

Using HealthOne to ensure that patients with hypothyroidism are having thyroid function monitored



Dr. Conor O'Shea

Keys to success

- Keeping your audit projects **relevant** to your practice, short, **simple and easily manageable** is the key to success.
- Choosing a topic is the first step and there should be agreement within the practice that the chosen topic for audit is a **worthwhile** area to study.

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

Use of thyroid function tests in
monitoring patients with
hypothyroidism

2. Define your Aims and Objectives

We wish to ensure that all our patients who are being treated for hypothyroidism are having regular monitoring of their thyroid function

3. Choose your Guidelines, state your Criteria and set your Standard

- Our guidelines on this topic are from the Association of Clinical Biochemists
www.acb.org.uk/docs/TFTguidelinefinal.pdf
- This recommends that all patients receiving thyroxine should have a blood test (TFT) at least annually
- We set a target of 95%

4. Collect your data

- The next few pages will show how data can be collected by HealthOne
- A basic knowledge of the database search in HealthOne is required

Our first task is to identify those patients who are known to be suffering from hypothyroidism

- In “patient criteria” we select all
- In “Item Inclusion criteria” we select either medical history or problem – content contains – hypothyroid; myxoedema

The phrase “hypothyroid” is used to identify either “hypothyroid”, “or “hypothyroidism”. We also include “myxoedema”. These terms must be separated by a semi-colon

We also include a drug search of repeat prescriptions for anyone whose medical history or problem list might not be up to date thyroxine;eltroxin

Tick the boxes to the left to see search result.

- Finally we call this search “hypothyroidism” and save in a group called “Audit” – see title boxes at top of page.

Analysis population criteria

Analysis
Analysis name: Hypothyroidism
Group: Audits
Execution:

Patient criteria

<input type="checkbox"/>	Age	All		
<input type="checkbox"/>	Sex	All		
<input type="checkbox"/>	Display	surname, first name, sex, date of birth	...	
<input type="checkbox"/>	Status	active		
<input type="checkbox"/>	Test	All		

Transaction criteria

<input type="checkbox"/>	Chapter	All		
<input type="checkbox"/>	Date	All		
<input type="checkbox"/>	Name	All	...	
<input type="checkbox"/>	Speciality	All	...	
<input type="checkbox"/>	Responsible			

Item inclusion criteria ☒ or ☐ and

<input checked="" type="checkbox"/>	medical history	Content	Contains	hypothyroid; myxoedema
<input checked="" type="checkbox"/>	problem	Content	Contains	hypothyroid; myxoedema
<input checked="" type="checkbox"/>	repeat prescription	Content	Contains	thyroxine; eltroxin
<input type="checkbox"/>				

Item exclusion criteria ☐ or ☐ and

<input type="checkbox"/>				
<input type="checkbox"/>				
<input type="checkbox"/>				
<input type="checkbox"/>				

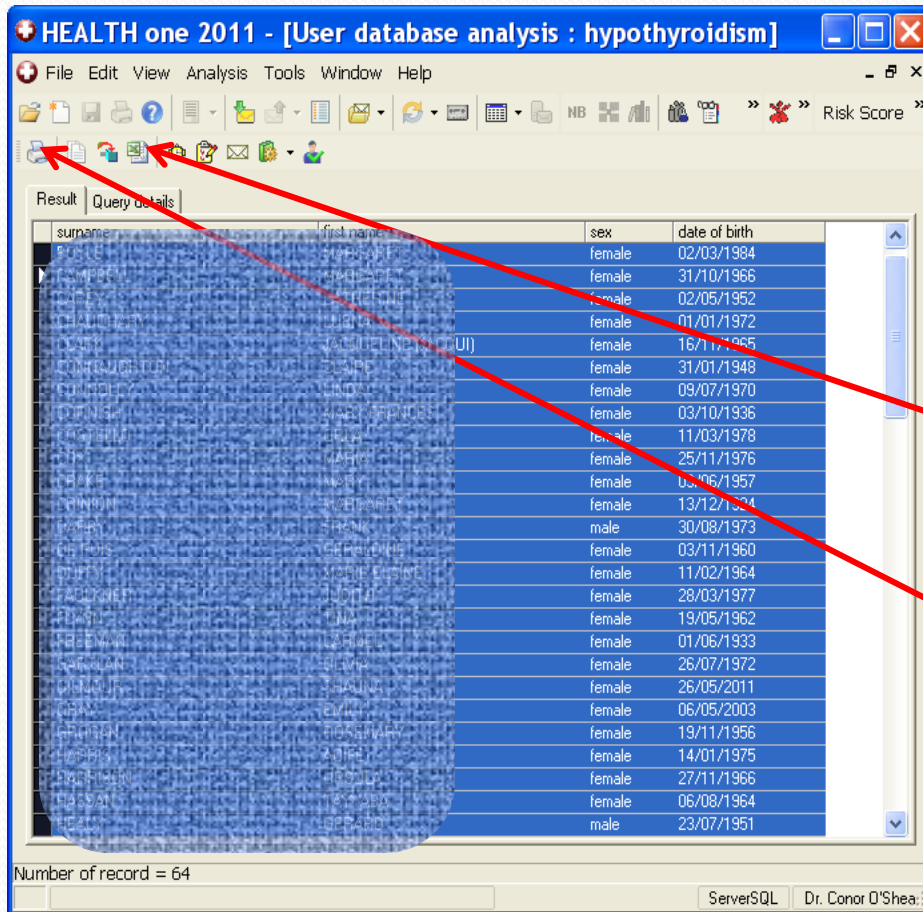
☒ Restrict to another analysis ☐ Restrict to prevention

