



THE CONTINUING PROFESSIONAL DEVELOPMENT PROGRAMME



This module is suitable for use by pharmacists as part of their continuing professional development. After reading this module, complete the learning scenarios and post-test at www.pharmacymag.co.uk and include in your CPD portfolio. Previous modules in the Pharmacy Magazine CPD Programme are also available to download from the website

MODULE 193

Welcome to the one hundred and ninety third module in the *Pharmacy Magazine* Continuing Professional Development Programme, which looks at hypertension and the NMS. It is valid until October 2014.

Continuing professional development (CPD) is a mandatory requirement for pharmacists. Journal-based educational programmes are an important means of keeping up-to-date with clinical and professional developments and form a significant element of your CPD. Completion of this module will contribute to the nine pieces of CPD that must be recorded a year.

Before reading this module, test your existing understanding of the topic by completing the pre-test at www.pharmacymag.co.uk. Then after studying the module in the magazine, work through the six learning scenarios and post-test on the website. Record your learning and how you applied it in practice using the CPD report form, available online and on pviii.

Self-assess your learning needs:

- Can you explain the new NICE recommendations for the management of hypertension?
- How can the new medicine service benefit people newly diagnosed with hypertension?
- What are the appropriate treatment options at each step of hypertension management?

Warning: The content contained in this module is the copyright of Pharmacy Magazine and cannot be reproduced without permission in the form of a valid written licence granted after July 1, 2011

CURRENT THINKING ON...

HYPERTENSION AND THE NEW MEDICINE SERVICE

Contributing author: Samixa Shah PgDip ClinPharm, MRPharmS, AxiMas Consulting; pharmaceutical consultant and clinical writer

Introduction

High blood pressure (hypertension) is one of the most important preventable causes of premature morbidity and mortality in the UK. Hypertension is a major risk factor for ischaemic and haemorrhagic stroke, myocardial infarction, heart failure, chronic kidney disease, cognitive decline and premature death.

Untreated hypertension is usually associated with a progressive rise in blood pressure. The vascular and renal damage that this may cause can culminate in a treatment-resistant state.

There is no natural cut-off point above which hypertension definitively exists and below which it does not. The risk associated with increasing blood pressure is continuous, with each 2mmHg rise in systolic blood pressure associated with a seven per cent increased risk of mortality from ischaemic heart disease and a 10 per cent increased risk of mortality from stroke.

Hypertension is remarkably common in the UK and the prevalence is strongly influenced by age. In any individual person, systolic and/or diastolic blood pressures may be elevated. Diastolic pressure – pressure in the arteries during ventricular contraction (i.e. heartbeat) – is more commonly elevated in people younger than 50 years of age.

With ageing, systolic hypertension – related to blood flow and elasticity of arteries (i.e. when the heart relaxes) – becomes a more significant problem as a result of progressive stiffening and loss of compliance of larger arteries. At least one quarter of adults (and more than half of those older than 60 years of age) have high blood pressure.

The clinical management of hypertension is one of the commonest interventions in primary care, accounting for approximately £1 billion in drug costs alone in 2006¹.

FOR THIS MODULE

pharmacy MAGAZINE
FIRST IN PROFESSIONAL & BUSINESS DEVELOPMENT

GOAL: To provide an overview of the management of hypertension and the role of the new medicine service (NMS) for patients prescribed a new treatment.

OBJECTIVES: After completing this module, you should be able to:

- Explain the current management of hypertension as recommended by NICE
- Understand how the NMS will benefit a patient with hypertension
- Give appropriate lifestyle advice to patients newly diagnosed with hypertension.



In one of the biggest changes to previous guidance, the new 2011 NICE guideline recommends that a diagnosis of primary hypertension should be confirmed using 24-hour ambulatory blood pressure monitoring (ABPM) as gold standard rather than be based solely on measurements of blood pressure taken in a clinic.

The guideline also gives a framework for use of home blood pressure monitoring (HBPM), empowering patients to become more involved in monitoring and caring for their hypertension.

Definitions

■ Stage 1 hypertension

Clinic blood pressure is 140/90mmHg or higher and subsequent ambulatory blood pressure monitoring (ABPM) daytime average or home blood pressure monitoring (HBPM) average blood pressure is 135/85mmHg or higher

■ Stage 2 hypertension

Clinic blood pressure is 160/100mmHg or higher and subsequent ABPM daytime average or HBPM average blood pressure is 150/95mmHg or higher

■ Severe hypertension

Clinic systolic blood pressure is 180mmHg or higher or clinic diastolic blood pressure is 110mmHg or higher.

Initiating treatment

According to the NICE clinical guideline 127, antihypertensive drug treatment is prescribed to:

■ People under 80 years of age with stage 1 hypertension who have one or more of the following:

- Target organ damage
 - Established cardiovascular disease
 - Renal disease
 - Diabetes
 - A 10-year cardiovascular risk equivalent to 20 per cent or greater.
- People of any age with stage 2 hypertension

Reflection exercise 1

- What are the different stages of hypertension?
- Do you know where to find this information?
- Have you read the new NICE clinical guideline 127?

