

SECONDARY PREVENTION OF MI
Aspirin audit - people taking nitrates

**To deliver health gain by promoting the appropriate use of aspirin
by people at high risk of coronary heart disease**

Introducing the Ready-to-go series for Quality Improvement

How often do we do something and think of ways that it could be improved if only....? In a busy practice it is all too easy to continue dealing with the same problems time and time again without stopping to think of solutions. Often the solutions require the co-operation of others, and this is time consuming. But if we do stop and think, a small investment of several people's time may be fruitful in the longer term.

AUDIT

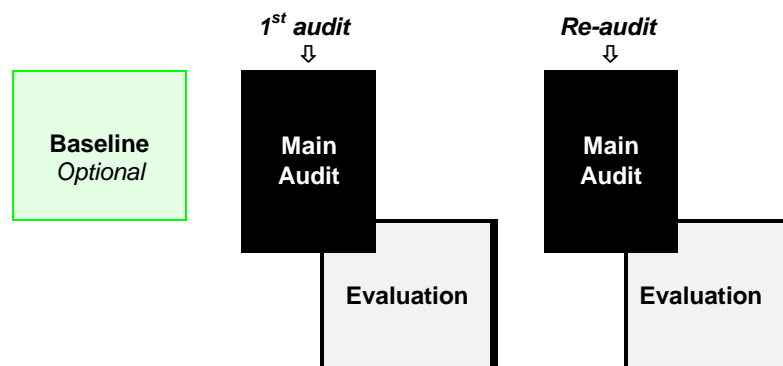
Quality improvement, as a professional responsibility for all the caring professions, is often undertaken through a process of peer review or audit. Audit is used as a tool to deliver quality improvements and encourage the evaluation of interventions. The baseline is optional: it is designed for pharmacists coming to audit for the first time, or for those who want to establish whether or not there is a problem that needs to be addressed in their own practice and to think about possible interventions before proceeding with a full audit.

WORK BOOKS

The **Ready-to-go** series has been developed by *The Royal Pharmaceutical Society of Great Britain* to support quality improvement in Pharmaceutical Care by encouraging the adoption of evidence based practice and supporting established good practice.

The **Ready-to-go** series is designed for ease of use by busy practitioners in their work place through the use of *Work Books*. A *Resource Pack* provides a reference source for the series.

The Work Books that support Topic Audits are shown in the diagram below.



The programme has been designed to ensure that changes effected though audit reflect the standards and good practices set by the health professions.

Using this audit you will be able to identify people who are taking nitrates who may benefit from taking aspirin for secondary prevention of coronary heart disease

and advise them on

- the evidence for this treatment
- the health gain (benefits) that might be expected
- the most appropriate dose
- the importance of advising their GP
- reasons why it might not be appropriate for them to take it

Introduction

Preparing to audit

You may have already completed a baseline audit for this topic. For those who have not, and would like to, copies can be obtained from the address at the back of this book. The baseline audit enables participants to decide whether or not the topic is important in their daily practice. It also goes through issues that need to be addressed before hand in this particular topic area. The preparatory work is summarised at the beginning of this work book.

Recognising Success

Success and a commitment to quality improvement by being active in audit is recognised through the award of Quality Credits. These can be applied for by individuals and/or practices on completion of the whole audit cycle.

Involving Others

Whilst the audit itself can be undertaken as a uni-professional activity, the exercises included in the baseline audit illustrate some of the issues that you should address by way of preparation.

It is particularly important to work with your local practices and to discuss the types of interventions you might make, and the reasons you might have for referring patients to the practice for review. Discussions will also help to ensure that the messages that you give are consistent with those of the patient's GP and practice nurses.

Although the data collection form for this audit is designed for use by pharmacists, GPs and/or practice staff may be very interested to see the information that is collected, and to discuss the evaluation and action plan with you. This work book has been designed to encourage multi-professional interaction.

For pharmacists and doctors it offers the chance to develop a professional working relationship with a clear focus on improving patient care. It presents an opportunity to involve practice staff, dispensing staff and counter assistants, bringing with it the advantages of sharing the workload and introducing staff to the concepts of audit and good practice.

Resources Required

Basic resources include the Audit Resource Pack, a pen, calculator, and of course your time. Avoid hectic times e.g. the Christmas period. A little or a lot of help with the audit can be found from a number of sources, many of which are described in more detail in the Audit Resource Pack. A sponsor or mentor who is familiar with this audit can take you through the stages, whilst your local MAAG may be able to provide computer facilities to help with the analysis or print high quality graphs.