☒ Include

Criteria

Test OK Cancel

Run the Search



HEALTH one 2011 - [User database analysis : hypothyroidism]

File Edit View Analysis Tools Window Help

Result Query details

surname	first name	sex	date of birth
BOSCH	ELIZABETH	female	02/03/1984
COMPBE	ANNA-MARIE	female	31/10/1966
DE VRIES	ANNEKE	female	02/05/1952
DE VRIES	ANNEKE	female	01/01/1972
DE VRIES	ANNEKE	female	16/11/1965
DE VRIES	ANNEKE	female	31/01/1948
DE VRIES	ANNEKE	female	09/07/1970
DE VRIES	ANNEKE	female	03/10/1936
DE VRIES	ANNEKE	female	11/03/1978
DE VRIES	ANNEKE	female	25/11/1976
DE VRIES	ANNEKE	female	05/06/1957
DE VRIES	ANNEKE	female	13/12/1934
DE VRIES	ANNEKE	male	30/08/1973
DE VRIES	ANNEKE	female	03/11/1960
DE VRIES	ANNEKE	female	11/02/1964
DE VRIES	ANNEKE	female	28/03/1977
DE VRIES	ANNEKE	female	19/05/1962
DE VRIES	ANNEKE	female	01/06/1933
DE VRIES	ANNEKE	female	26/07/1972
DE VRIES	ANNEKE	female	26/05/2011
DE VRIES	ANNEKE	female	06/05/2003
DE VRIES	ANNEKE	female	19/11/1956
DE VRIES	ANNEKE	female	14/01/1975
DE VRIES	ANNEKE	female	27/11/1966
DE VRIES	ANNEKE	female	06/08/1964
DE VRIES	ANNEKE	male	23/07/1951

Number of record = 64

ServerSQL Dr. Conor O'Shea

- Running the analysis will generate a list of all patients with hypothyroidism
- This could be exported to an excel sheet for saving and further analysis
- Alternatively this may be printed off

Check for thyroid function tests

The screenshot shows the 'Analysis population criteria' dialog box. Red arrows point to the following fields:

- Analysis name: TFT
- Group: Audits
- Display: surname, first name, sex, date of birth
- Transaction criteria: Date Greater than Date-1Y
- Item inclusion criteria: TSH
- Restrict to another analysis: Include Hypothyroidism

- This is similar to the previous analysis
- Analysis Type in analysis name e.g “TFTs” and group name “Audits”
- Patient criteria Again all patients
- Transaction Criteria In this case, we could search for the last year only by choosing a date “greater than” “Date-1Y”, however to see all TFTs in the target population, then “All” should be selected in the Date box. Tick to the left to see the dates when the search is run
- Item inclusion criteria In this example we search all patients who have the term “TSH” in their records (in the last year)
- Restrict to another analysis Finally we only want to search our “hypothyroid” group
- Click on “OK” to save the analysis of all patients with hypothyroidism who have had a thyroid function test in the last year

