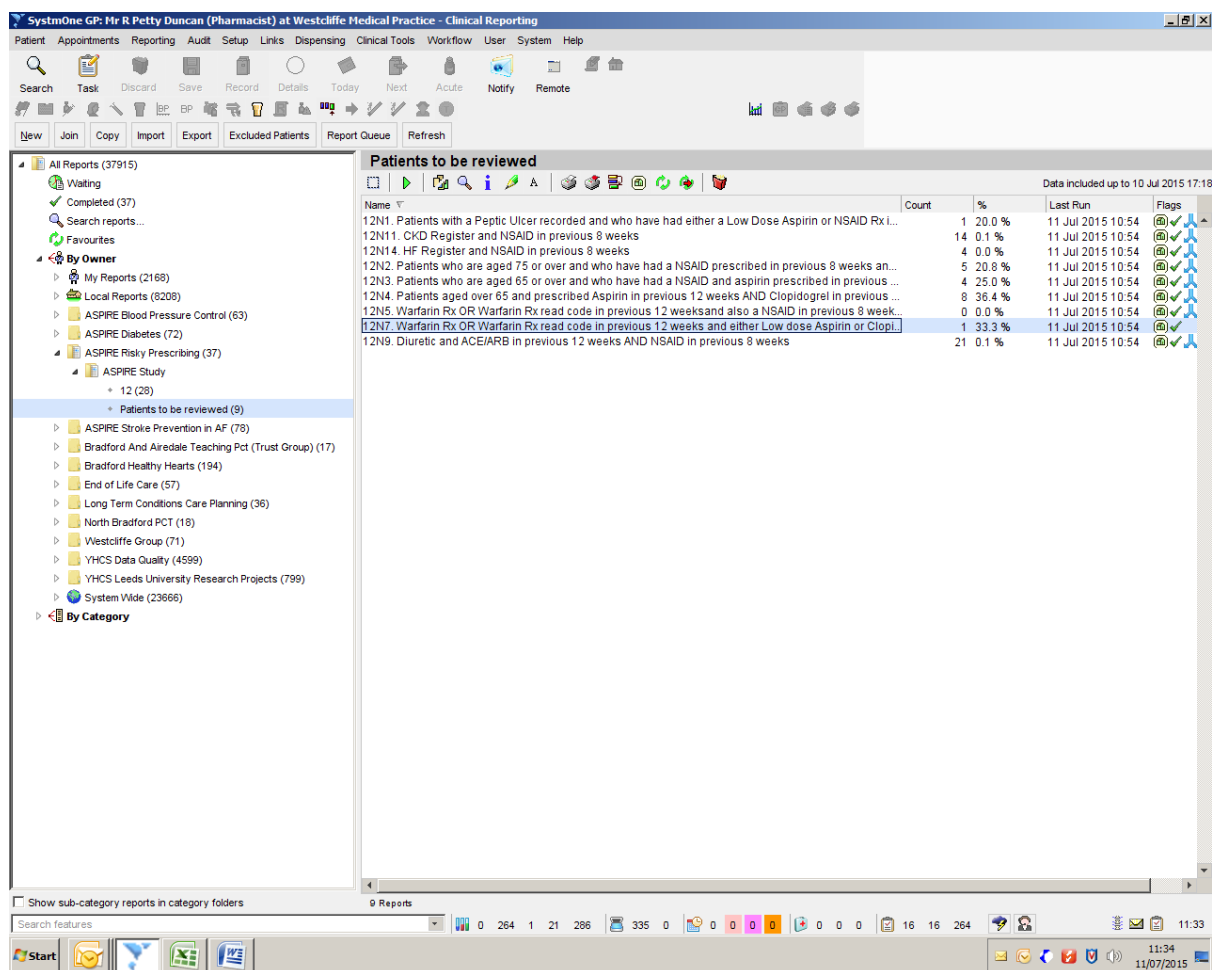


## Assisting prescribers to support safer NSAID prescribing

Patients can be at higher risk of gastrointestinal bleeds from the prescribing of NSAIDs. NSAIDs can also worsen heart failure, chronic kidney disease and are dangerous if co-prescribed with combinations of ACE-I/ARB with loop diuretics, or with warfarin.

We can offer your practice a set of prompts (SystemOne call them “protocols”) to alert prescribers to instances where it might be advisable to co-prescribe gastro protection with an NSAID, or when to stop an NSAID.