Purpose

- To utilise the opportunities presented daily in pharmacies to improve awareness and understanding of the benefits of aspirin amongst people at high risk of MI or stroke
- To provide GPs and pharmacists with a more complete picture of aspirin use amongst their local population
- To refer patients in whom aspirin use may be contra-indicated
- To increase the proportion of people at high risk of MI or stroke taking an appropriate daily dose of aspirin
- To promote a multi-professional approach to secondary prevention of MI and stroke
- To refer patients in whom aspirin may be contraindicated

Criteria

- People taking nitrates for a condition benefiting from 2^o prevention should be aware of the benefits of aspirin and the contra-indications if these apply
- People taking aspirin for secondary prevention of MI/stroke should be advised to inform their GP if they have not already done so
- Where a contra-indication may exist and aspirin use has not been specifically recommended by a doctor, patients should be referred to their GP for review
- People taking aspirin for secondary prevention of MI/stroke should be taking an appropriate dose (e.g.75-325mg/local guidelines)
- Regular aspirin use should be recorded in the pharmacy patient medication record regardless of whether it is purchased or prescribed
- Verbal counselling/advice should be offered to people who may benefit from secondary prevention
- Leaflets on the use of aspirin in secondary prevention should be available to people who may benefit from its use in secondary prevention

Data to be collected

Data used to measure standards set:

- Number of patients taking nitrates (cases)
- Whether nitrate obtained on prescription or over-the counter (OTC)
- Whether it is for own use
- Whether patient has had a previous coronary event or relevant current condition
- Whether aspirin is being taken: if obtained on prescription/ OTC
- Awareness of benefits
- Daily dose of aspirin
- GP awareness of aspirin use
- Potential or established contra-indication to aspirin use
- Type of action taken by pharmacist

Getting started

Having read the background to this audit in the Audit Report book tick the key benefits you hope to achieve for your customers, your colleagues and yourself if you undertake this audit

Closer professional relationships

Improved service to patients

Improved patient outcome

Am I committed to achieving quality improvement in this area of practice?

YES

Do I have enough information to get going?

NO

I will order and complete the baseline/pre-audit work book first

YES

How much help will I need?

Quite a lot - I don't feel ready to do this audit by myself, so I will speak to one of my pharmacy colleagues and discuss the things I am unsure about

Some - I would like to use this audit to develop my working relationship with other members of the primary care team but I think that I need some peer support to help me approach my local practice

Not that much - I'm fairly confident that I can get support from my local practice and will start on this right away

This work book contains all the information that you should need to undertake and audit and re-audit, including:

- Data collection
- Data analysis
- Presentation
- Evaluation
- Action plans
- Monitoring

Follow through the prompts for preparing to audit then complete the action plan to identify those you wish to involve, people who can help you, resources that you will need, and people who might be interested in the results.

Plan your approach

For the best results it is important to think through the change process and plan your approach before making any evidence based intervention.

If you have completed **the second part of the work book for the baseline audit** for people taking nitrates you will already have considered some of the practical and ethical issues that your intervention/s might raise.

As preparation for this audit, check through the following questions before completing your action plan.

Does your local health authority have a strategy for the prevention of coronary heart disease? Ask your local pharmaceutical adviser, ring the health authority and ask to speak to someone in public health or ask for a copy of the Health Authority's most recent health strategy

Is there already a scheme for the promotion of aspirin in CHD for use by other practitioners e.g. GPs , nurses, health promotion specialists, local stroke unit, nearest coronary care unit? Ask your local audit office (MAAG or equivalent), your local GP, or your pharmaceutical adviser

What daily dose of aspirin does it recommended?

Have any posters or leaflets been developed locally?

Can you get a free supply of these or will you need to get some from a national organisation?

Do you have a protocol for handing out medicines?

How could this be altered to reinforce the secondary prevention message to people who may be at high risk of MI or stroke?

Do all the pharmacy assistants use the protocol as intended?

For customers who say their GP is unaware that they take aspirin, do you have an advice slip/referral letter they can take to their GP?