Reflection exercise 2

- Have you had training to take blood pressure measurements?
- Do you know how to make sure your blood pressure monitor is operating accurately?
- Can you use an automated blood pressure monitor to measure the blood pressure for someone who has pulse irregularity (e.g. atrial fibrillation)?

■ People under 40 years of age with stage 1 hypertension and no evidence of target organ damage, cardiovascular disease, renal disease or diabetes, after specialist evaluation of secondary causes of hypertension and a more detailed assessment of potential target organ damage. This is because 10-year cardiovascular risk assessments can underestimate the lifetime risk of cardiovascular events in these people.

Monitoring treatment and blood pressure targets

The NICE clinical guideline makes the following recommendations as to how treatment should be monitored:

- Use clinic blood pressure measurements to monitor the response to antihypertensive treatment with lifestyle modifications or drugs
- Aim for a target clinic blood pressure below 140/90mmHg in people under 80 years of age with treated hypertension
- Aim for a target clinic blood pressure below 150/90mmHg in people aged 80 years and over with treated hypertension.

The new medicine service

The new medicine service (NMS)² provides support to people with long-term conditions prescribed a new medicine to help improve medicines adherence within the following four conditions/therapy areas:

- Asthma and COPD
- Type 2 diabetes
- Antiplatelet/anticoagulant therapy
- Hypertension.

It is hoped that the successful implementation of the NMS will:

- Improve patient adherence and generally lead to better health outcomes
- Increase patient engagement with their condition and medicines, supporting patients

in making decisions about their treatment and self-management

- Reduce medicines wastage
- Reduce hospital admissions due to adverse events from medicines
- Lead to increased Yellow Card reporting of adverse reactions to medicines by pharmacists and patients, thereby supporting improved pharmacovigilance
- Receive positive assessment from patients
- Improve the evidence base on the effectiveness of the service
- Support the development of outcome and/or quality measures for community pharmacy.

If a patient is newly prescribed one of the medicines for hypertension listed in Table 1, he/she will be eligible to receive the new medicine service, subject to the pharmacist being able to determine that the medicine is being used to treat hypertension in circumstances where a medicine can be used to treat multiple conditions.

The NICE guideline also recommends changing the priority of medicines used to treat hypertension in people over 55 years of age, focusing on calcium channel blockers, based on evidence of event reduction and, importantly, cost-effectiveness.

Thiazide-like diuretics represent an alternative for those with heart failure or the very elderly who are intolerant of calcium channel blockers. In addition, the evidence around the choice of thiazide-like diuretics suggests that chlorthalidone or indapamide may be more effective than bendroflumethiazide.

For the first time, the NICE guideline offers advice on treating hypertension in the very elderly (people over 80 years). A new cost-effectiveness analysis shows that the cost of treating hypertension is now cheaper than doing nothing.

Table 1: Hypertension medicines included in the NMS

- Thiazides and related diuretics
- Beta-adrenoceptor blocking drugs
- Vasodilator antihypertensive drugs
- Centrally acting antihypertensive drugs
- Alpha-adrenoceptor blocking drugs
- Drugs affecting the renin-angiotensin system
- Calcium channel blockers