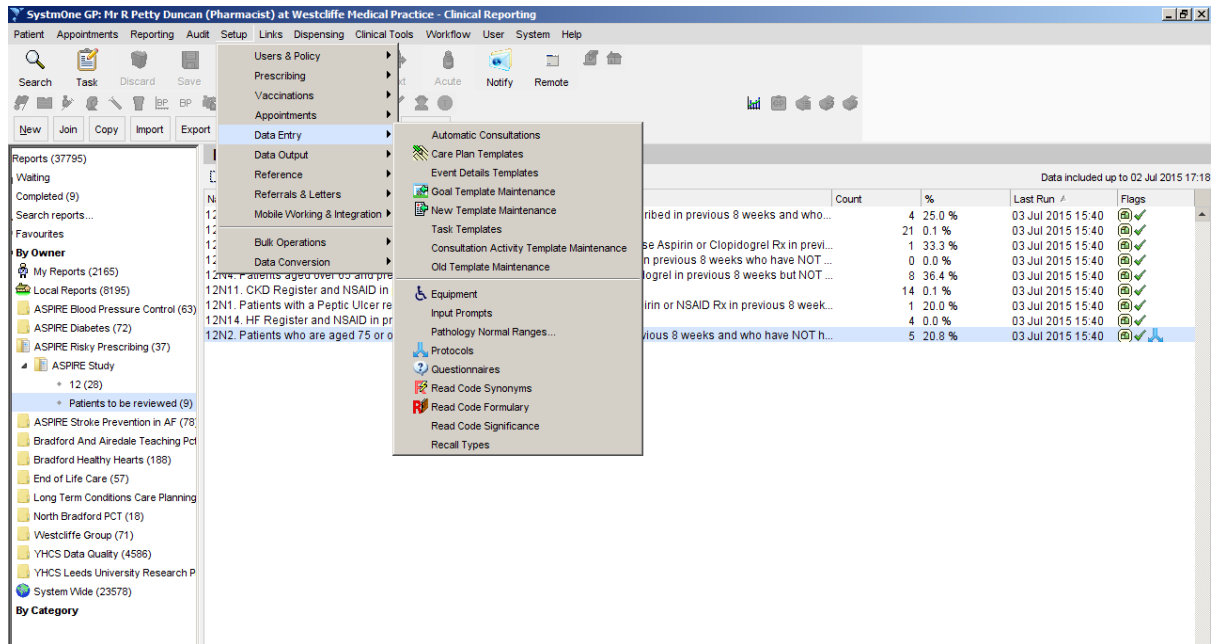
We have provided the practice with searches to identify patients who might be considered to be at risk and potentially in need of review. Where a protocol is associated with a search this is indicated with a blue logo (see below).



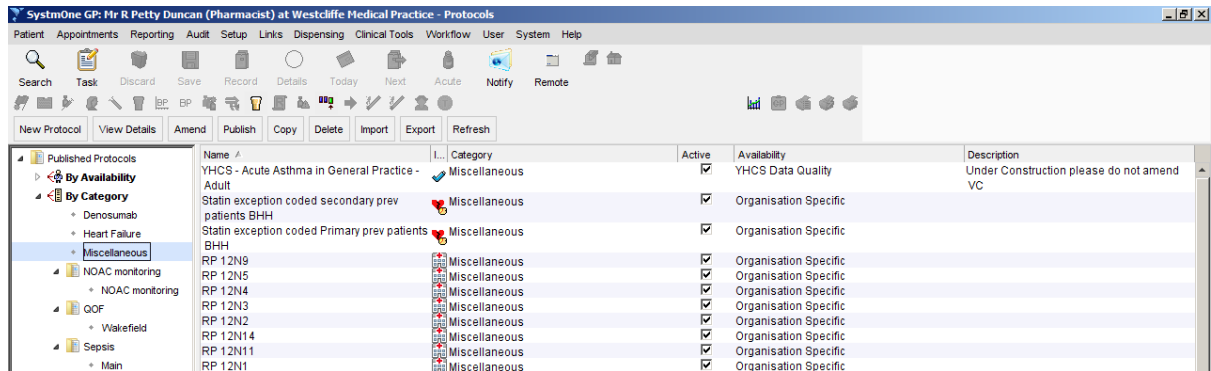
The screenshot shows the SystemOne GP software interface. The main window displays a list of reports on the left and a table of patients to be reviewed on the right. The table includes columns for Name, Count, %, Last Run, and Flags. The report '12N7. Warfarin Rx OR Warfarin Rx read code in previous 12 weeks and either Low dose Aspirin or Clopl.' is highlighted in blue, indicating it is associated with a protocol.

Name	Count	%	Last Run	Flags
12N1. Patients with a Peptic Ulcer recorded and who have had either a Low Dose Aspirin or NSAID Rx i...	1	20.0 %	11 Jul 2015 10:54	[Icons]
12N11. CKD Register and NSAID in previous 8 weeks	14	0.1 %	11 Jul 2015 10:54	[Icons]
12N14. HF Register and NSAID in previous 8 weeks	4	0.0 %	11 Jul 2015 10:54	[Icons]
12N2. Patients who are aged 75 or over and who have had a NSAID prescribed in previous 8 weeks an...	5	20.8 %	11 Jul 2015 10:54	[Icons]
12N3. Patients who are aged 65 or over and who have had a NSAID and aspirin prescribed in previous ...	4	25.0 %	11 Jul 2015 10:54	[Icons]
12N4. Patients aged over 65 and prescribed Aspirin in previous 12 weeks AND Clopidogrel in previous ...	8	36.4 %	11 Jul 2015 10:54	[Icons]
12N5. Warfarin Rx OR Warfarin Rx read code in previous 12 weeks and also a NSAID in previous 8 week...	0	0.0 %	11 Jul 2015 10:54	[Icons]
12N7. Warfarin Rx OR Warfarin Rx read code in previous 12 weeks and either Low dose Aspirin or Clopl.	1	33.3 %	11 Jul 2015 10:54	[Icons]
12N9. Diuretic and ACEI/ARB in previous 12 weeks AND NSAID in previous 8 weeks	21	0.1 %	11 Jul 2015 10:54	[Icons]

To view the protocols go to Setup > Data Entry > Protocols (see below).