5. Analyze and interpret your data

- We now have a list of patients with hypothyroidism who have had a thyroid function test performed in the last year
- From this a percentage uptake figure can be calculated
- Individual charts may need to be looked at to exclude data entry issues

6. Decide on what changes need to be made and implement them

- If our thyroid function testing in our hypothyroid patients is below target, we need to look at ways of improving it
- HealthOne can help you do this!
Action Plan? – for a chart reminder
Mail Merge? – send them all a letter

Generate a list of those requiring TFTs

- Our final challenge is to generate the list of patients with hypothyroidism who have not had a thyroid function test in the last year
- We do this by repeating our search of hypothyroid patients, but this time we wish to remove those who have had their TFTs done, by using the exclude option

Analysis population criteria

Analysis
Analysis name: Group: Execution:

Patient criteria

<input type="checkbox"/>	Age	All		
<input type="checkbox"/>	Sex	All		
<input type="checkbox"/>	Display	surname, first name, sex, date of birth	...	
<input type="checkbox"/>	Status	active		
<input type="checkbox"/>	Test	All		

Transaction criteria

<input type="checkbox"/>	Chapter	All		
<input type="checkbox"/>	Date	All		
<input type="checkbox"/>	Name	All	...	
<input type="checkbox"/>	Speciality	All	...	
<input type="checkbox"/>	Responsible			

Item inclusion criteria ☒ or ☐ and

<input type="checkbox"/>	medical history	Content	Contains	hypothyroid; myxoedema
<input type="checkbox"/>	repeat prescription	Content	Contains	throxine: eltroxin
<input type="checkbox"/>				
<input type="checkbox"/>				

Item exclusion criteria ☒ or ☐ and

<input type="checkbox"/>				
<input type="checkbox"/>				
<input type="checkbox"/>				
<input type="checkbox"/>				