Source: Chapter 2 of the British National Formulary

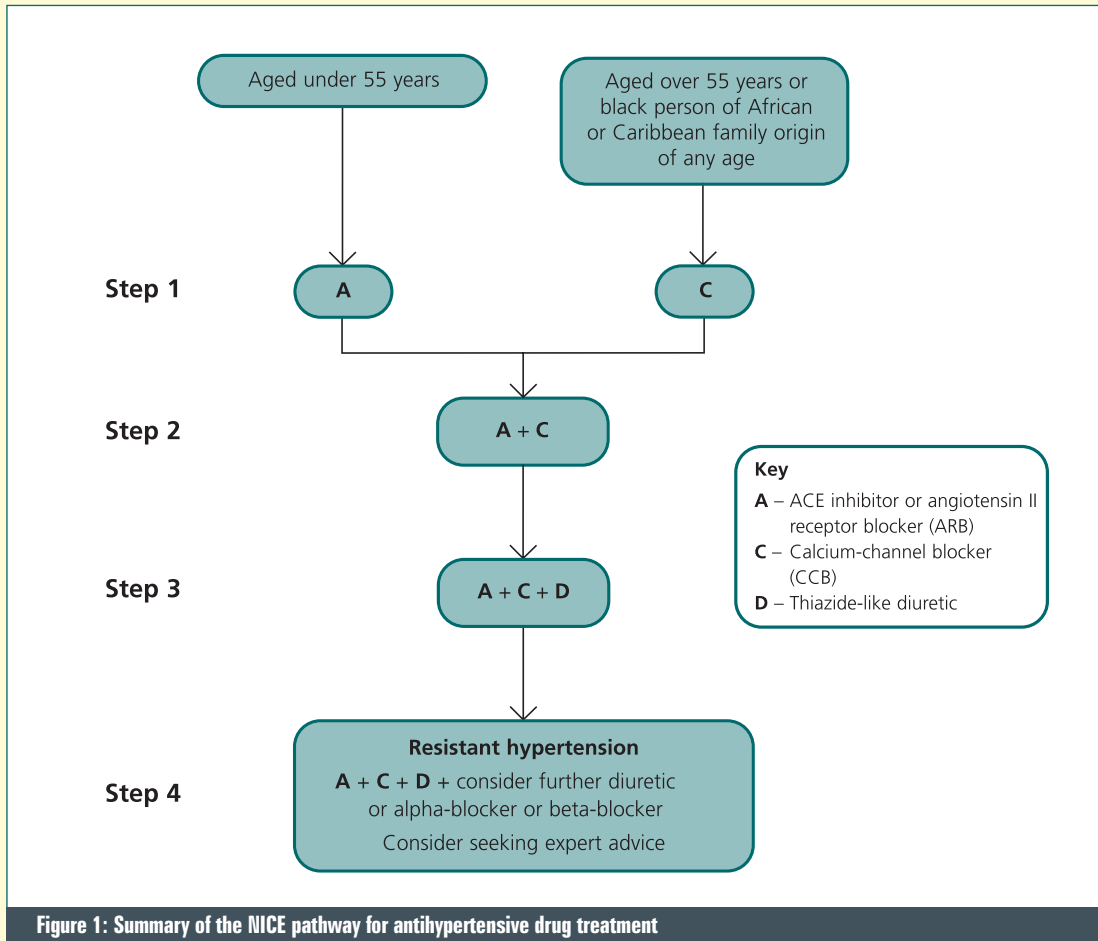


Figure 1: Summary of the NICE pathway for antihypertensive drug treatment

The stepped approach to antihypertensive drug treatment should be used for prescribing¹ (see Figure 1, above).

Step 1

■ People under 55 years of age should be offered step 1 antihypertensive treatment with an angiotensin-converting enzyme (ACE) inhibitor or a low-cost angiotensin-II receptor blocker (ARB). If an ACE inhibitor is prescribed but is not tolerated (e.g. because of cough), a low-cost ARB should be given

■ An ACE inhibitor should **not** be combined with an ARB to treat hypertension

■ Step 1 antihypertensive treatment with a calcium channel blocker (CCB) should be prescribed for people aged over 55 years and for black people of African or Caribbean family origin of any age. If a CCB is not suitable (e.g. because of oedema or intolerance), or if there

is evidence of heart failure or a high risk of heart failure, a thiazide-like diuretic should be given

■ If diuretic treatment is to be initiated or changed, offer a thiazide-like diuretic, such as chlorthalidone (12.5-25.0mg once daily) or indapamide (1.5mg modified-release once daily or 2.5mg once daily) in preference to a conventional thiazide diuretic such as bendroflumethiazide or hydrochlorothiazide

■ Treatment should be continued for people who are already on bendroflumethiazide or hydrochlorothiazide and whose blood pressure is stable and well controlled

■ Beta-blockers are not a preferred initial therapy for hypertension. However, beta-block-

Reflection exercise 3

- Is there an opportunity for you to monitor a patient's blood pressure while undertaking the new medicine service?
- Can you work in conjunction with your local GP practice by offering this service to all newly diagnosed patients?

ers may be considered in younger people, particularly:

- Those with an intolerance or contra-indication to ACE inhibitors and angiotensin-II receptor antagonists
- Women of child-bearing potential
- People with evidence of increased sympathetic drive.

If therapy is initiated with a beta-blocker and a second drug is required, a calcium channel blocker should be added rather than a thiazide-like diuretic to reduce the person's risk of developing diabetes.

Step 2

■ If blood pressure is not controlled by step 1 treatment, offer step 2 treatment with a CCB in combination with either an ACE inhibitor or an ARB (low cost)

■ If a CCB is not suitable for step 2 treatment (e.g. because of oedema or intolerance or if there is evidence of heart failure or a high risk of heart failure), offer a thiazide-like diuretic

■ For black people of African or Caribbean family origin, consider an ARB (low-cost) in preference to an ACE inhibitor, in combination with a CCB.

Step 3

■ Before considering step 3 treatment, review medication to ensure step 2 treatment is at optimal or best tolerated doses

■ If treatment with three drugs is required, the combination of ACE inhibitor or angiotensin-II receptor blocker, calcium channel blocker and thiazide-like diuretic should be used.

Step 4

■ Clinic blood pressure that remains higher than 140/90mmHg after treatment with the optimal or best tolerated doses of an ACE inhibitor or an ARB plus a CCB plus a diuretic is regarded as resistant hypertension, and adding a fourth antihypertensive drug should be considered and/or expert advice sought

■ For treatment of resistant hypertension at step 4, further diuretic therapy should be considered with low-dose spironolactone (25mg once daily) if the blood potassium level is 4.5mmol/l or



lower. Use with particular caution in people with a reduced estimated glomerular filtration rate because they have an increased risk of hyperkalaemia. (When the NICE guideline was published in August 2011, spironolactone did not have UK marketing authorisation for this indication. Informed consent should therefore be obtained and documented.)

