Social care (Adults, England)

KNOWLEDGE SET FOR MEDICATION

CONTINUOUS TRAINING PROGRAMME

Candidate Name…….....

Jet Training, Care Plus1, Minehead Road, Norton Fitzwarren, Taunton, Somerset, TA2 6NS
Telephone 01823 270845 Mobile 07775643169
Email: info@jet-training.org.uk

KNOWLEDGE SETS MEDICATION

LEGISLATION AND MEDICATION

1.1 Be aware of the legislation and guidance that controls the prescribing, dispensing, administration, storage and disposal of medicines:

MEDICINES ACT 1968 + AMENDMENTS

The **Medicines Act 1968** is an Act of Parliament of the United Kingdom. It governs the manufacture and supply of medicine. The act introduces three categories of medicine:

- prescription only drugs, which are available only from a pharmacist if prescribed by a doctor or a dentist;
- pharmacy medicines, available only from a pharmacist but without a prescription;
- and general sales medicine which may be bought from any shop without a prescription. It makes possession of prescription drugs without a prescription an offence

The Health Act 2006 (the Health Act) amends the Medicines Act 1968 in a number of important ways. It replaces the "personal control" requirement in the Medicines Act 1968 with a statutory duty on the pharmacist in charge of the pharmacy – the responsible pharmacist – to secure the safe and effective running of the pharmacy. There are requirements on the responsible pharmacist to set out procedures for safe working and to keep a record of the pharmacist responsible for the pharmacy at any one time. The Health Act inserts new regulation making powers in the Medicines Act to set out, in more detail, how the responsible pharmacist is to meet these requirements.

SECTION 8 AMENDMENT

In 2001, the Government passed an amendment to Section 8 of the Misuse of Drugs Act. The new amendment which made it a criminal offence for people to knowingly allow premises they own, manage, or have responsibility for, to be used by any other person for:

- adminstration or use of any controlled drugs
- supply of any controlled drug
- the production or cultivation of controlled drugs, such as growing cannabis

Professionals could be prosecuted if they knowingly allowed any of these things to occur on on work premises. The same legal obligations applied to people with regard to their own homes.

The law required that if staff become aware of the use or supply of illicit drugs on their premises, they must take reasonable action to prevent this continuing.

THE AMENDMENT TO SECTION 8 HAS NEVER BEEN IMPLEMENTED. It is still an offence to allow premises to be used for the smoking of cannabis and opium.

MISUSE OF DRUGS ACT 1971 (CONTROLLED DRUGS) + AMENDMENTS

This act is intended to prevent the non-medical use of certain drugs. For this reason it controls not just medicinal drugs (which will also be in the Medicines Act) but also drugs with no current medical uses. Offences under this Act overwhelmingly involve the general public, and even when the same drug and a similar offence are involved, penalties are far tougher.

Drugs subject to this Act are known as 'controlled' drugs. The law defines a series of offences, including unlawful supply, intent to supply, import or export (all these are collectively known as 'trafficking' offences), and unlawful production. The main difference from the Medicines Act is that the Misuse of Drugs Act also prohibits unlawful possession. To enforce this law the police have the special powers to stop, detain and search people on 'reasonable suspicion' that they are in possession of a controlled drug.

The laws controlling drug use are complicated. The Misuse of Drugs Act (MDA) regulates what are termed controlled drugs. It divides drugs into three classes as follows:

Class A:

These include, cocaine and crack (a form of cocaine), ecstasy, heroin, LSD, methadone, methamphetamine (crystal meth), magic mushrooms containing ester of psilocin and any Class B drug which is injected, such as, for example, amphetamine.

Class B:

These include amphetamine (not methamphetamine which is class A), barbiturates, and codeine.

Class C:

These include cannabis (in resin, oil or herbal form), anabolic steroids and minor tranquillisers.

Class A drugs are treated by the law as the most dangerous. Offences under the Misuse of Drugs Act can include:

- Possession of a controlled drug.
- Possession with intent to supply another person.
- Production, cultivation or manufacture of controlled drugs.
- Supplying another person with a controlled drug.
- Offering to supply another person with a controlled drug.
- Import or export of controlled drugs.
- Allowing premises you occupy or manage to be used for the consumption of certain controlled drugs (smoking of cannabis or opium but not use of other controlled drugs) or supply or production of any controlled drug.

N.B. Certain controlled drugs such as amphetamines, barbiturates, methadone, minor tranquillisers and occasionally heroin can be obtained through a legitimate doctor's prescription. In such cases their possession is not illegal.

The law is even more complicated by the fact that some drugs are covered by other laws, are not covered at all or treated in an exceptional way under the Misuse of Drugs Act.

2005 - DRUGS ACT

This Act came into force on 1st January 2006. Full text of the Act is available here

It includes the following clauses:

- A reversal of the burden of proof in cases where suspects are found in possession of a quantity of drugs greater than that which would be required for personal use. In other words - it will be up to the defendant to prove there was no intent to supply. The actual amount has yet to be defined.

- Compulsory drug-testing of arrestees where police have "reasonable grounds" for believing that Class A drugs were involved in the commission of an offence. Failure to comply with this testing is itself an offence and positive tests can lead to compulsory drug treatment assessment.
- The inclusion of fresh Liberty Cap or "magic" mushrooms in Class A of the Misuse of Drugs Act. Before this Bill, only dried or prepared mushrooms were considered illegal.
- The Act has also linked drug legislation with measures to deal with Anti-Social Behaviour so that anyone given an Anti Social Behaviour Order must undergo compulsory testing and drug treatment.

THE HEALTH & SAFETY AT WORK ACT (HSWA) 1974

This Act covers all people at work, including those working in Registered Care Homes. The only exception being domestic workers in private employment. The Act extends to the prevention of risks to the health and safety of the general public.

The HSWA includes the following general objectives:

- To secure the health, safety and welfare of all persons at work;

- To protect others from the risks arising from workplace activities;

Some duties are qualified by so far as is reasonably practicable which, at its simplest is striking a reasonable balance between an existing risk and the cost involved with reducing it to an acceptable level.

Employer's duties (HSWA)
There is a general duty under Sections 2 and 3 to ensure the health, safety and welfare of all employees at work.

Specific duties include:

- The provision and maintenance of plant and systems of work that are safe and without risks to health.
- Making arrangements for ensuring safety and absence of risks to health in connection with the use, handling, storage and transport of articles and substances.
- The provision of information, instruction, training and supervision to ensure health and safety.
- The maintenance of a safe workplace, with safe access to and egress from it.
- The provision and maintenance of a safe working environment and adequate arrangements for welfare at work.

Employers have a duty to prepare and revise as necessary a Statement of Health and Safety Policy and to consult with safety representatives. They have a duty not to charge employees in respect of anything done or provided to ensure legal compliance.

Duties of employers towards people other than their own employees include the following:

- Non-employees not to be exposed to risks so far as is reasonably practicable;
- Non-employees to be provided with prescribed information which might affect their health and safety.

In a Registered Care Home it should be especially noted that particular care must be exercised because so many aspects of the work involve the Health & Safety, not only of the employees, but also of the residents and the visiting public as well.

Employees' duties (HSWA)
All employees have a duty under Section 7 to look after the health and safety of themselves and others.

COSHH REGULATIONS 1999

The 2002 COSHH regulations revolk (by section 18) the 1999 regulations with effect from 21st November 2002 and then effectively re-enact them with modifications designed to ensure that they conform with current EC requirements

The regulations impose duties on employers to protect employees and other persons who may be exposed to substances hazardous to health and also impose certain duties on employees concerning their own protection from such exposure, and prohibit the import into the United Kingdom of certain substances and articles from outside the European Economic Area.

To comply with COSHH you need to follow these eight steps:

Step 1 Assess the risks

Assess the risks to health from hazardous substances used in or created by your workplace activities.

Step 2 Decide what precautions are needed

You must not carry out work which could expose your employees to hazardous substances without first considering the risks and the necessary precautions, and what what else you need to do to comply with COSHH.

Step 3 Prevent or adequately control exposure

You must prevent your employees being exposed to hazardous substances. Where preventing exposure is not reasonably practicable, then you must adequately control it. The advice in this leaflet, and in the other guidance it refers to, will help you to make correct assessments and to put the appropriate controls into place.

Step 4 Ensure that control measures are used and maintained

Ensure that control measures are used and maintained properly and that safety procedures are followed.

Step 5 Monitor the exposure

Monitor the exposure of employees to hazardous substances, if necessary.

Step 6 Carry out appropriate health surveillance

Carry out appropriate health surveillance where your assessment has shown this is necessary or where COSHH sets specific requirements.

Step 7 Prepare plans and procedures to deal with accidents, incidents and emergencies

Prepare plans and procedures to deal with accidents, incidents and emergencies involving hazardous substances, where necessary.

Step 8 Ensure employees are properly informed, trained and supervised

You should provide your employees with suitable and sufficient information, instruction and training.

CARE STANDARDS ACT 2000 (RECEIPT, STORAGE AND ADMINISTRATION OF MEDICINES)

ACCESS TO HEALTH RECORDS ACT 1990

This Act has been repealed to the extent that it now only affects the health records of deceased clients. It applies only to records created since 1 November 1991.

The Act allows access to:

a) the deceased's personal representatives (both executors or administrators) to enable them to carry out their duties; and

b) anyone who has a claim resulting from the death.

However, this is not a general right of access, it is a restricted right and the following circumstances could limit the applicant's access:

- if there is evidence that the deceased did not wish for any or part of their information to be disclosed; or
- if disclosure of the information would cause serious harm to the physical or mental health of any person; or
- if disclosure would identify a third party (i.e. not the client nor a healthcare professional) who has not consented to that disclosure.

As with the Data Protection Act, a medical professional may be required to screen the notes before release.

DATA PROTECTION ACT 1998

The Data Protection Act 1998 applies to personal information. This is information about living, identified or identifiable individuals and includes information such as names and address, bank details, and opinions expressed about an individual.

The Act regulates how personal information is used and requires organisations to comply with eight principles or rules of good information handling. It also requires some organisations to tell the Information Commissioner's Office (ICO) what they use personal information for.

Personal information can be used by an organisation only where it meets one of a number of conditions set out in the Act. In most cases, it should not be too difficult to meet one of these conditions, which include having the individual's consent or having a legitimate interest in using their personal information.

The Act does classify some personal information as "sensitive" and there are stricter rules about this. This is information about:

- racial or ethnic origin
- political opinions
- religious or similar beliefs
- trade union membership
- physical or mental health or condition
- sexual life
- offences or alleged offences committed
- proceedings relating to those offences or alleged offences

You can only use sensitive personal information where you can meet one of a narrower set of conditions for processing the information, as well as being able to meet one of the conditions for processing standard personal information. These narrower conditions make sure that this sensitive information is only used where an organisation has an essential need to use it, or where the individual has given explicit consent. You may have to get explicit consent unless you need the information to comply with legal or employment obligations or rights. As you are responsible for staff security, you are allowed to record violent behaviour towards staff. Amending a customer file in this way usually means that you have to inform the individual in question.

HAZARDOUS WASTE REGULATIONS 2005

New rules affecting the collection of hazardous waste were introduced in England and Wales in June 2005. The Hazardous Waste Regulations replaced the Special Waste controls and hazardous waste producers to register by July 16 2005 and on an annual basis thereafter.

Under the new regulations producers or consignors of hazardous waste are required to register their premises. Producers must separate hazardous waste from the general waste stream. The regulations create cradle-to-grave documentation for the movement of hazardous waste. This requires licensed hazardous waste disposal carriers and treatment plants to keep appropriate records of hazardous waste and provide the Environment Agency with quarterly disposal and recovery information.

All hazardous waste will need to be separated and stored safely on site. The Environment Agency will visit both registered and unregistered sites to ensure that they are acting accordingly. They will issue fixed penalties to premises which fail to register, fail to complete or retain consignment notes correctly or fail to register mid-year following unforeseen hazardous waste output.

Any site of an industrial type, including factories, warehouses, distribution centres and workshops, must register if any amount of hazardous waste is produced. Non-industrial sites such as shops and offices must register if they produce more than 200Kg of hazardous waste in a year. Examples of approximately 200kg of hazardous waste (provided by the Department for Environment, Food and Rural Affairs) are shown below:

- 10 small TVs or computer monitors.
- 14 lead acid batteries.
- 500 fluorescent tubes.
- 5 small domestic fridges.

ADMINISTRATION & CONTROL OF MEDICINES IN CARE HOMES AND CHILDREN'S SERVICES JUNE 2003 (*GUIDANCE)

NB This list of legislation and guidance is given as examples. Legislation and guidance is subject to change. It is important when designing learning packages, in-house training, etc., that the most current legislation and guidance is included.

The basic principles that underpin the safe handling of medicines in any establishment do not vary according to the nature of care that is offered. Whether the establishment is large or small; whether the staff have a nursing qualification or not, there is a duty of care that requires medication to be safely handled so that the people who are cared for in homes and children's services are supported to take their medicines safely.

This document is designed to assist owners and managers of care homes to safely handle medicines; and to meet the medication standards that now form an integral part of the process to regulate private care. The term 'care home' is intended to incorporate establishments formally known as residential and nursing homes and also children's homes.

The guidance in this booklet applies irrespective of how the medicines are obtained; including those dispensed at a pharmacy, supplied by a dispensing doctor or purchased over the counter.

The scope of this guidance is all care establishments, including those providing social and nursing care, including children's homes.

1.2 Understand the legal framework, and how the organisation's policies and procedures reflect these, for safe handling of medicines (prescribing, dispensing, administration, storage and disposal) by all workers.

MEDICINES CONTROL

Safe Management of Medicines: A Guide for Managers of Old People's Homes and Residential Care Facilities

Introduction

These guidelines outline the most suitable procedures for ensuring the safety and efficacy of medicines used in residential care facilities. They describe minimum standards for storage and use of medicines for all residential care facility managers to achieve.