Audit Plan

Anticipated start date	
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NETWORKS	Action
<p><i>People who can provide me with support</i> <i>See suggested networks and hints in the Audit Resource Pack</i></p>	

MENTOR/TUTOR	Action
<p><i>An individual who can encourage me</i> <i>This can be another pharmacist you know and respect, perhaps someone you have learnt from in the past</i></p>	

INVOLVING OTHERS	Action
<p><i>People I should involve/inform of audit</i> <i>Consider your own staff, your local GP and practice nurses, your local pharmaceutical adviser etc.</i></p>	<p><i>You might want to use or modify one of the prepared letters in Audit Resource Pack</i></p>
<p><i>Will I do this audit by myself, with some other pharmacists, or with my local GP?</i></p>	

RESOURCES	Action
<p><i>I require:</i> <i>e.g. Leaflets, posters, time, training, a calculator, access to a computer, copying facilities</i></p>	
<p><i>Have any leaflets been produced and used locally? Ask your local audit group if they have any resources they have developed for GPs. Get support from the LMC/LPC to develop a letter for customers to take to their GP</i></p>	

DISSEMINATION: People who should see the results	Action
<p><i>Ask yourself if they should really be contacted now to inform them of your intention to audit</i></p>	

Instructions

Suggested duration of audit: 1 month

Select sample

People to be included :

People taking nitrates

Standards set

Based on participants professional judgement

- Everyone taking nitrates for a condition benefiting from 2^o prevention should be aware of the benefits of aspirin and the contra-indications if these apply
- Everyone purchasing aspirin will be advised of the importance of the GP knowing it is being taken
- Everyone taking aspirin without their GP's knowledge and with any of the conditions listed under contra-indications should be referred to their GP (unless aspirin use has specifically been advised)
- At least ___% of people taking aspirin for secondary prevention of MI/stroke should be taking an appropriate dose (e.g.75-325mg/ local guidelines)
- Pharmacy records will be kept for ___% of aspirin supplies made to regular customers
- Verbal advice will be always be offered to patients receiving aspirin for secondary prevention of MI/stroke
- Leaflets will always be offered to reinforce the indications, contra-indications and benefits of aspirin use

Action points

Although this audit is based on the available evidence, your actions will, to some extent, need to reflect local custom and practice. Based on the information gathered in preparation for this audit list any amendments to the suggested action points in the box below, as well as on the data collection form.

Collect data

Using the accompanying flow chart, familiarise yourself with the data collection form. The form can be adapted if you wish to reflect action points that are more suited to your own practice. The data collection forms can be removed from this work book and placed next to the work area where the data is collected.

Case studies

Giving some more detailed examples of the interactions you have had with customers and the interventions made is a helpful way of illustrating to others the added value of your professional input. This is known as a case study. Four outlines are provided on pages 13 and 14 for you to complete.

Key to data collection

Number of people included in audit	A
Whether nitrate supplied on prescription or OTC	B
People reporting Coronary event or condition that might benefit from 2^o prevention measures	C
Source of aspirin if taken (prescription or OTC)	D
Awareness of potential benefits of aspirin in 2^o prevention	E
Dose of aspirin being taken	F
GP awareness of aspirin being taken	G
Potential or established contraindications to use of aspirin	H
Action points	
Numbers where aspirin status recorded on PMR	I
Numbers where verbal advice given	J
Numbers where leaflet offered	K
Numbers where customer advised to inform GP of aspirin use	L
Numbers where person referred directly to GP for assessment (e.g. significant interaction likely)	M

Transfer data

Transfer totals from the data collection form to the data analysis table on the next page

Data analysis

Use the formulas shown in the tables to perform the calculations on your data. The letters used in the formulas indicate the column on the data collection form where the correct figures can be found. The results of your calculations can be presented graphically using the outline graphs that follow.

Results

Number of people requesting nitrates on prescription or over the counter during the month of	A	
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Numbers taking each dose (from column F)					
37.5mg	75mg	150mg	300mg	325mg	>325mg
Numbers taking between 75mg and 325mg				(α)	

	Calculation	Results	
Number obtaining nitrate on prescription	from column B		N
Number taking aspirin (Rx or OTC)	from column D		O
Number not taking aspirin	from column D		P
Number of people taking nitrates who would benefit from aspirin for 2° prevention	C- H		Q
Number where aspirin is purchased (OTC)	from column D		R
Number where GP is unaware of aspirin use	from column H		S

