

**Using Health One
to ensure that all hypertensive
patients who take diuretics
have electrolytes checked
annually**

Dr John MacCarthy

How to carry out an audit:

The steps involved are:

1. Choose your topic
2. Define your Aims and Objectives
3. Choose your Guidelines, state your Criteria and set your Standard [Note the criteria are elements of care or activity, which can be measured; your standard (sometimes known as your target) is your desired level of performance and is usually stated as a percentage].
4. Collect your data
5. Analyze and interpret your data
6. Decide on what changes need to be made and implement them
7. Re-audit your practice

1. Choose your topic:

Number of hypertensive patients taking diuretics that didn't have electrolytes checked in the last year

2. Define Aims and objectives:

We wish to ensure that all patients who take diuretics have electrolytes checked annually.

3. Choose your guidelines:

NICE, Quick reference guide, Issue date: August 2011, "Hypertension: Clinical management of primary hypertension in adults"

An annual check is recommended for patient on treatment for hypertension. We will measure percentage of patients taking diuretics who have had electrolytes checked in the last year.

We will set a target of 90%

4. Collect your data

- This will show how data can be collected by HealthOne
- For this data collection an accurate age/sex register is required
- Past Medical History should ideally be recorded in the HealthOne term “problem”
- A basic knowledge of the database search in HealthOne is required

First task is to search for all patient who have hypertension documented in their medical history and take diuretics:

1. Open the population analysis
2. Click New
3. Name the analysis, eg “diuretics and U+E”. You could define a new group called “audits” and keep all your audit searches here

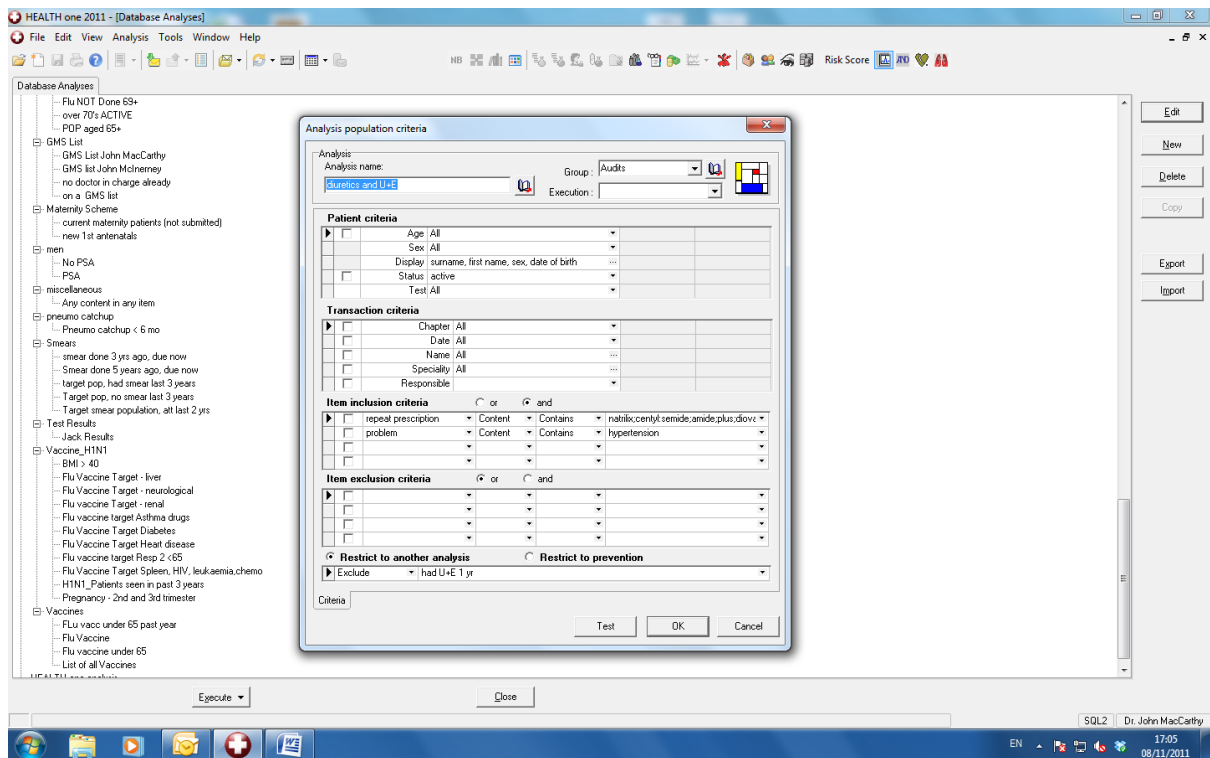
I have restricted my search to status=active patient only. In my practice this will limit the search to my active practice only. If you do not use this feature, you can limit the search using patient category, previously covered in an earlier meeting.

