

**ACCIDENT PREVENTION**  
**Medicines that can impair driving**  
Baseline

**INTRODUCTORY WORK BOOK: Baseline Survey/Pre-Audit**

*Review date: August 2002*

# 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

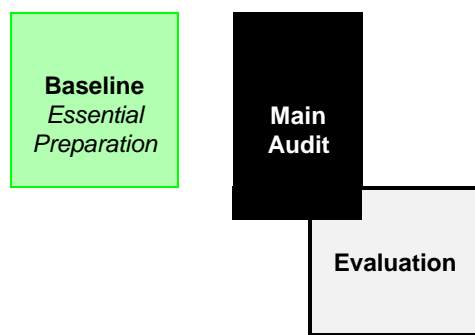
**Quality improvement**, as a professional responsibility for all the caring professions, is often undertaken through a process of peer review or audit. Audit is used as a tool to deliver quality improvements and encourage the evaluation of interventions. For practitioners who are unfamiliar with audit, or are unsure of the size of a problem, a baseline audit can provide useful information and confirm whether the perceived problem is a priority worth investing time in.

## 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 Campaign 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.

## Baseline audit

Baseline surveys/pre-audits are a quick way of getting a feel for the size of a problem. By looking at your records and drawing on your knowledge of customers you can get a better idea of the numbers of people who you might advise on the use of medicines that can impair driving. The information you gain can then be used to begin a dialogue with other professions who may share your interest and concern in achieving quality improvements, and health gain to people at high risk.

## Is there a problem?

In 1996 it was estimated that nearly 10 million accidents occurred that required a hospital visit or GP consultation: nearly a quarter of a million of these were road traffic accident (RTA) casualties, of which over 3,000 died<sup>1</sup>. Alcohol remains the single most likely cause of road traffic fatalities, with one in five fatalities found to have levels above the legal limit. In 1989 Everest et al. detected alcohol in 35% of RTA fatalities, and drugs likely to affect the central nervous system in 7.4%. Causal links between psychotropic drugs and RTAs have been suggested in many studies<sup>2-4</sup>. Two recent studies on Benzodiazepines were reviewed by Bandolier<sup>5</sup>.

Drugs acting on the central nervous system can cause drowsiness and/or increase reaction times, which may in turn impair driving.

**Responsibility for advising patients on medicines use and driving impairment is covered in the Medicines Act** and also covered in the 1992 Medicines Act (Labelling) Amendment which requires specific warnings to be included on certain medicines in patient friendly language<sup>6</sup>.

The British National Formulary advisory labels number 2 and 19 relate to driving<sup>7</sup>. In general label 2 is indicated for all anxiolytics given during the daytime and most antidepressants: The BNF suggests that pharmacists explain risks and encourage compliance. Label 9 is indicated for hypnotics or anxiolytics being prescribed only at night. The BNF highlights that SSRIs may impair skilled tasks such as driving, emphasising this after the cautionary label/s.

Warning 2. May cause drowsiness. If affected do not drive or operate machinery. Avoid alcoholic drink.

Warning 19. Causes drowsiness which may continue the next day. If affected do not drive or operate machinery. Avoid Alcohol.

**Further guidance is also available for GPs:** The Medical Commission on Accident Prevention's guide for general practitioner considers the need to prescribe treatment that impairs driving as little as possible and notes that *'there is considerable individual variation between individuals and their levels of psychotropic impairment relating to specific medicine. It is important that any prescribed drugs likely to impair driving performance should be given on a trial basis for at least a week telling the patient not to drive in the meantime'*<sup>8</sup>.

Insurance Companies also urge their respective professions to ensure that patients are fully informed concerning the potential for driving impairment when taking centrally acting medicines.

Section 4 of the 1998 Road Traffic Act states...  
A person who, when driving or attempting to drive a motor vehicle on a road or other public place, is unfit to drive through drink or drugs is guilty of an offence.

In summary, pharmacists clearly have a professional responsibility to ensure that people taking centrally acting medicines are made aware that driving may be impaired. Pharmacists must also be sensitive to the roles that others may play in advising a patient, and the lifestyle issues that are involved,

As pharmacists you are well placed to reinforce simple primary prevention measures - a baseline survey/pre-audit will help you assess the likely benefits to your customers of your involvement in reducing the risk of motor vehicle accidents amongst your local population. You may then choose to use an campaign/audit as a way of introducing an intervention and evaluating some of the outcomes.