■ Higher-dose thiazide-like diuretic treatment should be considered if the blood potassium level is higher than 4.5mmol/l

■ When using further diuretic therapy for resistant hypertension at step 4, monitor blood sodium and potassium and renal function within one month and repeat as required thereafter

■ If further diuretic therapy for resistant hypertension at step 4 is not tolerated, or is contraindicated or ineffective, consider an alpha- or beta-blocker

■ If blood pressure remains uncontrolled with the optimal or maximum tolerated doses of four drugs, seek expert advice if it has not yet been obtained.

Choosing antihypertensive drug treatment

Prescribers are recommended to adhere to the following guidelines when choosing an antihypertensive treatment¹:

■ Where possible, recommend treatment with drugs taken only once a day

■ Prescribe non-proprietary drugs where these are appropriate and minimise cost

■ Offer people with isolated systolic hypertension (systolic blood pressure 160mmHg or more) the same treatment as people with both raised systolic and diastolic blood pressure

■ Offer people aged >80 years the same antihypertensive treatment as people aged 55-80 years, taking into account any co-morbidities

■ Offer women of child-bearing potential antihypertensive drug treatment in line with the recommendations made on the management of hypertension in pregnancy in the NICE clinical guideline 107.

The key principles of the NICE guideline on medicines adherence³ are:



Clinic BP measurements should be used to monitor response to treatment

■ Healthcare professionals should adapt their consultation style to the needs of individual patients so that all patients have the opportunity to be involved in decisions about their medicines at the level they wish

■ Establish the most effective way of communicating with each patient and, if necessary, consider ways of making information accessible and understandable (e.g. using pictures, symbols, large print, different languages, an interpreter or patient advocate)

■ Offer all patients the opportunity to be involved in making decisions about prescribed medicines. Establish what level of involvement in decision-making the patient would like

■ Be aware that increasing patient involvement may mean that the patient decides not to take or to stop taking a medicine. If it is the healthcare professional's view that this could have an adverse effect, then the information provided

to the patient on risks and benefits and the patient's decision should be recorded

■ Accept that the patient has the right to decide not to take a medicine, even if you do not agree with the decision, as long as the patient has the capacity to make an informed decision and has been provided with the information needed to make such a decision

■ Be aware that patients' concerns about medicines, and whether they believe they need them, affect how and whether they take their prescribed medicines

■ Offer patients information that is relevant to their condition, possible treatments and personal circumstances, and that is easy to understand and free from jargon

■ Recognise that most patients are non-adherent sometimes. Routinely assess adherence in a non-judgemental way whenever you prescribe, dispense and review medicines.

Reflection exercise 4

How can you ensure that a patient who has been prescribed a new medicine for hypertension will consent to take part in the new medicine service, come back to see you after two weeks and allow you to share some of the data you collect with other individuals and organisations?

When an approved medicine for hypertension is prescribed for the first time, the pharmacist must offer the patient opportunistic advice on healthy living/public health issues, in line with the promotion of healthy lifestyles essential service, and explain to the patient the advantages of enrolling onto the NMS.

Once the patient has consented to take part in the service and signed the consent form, an appointment should be made for the patient to come and see the pharmacist (a telephone consultation can take place as stated in the NMS specification) in one to two weeks.

The intervention and follow-up stages of the service will also provide an opportunity to offer the patient healthy lifestyle advice and this should be recorded on the appropriate forms. A record should be made of the intervention and follow-up interviews and this will need to be kept for two years⁴.

Tables 2 and 3 outline the interview schedule for the new medicine service. Remember – the aim is to improve adherence of medicines prescribed for the first time.

Healthy lifestyle advice

Lifestyle advice should be offered initially and then periodically to people who are being treated for hypertension¹. Advice should cover diet and nutrition, alcohol consumption, smoking status, sexual health, physical activity and weight management⁵. This can be done by:

- Discussing the patient's diet and exercise patterns because a healthy diet and regular exercise can reduce blood pressure. Offer appropriate guidance and written or audiovisual materials to promote lifestyle changes. Signpost to appropriate healthcare professionals if necessary

Weight loss benefits quantified

- BMI 25-29.9 = overweight
 BMI over 30 = obese; may be ethnic variations
- Over 60 per cent of adults are classed as overweight or obese
 - Increased risk of type 2 diabetes, some cancers, heart disease and liver problems
 - 10 per cent of cancer deaths related to obesity

- Benefits of 10 per cent weight loss:
- Over 30 per cent decrease in diabetes-related deaths
 - 30-50 per cent reduction in fasting glucose
 - 15 per cent reduction in HbA_{1c}
 - 10 per cent decrease in total cholesterol
 - Over 40 per cent reduction in obesity-related cancers
 - Reduction in BP – 10mmHg systolic and 20mmHg diastolic.

Each 1kg weight loss can reduce systolic BP by 2.5mmHg and diastolic BP by 1.5mmHg.