I will look at this in 2 stages:

Stage 1: identifying hypertensive patients who are taking diuretics

I will create a search called “diuretics and U+E” , with item inclusion criteria,

the item repeat prescription with content “natrilix;centyl” AND The item problem content containing hypertension (if you use the item medical history, then select this item for searching instead of “problem”).



Stage 1 Results:

When I clicked “Test”, this produced a list of 28 patient for me. If some or all of my prescriptions are generic, I should include the generic names. I can expand my search to include the drugs I think I may have used.

Adding “semide;amide;azide” to my search - ie item repeat prescription contains “amide;azide” - gives a list of 34 patients. This will also pick up patients who are prescribed glicazide for example

Adding plus and co to my search - ie problem contains “amide;azide;plus;co” gives a list of 123 patients, because this will pick up entries like colpermin, zocor, etc

Just using co-diovan instead of Co, will shorten the list to 60. I will have to analyse this list to exclude patients inappropriately included, eg listed because they are taking glicazide as opposed to a diuretic. This will be dealt with in point 4.

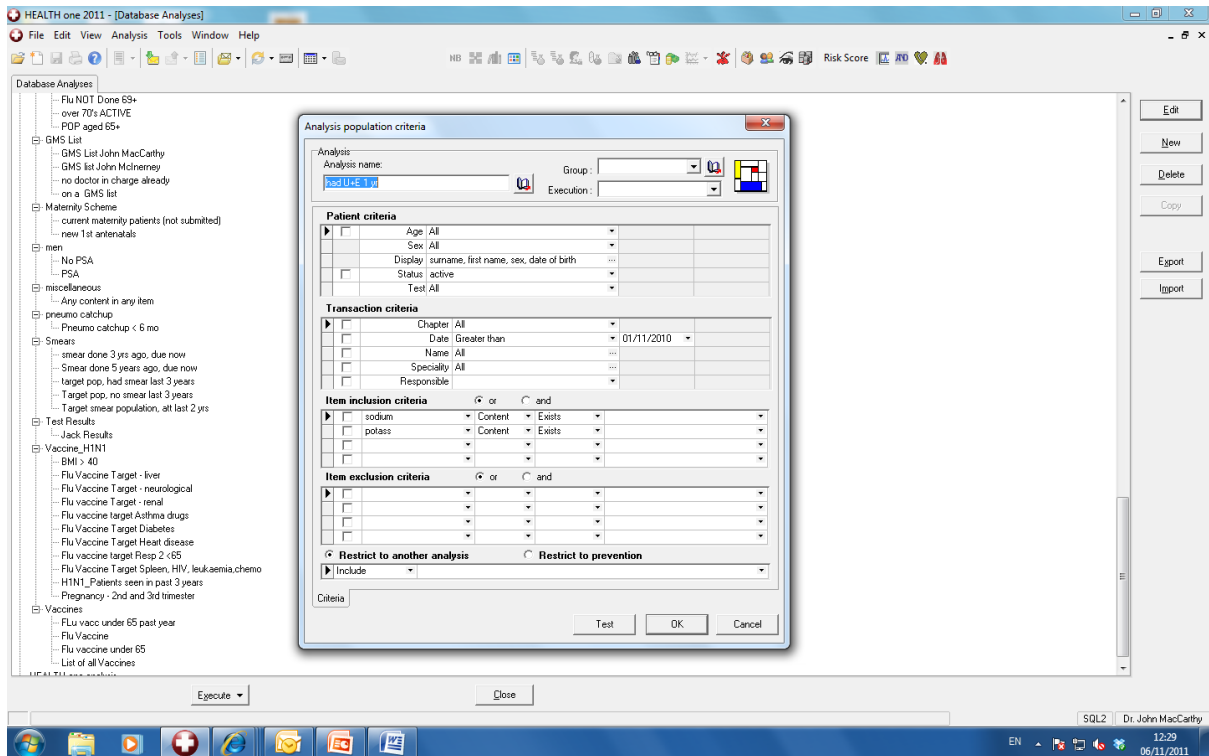
Save the search

Step 2: have electrolytes been checked?