☒ **Restrict to another analysis** ☐ **Restrict to prevention**

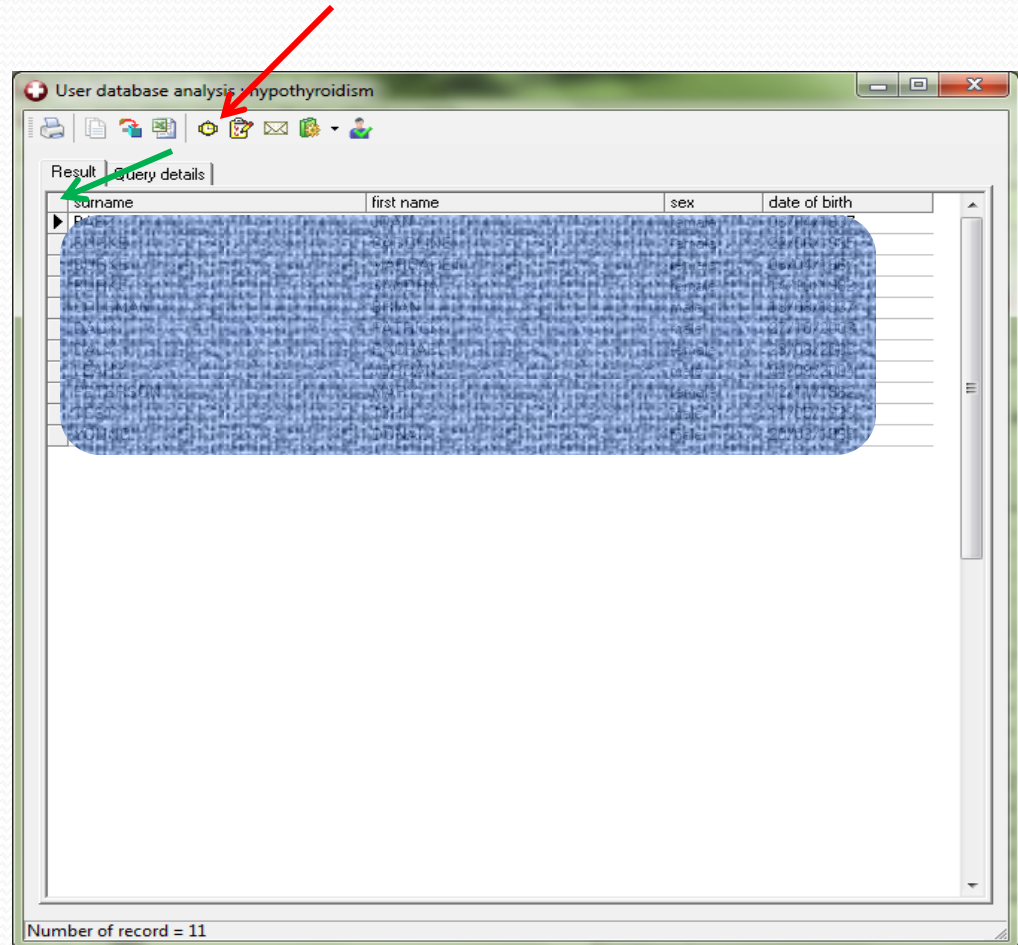
☒ **Exclude**

Criteria

Test OK Cancel

Create a Plan of Action for all?

- One option is to put a “Plan of Action” in to the charts of all patients needing blood tests
- From our Search result click the small box at the top left of the result (green arrow opposite) to highlight all patients found by the search
- Click on the “plan of Action” button (red arrow) to set up individual Plan of Action for each chart



Action Plan

- 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 week, “Reminder” is usually 2 weeks.
- 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
“If a Reminder should be Displayed – Select the Action Plan Tab

Creation of action plan

This dialog allow you to create a plan of action for all patients in the analysis result with the specified parameters
Press OK to confirm

Planning transaction attributes:

Responsible: Dr. Conor O'Shea

Date of event: 03/11/2011 40:34

Speciality: general practice

Planning of

Item: plan of action

Content: check TFTs within last year

Plan of action

☒ Planned Date: 1 Week(s) 10/11/2011

☐ Frequency: 1 Week(s) 1 times

Supposed provider: Dr. Conor O'Shea

Realisation item: done

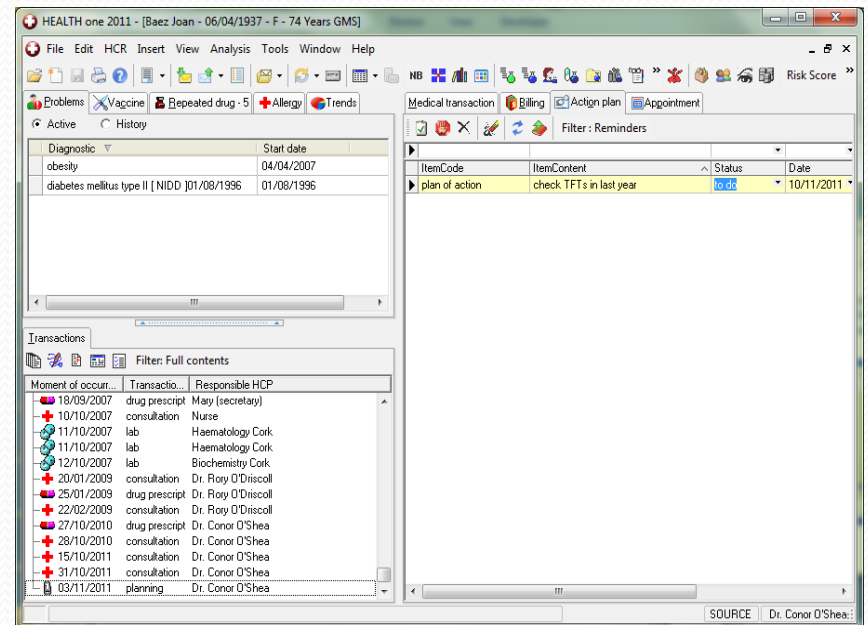
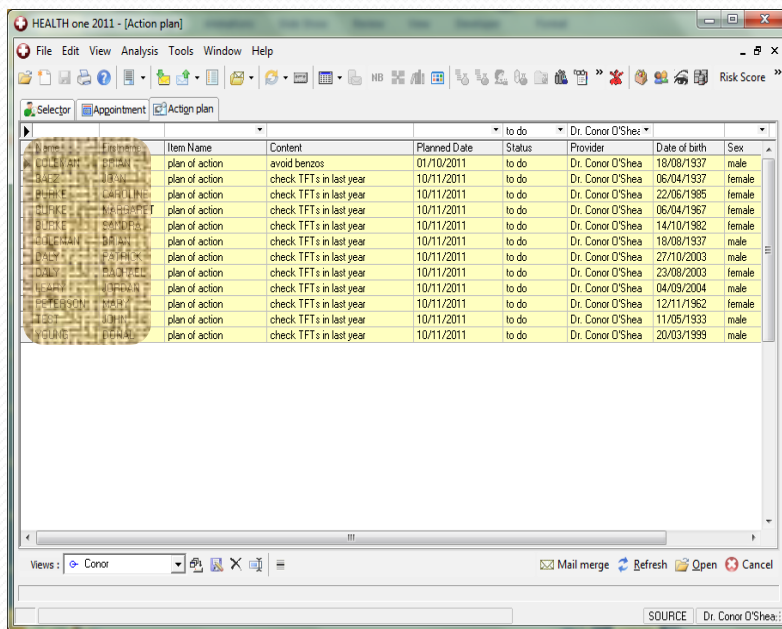
☒ Reminder: 2 Week(s) before the planned date