The guidelines have been written in consultation with the Ministry's Licensing and Therapeutics Sections. While there may be several ways to achieve or even surpass the standard set out in the document, their universal adoption will maximise the benefits which residents can gain from medicines.

Message

Every manager of a residential care facility must take all reasonable steps to ensure that at all times the storage, administration and disposal of medicines are strictly controlled and that safety, efficacy and accuracy are maintained with respect to "the right dose being administered to the right person in the right form at the right time"; as prescribed by the medical practitioner.

Ordering and Receiving Medicines

a. Medicines must be authorised in writing on the Resident Medication Profile and signed by the resident's medical practitioner. In an emergency the doctor can give telephone instructions. Enter these on the Resident Medication Profile and get them signed by the doctor as soon as possible on the next visit. A senior staff member must note, date and sign immediately all telephone changes in therapy.
b. Check all medicines arriving at the facility against the Resident Medication Profile as they are unpacked. Place all checked medicine in the security of the medicine room or cupboard. Read labels carefully and note any specific storage requirements, interactions or dose instructions on the Resident Medication Profile and action them. Failure to do so may reduce the effectiveness of the medicine. If you do not understand any medical instructions contact the supplying pharmacy or the prescribing doctor for help. Check the Resident Medication Profile and return any discontinued medicines to the pharmacy.
c. The prescribing doctor should review each resident's medications at least every three months.

Custody and Storage of Medicines

a. Store medicines in a locked room or locked cupboard which is free from heat, moisture and light.
b. Store all medicines in the original dispensed packs. Keep all foil or blister unit dose packs unopened in the original dispensed pack until the dose is given.
c. Store all residents' medications in an orderly fashion. Keep medicines in their original

dispensed containers until immediately prior to administration. Do not remove labels from medicine containers.

d. Some medicines require refrigeration. If a separate fridge is unavailable, keep the medicines in an airtight container in the fridge in a separate area from food to avoid contamination. Use a maximum/minimum thermometer to make daily checks on storage temperature. Keep a weekly record of temperatures.
e. Keep all Controlled Drugs in a locked safe or locked cupboard accessible only to senior staff. Record administration in a Controlled Drug Register to keep a running balance of stock. Nominated staff members must sign all entries in the register.
f. Keys to the medicines and Controlled Drugs rooms or cupboards are to be held by one senior staff member responsible for drug administration on each duty. Access to these areas should be restricted to staff authorised to handle medicines. Display a list of these persons.
g. Nominated senior staff or the supply pharmacist should check all medicines for expiry dates and deterioration each month. Rotate stock so that oldest stock is used first. Keep expired and discontinued medicines separate and in a secure area for return to the pharmacy for disposal.
h. To reduce the risk of error, keep the medicine room or cupboard clean and tidy at all times. Clean up any spillage immediately to prevent contamination and deterioration of the medicines.

Administration of Medicines

Under no circumstances give a medicine to anyone except the person it was prescribed for.

Check prepared daily doses against the Resident Medication Profile and enter them on the Medication Administration Record for signing off as the dose is administered.

Use the original dispensed container or unit dose pack to administer medicines.

If this is not possible, management must arrange a suitable alternative system which ensures that the right dose is administered to the right person at the right time. Take all reasonable steps to ensure strict control of storage and administration of medicines - even during the Medication Round.

Administration Procedure

1. Check the name of the resident against the name on the medicine container.
2. Check the instructions.
3. Administer the medicines directly from the container to the resident.
4. Make sure the resident has fluids to take with the medicine, or that special instructions for administration are complied with.
5. Ensure that oral medicines are swallowed. Medicine must not be left for the resident to take later.
6. Record on the Medication Administration Record sheet that the medicine has been administered and taken, by signing in the space provided. The sheet should also allow the recording of withheld doses, refused doses or extra doses given in the event of wastage.
7. Controlled Drug administration must be recorded on the Medication Administration Record and Controlled Drugs Register, and signed for.

8. Record and report to management at the earliest opportunity if medicine is not taken for any reason.
9. If the wrong medicine is given, report this immediately to the senior staff member on duty, who will inform the doctor. Complete an incident report.

Where Residents are Responsible for their Own Medication

a. Store the medicines, including Controlled Drugs, in the resident's room in a locked cupboard or drawer that is accessible to the resident and staff.
b. Medicines should be checked every week. Appropriate senior staff and the doctor must assess a resident's ability to take their own medicine at least every three months.

Administration of Household Remedies (Standing Orders)

Keep remedies for the relief of minor ailments in a separate area of the medicine cupboard.

Household remedies are for conditions such as occasional headache, constipation and cough. Their use must be authorised by the resident's doctor and entered on the Resident Medication Profile with details of dosage. Record the administration on the Medication Administration Record.

It is important to remember that minor ailments may be symptoms of other more serious diseases. They may also be adverse reactions to medicines already prescribed.

A non-prescribed medicine may cause a reaction to other prescribed medicines. Always check with the supplying pharmacy for any adverse reactions before administering a household remedy.

Protocols for Administering Household Remedies

If the prescribing doctor agrees to a list of household remedies for occasional use, then clearly record their protocol and strictly adhere to them. Include a definite period of time for their use and an expiry date when they should be reviewed by the doctor.

If a household remedy is prescribed for an individual, then it may only be administered to that person. Some household remedies are for the use of all residents and are purchased by the management.

Non-prescribed Remedies

Where a resident is self-administering vitamins and other non-prescribed items, record them on the Resident Medication Profile and bring it to the attention of the doctor. Notify the supplying pharmacy so they can check for any possible reaction with the prescribed medicine.

PART 2

The Supplying Pharmacy

Your supplying pharmacy should be willing to undertake the following:

- Prompt, accurate supply of all pharmaceutical requirements at agreed times.
- Provision of pharmaceutical advice and information.
- Training of staff where appropriate.

Supply of All Pharmaceutical Requirements

Aim

To provide a system for efficient and effective supply of pharmaceuticals which meets the requirements prescribed or recommended for a resident

The supplying pharmacy and the facility should together write a protocol or contract to cover the following points.

The supplying pharmacy should:

- agree to a system for the dispensing and delivery of medicine within a timeframe which ensures that the residents' pharmaceutical needs are met.
- arrange delivery of medicine to the facility by a pharmacist or nominated employee known to the staff
- provide a pharmacist to visit the facility regularly at a time to be agreed by the staff e.g. weekly
- provide assistance to the facility's staff member in charge of medicines by checking records against the medicine stocks to ensure the system is running correctly
- dispense prescriptions in quantities of not more than one month's supply to avoid overstocking and wastage
- supply dispensed medicines with clear labels on each container with full directions for use and cautionary and advisory labels where appropriate. The directions must be in accord with the Resident Medication Profile. The pharmacy must re-label the containers of any changed medicine
- supply medicines in containers suitable for direct administration to the individual resident
- maintain a small stock of "household remedies" in consultation with medical practitioners and staff
- monitor the stock of medicines held in the facility and be responsible for the removal and disposal of expired, discontinued and damaged medicines
- ensure the continuity of supply of medicines to residents who are being transferred or are temporarily absent
- maintain a medication profile for every resident receiving medication from the pharmacy.

Provision of Comprehensive Pharmaceutical Care

Aim

To provide information on medicines to the staff, resident, and medical practitioner where appropriate, to ensure that the maximum therapeutic benefit is obtained by the client.

The supplying pharmacist should:

- advise on the storage of medicines to ensure that:
  - the potency of the product is maintained
  - medicines are not muddled
  - external and internal preparations are kept apart
  - adequate security is maintained
- monitor all prescribed medicines and where indicated advise the medical practitioner on dosage, interactions and adverse reactions
- ensure that the relevant and accurate details on medication are maintained
- advise staff on the correct use and administration of medicines
- provide any information sought by staff on the medicines used by the residents
- provide a formal review of Comprehensive Pharmaceutical Care on a regular basis

Provision of Staff Training

Aim

To provide in-service education programmes for facility staff in order to promote the safe and effective use of medicines.

A pharmacist from the supplying pharmacy should be available to educate staff on the safe handling, storing, administration and dosage of medicines when requested by the facility.

PART 3

Written Protocol for the Safe Management of Medicines in Homes and Residential Care Facilities

A written protocol providing guidelines for the facility is necessary to:

- ensure high standards of care for the residents
- protect residents and staff by ensuring safe methods of medication administration
- enable facility and public accountability
- encourage a standard code of practice for all staff.
- The protocol should contain statements on:
  - the availability of the protocol document for use by staff, residents, the supplying pharmacy, doctors and relatives of residents of the facility
  - custody of all medicines prescribed or a description of the conditions whereby residents may take charge of their own medication
  - the procedures for prescribing medicines by medical practitioners, both in the case of a written prescription and an oral instruction
  - the system by which the prescriptions/orders are obtained
  - the positions of staff and their responsibilities relating to medicines at the facility
  - the assurance of safe and proper storage of medicines
  - a general description of the records kept of resident medication and administration
  - the method of payment of practitioners fees and prescription fees and charges
  - the procedure for disposal of medicines
  - a statement of confidentiality of residents' medical records
  - The protocol should detail specifically who is responsible for:

- taking charge of the key to the medicine room/cupboard
- preparation of medicine rounds
- administration of medicines
- recording details of medicines prescribed for residents
- recording medicine administration
- supplying household remedies to residents
- disposal of medicines

2. ROLES, RESPONSIBILITIES AND BOUNDARIES

2.1 Understand the process by which medicines are prescribed, dispensed and obtained by the individual and the worker's role in this process:

PRESCRIBERS (MEDICAL AND NON-MEDICAL)

General Medical Council - guidance for doctors on prescribing medicines
The General Medical Council (GMC), the doctors' regulatory body, has updated its guidance for doctors on good prescribing in Good Practice in Prescribing Medicines (2006).

This guidance for doctors covers a wide range of prescribing-related issues, including:

- basic principles of prescribing
- keeping up to date and prescribing in patients' best interests
- prescribing unlicensed medicines
- prescribing medicines for use outside the terms of their licence (known as off-label prescribing)
- responsibility for prescribing medicines for hospital outpatients
- repeat prescribing
- remote prescribing via telephone, email, fax, video link or a website
- prescribing anti-obesity medicines

The Medicines and Healthcare products Regulatory Agency (MHRA) is an agency of the Department of Health which is responsible for ensuring that medicines and medical devices meet appropriate safety and performance standards.

The agency licenses all medicines for use in the UK. Once a new drug has received a licence from the MHRA, it is normally referred to the National Institute for Health and Clinical Excellence (NICE) - see below - which will decide whether, and how, this drug should be used within the NHS.

There is information on the MHRA website about how they regulate the use of medicines in the UK. Information covers a wide range of issues, including:

- the licensing of medicines
- medicines for children
- herbal and homeopathic medicines
- ensuring the quality of medicines

- the import and export of medicines
- labels, patient information leaflets and packaging; and
- medicines advertising

The MHRA's website has a complete A-Z of the hundreds of the subjects it covers, including the advertising of medicines; buying medicines over the internet; herbal medicines safety information; nurse and pharmacist independent prescribing; paracetamol overdose; and testing kits (the A-Z also covers MHRA guidance on medical devices).

In September 2006, the MHRA introduced a new scheme aimed at improving and strengthening the regulation of homeopathic medicines in the UK (covered by either Product Licences of Right (PLRs) for existing homeopathic medicines, or certificates of registration introduced under the Simplified Registration Scheme in 1992).

Under the new National Rules Scheme introduced in 2006, companies are encouraged to register new homeopathic medicines, with the option of re-registering some existing products. For the first time, companies are allowed to include information for patients about products used for the treatment and relief of minor, self-limiting conditions - those that can ordinarily be relieved or treated without the supervision or intervention of a doctor - based on the use of the product within the homeopathic tradition.

All applications under the National Rules Scheme must be accompanied by supporting data on the quality, safety and efficacy of the homeopathic treatment concerned, together with product literature and information about product labelling.

The Non-Medical Prescribing Programme

The non-medical prescribing programme gives patients quicker access to medicines, improves access to services and makes better use of nurses' and other health professionals' skills.

Nurse and pharmacist prescribing is a valuable tool to deliver patient care in a variety of settings. To help the NHS to understand how Non-Medical Prescribing can help to deliver services, the Department of Health commissioned Primary Care Contracting to produce 6 Nurse Prescribing and 6 Pharmacist Prescribing case studies

Scope of Guidance - Position in Scotland, Wales and Northern Ireland

The guidance available on this website applies to England only. Although the legislation that permits the extension of prescribing responsibilities applies across the UK, it is for the devolved administrations in Scotland, Wales and Northern Ireland to decide whether and how it is implemented for the NHS in their countries. For further information please refer to the following websites:

Nurse Independent Prescribing

From 1 May 2006, qualified Nurse Independent Prescribers (formerly known as Extended Formulary Nurse Prescribers) are now able to prescribe any licensed medicine for any medical condition within their competence, including some Controlled Drugs.

Prescribing and Supply of Medicines by Optometrists

Optometrists are, from July 2005, able to train to act as supplementary prescribers and to use Level 2 exemptions. Please see the GOC Handbook for the accreditation of therapeutic programmes / assessment for optometrists.

Pharmacist independent prescribing

From 1 May 2006, a new category of prescriber - the "Pharmacist Independent Prescriber" was created. Once qualified, Pharmacist Independent Prescribers will be able to prescribe any licensed medicine for any medical condition within their competence, with the exception of Controlled Drugs.

Supplementary prescribing

To ease the burden on doctors and improve access to medicines, the Department is training nurses, pharmacists and some Allied Health Professions (AHPs) (physiotherapists, chiropodists/ podiatrists and radiographers) so that they can prescribe certain medicines, within agreed Clinical Management Plans.