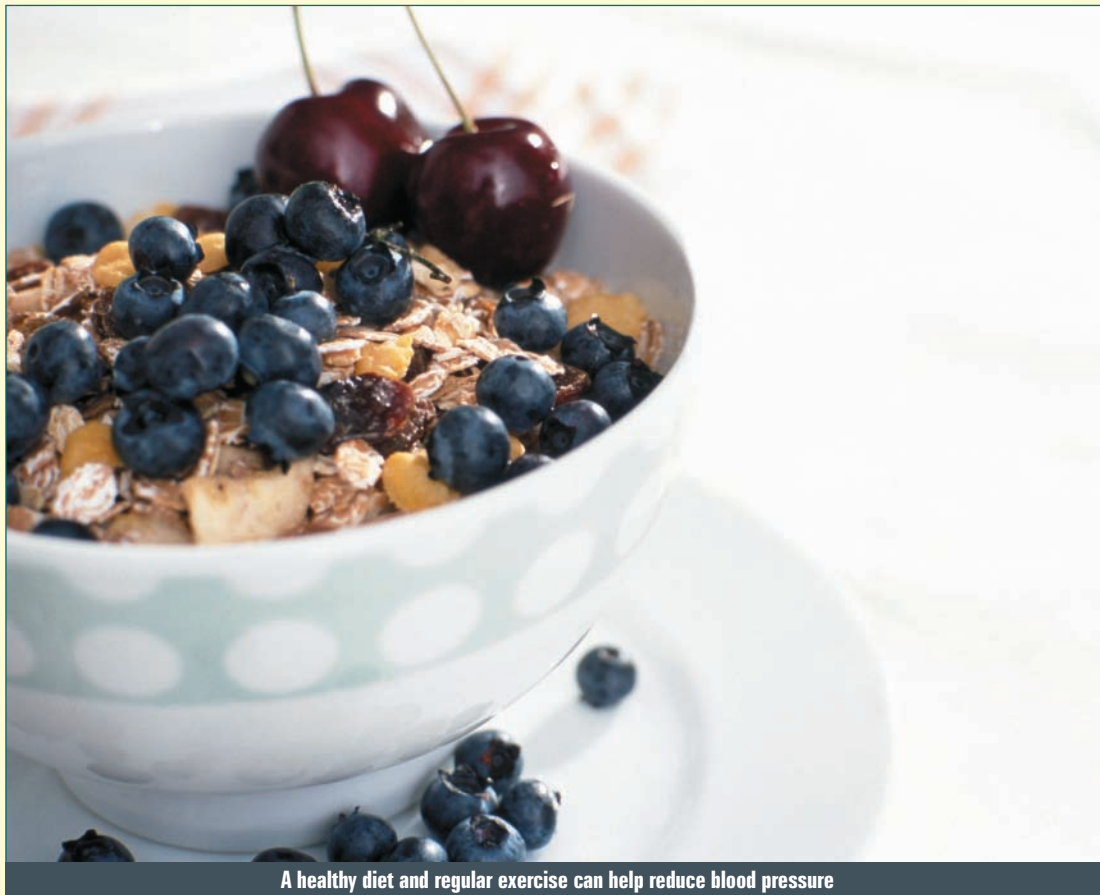
Table 2: NMS intervention stage

Questions	Prompts and notes
Have you had the chance to start taking your new medicine yet?	Check whether the patient has started taking the tablets prescribed for hypertension
How are you getting on with it?	Assess whether the patient is experiencing any side-effects, has any concerns about taking the tablets or is just not sure why he/she needs to take the medicine
Are you having any problems with your new medicine, or concerns about taking it?	Any extra information in addition to that obtained above
Do you think it is working? (Prompt: is this different from what you were expecting?)	Does the patient feel that the tablets are having an effect on his/her blood pressure
Do you think you are getting any side-effects or unexpected effects?	Check with the patient whether he/she has experienced anything different since starting the medication or noticed anything different
People often miss taking doses of their medicines, for a wide range of reasons. Have you missed any doses of your new medicine, or changed when you take it? (Prompt: when did you last miss a dose?)	This may have already been covered in the earlier questions
Do you have anything else you would like to know about your new medicine or is there anything you would like me to go over again?	Give the patient a chance to discuss any other concerns or issues he/she may have about the medicine as well as any beliefs he/she may have around hypertension

