The safe storage of medicines: Cupboards

To: NHS Chief Executives, Medical Directors, Directors of Nursing, Chief Pharmacists, Medication Safety Officers, Heads of Estates and Patient Safety Teams.

This document highlights legal standards, best practice and patient safety recommendations that apply to the safe and secure storage of medicines on hospital wards. It is the responsibility of Chief Pharmacists within health boards and trusts to ensure their organisation has in place policies which adhere to the standards for safe storage of medicines set out in this notice, and to take steps to ensure compliance with those policies. The nurse in charge of a ward is accountable for the safe custody of medicines in that ward.

Well-designed and appropriate storage of medicines can reduce waste, incorrect medicine selection and the incidence of missed doses.

To prevent the provision of unsafe, inefficient, inappropriate and potentially illegal storage arrangements for medicines, a lead pharmacist, local security management specialist and lead nurse in each organisation must be involved in any plan to upgrade or build new medicines storage facilities on hospital in-patient wards and must approve final plans prior to placing orders for storage systems.

Hospital in-patient wards require distinct storage facilities for:
- controlled drugs (CDs)
- epidural and intrathecal infusions and other high risk medicines
- oral solid medicines
- injectable medicines
- oral liquid medicines
- rectal medicines
- medicines to take home
- flammable medicines
- medicines requiring refrigerated storage
- external medicines and dressings
- intravenous fluids
- patients’ own medicines
- medical gases

Actions

Who: All providers of NHS funded care

When: As soon as possible but no later than 26 August 2016.

1. Disseminate this notice to all staff who are involved in the storage of medicines.

2. Ensure medicine cupboards are:
   - Located in a clean utility room. The room must not be freely accessible to patients. In areas where without a 24-hour staff presence, the room must be lockable;
   - Located so as not to be visible from an outside window at ground level;
   - Fixed to a solid wall where possible. Where this is not possible it should be ensured that access to medicines cannot be made from the back of the cupboard;
   - Located in a room with running water and a sink;
   - Accessible only to suitably authorised staff.

3. Ensure medicine storage areas are temperature controlled and routine checks of room temperature should be made to ensure appropriate storage temperatures are maintained. Medicines must not be stored near sources of direct heat such as radiators. Most medicines require storage below 25 degrees centigrade.

4. Ensure where medicines trolleys are used on in-patient wards, anchor points (i.e. points at which the trolleys can be secured to the floor or wall) are provided. When not in use, trolleys should either be secured to an anchor point or stored securely in a locked room.

5. Ensure appropriate segregation of medicines and reduce the risk of the incorrect selection of medicines by storing different categories of medicine (see list below) in dedicated cupboards. Cupboards should be appropriately designated.

Queries should be sent to: ImprovingPatientSafety@Wales.GSI.Gov.UK
www.patientsafety.wales.nhs.uk
Construction of medicine cupboards
Metal cupboards are recommended for the storage of medicines to ensure compliance with BS 2881.
Trays and baskets are not suitable for storing medicines (except external medicines, dressings and IV fluids) because they do not allow medicines to be adequately segregated and clearly displayed and increase the risk of incorrect medicines selection.

Locks
All cupboards and closed storage units in which medicines are stored must be lockable and should be locked when not being accessed. Locks for metal cupboards (except patients’ medicines cabinets) must comply with BS 3621 as a minimum.
All stock medicines cupboards (except CD cupboards) on a single in-patient ward should have locks that use identical keys. Multiple key copies may be available to reduce the time needed for authorised staff to unlock the cupboards. This is a decision for the nurse or midwife in charge who should carry out a risk assessment before determining the appropriate number of key copies available.
Each patient should either have a key to their own bedside medicines cabinet or the cabinet should be fitted with key code entry, swipe card facility or similar mechanism to facilitate self-administration of medicines. Each bedside medicines cabinet should have a unique, suited key within that ward, with a master key for that ward suite required for nursing and pharmacy staff.
Electronic locking systems are now commercially available and may be considered for medicine cupboards other than CD cupboards. CD cupboards must be locked using a key and locking mechanism that complies with BS 3621. Electronic locking systems use electronic keys or swipe cards which open the lock and then lock automatically on closing the door. Such systems can be designed to allow cards or keys to be allocated to each authorised person and hence allow access to medicine cupboards to be audited.
Use of standard keypads, where the number is shared with a number of users, are not considered secure and are not recommended.

6. Ensure physical barriers/dividers are always used to separate products with similar names.
7. Ensure patients’ own medicines are stored in medicines cabinets beside the patients’ beds. Medicines cabinets should be permanently attached to a wall, or to a detachable wall plate to allow them to be transferred with patients.
8. Consider if any action needs to be taken locally to comply with the advice set out in this notice.

Share any learning from local investigations or locally developed good practice resources by emailing: ImprovingPatientSafety@Wales.GSI.Gov.UK
Lighting
A lighting level of 1460 Lux has been shown to reduce the incidence of errors when selecting and preparing medicines. Medicine storage and preparation areas require this level of lighting. Appropriate switching should be provided to allow this to be operated “standalone” at night.

Working space
Medicines may be prepared on wards, however sufficient space must be provided to allow safe working particularly for the safe preparation of injectable medicines. Work surfaces must be easily cleaned and not cluttered. A minimum worktop area of two square metres (2m²) is required for medicine preparation in each 24-bed ward area.

Electronic medicines storage and issuing systems
Automated electronic medicines storage and issuing systems are now available for all types of medicines, including CDs. Local discussions are essential regarding such requirements. Consideration of access to power and IT connectivity will be required for these systems.

Other clinical areas requiring medicines storage
A wide range of clinical areas in acute hospitals require medicines storage facilities. The principles which apply to the storage of medicines on in-patient wards apply equally in other clinical areas, however space requirements in the following areas are likely to be significantly different from in-patient wards. Each organisation’s Chief Pharmacist should be consulted on the appropriate medicines storage arrangements for the following clinical areas:

• day case units
• out-patient departments
• A&E departments
• operating theatre departments
• cardiac catheter laboratory suites
• chemotherapy units
• dialysis units
Controlled drugs
The range and quantity of controlled drugs required to be stored in clinical areas has increased in recent years. The traditional design of a quarter size cupboard within full sized cupboards is considered to be too small to provide suitable controlled drug storage and should no longer be used.

Flammable medicines
Flammable medicines should be stored in lockable metal cupboards. A risk assessment should be undertaken to ascertain whether a fire-resistant cabinet is required. This will depend on the quantity and flammability of the medicines.

Staff seeking further advice on the safe storage of medicines should contact their organisation’s Chief Pharmacist. Whist the standards and principles set out in this alert will be applicable to most in-patient settings; each organisation must give detailed consideration to the arrangements for the safe storage of medicines in specific settings. For example additional security measures may be required on some specialist mental health wards.