OK Cancel

Action Plan (continued)

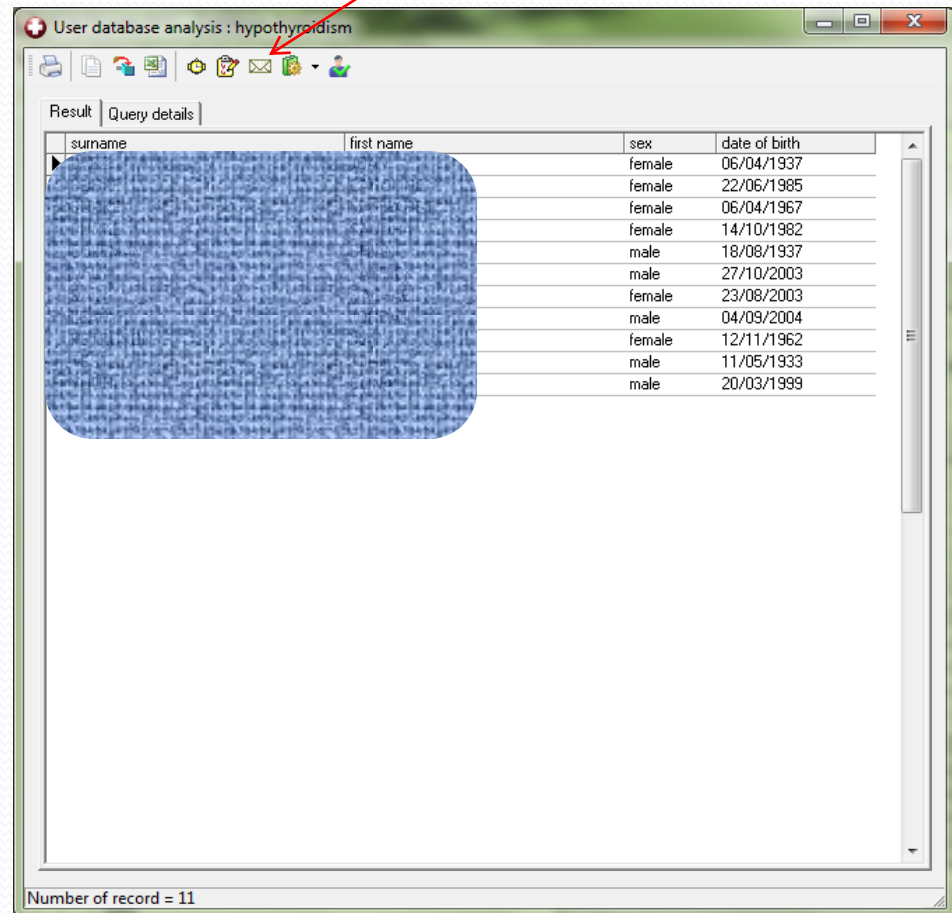
A list of all “Action Plans” can be seen at any time by choosing the tab to the right of the Patient Selector

If Action Plan is set up correctly, this reminder will appear when anyone opens the individual patient chart e.g. when issuing a repeat prescription