Table 3: NMS follow-up stage

Questions	Prompts and notes
How have you been getting on with your new medicine since we last spoke? (Prompt: are you still taking it?)	This is a general question to open up a natural dialogue and to see whether patients are still taking the new medicine
Last time we spoke, you mentioned a few issues you'd been having with your new medicine. Shall we go through each of these and see how you're getting on?	Use the pharmacy records to refer to each of the issues that arose from the initial contact with the patient at the intervention stage. Issues may have arisen from any of the questions at the initial contact (e.g. problems/concerns, information needs, side-effects, adherence issues)
A) The first issue you mentioned was [refer to specific issue] – is that correct? B) Did you try [the advice/solution recommended at the previous contact] to help with this issue?	Use the pharmacy records to refer back to the advice or solution recommended to the patient. This question should be phrased according to the specific advice, information or solution offered to the patient at the intervention stage
Did you try anything else?	This allows you to check whether the patient received help or advice from elsewhere
Did this help? (Prompt: how did it help?)	Document the outcome from the issue
Is this still a problem or concern?	The question above may give you the answer to this already but if not, it allows you to clearly establish whether or not the problem/concern is still an issue. If the problem/concern is still there, then the patient will need to be referred appropriately before exiting the service
People often miss taking doses of their medicines for a wide range of reasons. Since we last spoke, have you missed any doses of your new medicine, or changed when you take it? (Prompt: when did you last miss a dose?)	You need to obtain a reason as to why a dose was missed. Evaluate whether there is a need to provide the patient with any extra aids or to recommend a once-a-day dosing schedule if the medicine has to be taken more than once and hence a dose is missed
Have there been any other problems/concerns with your new medicine since we last spoke?	If new problems exist, then the patient will need to be referred appropriately, as mentioned above





A healthy diet and regular exercise can help reduce blood pressure

What is a healthy diet?

- Starchy foods should form one-third of the diet
- 15 per cent of calories per day should come from protein; include two portions of fish per week
- Reduce sugar and saturated fat intake
- Five portions fruit/vegetables per day; add fruit to cereal, canned and frozen fruit and vegetables all beneficial; use carrots, cucumber and peppers as snacks
- Reduce salt intake – no more than 6g a day
- Ensure adequate fluid intake; approximately six to eight glasses of water a day

■ Relaxation therapies can reduce blood pressure and people may wish to pursue these as part of their treatment (e.g. yoga, meditation, mindfulness). Signpost to NHS Choices www.nhs.uk/Livewell/Stressmanagement/Pages/Stressbusters.aspx

■ Ascertain people's alcohol consumption and encourage a reduced intake if they drink excessively, because this can reduce blood pressure and has broader health benefits too

■ Discourage excessive consumption of coffee and other caffeine-rich products

■ Encourage people to keep their dietary sodium intake low, either by reducing or substituting sodium salt, as this can reduce blood pressure

■ Do not offer calcium, magnesium or potassium supplements as a method for reducing blood pressure

■ Offer advice and help to smokers to stop smoking – signpost to the NHS Stop Smoking Service (www.smokefree.nhs.uk) if you do not offer a smoking cessation service yourself.

Giving feedback to GPs

It is important that doctors understand why pharmacists should be actively involved in providing the new medicine service⁶.

The NMS involves an intervention in which the pharmacist will provide advice, information and reassurance to address patients' concerns during the first month of a new treatment. This interven-

Benefits of smoking cessation

- 100,000 deaths a year linked to smoking
- More than eight in 10 cases of lung cancer deaths are attributable to smoking
- 10-25 per cent of smokers develop chronic obstructive pulmonary disease (COPD)
- Benefits of smoking cessation:
 - risk of dying from smoking-related issues reduced by up to 50 per cent
 - reduced risk of asthma attacks/COPD, heart disease, cancers
 - seen after 72 hours of stopping smoking
 - cough, wheeze and breathing problems improve after three to nine months

tion has been shown to improve adherence to medication. The consultation takes place typically seven to 14 days after the medicine is first prescribed and there is also a follow-up intervention at 28 days.

Research shows that non-adherence to medications for a long-term condition develops rapidly, with 30 per cent of patients being non-adherent at 10 days. Studies have also shown that patients receiving support from a pharmacist when starting a new medicine, to complement advice given by the prescriber, are more likely to still be taking it as prescribed at 28 days.

The research also demonstrated that the number of patients with medicine-related problems reduced significantly. Better adherence to medication is associated with better clinical outcomes.

This would be particularly beneficial for patients prescribed a new medicine for hypertension to ensure that they are in control of how they wish to take the medicine and what they wish to know about the medicine. It would enable the patient to be well informed and responsible for his/her own health and thereby more prone to continue taking the medication. This would prevent:

■ The need to add on another medicine or to increase the dose of the current medicine unless absolutely necessary

■ Wastage due to unused medicines and also an unnecessary increase in dosages, which could cause potentially dangerous hypotensive episodes leading to falls, especially in the elderly.

Alcohol consumption in figures

- 33,000 deaths a year related to alcohol (including accidents)
- Men = 3-4 units maximum per day
- Women = 2-3 units maximum per day
- Pregnancy = avoid, especially in first trimester
- One unit = 10ml or 8mg of pure alcohol: i.e. 25ml whisky, a third of a pint of beer or half a glass of wine (approx 85ml); however this does vary depending on percentage of alcohol

Activity – recommended amounts

- Aim to be active daily; at least 150 minutes of moderate intensity activity per week in bouts of at least 10 minutes (i.e. activity that makes you feel out of breath, such as heavy housework, brisk walking, dancing, swimming)
- Twice weekly – do activities to increase muscle strength (e.g. carrying shopping)
- For older adults (over 65 years) – any physical activity will be beneficial; gradually build it up
- Activity to improve balance and co-ordination twice a week for adults over 65 years of age
- Benefits of increased activity:
 - 30 per cent reduction in mortality risk
 - 20-35 per cent lower risk of cardiovascular disease, coronary heart disease and stroke
 - 30-40 per cent lower risk of metabolic syndrome and type 2 diabetes
 - 36-68 per cent reduced risk of hip fracture