I want to exclude patients who had electrolytes checked in the last year

I will create a new analysis called”U+E done in the last year”, with criteria looking for

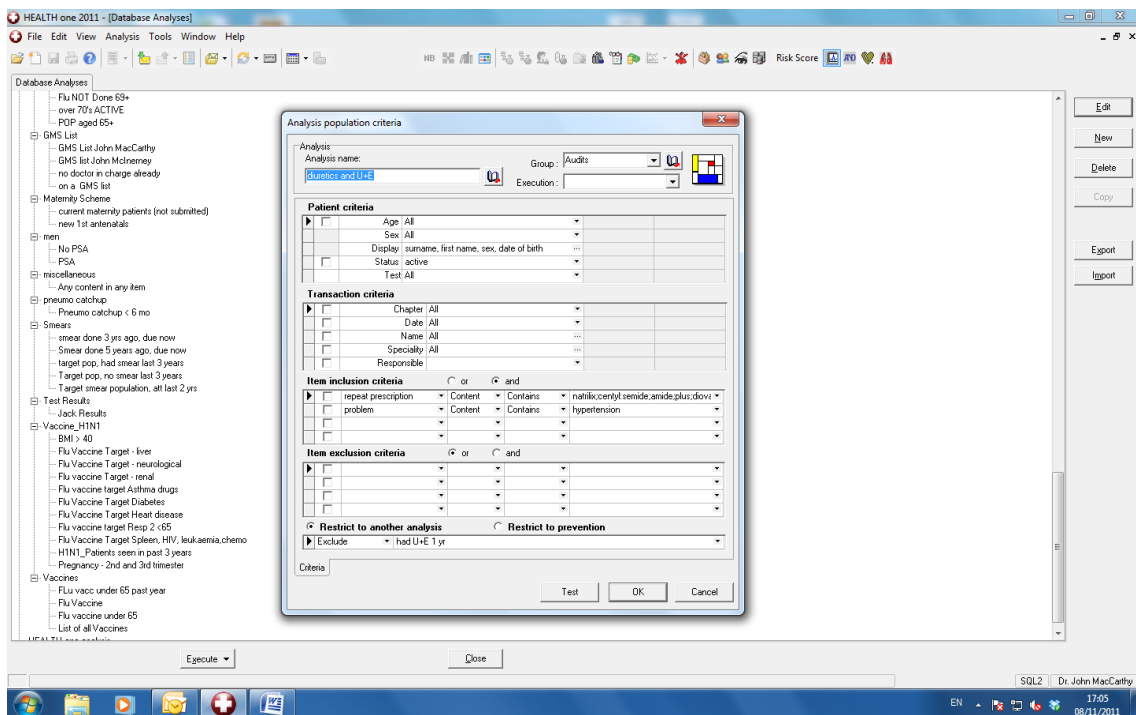
- Transaction criteria with date greater than 1 year ago
- The items sodium, potassium where content exists



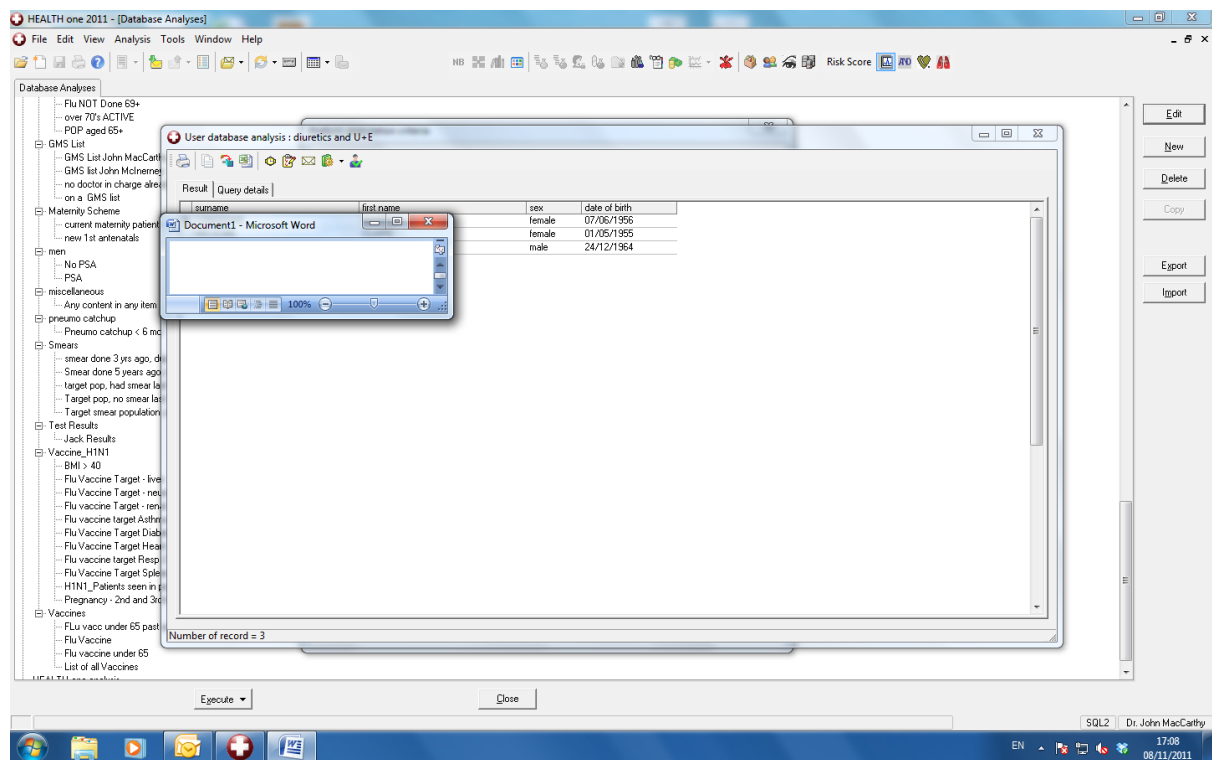
Save and run the search, this will produce a list of 52.