MANAGERS

Managers can order, receive and administer medications with regard to the clients care plan

SOCIAL CARE STAFF

Social Carte staff can order, receive and administer medications with regard to the clients care plan and level of training and responsibility and in line with the Homes and national policies

ANCILLARY STAFF

Have no role in this process unless specified in the care plan

CLERICAL STAFF/ADMINISTRATORS

Clerical staff administrators can order, receive and administer medications with regard to the clients care plan and level of training and responsibility and in line with the Homes and national policies

2.2 Understand the roles and boundaries of all workers with regard to the safe handling of medicines (prescribing, dispensing, administration, storage and disposal) in various care contexts, for example:

CARE HOMES (PERSONAL OR NURSING CARE)

National Minimum Standards apply:

Service users, where appropriate, are responsible for their own medication, and are protected by the home's policies and procedures for dealing with medicines.

The registered person ensures that there is a policy and staff adhere to procedures, for the receipt, recording, storage, handling, administration anddisposal of medicines, and service users are able to take responsibility for their own medication if they wish, within a risk management framework.

The service user, following assessment as able to self-administer medication, has a lockable space in which to store medication, to which suitably trained, designated care staff may have access with the service user's permission.

Records are kept of all medicines received, administered and leaving the home or disposed of to ensure that there is no mishandling. A record is maintained of current medication for each service user (including those self-administering).

Medicines in the custody of the home are handled according to the requirements of the medicines Act 1968, guidelines from the Royal Pharmaceutical Society, the requirements of the Misuse of Drugs Act 1971 and nursing staff abide by the UKCC Standards for the administration of medicines.

Controlled Drugs administered by staff are stored in a metal cupboard, which complies with the Misuse of Drugs (Safe Custody) Regulations 1973.

Medicines, including Controlled Drugs, for service users receiving nursing care, are administered by a medical practitioner or registered nurse.

In residential care homes, all medicines, including Controlled Drugs, (except those for self-administration) are administered by designated and appropriately trained staff. The administration of Controlled Drugs is witnessed by another designated, appropriately trained member of staff.

The training for care staff must be accredited and must include:

- basic knowledge of how medicines are used and how to recognise and deal with problems in use;
- the principles behind all aspects of the home's policy on medicines
- handling and records.

Receipt, administration and disposal of Controlled Drugs are recorded in a Controlled Drugs register.

The registered manager seeks information and advice from a pharmacist regarding medicines policies within the home and medicines dispensed for individuals in the home.

Staff monitor the condition of the service user on medication and call in the GP if staff are concerned about any change in condition that may be a result of medication, and prompt the review of medication on a regular basis.

When a service user dies, medicines should be retained for a period of seven days in case there is a coroner's inquest.

DOMICILIARY CARE Medication and health related activities for:

DAY SERVICES
AN INDIVIDUAL'S OWN HOME

SHELTERED ACCOMMODATION

SUPPORTED HOUSING

The registered person ensures there is a clear, written policy and procedure which is adhered to by staff and which identifies parameters and circumstances for assisting with medication and health related tasks and identifies the limits to assistance and tasks which may not be undertaken without specialist training.

The policy should include procedures if required for obtaining prescriptions and dispensed medicines and for recording the information.

Staff only provide assistance with taking medication or administer medication or undertake other health related tasks, when it is within their competence; they have received any necessary specialist training and it is:

- with the informed consent of the service user or their relatives or representative
- clearly requested on the care plan by a named assessor
- with agreement of the care or support workers' line manager, and
- not contrary to the agency's policy

Assistance with medication and other health related activities is identified in the Care Plan, forms part of the risk assessment and is detailed within the Service User Plan.

Care and support staff leave medication at all times in a safe place which is known and accessible to the service user or, if not appropriate for the service user to have access, where it is only accessible to relatives and other personal carers, health personnel and domiciliary care staff

Care and support workers follow the agency's procedures for reporting concerns, responding to incidents and seeking guidance.

Care and support workers record, with the user's permission, observation of the service user taking medication and any assistance given, including dosage and time of medication and undertaking any other health related tasks, on the record of the care visit kept in the home and/ or the Home Care

Medication record and the personal file of the service user held in the agency. Any advice to the service user to see or call in their General Practitioner or other health care professional is also recorded. The record is signed and dated by the care worker and the service user or their representative.

Except for employment agencies solely introducing workers, where delivery of the care package involves multiple agencies, including health care, a policy on medication and health related

tasks is agreed and followed. A key worker, generally a health care professional from one agency who visits on a regular basis is identified as responsible for taking the lead on medication. Care and support workers retain responsibility for their own actions in accordance with the policy.

Except for employment agencies solely introducing workers, where necessary and agreed the policy and procedures are approved by a suitably experienced pharmacist, if appropriate. The functions undertaken by staff in this context need to be covered by the employers insurance policy.

GENERAL NON CARE MEDICATION PROCEDURE FOR:

DAY SERVICES
AN INDIVIDUAL'S OWN HOME
SHELTERED ACCOMMODATION
SUPPORTED HOUSING

1. Assessing the person's ability to administer their own medication

- It is important to find out not only whether the person is able to look after their own medication but also that they want to do it
- An assessment should be completed by the agency involved with the person through consulting with the person themselves and other professional staff involved who can help to achieve a clear judgement about the person's ability
- Where there are doubts whether the person can do it safely, a risk assessment will be needed which will state the risks and how they can be overcome. This should be completed by the manager of the agency supporting the person
- It should always be explored whether training might provide the vital help to enable a person to become more independent in looking after their own medication
- A record should be made in the person's own file noting the decision about self administration of medication and the factors taken into account in arriving at the decision

2. Supporting the person who is administering their own medication

- It is helpful if medication is dispensed in suitable containers, such as blister packs, by the pharmacist to enable the person to know where they are up to with their medication
- If the medication is in liquid form, it will be necessary to help the person keep a written note when the medication is taken
- It is always important to keep medication safe and encouragement to use a locked cupboard would help to ensure this
- Members of staff should ensure they are available to support the person with their medication should circumstances change or if there is a difficulty. These changes should be reported to the line manager
- Even when it is agreed that a person is able and willing to administer their own medication, members of staff should be responsive to signs that this is not working out as planned and report any concerns to the line manager
- All arrangements, concerns or incidents regarding medication should be recorded in the person's own file

3. Supporting a person who is unable or only partly able to manage their own medication

- Where someone is unable to take their own responsibility for medication, it is essential that the process for supporting them is agreed by management and staff and carried out consistently by all staff

When medicines arrive, they should be checked to ensure that:-

- The Medication Administration Record (MAR) is up to date to include all prescribed medication
- The administration times are indicated
- The blister pack is clearly labelled and intact, including correct start day and expiry date
- If the medicine can't be "blistered", the instructions with it should be checked with the MAR sheet
- The prescribed medicine is for the correct person
- The correct strength is stated
- If the medicine is to be taken "as and when required" there is clear advice as to how much can be taken in a 24 hour period
- The medication should be stored in a locked cabinet and there should be arrangements for the medication to be safely stored if it is needed to be used outside the home
- The Medication Administration Record should be completed and signed by the member of staff every time the medicine is given

4. How to support a person who is unable to give consent to having medication or has refused consent

- If someone is not able to give consent, the doctor will need to make a judgement about what is in the person's best interest, for example if the medication is necessary to ensure their good health or even save the person's life
- This judgement is a professional one but is also governed by medical guidelines and the law. Staff may be asked to assist by providing information about a person to help others make a judgement about the person's capacity to consent
- Members of staff should never volunteer to give consent to medical treatment on behalf of a person who is using services
- If someone is refusing to give consent to having medication, the responsibility of staff is to bring this to the attention of the doctor and line manager
- All details about consent to medication should be recorded in the person's own file

5. Obtaining a prescription

- When a person sees a doctor, it is important that the doctor has a list of all the medication currently prescribed or being used by the person
- It is important to make sure that there are prescriptions for all the items suggested by the doctor and at the correct strengths. If not, refer back to the surgery
- It is also vital that the medication container states clearly when and how often the medication should be taken

- If it is a repeat prescription, it is important to leave enough time to obtain the new medication before the existing supply runs out. Sometimes surgeries give guidance about how long this will take

6. What to do if a person refuses to take their medication

- It is essential that all medication is taken according to the Doctor's instructions unless the doctor later advises differently
- If someone refuses to take the medication they have been prescribed, encouragement may help but the person should not be forced to take something they are not happy with.
- Members of staff dealing with this difficulty should make sure that the doctor who prescribed the medication or a colleague from the same practice is made aware of the situation as soon as possible. The line manager should also be notified. If there is difficulty in contacting the doctor, NHS Direct should be contacted for general advice
- All details regarding any refusal to take medication should be recorded in the person's own file

7. What to do if a person has taken different or more medication than has been prescribed

- If the person appears to be at all unwell or if the member of staff has any concerns, the medical emergency services should be contacted immediately
- The doctor and line manager should also be informed as soon as possible
- As much detail as possible should be given about the nature and amount of medication consumed
- The events leading up to this incident and the action taken should be recorded clearly in the person's own file

8. What to do if medication is missing

- The first thing is to carry out a search of the place where the medication is usually kept.
- The person using the medication and any other people using services who might have had access to the medication should be observed to check for any symptoms of overdose or other adverse reaction. If there are any concerns, medical emergency services should be contacted
- If the missing medication cannot be traced, the line manager must be informed and arrangements made for the medication to be replaced and any other action required to prevent it happening again
- The incident should be recorded in the person's own file

9. Dealing with non-prescribed medication

- It is important that each house has an agreed supply of non-prescribed medication for general use
- The use of this type of medication should be authorised by a manager
- Members of staff should observe for any signs of adverse reaction to non-prescribed medication and seek medical advice immediately if concerned
- People who are prescribed medication containing paracetamol should not use non-prescribed medication

- If someone is requiring non-prescribed medication more than 10 times per month or for longer than 48 hours, a doctor's opinion should be obtained
- The use of non-prescribed medication should be recorded in the person's own file

Other networks and services for individuals (education, religious establishments, voluntary agencies, activities and entertainment)

2.3 Understand the need to check that the medicine received matches the medication and dosage prescribed by the prescriber and is listed on the appropriate documentation

The prescriber must be registered with the GMC in order to prescribe medicines. If you have provisional or limited registration you may prescribe medicines in line with the supervisory conditions of your employment.

In order to prescribe safely the prescriber must prescribe only within the limits of their competence. Prescribers must follow the advice in Good Medical Practice and be aware of the major contraindications and side effects of the drugs prescribed.

Ensure you are familiar with current guidance published in the British National Formulary, including the use, side effects and contraindications of the medicines.

Be in possession of, or take, an adequate history from the client, including: any previous adverse reactions to medicines; current medical conditions; and concurrent or recent use of non-prescription medicines.

Reach agreement with the client on the use of any proposed medication, and the management of the condition by exchanging information and clarifying any concerns. The amount of information you should give each client will vary according to factors such as the nature of the client's condition, risks and side effects of the medicine and the client's wishes. Bearing these issues in mind, you should, where appropriate:

- Establish the client's priorities, preferences and concerns about medicine taking and the proposed treatment;
- Discuss other treatment options with the client;
- Satisfy yourself that your client has been given appropriate information, in a way they can understand, about: any common adverse side effects; potentially serious side effects; interactions with other medicines; and the dosage and administration of the medicine; (see GMC guidance Seeking clients consent; the ethical considerations).

When a medication is prescribed for a client you should be aware that the dosages are appropriate for the client and their condition

When providing care in a multi-disciplinary team: you should ensure that client care is provided and supervised only by staff who have appropriate skills, experience and training.

If you prescribe at the recommendation of a nurse or other healthcare professional who does not have prescribing rights, you must be satisfied that the prescription is appropriate for the client

concerned and that the professional is competent to have recommended the treatment.

Agree with the client arrangements for appropriate follow-up and monitoring where relevant. This may include: further consultations; blood tests or other investigations; processes for adjusting the dosage of medicines, changing medicines and issuing repeat prescriptions

Record the medicine prescribed and the reasons for choosing this medicine in the client's notes.

In short:

- Give the right dose
- Of the right medicine
- To the right person
- At the right time
- With the right preparation (tablet, elixir, suppository etc)
- In the right place (oral, intramuscular etc)
- And record in the right format

2.4 Understand the need to seek guidance and support (and from where) about the medicine and dosage prescribed for any particular individual, e.g. prescriber (medical or non-medical), NHS Direct, manager, nurse, or from supportive reference material

Get the right treatment

In order to provide the best healthcare possible, NHS healthcare services are available in many different ways. You can choose from a range of healthcare options to ensure that you always get the right treatment for your needs.

As well as the services provided by your local GP surgery, or health centre, there are many other options, such as the NHS Direct telephone service, NHS walk-in centres, and your local pharmacy.

The various ways that you can access NHS healthcare services are outlined below.

GP surgeries and health centres

Your local GP surgery is often the first point of contact for a wide variety of treatment and further healthcare services. GPs work with a range of healthcare professionals including:

- nurses,
- health visitors,
- mental health nurses,
- midwives, and
- practice nurses.

GP surgeries are particularly busy in the winter months so be sure to keep to your appointment time. If you need to cancel your appointment, you should always let your surgery know because missed appointments waste precious time and resources.

Out-of-hours services are for urgent medical treatment and should only be contacted if you cannot wait until the next day to be treated. Most surgeries have an answering machine message referring you to out-of-hours telephone numbers, or you can call NHS Direct.

Accident and emergency (A&E) departments

It is usually obvious when emergency care is needed for serious injury or illness. You can get emergency medical attention by going to the A&E department at your local hospital, or by dialling 999 for an ambulance.

