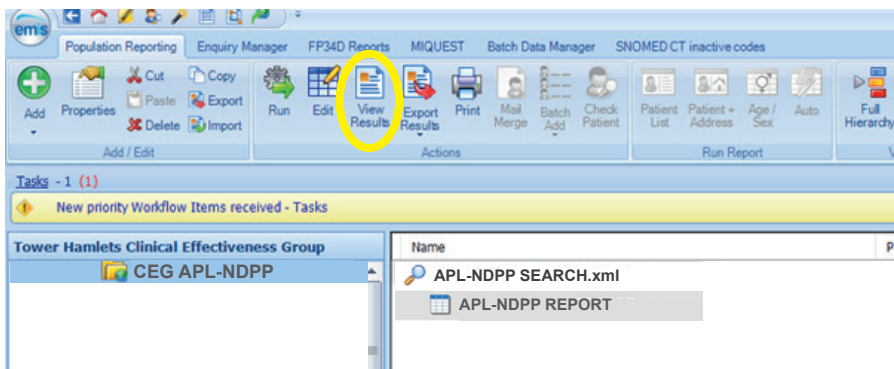
Step-by-step: Listing patients for invitation

Step 2: Export the search results

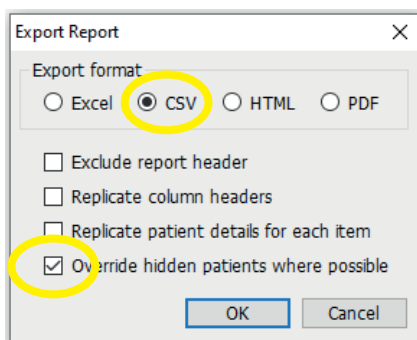
2.1 When the run is complete, select the **APL-NDPP Report** (it has a grid icon rather than a magnifying glass):



2.2 Click '**View Results**'. Then, when the table of patients has loaded, click '**Export**' (now visible in the top ribbon).



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.

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

Step-by-step: Listing patients for invitation

Step 3: Import data into the tool

3.1 Open **APL-NDPP TOOL.xlsm** (Excel file).

3.2 Select your clinical system.

The screenshot shows the APL - National Diabetes Prevention Tool interface. The 'Select Clinical System' dropdown is set to 'EMIS'. The 'Press to locate CSV file' button is highlighted with a yellow circle. The interface shows filters for Referral, Ethnic Group, BMI, and Disease, along with a Practice Summary table and Risk Factors section.

3.3 Click 'Press to locate CSV file'. Find and select the file you just exported from EMIS Web.

The screenshot shows the APL - National Diabetes Prevention Tool interface. The 'Press to locate CSV file' button is highlighted with a yellow circle.

Important: Each time you use the tool, run a new search in EMIS and import fresh data to ensure you are seeing the latest information.

Step 4: Filter the patient list

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

Depending on who you want to prioritise for invitation, you could list patients who have not been referred, who are under 65 years old, with risk factors 5-9 and have a BMI ≥ 40 , for example.

The screenshot shows the APL - National Diabetes Prevention Tool interface with filters applied. The 'Filtered patients = 295' text is highlighted in red. The 'Practice Summary' table and 'Risk Factors' section are also highlighted with yellow circles.

'Filtered patients' shows the number of patients who fulfil all the criteria you have ticked.

'Practice Summary' breaks down the eligible cohort by referral, BMI and ethnicity.

'Risk Factors' shows how patient risk is calculated, to a maximum score of 9.

Step-by-step: Listing patients for invitation

Step 5: Review individuals easily

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

The screenshot shows the 'APL - National Diabetes Prevention Tool' interface. At the top, there are logos for 'ceg' (Clinical Effectiveness Group) and 'Queen Mary University of London'. Below the logos, there are navigation options like 'Select Clinical System' (EMIS, SystemOne) and a warning: 'This tool has been created to present clinical information coded in the patient health record. It is not a diagnostic tool or intended to replace clinical judgement.' There are also buttons for 'Press to locate CSV file', 'Export to xlsx', 'Export' (with OCCURX logo), 'Export NHS number', 'RESET to clear', and 'Date of last run: 26/Oct/2022'. The main area is divided into 'Filters' and 'Practice Summary'. The 'Filters' section includes 'Referral' (Not yet referred, Referred, Declined), 'Age' (< 65, ≥ 65), 'Ethnic Group' (South Asian, Black, White, Other), 'Risk Factors' (0-4, 5-9), 'BMI' (< 30, 30-34, 35-39, ≥ 40), 'Interpreter Needed?' (Yes, No), and 'Disease' (CVD, Hypertension, Gestational Diab?). The 'Practice Summary' table shows statistics for the entire cohort and various BMI and South Asian/Black categories. The 'Risk Factors' table lists ethnicity, deprivation, vulnerability, pre-existing CVD, and hypertension. Below these is a table of patients with columns for Full Name, Patient Reference no., Sex, Age, Ethnic Group, Risk Factors, HbA1c in last 12m, BMI, CVD, Hypertension, Gestational Diabetes?, Referral Status, Interpreter status, and Main Language Spoken. The third row in this table is highlighted with a yellow circle, and an arrow points to it from the text below.