I will now need to combine the searches.

If I open my first” diuretics and U+E” search, and choose to “restrict to another analysis” and set this exclusion as my second search, “had U+E 1 yr” . Click Save, and run.



This will produce a list of people, likely to be taking diuretics but exclude those who had a U+E in the last year.



4. **Analysing your data**

Having run the search, and depending on the amount and type of data you have, you can analyse the data by:

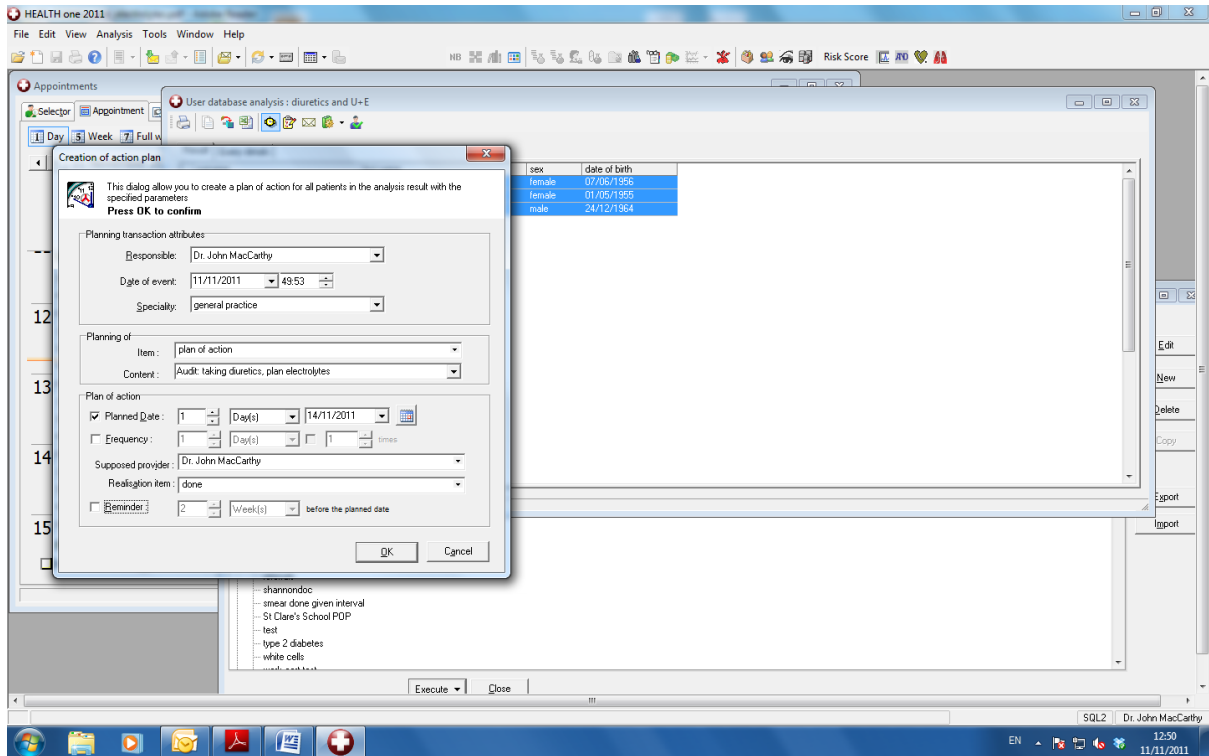
- Clicking on any patient on the list to open their file
- Export the results to excel
- Print the results
- A percentage of patients without electrolytes checked can be calculated

6. **Deciding on change**

If the number of patients without electrolytes checked is below target, you can use Health one to implement change. This may be done commonly by using action plan or mailmerge.