The healthcare professionals at an A&E department are equipped to deal with serious cases of injury and illness, rather than routine or minor ailments.

See the 'related articles' section for more information about emergency treatment and when it is needed.

NHS walk-in centres

There are many NHS walk-in centres across the UK, and new ones are being set up all the time. Each centre is run by experienced NHS nurses, who can offer help and advice for a wide range of minor illnesses. NHS walk-in centres deal with common ailments and non-urgent conditions. They are usually open from early morning to late evening, seven days a week and you do not need to make an appointment.

See the 'related articles' section for more information about NHS walk-in centres.

Pharmacies

Pharmacists are experts on medicines and how they work. Your local pharmacist can answer questions about medicines, provide advice about treating everyday ailments, and help you decide whether or not you need to see your GP, as well as providing many other services.

See the 'related articles' section for more information about the services provided by pharmacies, and to find your nearest pharmacy.

The NHS Direct telephone service

You can contact NHS Direct on 0845 46 47 for confidential healthcare advice 24-hours a day, 365 days a year. NHS Direct has become an alternative source of information for patients seeking medical help outside normal surgery hours.

Call NHS Direct for information on:

- what to do if you, or your family, are feeling ill,
- particular health conditions,
- local healthcare services, such as doctors, dentists, or the out-of-hours opening times of pharmacies, and
- self-help and support organisations.

Dentists

Many dentists are still providing NHS dental care. The NHS Direct telephone service can provide you with:

- details of dentists accepting NHS patients,
- emergency dental services, and
- general advice about pain relief and self-care.

Alternatively, see the 'related articles' section to find your nearest NHS dentist.

Self-care

You can prepare for minor illnesses and ailments by keeping a range of over-the-counter (OTC) medicines at home. A well-stocked medicine collection will help you with many common health problems, such as:

- colds and flu,
- coughs,
- sore throats,
- indigestion,
- toothache,
- headaches, and
- constipation.

If you have children, do not forget to include appropriate medicines for them too.

The NHS Direct online self-help guide can help you identify common symptoms and also gives suggestions about what medicines to include in your collection. However, the information provided by the self-help guide is not intended to replace advice from your GP. If your symptoms persist, or get worse, you should always see your GP.

2.5 Understand the need for confidentiality, when and to whom information about a individual's medication may be disclosed or discussed, e.g. doctor, pharmacist, other care professionals, relatives/solicitor with enduring power of attorney

All information regarding clients or other parties must be recorded in the appropriate place, i.e. Care Notes, Staff Files, Diary, Computer Files. No information should be left unattended or in a place where others can view the information. Any Computer Files should be consistent with the Data Protection Act.

All records must be current, accurate, legible and appropriate at the time of writing or recording.

Only those who have a right to access information should be able to view it. Any unauthorised viewing is contrary to policy and a disciplinary offence. Any outside agency or internal employee must identify who they are and the reasons for their interest in the information

Any statement, verbal, written, sign language must be consistent with the need of that information and information should not be given outside of that need. All staff should be aware of the need for confidentiality and be sensitive to whom and why the information is given

Where information is given which is relevant outside of inter-personal communication, the individual giving the information to the other person must be made aware of the fact that the information will be given to any appropriate individual or organisation.

All records that carry confidential information should be stored securely and where appropriate, locked in a room or cupboard which has access only to those whom have authority to hold a key or enter that area.

3. TYPES OF MEDICINE AND ROUTES

3.1 Understand the importance of some types of medication prescribed and administered to individuals, for example:

ANTIBIOTICS (used to fight infection)

The term **antibiotic** was coined by Selman Waksman in 1942 to describe any substance produced by a micro-organism that is antagonistic to the growth of other micro-organisms in high dilution. This definition therefore excludes naturally occurring substances, such as gastric juice and hydrogen peroxide, which may kill micro-organisms but are not produced by micro-organisms. The strict definition of "antibiotic" therefore excludes synthetic compounds such as the sulphonamides (which are antimicrobial agents).

In modern usage, the term "antibiotic" is more loosely used to refer to any chemotherapeutic agent or antimicrobial agent with activity against micro-organisms such as bacteria, fungi or protozoa.

Many antibiotic compounds used in modern medicine are produced and isolated from living organisms, such as the penicillin class produced by fungi in the genus *Penicillium*, or streptomycin from bacteria of the genus *Streptomyces*. With advances in medicinal chemistry many antibiotics are now modified chemically from their original form found in nature. In addition, some modern antibiotics have been created through purely synthetic means

ANALGESICS (used to relieve pain)

An **analgesic** (colloquially known as a **painkiller**) is any member of the diverse group of drugs used to relieve pain (achieve *analgesia*). The word *analgesic* derives from Greek *an-* ("without") and *-algia* ("pain"). Analgesic drugs act in various ways on the peripheral and central nervous systems; they include paracetamol (acetaminophen), the non-steroidal anti-inflammatory drugs (NSAIDs) such as the salicylates, narcotic drugs such as morphine, synthetic drugs with narcotic properties such as tramadol, and various others.

In choosing analgesia, the severity and response to other medication determines the choice of agent; the WHO pain ladder, originally developed in cancer-related pain, is widely applied to find suitable drugs in a stepwise manner.[1] The choice of analgesia is also determined by the type of pain: for neuropathic pain, traditional analgesia is less effective, and there is often benefit from classes of drugs that are not normally considered analgesics, such as trycyclic anti-depressants and anti-convulsants

ANTI-HISTAMINES (used to relieve allergy symptoms, e.g. hay fever)

Antihistamines, usually as tablets, are the basic treatment of hayfever and some other allergic illnesses. They are also the main treatment for a kind of skin rash called 'urticaria' or 'hives', also called 'nettlerash'.

In hayfever, the big advantage of antihistamines is that they treat the nose, the eyes, and the terrible itching which some sufferers get in the throat or ears. The only other treatments which help so many of the symptoms are steroid tablets or injections, and desensitising injections. Both of these other treatments have disadvantages not shared by antihistamines.

In hayfever the drawback of antihistamines is that they are not so effective for the blockage in the nose which troubles some people.

Asthma is helped only slightly by antihistamines; they are rarely used for asthma in Britain because there are so many better medicines for that.

ANTACIDS (used to relieve indigestion)

An antacid is any substance, generally a base or basic salt, which counteracts stomach acidity. In other words, antacids are stomach acid neutralisers.

ANTI-COAGULANTS (used to prevent blood clotting e.g. following heart attack, thrombosis, some surgical procedures)

Anticoagulants are given to people to stop thrombosis (blood clotting inappropriately in the blood vessels). This is useful in primary and secondary prevention of deep vein thrombosis, pulmonary embolism, myocardial infarctions and strokes in those who are predisposed

PSYCHOTROPIC MEDICINE (e.g. used to treat depression)

A psychotropic substance is a chemical substance that acts primarily upon the central nervous system where it alters brain function, resulting in temporary changes in perception, mood, consciousness and behaviour. These drugs may be used recreationally to purposefully alter one's consiousness as entheogens for ritual or spiritual purposes, as a tool for studying or augmenting the mind, or therapeutically as medication.

A loosely defined grouping of drugs that have effects on psychological function. Here the psychotropic agents include the antidepressive agents, hallucinogens, and tranquillising agents (including the antipsychotics and anti-anxiety agents).

DIURETICS (used to get rid of excess fluids in the body)

Diuretics are medicines that remove water from the body by increasing the amount of urine the kidneys produce. They are often known as "water tablets".

Mechanisms of diuretic drugs. Diuretic drugs increase urine output by the kidney (i.e., promote diuresis). This is accomplished by altering how the kidney handles sodium. If the kidney excretes more sodium, then water excretion will also increase. Most diuretics produce diuresis by inhibiting the reabsorption of sodium at different segments of the renal tubular system. Sometimes a combination of two diuretics is given because this can be significantly more effective than either compound alone (synergistic effect). The reason for this is that one nephron segment can compensate for altered sodium reabsorption at another nephron segment; therefore, blocking multiple nephron sites significantly enhances efficacy.

Loop diuretics inhibit the sodium-potassium-chloride cotransporter in the thick ascending limb (see above figure). This transporter normally reabsorbs about 25% of the sodium load; therefore, inhibition of this pump can lead to a significant increase in the distal tubular concentration of sodium, reduced hypertonicity of the surrounding interstitium, and less water reabsorption in the collecting duct. This altered handling of sodium and water leads to both diuresis (increased water loss) and natriuresis (increased sodium loss). By acting on the thick ascending limb, which handles a significant fraction of sodium reabsorption, loop diuretics are very powerful diuretics. These drugs also induce renal synthesis of prostaglandins, which contributes to their renal action including the increase in renal blood flow and redistribution of renal cortical blood flow.

Thiazide diuretics, which are the most commonly used diuretic, inhibit the sodium-chloride transporter in the distal tubule. Because this transporter normally only reabsorbs about 5% of

filtered sodium, these diuretics are less efficacious than loop diuretics in producing diuresis and natriuresis. Nevertheless, they are sufficiently powerful to satisfy most therapeutic needs requiring a diuretic. Their mechanism depends on renal prostaglandin production.

Because loop and thiazide diuretics increase sodium delivery to the distal segment of the distal tubule, this increases potassium loss (potentially causing *hypokalemia***)** because the increase in distal tubular sodium concentration stimulates the aldosterone-sensitive sodium pump to increase sodium reabsorption in exchange for potassium and hydrogen ion, which are lost to the urine. The increased hydrogen ion loss can lead to *metabolic alkalosis*. Part of the loss of potassium and hydrogen ion by loop and thiazide diuretics results from activation of the renin-angiotensin-aldosterone system that occurs because of reduced blood volume and arterial pressure. Increased aldosterone stimulates sodium reabsorption and increases potassium and hydrogen ion excretion into the urine.

There is a third class of diuretic that is referred to as **potassium-sparing diuretics**. Unlike loop and thiazide diuretics, some of these drugs do not act directly on sodium transport. Some drugs in this class antagonize the actions of aldosterone (**aldosterone receptor antagonists**) at the distal segment of the distal tubule. This causes more sodium (and water) to pass into the collecting duct and be excreted in the urine. They are called K^+-sparing diuretics because they do not produce hypokalemia like the loop and thiazide diuretics. The reason for this is that by inhibiting aldosterone-sensitive sodium reabsorption, less potassium and hydrogen ion are exchanged for sodium by this transporter and therefore less potassium and hydrogen are lost to the urine. Other potassium-sparing diuretics directly inhibit sodium channels associated with the aldosterone-sensitive sodium pump, and therefore have similar effects on potassium and hydrogen ion as the aldosterone antagonists. Their mechanism depends on renal prostaglandin production. Because this class of diuretic has relatively weak effects on overall sodium balance, they are often used in conjunction with thiazide or loop diuretics to help prevent hypokalemia.

Carbonic anhydrase inhibitors inhibit the transport of bicarbonate out of the proximal convoluted tubule into the interstitium, which leads to less sodium reabsorption at this site and therefore greater sodium, bicarbonate and water loss in the urine. These are the weakest of the diuretics and seldom used in cardiovascular disease. Their main use is in the treatment of glaucoma.

LAXATIVES (used to alleviate constipation)

Laxatives (or **purgatives**) are foods, compounds, or drugs taken to induce bowel movements or to loosen the stool, most often taken to treat constipation. Certain stimulant, lubricant, and saline laxatives are used to evacuate the colon for rectal and bowel examinations, and may be supplemented by enemas in that circumstance. Sufficiently high doses of laxatives will cause diarrhea. Laxatives only work to hasten the elimination of undigested remains of food in the large intestine and colon.[*citation needed*]

There are several types of laxatives. Some laxatives combine more than one type of active ingredient to produce a combination of the effects mentioned. Laxatives may be oral or in suppository form.

Constipation with no known organic cause, i.e. no medical explanation, exhibits gender differences in prevalence: females are more often affected than males.[1] Not surprisingly, some advertisers promote their brands as being more feminine and thereby tailor their message to the market. The way laxatives function in males and females, however, does not exhibit significant differences.

HORMONES (e.g. insulin, steroids, Hormone Replacement Therapy)

Insulin

Insulin is a polypeptide hormone secreted by the islets of Langerhans and functioning in the regulation of the metabolism of carbohydrates and fats, especially the conversion of glucose to glycogen, which lowers the blood glucose level.

Any of various pharmaceutical preparations containing this hormone that are derived from the pancreas of certain animals or produced through genetic engineering and are used in the medical treatment and management of diabetes mellitus (type I).

Insulin is a hormone with intensive effects on both metabolism and several other body systems (eg, vascular compliance). Insulin causes most of the body's cells to take up glucose from the blood (including liver, muscle, and fat tissue cells), storing it as glycogen in the liver and muscle, and stops use of fat as an energy source. When insulin is absent (or low), glucose is not taken up by most body cells and the body begins to use fat as an energy source (ie, transfer of lipids from adipose tissue to the liver for mobilization as an energy source). As its level is a central metabolic control mechanism, its status is also used as a control signal to other body systems (such as amino acid uptake by body cells). It has several other anabolic effects throughout the body. When control of insulin levels fail, diabetes mellitus results.

Insulin is used medically to treat some forms of diabetes mellitus. Patients with Type 1 diabetes mellitus depend on external insulin (most commonly injected subcutaneously) for their survival because the hormone is no longer produced internally. Patients with Type 2 diabetes mellitus are insulin resistant, have relatively low insulin production, or both; some patients with Type 2 diabetes may eventually require insulin when other medications fail to control blood glucose levels adequately.

Insulin is a peptide hormone composed of 51 amino acid residues and has a molecular weight of 5808 Da. It is produced in the Islets of Langerhans in the pancreas. The name comes from the Latin *insula* for "island".

Insulin's structure varies slightly between species of animal. Insulin from animal sources differs somewhat in 'strength' (i.e., in carbohydrate metabolism control effects) in humans because of those variations. Porcine (pig) insulin is especially close to the human version.