Practical points

■ Brief your team. Pharmacy staff are often in a much better position for ‘selling’ services than pharmacists, so use your team to best advantage

■ Make sure that local GPs and nurses know about the service so that they can encourage patients to enquire about it. You may wish to inform the local healthcare team about specific drugs or conditions you are targeting and give them information leaflets to give to patients. This gives you an opportunity to attract more NMS patients

■ Have leaflets available so that if patients are not interested when first approached, they can read about the service and return for a NMS when/if they are comfortable to do so.

Future developments

The introduction of the NMS provides community pharmacists with an ideal opportunity to not only enhance their own working practice by making a real difference to the health and well-being of patients, but also to build relationships with patients and other healthcare providers.

It also provides community pharmacists with an opportunity to develop their clinical skills in

CPD competences

This module supports the following community pharmacy competences:

Competence	Where this module supports competence development
G1a: Using expert knowledge and skills to benefit patients	This module helps pharmacists to have a greater understanding of hypertension so they can support patients who have been prescribed a new medicine and provide a blood pressure monitoring service after appropriate training
G1f: Using clinical and pharmaceutical knowledge to optimise the balance among effectiveness, safety and cost of medicines	Reflection exercise 1 encourages pharmacists to read the current NICE guideline and thus understand the rationale for quality and cost-effective prescribing
G1w: Taking on new roles or responsibilities	The module highlights the importance of effective consultation skills in undertaking the NMS
C2c: Creating and making use of opportunities to encourage healthy lifestyles	How healthy lifestyle advice can be incorporated into the consultation process for the NMS is explained in the module
C3e: Providing pharmaceutical care to people with chronic conditions	The module explains how the NMS will help provide care to people with a long-term condition such as hypertension
C5c: Developing and implementing new services under local or national contracts	The place of the NMS in the patient journey is explained and pharmacists are encouraged to work closely with patients in order to have the best possible impact – on patients, as well as on professional relationships

the long-term conditions specified in the NMS such as hypertension

Any pharmacists who have not been accredited for the MUR service will have to be accredited before they are eligible to provide the NMS.

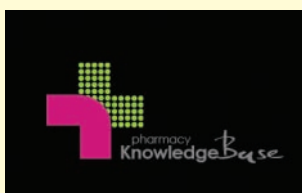
Finally, by becoming actively involved in providing the NMS, particularly for newly prescribed medicines for hypertension, community pharmacists will help improve health outcomes, promote cost-effective prescribing, ensure adherence to prescribed medication, and reduce drug wastage in this large patient group.

Other sources of information

- New Medicine Service – an open learning programme for pharmacists and pharmacy technicians (Centre for Pharmacy Postgraduate Education, 2011)
- British Hypertension Society: www.bhsoc.org

References

1. NICE clinical guideline 127. Hypertension: clinical management of primary hypertension in adults. www.nice.org.uk/nicemedia/live/13561/56008/56008.pdf
2. NMS Service Specification (Pharmaceutical Services Negotiating Committee, 2011) www.psn.org.uk/pages/nms.html
3. NICE clinical guideline 76. Medicines adherence. www.nice.org.uk/nicemedia/live/11766/43042/43042.pdf
4. National Pharmacy Association (NPA): New Medicine Service – frequently asked questions. www.npa.co.uk/Documents/Docstore/NMS/NMS_FAQs_updated_29_9_11.pdf
5. NPA Healthy living information www.npa.co.uk/Documents/Docstore/NMS/Revised/Healthy_living_adults.pdf
6. Feedback form for GPs www.psn.org.uk/data/files/PharmacyContract/Contract_changes_2011/GP_guide_to_contract_changes_Aug_2011.pdf



Pharmacy Magazine's CPD modules are now available on Cegedim Rx's PMR systems, Pharmacy Manager and Nexphase. Just click on the 'Professional Information & Articles' button within Pharmacy KnowledgeBase and search by therapy area. Please call the Cegedim Rx helpdesk on 0844 630 2002 for further information.



ASSESSMENT QUESTIONS

PHARMACY MAGAZINE CPD RECORD – NOVEMBER 2011

USE THIS FORM TO RECORD YOUR LEARNING AND ACTION POINTS FROM THIS MODULE ON HYPERTENSION AND THE NEW MEDICINE SERVICE OR DOWNLOAD FROM WWW.PHARMACYMAG.CO.UK AFTER COMPLETING THE ONLINE LEARNING SCENARIOS