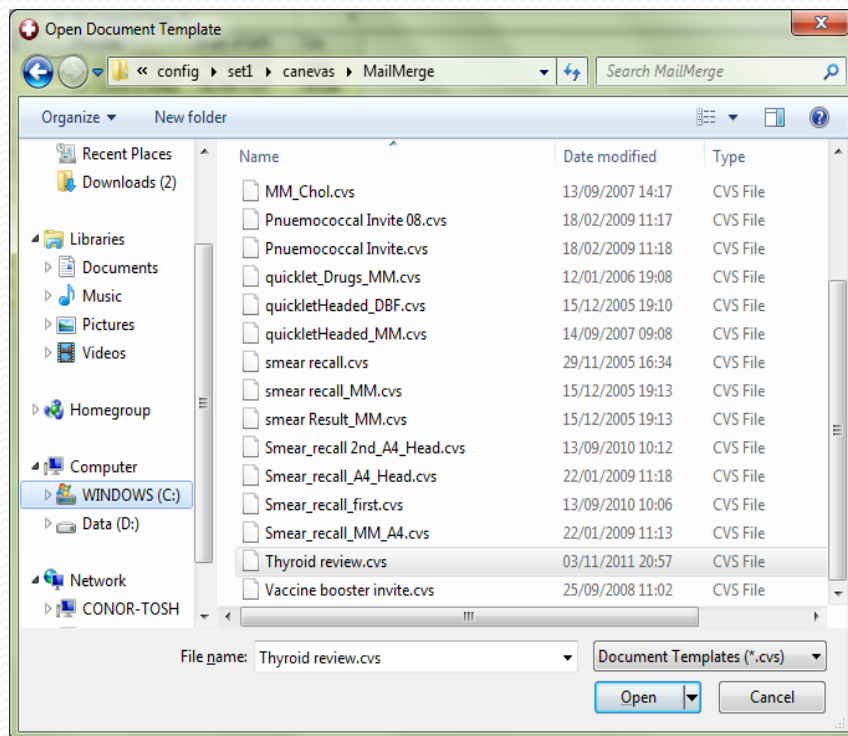
Send patients a letter

- 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 thyroid function tests
- The letter should be prepared in advance (like any hospital referral letter)

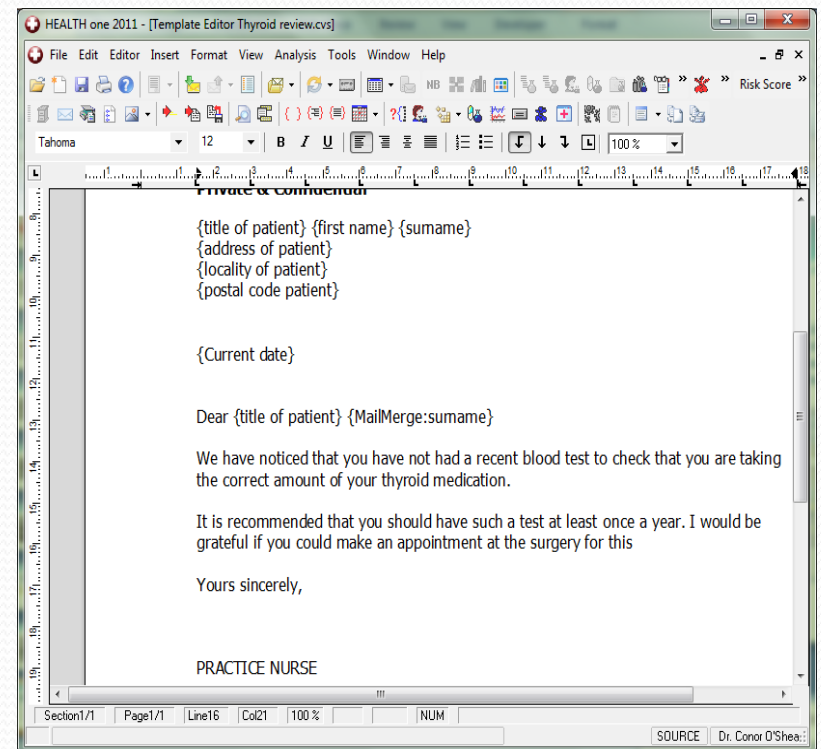


Mail Merge - Continued

Clicking the MailMerge button will send you to your letter template folder from where the appropriate letter can be selected



If your MailMerge letter is formatted correctly, all letters will now be prepared ready for printing



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 thyroid function monitoring
- 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