Proportion of people requesting nitrates on prescription	$(N \div A) \times 100$		β
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Proportion of people taking nitrates who would benefit from 2° prevention and are aware of the benefits of aspirin and the contra-indications if these apply	$(E \div Q) \times 100$		T
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Proportion of people taking nitrates and purchasing aspirin who are advised to inform their GP of aspirin use	$(L \div R) \times 100$		U
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Proportion of people taking aspirin without their GPs knowledge and with any of the contra-indications listed who are referred to their GP for assessment	$(M \div S) \times 100$		V
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Proportion of people taking a dose of aspirin recommended for 2° prevention	$(\alpha \div O) \times 100$		W
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Proportion of instances where the aspirin status of people taking nitrates is recorded in the Patient Medication Record	$(I \div B) \times 100$		X
---	-------------------------	--	---

Proportion of instances where verbal counselling offered	$(J \div B) \times 100$		Y
--	-------------------------	--	---

Proportion of instances where leaflet offered	$(K \div B) \times 100$		Z
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Summary of findings

___(B) people presented requested nitrates on prescription or OTC during a _____ period

Of these ___ (from column A) were requested on prescription

___% (T) of people taking nitrates who would benefit from 2^o prevention were aware of the benefits of aspirin and the contra-indications if these apply

___% (U) of people purchasing aspirin were advised to inform their GP of their aspirin use if they had not already done so

___% (V) of people taking aspirin without their GPs knowledge and with any of the conditions listed under contra-indications referred to their GP for assessment

___% (W) of people were taking a dose of aspirin that fell within the range recommended for 2^o prevention of CHD

In ___% (X) of instances the aspirin status of people taking nitrates was recorded in the PMR

___% (Y) of people taking nitrates were offered verbal advice by the pharmacist about the use of aspirin for 2^o prevention of CHD

___% (Z) of people taking nitrates were offered a leaflet on 2^o prevention of CHD

Further information

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Low dose Aspirin - Data collection form

Target group - People taking nitrates

	Nitrate OTC/ Rx	For own use Y/N	Coronary event or condition benefiting from 2 ^o prevention Y/N/?	Taking aspirin Rx / OTC / N / C/I / ? <i>(if C/I complete column H)</i>	Awareness of potential benefits Y/N	Aspirin Dose
e.g.	Rx	y	y	OTC	y	600mg
e.g.	Rx	y	y	n	n	-
1						
2						
3						
4						
5						
6						
7						
8						
9						
10						
11						
12						
13						
14						
15						
16						
17						
18						
19						
20						
TOT						
A	B		C	D	E	F

Use of aspirin reduces the risk of heart attack, stroke or vascular death in people who have had experienced the following events: Myocardial infarction (heart attack), Angina, Transient ischaemic attack (TIA), Arterial bypass surgery/angioplasty, or Stroke

Low dose Aspirin - Data collection form

Target group - People taking nitrates

	Nitrate OTC/ Rx	For own use Y/N	Coronary event or condition benefiting from 2 ^o prevention Y/N/?	Taking aspirin Rx / OTC / N / C/I / ? <i>(if C/I complete column H)</i>	Awareness of potential benefits Y/N	Aspirin Dose
e.g.	Rx	y	y	OTC	y	75mg
e.g.	Rx	y	?	y	y	300mg
21						
22						
23						
24						
25						
26						
27						
28						
29						
30						
31						
32						
33						
34						
35						
36						
37						
38						
39						
40						
TOT						
A	B		C	D	E	F

Use of aspirin reduces the risk of heart attack, stroke or vascular death in people who have had experienced the following events: Myocardial infarction (heart attack), Angina, Transient ischaemic attack (TIA), Arterial bypass surgery/angioplasty, or Stroke

GP aware that aspirin is taken Y / N / ?	Potential (P)/ Established (E) contraindications (C/I) to aspirin	ACTION POINTS (Shaded columns are optional & should be locally agreed)				
		Aspirin status recorded on PMR Y / N	Verbal advice	Leaflet offered	Advised to inform GP at next visit	Referred to GP for assessment
<i>n</i>	-	<i>y</i>			<i>y</i>	-
-	-	<i>y (with note)</i>	<i>y</i>	<i>y</i>	<i>y</i>	-
G	H	I	J	K	L	M

Although aspirin is generally contra-indicated in the situations listed below doctors may, after an assessment of the benefits and risks, recommend the use of aspirin to individual patients.

- Warfarin
- Indigestion in last 3 months
- Duodenal/stomach ulcer in last year
- Allergy to aspirin
- Pregnancy