Steriods

Steroid hormones are steroids which act as hormones. Mammalian steroid hormones can be grouped into five groups by the receptors to which they bind: glucocorticoids, mineralocorticoids, androgens, estrogens, and progestagens. Vitamin D derivatives are a sixth closely related hormone system with homologous receptors, though technically sterols rather than steroids.

Steroids exert a wide variety of effects mediated by slow genomic as well as by rapid nongenomic mechanisms. They bind to nuclear receptor in the cell nucleus for genomic actions. Membrane-associated steroid receptors activate intracellular signaling cascades involved in nongenomic actions.

Because steroids and sterols are lipid soluble, they can diffuse fairly freely from the blood through the cell membrane and into the cytoplasm of target cells. In the cytoplasm the steroid may or may not undergo an enzyme-mediated alteration such as reduction, hydroxylation, or

aromatization. In the cytoplasm, the steroid binds to the specific receptor, a large metalloprotein. Upon steroid binding, many kinds of steroid receptor dimerize: two receptor subunits join together to form one functional DNA-binding unit that can enter the cell nucleus. In some of the hormone systems known, the receptor is associated with a heat shock protein which is released on the binding of the ligand, the hormone. Once in the nucleus, the steroid-receptor ligand complex binds to specific DNA sequences and induces transcription of its target genes.

Hormone Replacement Therapy

Hormone replacement therapy (HRT) or in Britain, Hormone therapy (HT), now often referred to as "treatment" rather than therapy, is a system of medical treatment for surgically menopausal, perimenopausal and to a lesser extent postmenopausal women, based on the assumption that the treatment may prevent discomfort caused by diminished circulating estrogen and progesterone hormones. It involves the use of one or more of a group of medications designed to artificially boost hormone levels. The main types of hormones involved are estrogens, progesterone or progestins, and sometimes testosterone.

Attitudes towards HRT changed significantly in 2002 with the announcement by the Women's Health Initiative of the National Institutes of Health that the treatment (Prempro) they were using in the main part of their study coincided with a larger incidence of breast cancer, heart attacks and strokes. The WHI findings were reconfirmed in a following wide-scale, national study done in the UK, known as the the Million Women Study. As a result of these findings, the number of women taking hormone treatment dropped by almost half. The warning that followed the announcements, in the *Journal of the American Medical Association* and elsewhere, is that women with normal rather than surgical menopause should take any prescribed HRT treatment at the lowest feasible dose, for the shortest possible time. For health problems associated with menopause such as osteoporosis (a small percentage of postmenopausal women are at risk of severe bone loss), other life-style changes and/or medications are now recommended.

HRT is available in various forms. It generally provides low dosages of one or more estrogens, and often also provides either progesterone or a chemical analogue, called a progestin. Testosterone may also be included. In women who have had a hysterectomy, an estrogen compound is usually given without any progesterone, a therapy referred to as "unopposed estrogen therapy". HRT may be delivered to the body via patches, tablets, creams, troches, IUDs, vaginal rings, gels or, more rarely, by injection. Dosage is often varied cyclically, with estrogens taken daily and progesterone or progestins taken for about two weeks every month or two; a method called "sequentially combined HRT" or scHRT. An alternate method, a constant dosage with both types of hormones taken daily, is called "continuous combined HRT" or ccHRT, and is a more recent innovation. Sometimes an androgen, generally testosterone, is added to treat reduced sexual desire/(libido). It may also treat reduced energy and help reduce osteoporosis after menopause.

HRT is seen as a short-term relief (often one or two years, usually less than five) from menopausal symptoms (hot flashes, irregular menstruation, fat redistribution etc.). Younger women with premature ovarian failure or surgical menopause may use hormone replacement therapy for many years, until the age that natural menopause would be expected to occur.

CYTOTOXIC MEDICINES (used to treat some forms of cancer)

Hormonal therapy is one of the major modalities of medical treatment for cancer, others being

cytotoxic chemotherapy and targeted therapy (biotherapeutics). It involves the manipulation of the endocrine system through exogenous administration of specific hormones, particularly steroid hormones, or drugs which inhibit the production or activity of such homones (hormone antagonists). Because steroid hormones are powerful drivers of gene expression in certain cancer cells, changing the levels or activity of certain hormones can cause certain cancers to cease growing, or even undergo cell death. Surgical removal of endocrine organs, such as orchiectomy and oophorectomy can also be employed as a form of hormonal therapy.

Hormonal therapy is used for several types of cancers derived from hormonally responsive tissues, including the breast, prostate, endometrium, and adrenal cortex. Hormonal therapy may also be used in the treatment of paraneoplastic syndromes or to ameliorate certain cancer- and chemotherapy-associated symptoms, such as anorexia. Perhaps the most familiar example of hormonal therapy in oncology is the use of the *selective estrogen-response modulator* tamoxifen for the treatment of breast cancer, although another class of hormonal agents, aromatase inhibitors, now have an expanding role in that disease.

3.2 Understand the classification of medication:

The Medicines Act 1968 defines three legal categories of medicines. These are:

- general sales list medicines,
- pharmacy medicines, and
- prescription only medicines.

PRESCRIPTION ONLY MEDICINE (POM)

You cannot get prescription only medicines without a prescription, usually from your GP or dentist, but in some cases, a nurse, pharmacist or other healthcare professional.

Some medicines may be reclassified from Prescription only to Pharmacy or from Pharmacy to General sale list. This can happen after several years, when it's known that the medicine is safe for most people to use. For example, aciclovir cream, which can be used to treat cold sores, was first available as a Prescription only medicine. After a few years, it was reclassified to a Pharmacy medicine and recently, it has been reclassified again to a General sale list medicine.

OVER-THE-COUNTER MEDICINE (P – IN THE PRESENCE OF PHARMACIST; GSL – GENERAL SALES LIST)

Pharmacy medicines may only be sold from a pharmacy. A pharmacist must make or supervise the sale.

Before being sold a pharmacy medicine, you will usually be asked if you have any medical conditions and if you take any other medicines. This is to check that it is safe for you to take the pharmacy medicine. For example, you will be asked if you have high blood pressure before being sold certain nasal decongestant medicines because some of these medicines can raise your blood pressure.

Some medicines may only be sold once the pharmacist is satisfied certain circumstances have been fulfilled. For example, emergency contraception (also known as the morning after pill) may only be sold the person who needs the emergency contraception, and she must be over 16.

Sometimes, the pharmacist may suggest that you see your GP before they can give you a pharmacy medicine. For example, if you have used clotrimazole pessaries for vaginal thrush more than twice in six months, you should see your GP so they can assess your symptoms and decide on the most appropriate treatment

CONTROLLED DRUGS

Some prescription only medicines are further classified as Controlled drugs, such as morphine, pethidine and methadone. In some cases, these medicines may be misused or sold illegally, so there are stricter legal controls on their supply.

There are controls on:

- who may prescribe these medicines,
- how the prescription is written,
- how much may be prescribed, and
- how the medicines are stored in the pharmacy.

Also, the pharmacist must make a record of the prescription in the controlled drugs register. The controls are currently under review and are likely to be made even stricter in the future.

All medicines that are bought and obtained by prescription must be properly and safely stored at home and when carried during the day, to ensure the safety of others.

Illegal Substances and the Misuse of Drugs Act 1971

The Misuse of Drugs Act 1971 gives a list of substances, including some medicines, that it is illegal to possess, supply or manufacture without proper authority such as a prescription written by a registered medical practitioner that was dispensed by a registered pharmacist.

The list of substances is divided into three legal categories known as class A, B and C. This defines how serious it is if you're found to illegally possess, supply or manufacture one of these substances, for example class A substances carry a greater legal penalty than class B and class C

COMPLEMENTARY/HOMEOPATHIC REMEDIES

Homeopathic remedies are made from plants, such as the Dandelion; some animal substances, such as the venom of the bee; different active and naturally occurring substances such as Mother of Pearl; beneficial metals, such as iron and magnesium salts; and from substances that have a known curative effect. The theory is that these substances produce the expression of similar symptoms as those we are trying to treat. Minute (actually infinitesimal) doses are designed to stimulate the body's natural response to self-heal. The effect of these different substances is presumably enhanced by a special process, called "POTENTIZING." It consists of diluting the original substance in steps, and shaking the solution after every dilution, enhancing its action as a remedy. Often times with the special type of homeopathy used by Dr. Kaslow, there may be something you appear to react to listed on the label. However, by the time you receive the remedy, there is in fact NONE of the original substance remaining. This then eliminates the possibility of an allergic reaction. Any reaction you may experience is thus a detoxification or healing response. Adjusting the dose may be necessary to balance the effects of a beneficial response with any adverse reactions. Through this process, remarkable as it sounds, the diluted remedies that may have been dangerously strong in their original state, not only become completely safe to use, but apparently acquire *increased potency* for more effective healing or detoxification.

For many homeopathic remedies, the dilution of the remedy is indicated by a symbol, consisting of a number and a letter. The number indicates the number of times the remedy has been diluted and the letter indicates the kind of diluting step used.

The most common homeopathic remedies are liquids or lactose/sugar pellets or wafers impregnated with the liquid remedy. Some liquid forms contain alcohol to preserve the remedy. Non-alcoholic liquids are used whenever possible or pellets/wafers may be used if alcohol is undesirable. Also available are ointments and herbal tinctures for first aid help in the case of injuries such as wounds, burns, bruises, insect bites, etc.

Common complementary therapies

Acupressure	Chiropractic	Naturopathy
Acupuncture	Cranial osteopathy	Nutritional therapy
Alexander Technique	Environmental medicine	Osteopathy
Applied kinesiology	Healing	Reflexology
Anthroposophic medicine	Herbal medicine	Reiki
Aromatherapy	Homoeopathy	Relaxation and visualisation
Autogenic training	Hypnosis	Shiatsu
Ayurveda	Massage	Therapeutic touch
	Meditation	Yoga

3.3 Understand the different routes by which medicines are administered and by whom:

INHALATION (USE OF INHALERS –NASAL OR ORAL)

An **inhaler** or **puffer** is a medical device used for delivering medication into the body via the lungs. It is mainly used in the treatment of asthma and Chronic Obstructive Pulmonary Disease (COPD).

There are several different types of inhalers. The most common is the pressurized metered-dose inhaler (*MDI*). In MDIs, medication is most commonly stored in solution in a pressurized canister that contains a propellant, although it may also be a suspension[1]. The MDI canister is attached to a plastic, hand-operated actuator. On activation, the metered-dose inhaler releases a fixed dose of medication in aerosol form. The correct procedure for using an MDI is to first fully exhale, place the mouth-piece end of the pump into the mouth, and having just started to inhale at a moderate rate, depress the canister to release the medicine. The aerosolized medication is drawn into the lungs by continuing to inhale deeply before holding the breath for 10 seconds to allow the aerosol to settle onto the walls of the bronchial and other airways of the lung.

To reduce deposition in the mouth and throat, and to reduce the need for precise synchronization of the start of inhalation with actuation of the device, MDIs are sometimes used with a complementary spacer or holding chamber device[1].

Besides the MDI, other types of inhalers[1] include dry powder inhalers (DPIs), which release a dose of medicine as a powder aerosol that is inhaled by the patient, and nebulizers, which instead supply the aerosol as a mist created from an aqueous formulation.

Nasal Inhalars

Mild symptoms of allergic rhinitis respond well to oral medications including antihistamines and decongestants. When these medications do not give adequate relief, nasal inhalers may be

used. Two types are available: *aqueous sprays* that spray a liquid from a bottle through a nozzle fixed to the top of the unit, and *metered dose nasal inhalers* that deliver the drug from a pressurized canister through a nozzle on the side near the bottom of the unit.

Current Types of Inhalers by Delivery

- Metered-dose inhaler or MDI
- Dry Powder Inhaler or DPI
- Nebulizer

INJECTION (by piercing the skin)

An **injection** is an infusion method of putting liquid into the body, usually with a hollow needle and a syringe which is pierced through the skin to a sufficient depth for the material to be forced into the body. An injection follows a parenteral route of administration, that is, its effect is not necessarily local to the area in which the injection is administered; it is systemic.

Hypodermic syringe injection

There are several methods of injection or infusion, including intradermal, subcutaneous, intramuscular, intravenous, intraosseous, and intraperitoneal. Long-acting forms of subcutaneous/intramuscular injections are available for various drugs, and are called depot injections.

INGESTION (MEDICINES/TABLETS TAKEN ORALLY, INCLUDING UNDER THE TONGUE)

Medications now come in multiple forms for administration via multiple routes

The prescribed route will depend on availability, cost, speed and mode of action, the condition being treated and the child's ability/tolerance of the chosen route.

Administration of medicines is an important aspect of the professional practice. It is not solely a mechanistic task; it requires thought and the exercise of professional judgment.

Improvement in the oral medications outcome is demonstrated by an increase in the percentage of patients who improve the ability to take their medicines correctly. Higher percentages are better. The measure excludes rectal, IV (intravenous), or injectable medications. It is important that patients take the right medicines, at the right times, and in the right amounts.

Medicines include those prescribed by a doctor and over-the-counter (OTC) medicines (e.g., pain relievers, vitamins, laxatives, etc.). Patients should inform their doctor and home health care staff about all their medicines, including OTC, and any allergic or bad reactions (like rashes or dizziness). Taking too much or too little medication can keep the patient from feeling better, make the patient sicker, confuse the patient (affecting their safety), or even cause their death. Home health staff can help teach ways to organize medicines and take them properly.

Sublingual Medication

A drug dosage form intended to be used by placement under the tongue; the drug (e.g., nitroglycerin) is absorbed from the mucosal tissues and bypasses the gastrointestinal tract, where it may be partially or totally degraded.