#### References

1. Our Healthier Nation, 1998, HMSO,
2. Medical Aspects of Fitness to Drive: A guide for Medical Practitioners, 1995, The Medical Commission on Accident Prevention, London.
3. Medicines Act (Labelling) Amendment, Statutory Instruments 1992 no. 3273 & 3274

How big an issue is it?

It is difficult to know where to start a campaign or audit without some baseline information. If you are thinking about running a campaign to reduce RTAs amongst people taking centrally acting medicines it might be useful to know more about the people who visit your shop. For example may want to know what they come in for, or to identify sub-groups for whom your message will need to be more specific. If the campaign involves leaflets you may want to establish how many are normally taken/given out each week/month.

What can be measured?

Information that you can easily collect **without involving the customer** might include:

- The numbers of people who have just been started on a medicine that can impair driving
- The number of people who have been taking medicines for some time that can impair driving
- The category of drug being taken
- Any specific warnings included on medicine
- Any additional advice requested and/or given
- The numbers of leaflets on driving and medicines use taken or given out in the last week/month

What might be learned?

You might find out for example

- that a high proportion of patients are taking SSRIs
- that leaflets on driving and medicines use are not easily available

Data to be collected

- Number of people taking medicines that can impair driving
- Numbers of these who are being started on such medicines
- Drug taken by drug group
- Number of items where a specific warning is included on medicine
- Numbers of times additional advice is requested and/or given

Planning data collection

Before starting to collect data it is helpful to check through the data collection form. **The form can be removed from this booklet and placed next to the work area where the data is collected.**

Consider the variations in daily work load and staffing to avoid starting data collection at the most busy part of the Collect data for all medicines issued that can impair driving during a one week period

Planned start date

Simple calculations

Measure		Result	
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<b>Estimate of audience for medicines and driving advice</b>			
No. taking medicine for 1 <sup>st</sup> time that can impair driving	<b>A</b>		
No. taking medicine on a regular basis that can impair driving	<b>B</b>		
Total number of people taking a medicine/s that can impair driving	<b>A+B</b>		<b>=X</b>
<b>Profile of centrally acting medicines being taken:</b>			
No. taking benzodiazepines	<b>C</b>		
No. taking Zopiclone	<b>D</b>		
No. taking tricyclic antidepressants	<b>E</b>		
No. taking SSRIs	<b>F</b>		
No. taking antihistamines	<b>G</b>		
No. taking others	<b>H</b>		
<b>Profile of information provided:</b>			
No. of medicines where specific warning included	<b>J</b>		
No. of medicines where advice requested and/or given	<b>K</b>		
<b>Leaflets available</b>			
Total number of leaflets taken from stand over one week period	<b>L</b>		
Number of leaflets on medicines and driving taken over week	<b>M</b>		

## Medicines that can impair driving - Baseline Data Collection

Selection Criteria	People over 17 who appear to be fit to drive and are taking centrally acting medicines that can impair driving
Data collection period	One week .....(month/year)

	Rx Status		Category of drug						Specific warning included	Extra advice
	New	Long-term	Benzos	Zopiclone	TAD	SSRI	Anti-Hist	Other		
<b>e.g.</b>	✓	-	✓							
<b>e.g.</b>	✓	-	✓							
<b>1</b>										
<b>2</b>										
<b>3</b>										
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<b>19</b>										
<b>20</b>										
<b>TOTAL</b>										
	<b>A</b>	<b>B</b>	<b>C</b>	<b>D</b>	<b>E</b>	<b>F</b>	<b>G</b>	<b>H</b>	<b>J</b>	<b>K</b>

Total number of leaflets taken from stand during week		<b>L</b>	Number taken on driving and safe use of medicines during week		<b>M</b>
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**Potential audience for advising on medicines that can impair driving**

Numbers of people taking a medicine that can impair driving

<b>A + B</b>		<b>= X</b>
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**Priority groups**

Proportion of these taking the medicine for the first time

<b>(A ÷ X) x 100</b>	<b>%</b>
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Proportion of these taking the medicine on a regular basis