We used a dummy dataset for demonstration purposes, but the full names of patients will appear here.

The **Patient Information** screen pulls relevant details from the patient record, including registration data, type 2 diabetes risk factors and result and date of their last HbA1c and/or fasting blood glucose.

The screenshot shows the 'Patient Information' screen. At the top, there are logos for 'ceg' and 'Queen Mary University of London'. A 'BACK' button is circled in yellow. The screen is divided into several sections. The 'Patient Information' section includes fields for Full Name, Date of Birth, NHS Number, Home/Work Telephone, Main Language Spoken, and Interpreter Status. The 'Total risk factors' section shows a count of 5. The 'NDPP Referral' section shows a referral status of 'Not referred'. The 'Risk Factors' section lists 'CVD (IHD/Stroke/TIA/PAD/AF)' and 'Hypertension'. A 'Legend' section shows color-coded boxes for High Risk (red), Moderate Risk (orange), and Mild Risk (yellow). A 'Risk Factors' section shows a color-coded box for 'CVD (IHD/Stroke/TIA/PAD/AF)'.

5.2 Click 'BACK' to go back to your patient list.

Step-by-step: Listing patients for invitation

Step 6: Export your list for invitation

Option 1: 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 2: Accurx csv file: click 'Export accurx'

This method will create a .csv file that you can import into the Accurx text message system to batch send text invitations to patients.

Option 3: NHS numbers: click 'Export NHS number'

This will create a .txt file that you can import back into EMIS to batch add codes, letters, text messages, or even run searches or auto reports - see step 7.

The screenshot shows the 'APL - National Diabetes Prevention Tool' interface. At the top, there are logos for 'ceg' and 'Queen Mary University of London'. Below the logos, there are navigation options for 'Select Clinical System' (EMIS, SystemOne) and a disclaimer: 'This tool has been created to present clinical information coded in the patient health record. It is not a diagnostic tool or intended to replace clinical judgement.' Three buttons are circled in yellow: 'Export to xlsx', 'Export accurx', and 'Export NHS number'. The interface also includes a 'Filters' section on the left and a 'Practice Summary' table on the right.

	Number	Referred	Not Referred	Declined	Risk Factors
Entire cohort	412	25.5%	71.6%	2.9%	Ethnicity – Black or South Asian = 1
% BMI < 30	256	27.7%	70.7%	1.6%	Deprivation – IMD score Q4/5 = 1
% BMI 30 – 34	94	20.2%	73.4%	6.4%	BMI – 35–39 = 1, ≥ 40 = 2
% BMI 35 – 39	36	25.0%	72.2%	2.8%	Vulnerability – LD or SMI = 1
% BMI ≥ 40	18	16.7%	77.8%	5.6%	Pre-existing CVD – IHD, Stroke/TIA, AF = 2
% South Asian/Black	309	26.5%	70.9%	2.6%	Pre-existing Hypertension = 1
					Age ≥ 65 years = 1

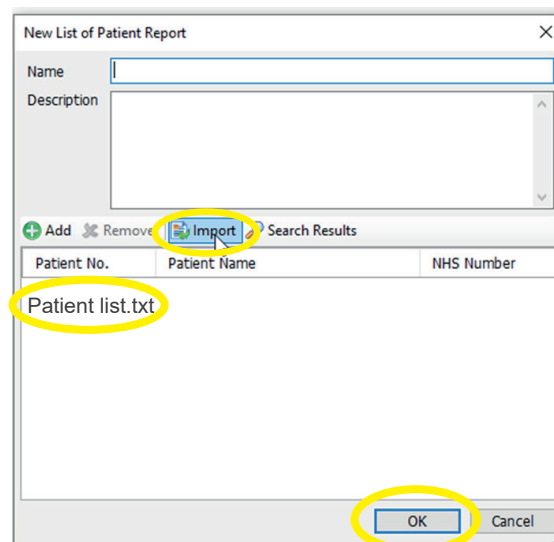
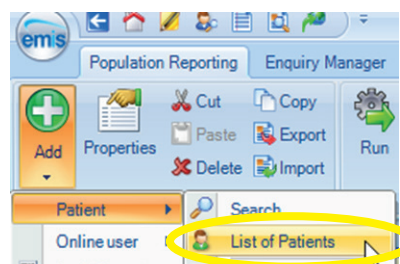
The tool download folder includes a Word document with example SMS messages (written by NHS North East London). The Diabetes Prevention Programme invitation letter is available in Resource Publisher: 'NDPP Invitation Letter CEG (RP)」

Step 7: Import NHS numbers into EMIS

7.1 Open EMIS Web and click 'Population Reporting'

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

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



Tip: Remember to use CEG templates to code any actions, including referrals and declines. This will ensure every patient record has a clear, coded history that the tool will draw from next time you use it.

Clinical Effectiveness Group (CEG)
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