Sublingual and buccal medications are given for a variety of conditions. The most common sublingual medication is the nitroglycerin tablet. Its rapid action to relax the blood vessels reduces the workload on the heart and relieves the pain of angina pectoris. Other buccal and sublingual medications, however, serve a variety of purposes-such as narcotic pain relief, migraine pain relief, blood pressure control, and mental decline due to dementia (i.e., ergoloid mesylates). This form of medication is extremely effective, because it bypasses the digestive system and is absorbed into the bloodstream in minutes. Not all medications can be prepared for sublingual or buccal administration; some of the compounding difficulties are taste, solubility, and dosage limitations of the medicine.

Precautions

Sublingual medications should not be administered if the gums or mucous membranes have open sores or areas of irritation. Rather, the physician should be notified, and medication held. The patient should be placed in a sitting position to prevent accidental aspiration of the medication. Buccal or sublingual medication should not be used when a patient is uncooperative or unconscious. The patient should not eat, drink, chew, or swallow until the medication has been absorbed; swallowing the medication must be prevented, as it will decrease the drug's effectiveness. The patient should not smoke while taking sublingual or buccal medication, because smoking causes vasoconstriction of the blood vessels. This will decrease the absorption of the medication.

TOPICAL (APPLICATION OF CREAMS, LOTIONS, OINTMENTS)

The term "**topical**" can refer to two different concepts, both ultimately deriving from the Ancient Greek *topos* (plural: *topoi*), "place" or "location".

For one thing – derived via the topoi in literature – it can refer to a topic, such as in "topical lists" (ordered by topic); it can also mean that something is currently a topic of particular interest.

The other meaning is closer to the original meaning of the Greek term. In this case, "topical" means something that pertains to or is related to a surface or a circumscribed locality.

In medicine, a topical medication is applied to body surfaces such as the skin or mucous membranes, for example the vagina, throat, penis, eyes and ears.

Some hydrophobic chemicals such as steroid hormones can be absorbed into the body after being applied to the skin in the form of a cream, gel or lotion. Transdermal patches have become a popular means of administering some drugs for birth control, hormone replacement therapy, and prevention of motion sickness. Chloramphenicol is an example of an antibiotic that may be used topically.

In dentistry, a topical medication may also mean one that is applied to the surface of teeth

INFUSION (INTRAVENOUS DRIPS)

Intravenous Infusion

When a medicine or a fluid, such as blood, is fed directly into a vein, it's called an intravenous infusion (or IV). To give you an intravenous infusion, a nurse, technician or a doctor places a narrow plastic tube into a vein (usually in your arm) using a needle. The needle is then removed and the fluid is infused (or dripped) through the tube into the vein.

Intravenous infusions are one of the commonest invasive procedures in hospitals and are administered either by the peripheral or central routes. The principles of prevention of infection are similar, although these guidelines refer particularly to peripheral administration.

An intravenous catheter is a foreign body which produces a reaction in the host consisting of a film of a fibrinous material on the inner and outer surfaces of the catheter. This biofilm may become colonised by microorganisms and will protect them from host defence mechanisms. Microbial contamination may cause local sepsis or septic thrombophlebitis or bacteraemia/ septicaemia.

Infection control measures are designed to prevent microorganisms from entering the equipment, the catheter insertion site or the bloodstream.
Indications for insertion of catheters should be strict e.g. severe dehydration, blood transfusion, parenteral feeding. Use alternative routes where possible for hydration or parenteral therapy.

Good asepsis is required during insertion of the catheter and maintenance of the insertion site. The site should be kept dry, safe from contamination, secure and comfortable for the patient.

INSTILLATION (ADMINISTRATION OF DROPS TO EARS/NOSE/EYES)

Eye Drops

Using eye drops

- Wash your hands and sit or stand in front of a mirror.
- Take off the top of the bottle.
- Bend your head backwards and gently pull your lower eyelid down.
- Hold the dropper above one eye and squeeze one drop inside the lower eyelid. Try not to touch your eye, eyelashes, or anything else with the dropper tip.
- Let go of the eyelid and blink a few times. This helps to spread the drop over the whole eye surface.
- Wipe away any liquid that falls onto your cheek with a tissue.
- Repeat in the other eye if the drop is prescribed for both eyes.
- If you are prescribed more than one drop, or need to put in another type of drop, wait for a couple of minutes before putting a second drop into an eye. This allows the first drop to 'settle in' and not be washed out by a second drop if it is put in too quickly.

Some points about eye drops

- Eye-drops are sterile (free from bacteria) before the bottle top is opened.

Once it is opened:

- Keep the bottle closed in a cool, dark place (unless otherwise advised).

    - Do not let the dropper or dropper nozzle touch your eye, fingers, or any other surface. This is to keep it free from bacteria (bugs).
    - Do not let anyone else use your drops, and do not use anyone else's drops yourself.
    - Throw out the bottle (and get a new one if required) after the recommended time. This is usually 4 weeks after first opening the bottle. There is a risk that the drops may become infected if they are kept and used for longer than advised. (One tip is to write the date that you opened the bottle on the label so you will know when it is time to throw it out.)
    - You may get a taste of eye drops in your mouth, or a feeling that the drops are running down your throat. This is normal as the tear duct which drains tears to your nose will also drain some of the eye drop.
    - Some eye drops sting or irritate for a short while. Rarely, some people are allergic to some eye drops. Tell your doctor if eye symptoms become worse after using eye drops.
    - Do not wear contact lenses whilst using eye drops unless otherwise advised. (Some drugs and preservatives in eye drops can accumulate in soft contact lenses and may cause harm.)
    - Keep the drops out of children's reach.

Ear Drops

Ear drops are a sterile solution or suspension of medicine. They are administered into the ear to produce a local effect directly on the outer ear canal.

How to use your ear drops

- If your ear drops are a suspension, the label will remind you to shake the bottle before using the drops.
- Wash your hands.
- Sit in front of a mirror so you can see what you are doing.
- Take the lid off the bottle.
- Tip your head to one side or lie on your side so that the affected ear is facing upwards.
- Gently pull the ear lobe away from your neck.
- Hold the bottle or dropper over the ear opening and gently squeeze the correct number of drops into your ear.
- Keep your head tipped or stay lying on your side for a few minutes to let the drops spread into the ear canal.
- Wipe away any excess liquid with a clean tissue.
- Repeat this procedure for the other ear if your doctor or pharmacist has advised you to do this.
- Replace the lid on the bottle.
- Take care not to touch the tip of the bottle or dropper with your fingers. If the dropper is separate don't put it down on any surface.

Other useful advice

- You may find it easier for someone else to put your ear drops in for you.
- Try not to get water in your ear while you are using your ear drops. Take care when showering and washing your hair. You shouldn't go swimming until your course of treatment is completed.
- Do not share ear drops with other people.
- EXPIRY: never use your ear drops after the expiry date as they may be contaminated with dirt or bacteria. Ear drops should be thrown away four weeks after opening. Follow the printed instructions given with your drops. Write the date you open your ear drops on the bottle so you know when to throw them away.
- Certain ear drops must not be used if your eardrum is, or may be, perforated. Inform your doctor or pharmacist if this is the case.
- Always use the drops according to the printed label or as instructed by your doctor or pharmacist.
- Inform your doctor or pharmacist if you accidentally use more than you were supposed to.
- Once you have finished the treatment course, carefully dispose of any leftover drops, or return them to your pharmacist for disposal.
- Ear drops should only be used in the ears and must not to be taken by mouth.
- Always keep medicines out of the reach of children.
- Nose Drops
- **How to use nose drops**
- Blow your nose gently.
- Drop the required number of drops into each nostril.
- The aim is to get the liquid to spread over all the inside surface of the nose - including the upper surface.
- A good position is to lie on a bed with your head hanging back over the edge. Stay like this for two minutes after putting in the drops before getting up. This is so the liquid does not immediately run out of your nose or down the back of your throat but stays for a while in the nose cavity.
- Kneeling or bending forward is an alternative, but it is harder to stay like this for two minutes after putting in the drops.
- Do not put in nose drops by tilting your head back when standing or sitting. The upper surface inside your nose will not be covered by the liquid.
- Replace the top on the bottle after using.
- **Some points about nose drops**
- Ask a pharmacist or doctor for advice before starting a new type of nose drop, or if you use nose drops long term.
- Between doses, keep the bottle closed and store in a cool, dark place (unless otherwise advised).
- Do not let anyone else use your drops and do not use anyone else's drops yourself.
- Do not use nose drops more often or for longer than advised. Some nose drops must only be used for a short time. Some 'go off' and need replacing after a certain time.
- Throw out the bottle (and get a new one if required) after the recommended time. (One tip is to write the date that you opened the bottle on the label so you will know when it is time to throw it out.)
- Keep the drops out of children's reach.

The above advice is general advice for most nose drops. You may be given specific instructions which may vary from the above.

PR – *PER RECTUM* (ENEMAS, SUPPOSITORIES)

Constipation, **costiveness**, or **irregularity**, is a condition of the digestive system in which a person (or animal) experiences hard feces that are difficult to expel. This usually happens because the colon absorbs too much water from the food. If the food moves through the gastro-intestinal tract too slowly, the colon may absorb too much water, resulting in feces that are dry and hard. Defecation may be extremely painful, and in severe cases (*fecal impaction*) lead to symptoms of bowel obstruction. The term **obstipation** is used for severe constipation that prevents passage of both stools and gas. Causes of constipation may be dietary, hormonal, anatomical, a side effect of medications (e.g. some painkillers), or an illness or disorder. Treatments consist of changes in dietary and exercise habits, the use of laxatives, and other medical interventions depending on the underlying cause.

ENEMAS

An **enema** (plural **enemata** or **enemas**) is the procedure of introducing liquids into the rectum and colon via the anus. Enemas can be carried out for medical reasons (as a treatment for constipation) as a remedy for encopresis, as part of alternative health therapies, and also for erotic purposes, particularly as part of BDSM activities. In earlier times, they were often known as clysters, and were probably used more frequently than at present.

SUPPOSITORIES

A suppository is a drug delivery system that is inserted either into the rectum (rectal suppository), vagina (vaginal suppository) or urethra (urethral suppository) where it dissolves.

They are used to deliver both systemically-acting and locally-acting medications.

The alternative term for delivery of medicine via such routes is pharmaceutical pessary.

The general principle is that the suppository is inserted as a solid, and will dissolve inside the body to deliver the medicine.

Rectal suppositories

Glycerin suppositories (laxative)
Rectal suppositories are commonly used for:

- For laxative purposes, with chemicals such as glycerin or bisacodyl.
- To treat a hemorrhoid by delivering a moisturizer or vasoconstrictor.
- Delivery of many other systemically-acting medications, such as promethazine or aspirin.
- For general medical administration purposes: the substance crosses the rectal mucosa into the bloodstream; examples include paracetamol (acetaminophen), diclofenac, opiates, and eucalyptol suppositories.

Mode of insertion

In 1991, Abd-El-Maeboud and his colleagues published a study in *The Lancet*[1] , based upon their investigation into whether there was some hidden and forgotten knowledge behind the traditional shape of a rectal suppository.

Their research very clearly demonstrated that there was, indeed, a very good reason for the traditional "torpedo" shape; namely, that the shape had a strong influence on the extent to which the rectal suppository traveled internally — and, thus, upon its increased efficiency.

They (counter-intuitively) found that the ideal mode of insertion was to insert suppositories "blunt"-end first, rather than the generally used mode of inserting the "pointy"-end first. This conclusion was based on the greater distance of internal travel of the suppository once inserted, which was entirely a mechanical consequence of the natural actions of the bowel's muscular structure and the rectal configuration.

As a consequence, and in order to guarantee the maximum optimal efficiency, they recommended that all rectal suppositories be inserted "blunt"-end first. The findings of this single study have been challenged as insufficient evidence on which to base clinical practice.[2]

Non-laxative rectal suppositories

Four 500 mg acetaminophen/paracetamol suppositories
Non-laxative rectal suppositories are to be used *after* defecation, so as not to be expelled before they are fully dissolved and the substance is absorbed. The use of a examination glove or a finger cot can ease insertion by protecting the rectal wall and the fingernail(s) from each other.

PV – *PER VAGINA* (PESSARIES, CREAMS)

Pessary

A **pessary** is a small plastic or silicone medical device or form of pharmaceutical preparation which is inserted into the vagina or rectum and held in place by the pelvic floor musculature.

Therapeutic pessaries

Uses

A **therapeutic pessary** is used to support the uterus, vagina, bladder or rectum. A pessary is most commonly used to treat prolapse of the uterus. It is also used to treat stress urinary incontinence, a retroverted uterus, cystocele and rectocele.

The pessary is similar to the outer ring of a diaphragm. It can be placed temporarily or permanently and must be fitted by a physician. Most pessaries can be worn during intercourse.

Vaginal Creams, Foams And Jellies

Medicated dosage forms for topical application in the vagina. A cream is a semisolid emulsion containing suspended or dissolved medication; a foam is a dispersion of a gas in a medicated liquid resulting in a light, frothy mass; a jelly is a colloidal semisolid mass of a water soluble medicated material, usually translucent. The concept includes vaginal creams, foams, and jellies in general or for which there is no other specific heading.

3.4 Understand the importance of noting and reporting any changes to individual following administration of medicine. These may or may not be side effects and adverse reactions to common medicines. Some examples of common symptoms of adverse reactions (long-term/short-term) may be:

- Rashes
- Breathing Difficulties
- Swellings
- Nausea
- Vomiting
- Diarrhoea
- Stiffness
- Shaking
- Headaches
- Drowsiness
- Constipation
- Weight Gain

In medicine, an **adverse effect** is a harmful and undesired effect resulting from a medication or other intervention such as chemotherapy or surgery. An adverse effect may be termed a "side-effect" (when judged to be secondary to a main or therapeutic effect) and may result from an unsuitable or incorrect dosage or procedure (which could be due to medical error). Adverse effects are sometimes referred to as "iatrogenic" because they are generated by a physician/ treatment. Some adverse effects only occur only when starting, increasing or discontinuing a treatment. Using a drug or other medical intervention which is contraindicated may increase the risk of adverse effects. Adverse effects may cause medical complications of a disease or procedure and negatively affect its prognosis. They may also lead to non-compliance with a treatment regimen.