HYPERTENSION AND THE NMS

- To undertake the NMS for hypertension, you must have:**
 - Completed a learning module on hypertension
 - A blood pressure monitor
 - Access to the PMR
 - Appropriate MUR accreditation and a suitable private area
- What should be the first drug of choice for a 50-year-old Caucasian man just diagnosed with hypertension?**
 - An ACE inhibitor
 - An ARB
 - A calcium channel blocker
 - A beta-blocker
- Which diuretic is normally added at Step 3 and why?**
 - Indapamide or chlorthalidone because they are cost-effective
 - Bendroflumethiazide because it is more cost-effective
 - Indapamide or clorthalidone due to evidence of benefit on clinical outcomes
 - Bendroflumethiazide due to evidence of benefit on clinical outcomes
- What question do you need to ask before a patient is enrolled on the NMS?**
 - Do you know what this medicine has been prescribed for?
 - Do you know what your blood pressure is?
 - Have you got any concerns about your medicine?
- Are you taking any other hypertension medicines?
- How often should patients on a new antihypertensive have a face-to-face review of care?**
 - 12 months
 - Three months
 - Six months
 - One month
- What lifestyle advice is NOT going to benefit a patient who has been prescribed an antihypertensive?**
 - Smoking cessation
 - Reducing alcohol consumption
 - Changing to a healthy diet/increasing exercise
 - Taking potassium supplements
- What advice can you give as part of the NMS to a patient newly prescribed a diuretic for resistant hypertension?**
 - Avoid drinking too much water
 - Measure blood pressure every month
 - Remember to go back to the GP for renal function testing and sodium and potassium level monitoring
 - Continue taking the medication
- What percentage of patients become non-adherent to medications for long-term conditions at 10 days?**
 - Five per cent
 - Ten per cent
 - Twenty per cent
 - Thirty per cent

Activity completed. (Describe what you did to increase your learning. Be specific) (Act)

Name/date:

Time taken to complete activity:

What did I learn that was new in terms of developing my skills, knowledge and behaviours? Have my learning objectives been met?* (Evaluate)

How have I put this into practice? (Give an example of how you applied your learning. Why did it benefit your practice? How did your learning affect outcomes?) (Evaluate)

Do I need to learn anything else in this area? (List your learning action points. How do you intend to meet these action points?) (Reflect)

* If as a result of completing your evaluation you have identified another new learning objective, start a new cycle – this will enable you to start at **Reflect** and then go on to **Plan, Act** and **Evaluate**. This form can be photocopied to avoid having to cut this page out of the module. Complete the learning scenarios at www.pharmacymag.co.uk

MODULE 193 ANSWER SHEET

ENTER YOUR ANSWERS HERE Please mark your answers on the sheet below by placing a cross in the box next to the correct answer. Only mark one box for each question. Once you have completed the answer sheet in ink, return it to the address below together with your payment of £3.75. Clear photocopies are acceptable. You may need to consult other information sources to answer the questions.

- | | | | | | | | | | | | | | | | |
|----|-----------------------------|----|-----------------------------|----|-----------------------------|----|-----------------------------|----|-----------------------------|----|-----------------------------|----|-----------------------------|----|-----------------------------|
| 1. | a. <input type="checkbox"/> | 2. | a. <input type="checkbox"/> | 3. | a. <input type="checkbox"/> | 4. | a. <input type="checkbox"/> | 5. | a. <input type="checkbox"/> | 6. | a. <input type="checkbox"/> | 7. | a. <input type="checkbox"/> | 8. | a. <input type="checkbox"/> |
| | b. <input type="checkbox"/> | | b. <input type="checkbox"/> | | b. <input type="checkbox"/> | | b. <input type="checkbox"/> | | b. <input type="checkbox"/> | | b. <input type="checkbox"/> | | b. <input type="checkbox"/> | | b. <input type="checkbox"/> |
| | c. <input type="checkbox"/> | | c. <input type="checkbox"/> | | c. <input type="checkbox"/> | | c. <input type="checkbox"/> | | c. <input type="checkbox"/> | | c. <input type="checkbox"/> | | c. <input type="checkbox"/> | | c. <input type="checkbox"/> |
| | d. <input type="checkbox"/> | | d. <input type="checkbox"/> | | d. <input type="checkbox"/> | | d. <input type="checkbox"/> | | d. <input type="checkbox"/> | | d. <input type="checkbox"/> | | d. <input type="checkbox"/> | | d. <input type="checkbox"/> |

Name (Mr, Mrs, Ms) _____

Business/home address _____

Town _____ Postcode _____ Tel: _____ GPhC/PSNI Reg no.

--	--	--	--	--	--	--	--	--	--

I am a PM subscriber I confirm the form submitted is my own work (signature): _____

Please charge my card the sum of £3.75 Name on card _____ Visa Mastercard Switch/Maestro

Card No. _____ Start date _____ Expiry date _____

Date _____ Switch/Maestro Issue Number _____

Processing of answers
Completed answer sheets should be sent to Precision Marketing Group, Precision House, Bury Road, Beyton, Bury St Edmunds IP30 9PP (tel: 01284 718918; fax: 01284 718920; email: cpd@precisionmarketinggroup.co.uk), together with credit/debit card/cheque details to cover administration costs. This assessment will be marked and you will be notified of your result and sent a copy of the correct answers. The examiners' decision is final and no correspondence will be entered into.