<b>(B ÷ X) x 100</b>	<b>%</b>
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Proportion taking medicines in each drug group

<b>Benzodiazepine</b>	<b>(C ÷ X) x 100</b>	<b>%</b>
<b>Zopiclone</b>	<b>(D ÷ X) x 100</b>	<b>%</b>
<b>Tricyclic antidepressants</b>	<b>(E ÷ X) x 100</b>	<b>%</b>
<b>SSRIs</b>	<b>(F ÷ X) x 100</b>	<b>%</b>
<b>Antihistamines</b>	<b>(G ÷ X) x 100</b>	<b>%</b>
<b>Others</b>	<b>(H ÷ X) x 100</b>	<b>%</b>

**Information**

Proportion of medicines issued with specific warning included on label (BNF warning 2 or 19)

<b>(J ÷ X) x 100</b>	<b>%</b>
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Proportion of occasions when additional advice on driving was requested and/or given

<b>(K ÷ X) x 100</b>	<b>%</b>
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Range of leaflets available relating to driving and use of medicines

Titles	Source/supplier

Leaflets on driving and medicines use taken as a proportion of all leaflets taken from stand in same week

<b>(L ÷ M) x 100</b>	<b>%</b>
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## Conclusions

**What does your baseline survey/pre-audit tell you about the proportion of people taking centrally acting medicines which may impair their driving?**

**What does your baseline survey/pre-audit tell you about the information that you provide?**

## Preparing to change

### ***Seeking further information from the customer may raise some practical issues:***

- *How will you identify your target audience?*
- *How will get the information you need to give them the right advice?*
- *Do you have sufficient leaflets for all who may want one?*
- *Where might you obtain a further supply?*

You now have some information on the numbers of people taking medicines drugs that may impair their driving. You also have some details about the information that you provide on the medicine label and the extent to which advice is requested and/or given both verbally and via leaflets.

If you decide to use your position as a pharmacist to more actively promote greater awareness about medicines which can impair driving you will need to spend some time thinking about how you do target people with the right message. For example you may need to adopt a different approach to advising people who are receiving a medicine for the first time than you would if they were already taking it. You will also need to be aware of the type of advice they might receive from other sources e.g. their GP.

To make embark on a successful awareness raising campaign you may want to

- a) ask people whether they experience day time drowsiness and, if appropriate, advise them on ways to assess this
- b) ask people if they are aware of the warning on the medicine label
- c) ask people if they drive
- d) provide advice/referral if they wish to discuss their treatment in relation to their need to drive
- e) make sure that the advice you are giving does not conflict with other advice they might receive

## Practical Help

The next section of this work book provides you with some very practical support to help you think through the issues before you try to increase awareness about medicines which can impair driving. These exercises will also be good preparation if you chose to undertake the ready-to-go campaign using audit as part of your evaluation.

These exercises have been designed for use by individual pharmacists or groups of pharmacists working together. If you have the advantage of an audit or pharmacist facilitator in your area, they may take you through this process.

### Plan your approach

**For the best results it is important to think through the change process and plan your approach - so before making any intervention based on evidence you should consider:**

- the opportunities you have to bring about change
- suitable interventions
- any ethical dilemmas you may face
- your motivation to implement change
- gaining support for your planned intervention/s
- your measure of 'success'

### Opportunities to bring about change

List the opportunities that arise during the course of your daily practice to advise people about medicines which can impair driving e.g. when people are started on a medicine that can impair driving, when people come to collect a prescription for a medicine that can impair driving, through a poster campaign, when selling OTC medicines that can impair driving.

Are all your staff aware that some medicines can impair driving?

Do you have a programme of health promotion campaigns in your store over the next year?

If so, how do you decide what topics to cover? Could you include one on accident prevention?

Do you involve your pharmacy staff in health promotion campaigns?

**Suitable interventions**

- List the types on intervention that you might make e.g.
- Advertise the fact that some medicines can impair driving - encourage people to seek advice if they need to continue to drive for work and/or pleasure
  - Find out if people have been advised that the medicine they are taking can impair driving
  - Advise people to avoid driving whilst becoming accustomed to the effects of a new medicine
  - Find out if people are experiencing day time drowsiness and help them assess this.
  - Refer people to their GP if they need to drive and wish to discuss the use of medicines that can impair driving.