The harmful outcome is usually indicated by some result such as morbidity, mortality, alteration in body weight, levels of enzymes, loss of function, or as a pathological change detected at the microscopic, macroscopic or physiological level. It may also be indicated by symptoms reported by a patient. Adverse effects may cause a reversible or irreversible change, including an increase or decrease in the susceptibility of the individual to other chemicals, foods, or procedures (e.g. drug interaction).

Adverse effects can occur as a collateral or side effect of many interventions, but they are particularly important in pharmacology, due to its wider, and sometimes uncontrollable, use by way of self-medication. Thus, responsible drug use becomes an important issue here.

Adverse effects, like intended effects of drugs, are a function of dosage or drug levels at the target organs, so they may be avoided or decreased by means of careful and precise pharmacokinetics (the change of drug levels in the organism in function of time after administration).

Adverse effects may also be caused by drug interaction, i.e., when physicians fail to check for all medicaments a patient is taking and prescribe new ones which interact agonistically or antagonistically (potentiate or decrease the intended therapeutic effect). Significant morbidity and mortality is caused around the world because of this. Drug-drug and food-drug interactions

may occur, and even so-called "natural drugs" used in alternative medicine may have dangerous adverse effects. For example, extracts of St. John's wort (*Hypericum perforatum*), a phytotherapic used for treating mild depression are known to cause an increase in the cytochrome P450 enzymes responsible for the metabolism and elimination of many drugs, so that patients taking it are likely to experience a reduction in blood levels of drugs that they are taking for other purposes, such as cancer chemotherapeutic drugs, protease inhibitors for HIV and hormonal contraceptives.

The scientific field of activity associated with drug safety is increasingly government-regulated and is of major concern for the public as well as to drug manufacturers. The distinction between adverse and non-adverse effects is a major undertaking when a new drug is developed and tested before marketing it. This is done in toxicity studies to determine the non-adverse effect level (NOAEL). These studies are used to define the dosage to be used in human testing (phase I) as well as to calculate the maximum admissible daily intake. Imperfections in clinical trials, such as insufficient number of patients or short duration, sometimes lead to public health disasters such as those of fenfluramine (the so-called fen-phen episode), thalidomide and, more recently, of cerivastatin (Baycol, Lipobay) and rofecoxib (Vioxx), where drastic adverse effects were observed, like teratogenesis, pulmonary hypertension, stroke, heart disease, neuropathy, etc., and a significant number of deaths, causing the forced or voluntary withdrawal of the drug from the market.

Most drugs have a large list of non-severe or mild adverse effects which do not rule out the interruption of usage. These effects have widely variable incidence, according to individual sensitivity. They comprise nausea, dizziness, diarrhea, malaise, vomit, headache, dermatitis, dry mouth, etc.

Controversies

Sometimes, putative medical adverse effects are regarded as controversial and generate heated discussions in society and lawsuits against drug manufacturers. One example is the recent controversy as to whether autism was linked to the MMR vaccine (or by thimerosal, a mercury-based preservative used in some vaccines). No link has been found in several large studies and no change in the rate of autism has occurred when thimerosal was removed from vaccines a decade ago in Canada and Europe.

Another instance is the potential adverse effects of silicone breast implants, which lead to hundreds of thousands of litigations against manufacturers of gel-based implants, due to allegations of damage to the immune system which have not yet been conclusively proven.

Due to the exceedingly high impact on public health of widely used medications, such as hormonal contraception and hormone replacement therapy, which may affect millions of users, even marginal probabilities of adverse effects of a severe nature, such as breast cancer, have led to public outcry and changes in medical therapy, although its benefits largely surpassed the statistical risks.

Limitations of adverse effects reporting

In principle, medical professionals are required to report all adverse effects related to a specific form of therapy. In practice, it is at the discretion of the professional to determine whether a medical event is at all related to the therapy. For example, a leg fracture in a skiing accident in a patient who years before took antibiotics for pneumonia is not likely to get reported.

As a result, routine adverse effects reporting may often not include long-term and subtle effects that may ultimately be attributed to a therapy.

Part of the difficulty is identifying the source of a complaint. A headache in a patient taking medication for influenza may be the underlying disease and may be an adverse effect. In patients with end-stage cancer, death is a very likely outcome and whether the drug is the cause or a bystander is often difficult to discern.

Examples of adverse effects associated with specific medications

- Abortion, miscarriage or uterine hemorrhage associated with misoprostol (Cytotec), a labor-inducing drug (this is a case where the adverse effect has been used legally and illegally for performing abortions)
- Addiction to many sedatives and analgesics such as diazepam, morphine, etc.
- Birth defects associated with Thalidomide and Accutane.
- Bleeding of the intestine associated with aspirin therapy
- Cardiovascular disease associated with COX-2 inhibitors (i.e. Vioxx)
- Deafness and kidney failure associated with gentamicin (an antibiotic)
- Death, following sedation in children using propofol (Diprivan)
- Dementia associated with heart bypass surgery
- Depression or hepatic injury caused by interferon
- Diabetes caused by atypical antipsychotic medications (neuroleptic psychiatric drugs)
- Diarrhea caused by the use of orlistat (Xenical)
- Erectile dysfunction associated with many drugs, such as antidepressants
- Fever associated with vaccination (in the past, imperfectly manufactured vaccines, such as BCG and poliomyelitis, have caused the very disease they intended to fight).
- Glaucoma associated with corticosteroid-based eye drops
- Hair loss and anemia may be caused by chemotherapy against cancer, leukemia, etc.
- Headache following spinal anesthesia
- Hypertension in ephedrine users, which prompted FDA to remove the status of dietary supplement of ephedra extracts
- Insomnia caused by stimulants, Ritalin, Adderall, etc.
- Lactic acidosis associated with the use of stavudine (Zerit, for anti-HIV therapy) or metformin (for diabetes)
- Liver damage from paracetamol
- Melasma and thrombosis associated with use of estrogen-containing hormonal contraception such as the combined oral contraceptive pill
- Rhabdomyolysis associated with statins (anti-cholesterol drugs)
- Seizures caused by withdrawal from benzodiazepine
- Drowsiness or increase in appetite due to antihistamine use. Some antihistamines are used in sleep aids explicitly because they cause drowsiness.
- Stroke or heart attack associated with sildenafil (Viagra) when used with nitroglycerine
- Suicide, increased tendency associated to the use of fluoxetine and other SSRI antidepressants
- Tardive dyskinesia associated with long-term use of metoclopramide and many antipsychotic medications

3.5 Understand the need to check contra indications and medicine interactions prior to administration of home remedies or over-the-counter medicines, and complementary medicines and preparations

Just because a product is "natural" doesn't mean it is safe for everyone to take. Herbal remedies can have contraindications and drug interactions that can be harmful if not properly prescribed.

Herbal remedies, dietary supplements, and botanical medicines are part of the growing interest in alternative medicines and therapies that people are seeking today. When you walk into many large supermarkets you may see an aisle dedicated to natural medicines. Spend any time online researching health questions and you will be bombarded with advertisements for the "next big thing" in supplements that will claim to cure everything from earaches to diabetes to cancer.

I am a great believer in the efficacy and safety of natural products when used properly in a patient's overall regimen. I also think it's great that more and more people are interested in taking an active role in their own health plans, but as the old saying goes, "A little knowledge can be a dangerous thing," especially when it comes to self-prescribing medicines. Here are three vital things every consumer should consider about botanicals and dietary supplements:

- Just because a plant or herb is natural doesn't make it safe for you to take, even if it is sold as an alternative medicine.
- Not all herbal remedies or natural medicines are created equal.
- As always, if the claims about a product sound too good to be true, they probably are.

Let's consider each of these points in a little more detail.

1) Just because a plant or herb is natural doesn't make it safe for you to take, even if it is sold as an alternative medicine.

Since herbs and plants must be used in strong enough doses to make them effective in the treatment of many conditions, there can also be contraindications for the use of them. Contraindications can occur if the herb is taken over an extended period of time (1-2 months) or in large doses that could result in side effects.

Drug interactions may also occur when an herb is taken. Combining an herbal remedy with another drug can be problematic and possibly dangerous. The combination of a pharmaceutical drug with an herb may interfere with the activity of the herb or drug, thus producing a decrease or increase in the effectiveness of the drug. For example, willow (salix) is used as an anti-inflammatory and analgesic (pain reliever) just as aspirin is used in inflammatory conditions such as arthritis and for headache pain. Willow is also used for fevers. Like aspirin, willow is contraindicated in conjunction with other blood thinning agents (such as coumadin). It is also contraindicated in patients with bleeding disorders like hemophilia.

It is absolutely essential that you keep your primary care physician and all others who may prescribe medicines for you (natural or pharmaceutical) aware of any and all medications you are taking.

2) Not all herbal remedies or natural medicines are created equal.

Pharmaceutical drugs are tightly controlled and regulated by the Food and Drug Administration (FDA) to ensure standardization and quality in the products. However, herbal remedies and dietary supplements are classified as "food" by the FDA and therefore are regulated in a different way. The following is an excerpt from the web site of the National Center for Alternative and Complementary Health, a division of the National Institutes of Health:

"Currently, the FDA regulates supplements as foods rather than drugs. In general, the laws about putting foods (including supplements) on the market and keeping them on the market are less strict than the laws for drugs. Specifically:

- Research studies in people to prove a supplement's safety are not required before the supplement is marketed, unlike for drugs.
- The manufacturer does not have to prove that the supplement is effective, unlike for drugs. The manufacturer can say that the product addresses a nutrient deficiency, supports health, or reduces the risk of developing a health problem, if that is true. If the manufacturer does make a claim, it must be followed by the statement "This statement has not been evaluated by the Food and Drug Administration. This product is not intended to diagnose, treat, cure, or prevent any disease."

"The manufacturer does not have to prove supplement quality. Specifically:

- The FDA does not analyze the content of dietary supplements.
- At this time, supplement manufacturers must meet the requirements of the FDA's Good Manufacturing Practices (GMPs) for foods. GMPs describe conditions under which products must be prepared, packed, and stored. Food GMPs do not always cover all issues of supplement quality. Some manufacturers voluntarily follow the FDA's GMPs for drugs, which are stricter.
- Some manufacturers use the term "standardized" to describe efforts to make their products consistent. However, U.S. law does not define standardization. Therefore, the use of this term (or similar terms such as "verified" or "certified") does not guarantee product quality or consistency."

(Source: National Center for Complementary and Alternative Medicine, http://nccam.nih.gov/health/bottle/)

The bottom line? Some manufacturers produce better products than others. The herb must be of sufficient potency and meet certain standards to be truly effective. I like to look at the research done on the herbs that I prescribe to my patients before recommending a particular herbal remedy or botanical medicine.

3) As always, if the claims about a product sound too good to be true, they probably are.

There are a lot of natural products on the market that are being hyped with some outrageous claims. It is true that I have seen some pretty amazing results with some botanical medicines, but use common sense when considering a new product. There is no "cure all" with herbal remedies. There are more scientific clinical studies being done every day on herbal products, and I try to stick with products that have been tested and proven effective. Used with a complete treatment program, botanicals can be very helpful in promoting the overall health of a patient.

If you are one of the millions of people who are researching and considering the use of herbal remedies, I congratulate you for wanting to take an active role in your own health plan. Be sure to be an informed consumer, and keep your health care providers abreast of all the medicines or supplements you may be taking, natural or otherwise.

4. SAFE PRACTICE IN THE ADMINISTRATION OF MEDICINES

4.1 Understand the need to obtain the individual's consent (and where applicable privacy) prior to administering medicines to them (includes invasive techniques such as administering suppositories)*

*1. Where possible the individual provides informed consent.

Consent – it's up to you

When a doctor, nurse or therapist asks you to agree to any form of examination, treatment or care, remember you have a choice. You are always free to say no, or to ask for more information before you make up your mind.
This leaflet aims to answer your questions about what you have a right to expect and what to do. It is for adults; there are separate leaflets for relatives and carers, for children and young people and for their parents. What we say mainly concerns physical conditions. The rules may be different if you are being treated for a mental disorder.

What does consent really mean?

Before any doctor, nurse or therapist examines or treats you, they must seek your *consent* or permission. This could simply mean following their suggestions, such as your GP asking to have a look at your throat and you showing your consent by opening your mouth. Sometimes they will ask you to sign a form, depending on the seriousness of what they're proposing or whether it carries risks as well as benefits.

It does not matter so much *how* you show your consent: whether you sign or say you agree. What is important is that your consent is genuine or *valid*. That means:

- you must be able to give your consent
- you must be given enough information to enable you to make a decision
- you must be acting under your own free will and not, say, under the strong influence of another person.

English law assumes that if you're an adult you are able to make your own decisions, unless it's proved otherwise. As long as you can understand and weigh up the information you need to make the decision, you should be able to make it.

What if I'm not able to take a particular decision?

Suppose, for example, you are unconscious after a road accident or cannot communicate after a severe stroke, in general people providing health care can still give you treatment that they believe is in your best interests. The only exception is if you have clearly refused a particular treatment in advance

Although no-one (not even husbands, wives, partners or close relatives) can give consent to treatment on behalf of another adult, friends and relatives may have useful advice to give. They may be able to tell health care professionals about the person's beliefs and values - for example whether they have accepted or refused certain kinds of treatment in the past or have strong views on some health questions. So it is important to discuss your views with your friends and relatives in case anything happens.