The Protocols will appear in SystmOne as shown below, i.e. they all start with RP and are listed in the “Miscellaneous” category”:



You need to ensure the protocols are “published”, i.e. the box in the “Active” column should be ticked.

## What the protocols do

When an attempt is made to prescribe any medicine a pop-up box will appear as shown below. There are several instances where it would be advisable to co-prescribe a PPI alongside the NSAID.

In this scenario below you can:

- Continue NSAID prescribing without PPI cover
- Prescribe a PPI
- Invite the patient in for a review

The screenshot displays the SystmOne GP software interface. On the left is a navigation pane with various clinical and administrative tools. The main window shows a patient record for Mr R Petty Duncan, including a list of medications and their dates. A 'Question' pop-up window is overlaid on the medication list, containing the text: 'Patients aged 75 and over are at increased risk of gastro-intestinal adverse events from NSAIDs. PPIs are effective and safe and should be co-prescribed with an NSAID (NICE Osteoarthritis CG59 2014)'. Below this text are three buttons: 'Continue NSAID without PPI cover', 'Prescribe PPI cover', and 'Invite patient in for review'. To the right, a 'RP 12N2 Protocol' window is open, showing a flowchart with a 'Start' button, a 'Go' button, and a 'Question' box with three options: 'Continue NSAID without PPI cover', 'Prescribe PPI cover', and 'Invite patient in for review'. Each option has an 'Add Code' button and a 'Next' button.

The practice can choose to turn off the prompt at any time at any time by un-ticking the active box.

In other circumstances, e.g. the patient has had heart failure, it would be advisable to consider stopping the NSAID. Here, the options given in the pop-up box are:

- Stop NSAID
- Continue aware of risk
- Invite the patient in for a review

Pressing “pause” pauses the running of the protocol. We suggest that this option is not chosen.

The screenshot displays a clinical software interface with a medication list and a protocol question pop-up. The medication list includes the following entries:

Start Date	Drug	End Date	Notes
16 May 2014	Cand 28 tal		Hypertensive disease (G2...)
16 May 2014	Furo 28 tal		Hypertensive disease (G2...)
16 May 2014	Levothyroxine sodium 25microgram tablets 28 tablet - take one each morning	13 Jun 2014	28 NHS medication
13 Jun 2014	Candesartan 16mg tablets 28 tablet - take one once daily	11 Jul 2014	28 NHS medication
13 Jun 2014	Furosemide 40mg tablets 28 tablet - take one each morning	11 Jul 2014	28 NHS medication
13 Jun 2014	Ibuprofen 400mg tablets 84 tablet - take one 3 times/day When Required	11 Jul 2014	28 NHS medication
13 Jun 2014	Levothyroxine sodium 100microgram tablets 28 tablet - ONE TO BE TAKEN DAILY	11 Jul 2014	28 NHS medication
13 Jun 2014	Levothyroxine sodium 25microgram tablets 28 tablet - take one each morning	11 Jul 2014	28 NHS medication
02 Jul 2014	Candesartan 16mg tablets 28 tablet - take one once daily	30 Jul 2014	28 NHS medication
02 Jul 2014	Furosemide 40mg tablets 28 tablet - take one each morning	30 Jul 2014	28 NHS medication
02 Jul 2014	Ibuprofen 400mg tablets 84 tablet - take one 3 times/day When Required	30 Jul 2014	28 NHS medication
02 Jul 2014	Levothyroxine sodium 100microgram tablets 28 tablet - ONE TO BE TAKEN DAILY	30 Jul 2014	28 NHS medication
02 Jul 2014	Levothyroxine sodium 25microgram tablets 28 tablet - take one each morning	30 Jul 2014	28 NHS medication

The pop-up question box contains the text: "This patient has been prescribed a diuretic and ACE-inhibitor/ARB. The use of NSAIDs, diuretics and ACEis/ARBs has a fatality rate as high as 10%." Below the text are four buttons: "Stop NSAIDs", "Continue basis aware of risk", "Invite patient in for review", and "Pause".

The protocol flowchart on the right shows a "Question" step with three possible paths: "Stop NSAIDs", "Continue basis aware of risk", and "Invite patient in for review". Each path leads to an "Add Code" step, which then leads to a "Next" step.