Passive interventions such as posters and leaflets in stands require no knowledge of peoples health status or lifestyle, whilst proactive interventions depend on having some knowledge of what medicines people are taking, how long they expect to take them for, their understanding and beliefs about the use of the medicine, and their need to drive.

List the information you would normally need to help you identify people who might benefit from the interventions you can offer

**Ethical issues**

*Responding to further information gained from the customer may raise ethical issues*

- If you have any concerns regarding a person's understanding of their medicines and the effect on driving can you discuss these concerns with anyone else without their permission? e.g. a neighbour may comment on a recent road traffic accident that the patient has had - can you discuss this with the patient and/patients GP?
- Might information you give conflict with information provided by the doctor or nurse? e.g. you tell the patient that it would better to avoid driving until they become accustomed to the effects of the drug, but the GP has suggested they can drive as long as they are careful.
- Do you have the full picture? e.g. the patient is experiencing drowsiness but has to drive to do their job and cannot afford a break from work - might they avoid taking the medicine instead?

**Your motivation to implement change**

Note any benefits for you personally to become involved in increasing peoples awareness of medicines that can impair driving

Interventions will often be more successful if you have gained the support and co-operation of GPs and nurses. Remember this is a two way process. The support of others e.g. health promotion units, the Health Authority etc. may also be useful if you require materials such as leaflets and posters

Does your local health authority have a strategy for the prevention of accidents? 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 improvement programme (HiMP)

Is there a national campaign to promote safe driving when taking medicines already developed for use by pharmacists and/other practitioners e.g. health visitors, GPs, nurses, health promotion specialists? Ask your local health promotion office, your local CPPE tutor, your pharmaceutical adviser or contact the Pharmacy Healthcare Scheme

Do you have a local health promotion unit? Ask if they are involved or know of anyone else who is actively promoting driving and safe use of medicines, have they developed local leaflets and posters?

*Think about how you might discuss your ideas with your local health promotion unit, health visitor, district nurse, GP or practice nurse,*

You might want to

- *ask about the ways in which they are trying to promote accident prevention*
- *raise their awareness of the numbers of people who take medicines which can impair driving*
- *compare perception of risks and advice given*
- *explain the opportunity to deliver a safety message to people when they collect their medicines or visit the pharmacy for other reasons including those who purchase medicines over-the-counter*
- *explain the opportunities that you have to reinforce messages*

**Next Steps**

When you have done this list the three interventions that you would most like to make, the people who can support you, and the issues that you need to address before you start.

<b>Intervention</b> e.g. ask people whether they experience day time drowsiness/refer people to GP for further advice	<b>Support</b> e.g. provide copies of validated sleepiness questionnaire and/ leaflets on driving and medicines use	<b>Issues to address</b> e.g. who is qualified to interpret the results from the questionnaire?/ how to get a regular supply of the leaflets?

**Your own measure of 'success'**

Describe ways in which you might obtain evidence for your success in promoting awareness on the safe storage/use of medicines  
e.g. audit, patient questionnaires, feedback from GPs

## **ACCIDENT PREVENTION** **Medicines in the home**

This safety campaign is designed to improve people's awareness of storing medicines safely in the home. The audit component aims to evaluate the intervention/s. The activities included in the work book will help people identify where they currently store medicines and consider how appropriate this storage place is; they also encourage people to reflect on occasions when young children come into their house, and to think about the steps they can take to prevent accidents with prescription and purchased medicines. The evaluation through audit also provides the pharmacist with a way of recording the outcomes and actions taken.

## **ACCIDENT PREVENTION** **Medicines that can impair driving**

This safety campaign is designed to improve awareness of warnings on centrally acting medicines, particularly those that relate to driving. The audit component aims to evaluate the intervention/s. The activities included in the work book will highlight the need to advise and/counsel patients who are taking, or about to start taking, medicines which can impair driving. Consideration is given to patients need to drive or operate machinery. Pharmacists are encouraged to counsel patients when they are started on new drugs, offering explanation of warnings and an opportunity to discuss any concerns the patient may have. The evaluation through audit also provides the pharmacist with a way of recording the outcomes and actions taken.

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