What if I'm asked about students being present?

Sometimes you may be asked if you mind students being present while you are treated. If you are undecided, ask what they intend doing – just observing, taking notes or examining you. If you prefer, you can specify students of one sex only.

If you are not comfortable about students being present, you can always say no. It shouldn't make any difference to the quality of the care you receive.

What sort of information do I need?

In order to make a decision, you need to have information from health professionals about the treatment or investigation which is being offered
to you.

You should always ask them more questions if you don't understand or if you want more information. For example:

- What sort of things will the treatment involve?
- What are the benefits they hope will result?
- How good are the chances of getting such benefits?
- Are there any alternatives?
- What are the risks, if any?
- If there are risks, are they minor or serious?
- What may happen if you don't have treatment?

If the person asking for your consent to the treatment isn't able to answer your questions, ask them to find out or arrange for someone else to talk to you about your concerns. If you would find it easier to ask questions with someone supporting you, take a friend with you, or ask about local advocacy services. You can also ask for some-one of the same sex as yourself to be with you while you are being examined or treated.

How much do I need to know?

Some people want to know as much as possible about their condition and possible treatments; others prefer to leave decisions to the experts.

No one providing health care will force information on you, for example, about the risks of treatment if you don't want to know. But remember, the person in the best position to know what matters most to you is **you** yourself.

Perhaps you're the kind of person who is prepared to take some risks if there is also a chance of a very good outcome. On the other hand, you might rather put up with some discomfort than have treatment which carries a small risk of making things worse – even though it ought to improve your condition.

Only you can know what is most important to you.

How much time can I take to decide?

Your doctor, nurse or therapist may certainly encourage you to accept a particular treatment if they believe it will be helpful for you, but it is **your** decision whether or not to go ahead.

If you want more time to think about your decision, say so. In emergencies, decisions may have to be taken quickly, but at other times it is often possible to take as much time as you need.

Can I refuse treatment in advance?

You may be quite certain that you would **not** want a particular treatment in the future. In that case you may like to make a written record of your wishes (a document sometimes called a Living Will), and make sure people close to you know. Then if this situation arises at some point in the future and you are not in a position to tell your wishes to people providing health care, they will be bound by your earlier decision.

It is important to be very precise about any treatment you are refusing in advance, otherwise you could exclude treatments which you would want to accept. It is also important to let people close to you know if you have changed your mind so they can pass on this information if necessary.

Can I say in advance which treatment I'd prefer?

You may want to write down the sorts of treatment you would rather have, and the concerns that you have about other kinds. These wishes would not be binding in the same way as an advance refusal. You cannot, for example, insist on a particular kind of treatment if a health care professional does not believe it is right for you. But if the time ever comes when you can no longer make decisions or tell people about them, it would help people providing health care to have your wishes as a guide when deciding what is in your best interests.

You **cannot** request something that is against the law, such as euthanasia.

What if I'm asked to take part in research?

This may be as part of your treatment, for example to compare two different treatments; or it may be quite separate, for example being asked to provide extra blood samples for a research project. In any case, a research project will always be approved by a Research Ethics Committee before you are asked to take part in it. It is for **you** to decide whether or not to take part. You should usually be given an information sheet about the research project, and you should ask as many additional questions as you want before coming to a decision. If you choose not to take part, this ought not to affect the rest of your care. If you agree to take part in a research project, and then change your mind, you are free to withdraw at any time.

Is there any advantage or disadvantage to taking part in research?

Sometimes you may only be able to get particular treatments as part of a research trial. This is because they are new and cannot be made generally available until they have been properly tested. If the person responsible for your care suggests that you might benefit from being in the trial, ask as many questions as you want:

- about the new treatment
- about any risks
- and about the alternatives to being involved

There is a type of research in which neither you nor your doctor will know whether you are being given the new treatment, the standard treatment or possibly any treatment at all. (You will always be told what options are being used in the research project, even though you will not know which option you will receive.) If you are not happy about being involved in this or indeed in any kind of trial, you should feel free to say so. You will always be able to have the available standard treatment. All treatments, even established ones, have risks and these have to be weighed up when making your decision.

What if I have a mental illness?

If you are suffering from a serious mental illness, it may be necessary for you to stay in hospital under the *Mental Health Act 1983*. If so, you may be given treatment for your mental disorder, even if you do not consent. There are safeguards for patients in this situation. However, the terms of that Act only apply to treatment for *mental* disorder. You may also have a *physical* disorder (concerned with your body) that has nothing to do with your mental condition. If treatment is suggested for that, you are entitled to choose whether or not to accept it, as long as you are able to understand enough about the choices to make a decision.

Suppose I'm not happy about how I've been approached about consent?

You can tell the health care professionals concerned that you're worried.
But if you're still not satisfied, you are entitled to complain. You can find out how to go about it from *Your Guide to the NHS* or from NHS Direct NHS Direct can also give you details of a new scheme called PALS (Patient Advocacy and Liaison Service) designed to help sort out problems simply and quickly.

2. When required the individual is provided with assistance to enable informed consent to take place (independent advocate, family member, medical professional)

Consent – what you have a right to expect

Before a doctor, nurse or therapist can examine or treat a patient, they usually need his or her *consent* or agreement. As long as the person you care for can understand what's involved in the treatment, like anyone else over 18 he or she is the only person who can give consent.

But what happens about consent if they have problems in understanding?

Big problems Suppose someone is unconscious after an accident, cannot communicate at all after a severe stroke, or is too bewildered to make decisions because of advanced dementia – then they're not usually in a position to give consent. Then who is?

Some problems Sometimes people can understand enough to make everyday decisions about health care, such as pain relief. But when it comes to a major operation, perhaps because of a learning disability, they have too much of a problem in understanding to give consent. Or do they?

How far is the person you care for able to decide for themselves?

A patient might *seem* unable to understand enough to consent to, or refuse, proposed medical treatment. Or they might seem unable to communicate their wishes.

But no one should assume – neither carers nor health care professionals

- that a patient with for example a learning disability or dementia is not capable of consenting. No one knows better than you that if time is spent explaining the options simply, they may be able to reach a decision.

Making the most of people's abilities

If individuals have some ability to understand and think things over, they should always be encouraged to decide for themselves.

It may not be a decision you agree with, but that's not the key test.

What you and the people providing the health care need to ask yourselves is: *can the patient understand and weigh up the information provided?*

What if a person is totally unable to decide for themselves?

Under English law, no-one (not even husbands or wives, partners, close relatives or carers) can give consent to treatment on behalf of another adult. This obviously causes a problem if patients are not in a condition to give consent for themselves.

How can they be treated?

Doctors, nurses and therapists are generally allowed to provide treatment which they believe is in their patient's "best interests". This doesn't just mean what might be best for the patient's physical health.

It takes into account their general well-being and what they're known to believe in.

You can help

It's true that friends and relatives cannot make decisions on behalf of patients who can't decide

for themselves. Even so, they may be able to tell health care professionals about the person's opinions and beliefs – for example whether they've ever accepted or refused certain kinds of treatment, or if they have strong views about particular health conditions or treatments.

This will help health care professionals make a better decision about what will be in the patient's best interests. People close to the patient should be involved in this way, unless the patient has made clear in the past that he or she would not want a particular person involved.

Whose opinion counts on whether or not the person you care for understands enough to decide about consent? And if they cannot decide, who is to judge what's in their best interests?

On the one hand, health care professionals may feel the need to take urgent action; but this should not lead them to assume a patient isn't capable of deciding. On the other, no one is in a better position than you to stand up for the patient, but you need to take on board medical opinion.

It's a difficult area and requires give and take all round. In the end, everyone usually agrees what's best. Occasionally they don't. If this is about a serious matter, either you or the person providing health care can ask a Court to intervene and decide what is in the patient's best interests.

You should never be asked to sign a consent form on behalf of the person you are looking after. However you may be asked to sign a form to say that you have been consulted.

Refusing treatment in advance

Sometimes people may decide that they would not want a particular treatment if something happened to them in the future and they were no longer capable of refusing consent. This is sometimes called a Living Will.

What if this situation actually comes about?

- If you know that the person you care for has taken such a decision in the past, you should tell the health care professionals caring for them.
- If the patient has signed a document in which they refuse treatment, you should, if possible, give a copy to the health care professionals.
- Health care professionals are bound by that earlier decision, even if you disagree with it.

3. If it is impossible to obtain consent as many key people (independent advocates, family members and medical professionals) as possible act in the best interest of the individual.

Temporary incapacity

An adult who usually has capacity may become temporarily incapable, for example whilst under the influence of alcohol or drugs, a general anaesthetic or sedation, or after a road accident. Unless a valid advance refusal of treatment or care is applicable to the circumstances

the law permits interventions to be made which are necessary and no more than is reasonably required in the individual's best interests pending the recovery of capacity. This will include, but is not limited to, routine procedures such as washing and assistance with feeding. If a medical intervention is thought to be in the individual's best interests but can be delayed until the individual recovers capacity and can consent to (or refuse) the intervention, it must be delayed until that time.

Permanent or long-standing incapacity

Where the adult's incapacity is permanent or likely to be long-standing, it will be lawful to carry out any procedure which is in the "best interests" of the adult. The House of Lords has suggested that action taken "to preserve the life, health or well-being" of an individual will be in their best interests, and subsequent court judgements have emphasised that an individual's best interests go beyond their best medical interests, to include much wider welfare considerations The principle of caring for individuals in their best interests also covers such routine procedures as dressing, washing, putting to bed and assisting with the consumption of food and drink. Where treatment or care is given to an incapable adult on this basis, the standard consent form should not be signed by either relatives or healthcare professionals. It is good practice to note either in the records or in a "person unable to consent" form why the treatment or care was believed to be in the person's best interests.

Where the person has never been competent, it is clearly impossible to determine their best interests by reference to earlier, competent, beliefs and values. In such cases, family and friends close to the person will often be in the best position to advise health and social care professionals on his/her needs and preferences.

4.2 Understand the need to carry out a risk assessment for each individual requiring medication in relation to:

SELF ADMINISTRATION

In most healthcare systems, the use of medicines is the dominant and often preferred method of treatment. Although the majority of medicines are used safely with little or no unwanted effects, in recent times there has been a rise in medication errors that have in some cases led to serious harm and even death. Medication errors have severe moral, political and financial implications for healthcare systems and have been associated with rising public mistrust and litigation.

Motivation

Medication errors have been described as the "single commonest cause of medical errors" (Naylor, 2002) and it is therefore important to reduce these to significantly improve patient safety.

Objectives

- Develop a systems view of medication provision of prescription only medicines in the Home
- Apply risk assessment methods to identify, analyse and evaluate risks to medication safety
- Develop strategies to reduce the risk identified and improve patient safety

Method

Following a systems approach, this project will look at risk across both primary and secondary care. The core activities associated with treatment with medicines (including prescribing, dispensing, administering and monitoring) will be investigated in detail. The first stage will be to understand the process and establish the context. This will be followed by risk assessment to identify, analyse, and evaluate hazards/risks in the system. A risk management strategy will then be devised and locally implemented, which will subsequently be evaluated for effectiveness. Stakeholders will be involved at each stage. This is presented in figure 1 (adapted from the FDA's risk management model). Possible risk assessment methods will include the Failure Mode Effects Analysis (FMEA); Systematic Human Error Reduction and Prediction Approach

RISK ASSESSMENT PROCESS

Service User Medication and Health Care Tasks Risk Assessment

Only completed if Providers are to be involved in the tasks listed

Service User: **Address:**

DOB:

GP:
Tel: **Address:**

Pharmacy:
Tel: **Address:**

Obtaining Supplies Y N N/A
Comments Action

Is service user able to obtain their own meds

Are care providers to be involved

Taking Medication Y N N/A

Does service user need prompting

Does service user need assisting

Does service user need medication administered (includes liquid medication) - See guidance below

Where is the medication to be kept

Are family or friends involved

Are care providers to be involved

Applying Topical Applications

	Y	N	N/A
Does service user apply their own creams, ointment, eye drops.			
Is service user able to use their own Inhaler/ nebuliser			
Are care providers to be involved			

Health Care Tasks	**Y**	**N**	**N/A**
Does service user empty Catheter			
Does service user change own stoma			
Does a D/N or relative assist			
Are care providers to be involved			

Guidance notes

- **Where administration of medication is required (including Liquid Medication) an individual protocol will need to be drawn up in all cases. This protocol should be signed by the GP or D/N and should be drawn up by the multidisciplinary team**
- **For controlled drugs providers will prompt only (not assist or administer). If in any doubt about whether a drug is controlled please contact the Community Pharmacist**

Statement By Service User/Next of Kin

I confirm that I have provided all necessary information to the care manager to support the planning of any necessary assistance with my medication. I hereby consent to assistance being given by staff as part of arrangements made for my domiciliary care, to include, if necessary, either being prompted to take medication, assisted in taking medication or being administered medication.

Care Manager's Recommendations

4.3 Understand the need for appropriate preparation prior to administering medicines:

BASIC HYGIENE PROCEDURES

Staff who give medicine are familiar with normal precautions for avoiding infection and follow basic hygiene procedures. Prior to engaging with medicines

- Hands must be washed
- Do not handle medications
- Check for allergic reactions
- Having the correct equipment such as:

  - Gloves

  - Plastic Gowns

  - Spoons and containers

  - Equipment washing facilities

  - Drying facilities

  - Safe storage facilities

Disposable gloves are available and great care is taken with accidents dealing with spillages of blood or other body fluids.

Having the correct recording documents available

Medication records, dated and signed with dose, type of formulation (tablet, suppository etc) times of medication given.

4.4 Understand the need to ensure that the correct dose, of the correct medication, is given to the correct person at the correct time by the correct route or method

See 2.3 above