Action plan:

This can be done from search results list, by individually selecting patients or selecting all (see below), or by opening individual patient files and inserting a plan of action



- Creating an action plan will set up an alert on each chart in our target population
- In the Content box type an appropriate message
- To ensure that the action plan becomes immediately active set “planned date” to 1 day, “Reminder” is usually 2 weeks but can be unticked.
- This action plan will be displayed on opening a patient’s chart if HealthOne is configured to do so.
From main menu, select Tools – Options – Action Plan

A list of all “Action Plans” can be seen at any time by choosing the tab to the right of the Patient Selector.

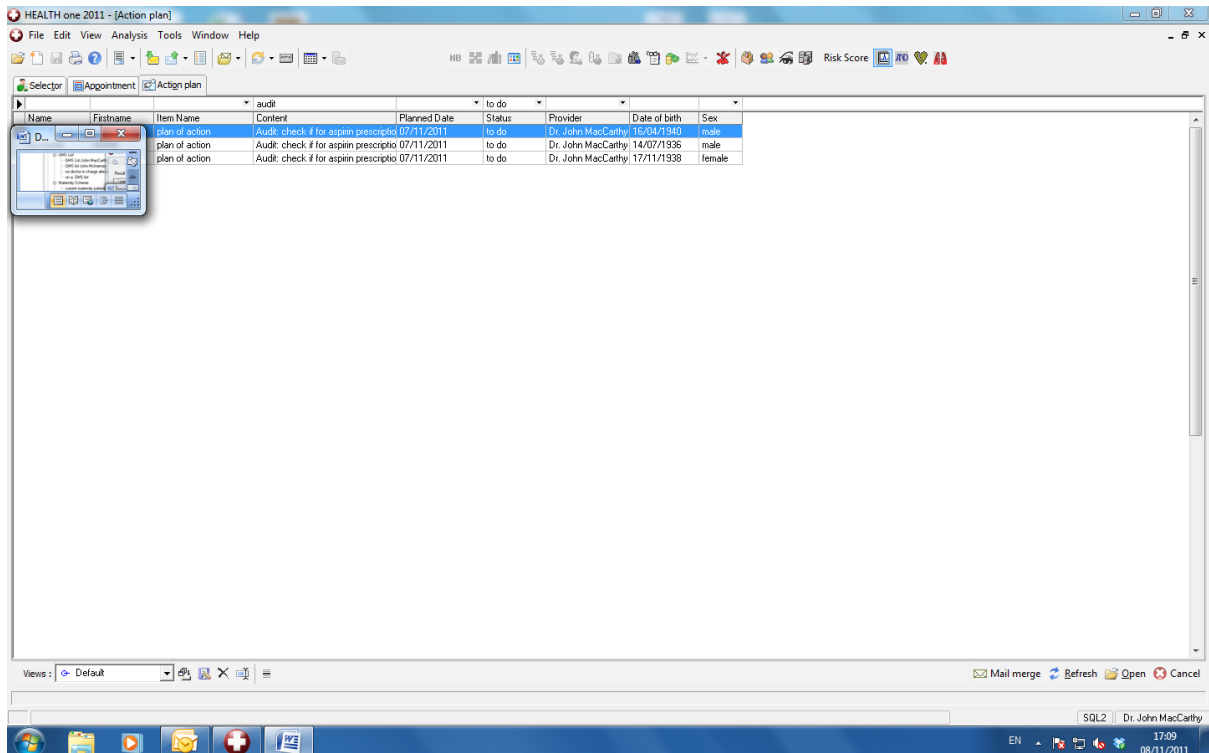
If Action Plan is set up correctly, this reminder will appear when anyone opens the individual patient chart

Mailmerge:

You could send patients who haven't had electrolytes checked a letter inviting them to come in for blood test with the practice nurse

As before, select all patients found by the Search

This time we click on the MailMerge button



This begins the process by which we can easily print individual letters to all the selected patients, inviting them to attend for a blood test

The letter should be prepared in advance (like any mailmerge template letter)

7. Re-audit your practice:

- After a designated period of time, the HealthOne search should be run again, in the hope that we have now reached the target figure for electrolytes checked
- Under the Professional competence scheme, a short report is required for any audit submitted. The results of your HealthOne searches and the measures taken by you, will form an important part of that report

Summary

Audit is about maintaining or improving standards in practice

- It is a requirement for all GPs under the Professional Competence Scheme
- HealthOne can make the processes in audit much easier for you
- Preparing for and doing audits will encourage good practices in using HealthOne.