

## Good Practice Guidance E: Monitored Dosage Systems (MDS) in Care Homes

### Key Points

- MDS is a medication storage device designed to simplify the administration of solid oral dose medication.
- There are advantageous and disadvantages to using MDS in care homes. Care home should consider these in conjunction with the homes individual circumstances when deciding if an MDS system is suitable for their residents.
- The NHS does not fund MDS systems for use in care homes.
- Individuals can be assessed within the Equality Act criteria for support to manage medicines themselves. However this would be for individual residents that are self medicating.
- The use of seven day prescriptions is only recommended where there is a clinical need for a resident and they need to receive their medicines on a weekly basis. This should not be necessary for the majority of residents within care homes.

### What are Monitored Dosage Systems (MDS)?

MDS is a medication storage device designed to simplify the administration of solid oral dose medication. There are various types which include the NOMAD, Plus Pak, dossette and Venalink 7 Day systems

The CHUMS ([Care homes' use of medicines study: prevalence, causes and potential harm of medication errors in care homes for older people](#)) study has highlighted that the MDS may not always be the best way of assisting residents with their medicines. There appeared to be no difference in the overall rate of errors between the homes in the study that did and didn't use an MDS system. However, dispensing errors were more likely to be associated with **MDS cassette** systems.

The report suggests that MDS systems impose demands on home and pharmacy alike, yet their contribution to safety is unclear. Also, the use of MDS drives efficiencies of scale, such as large centralised repackaging units, which in turn leads to the dispensary becoming remote from the customers (care home and patient). The report suggests that research into the effectiveness of MDS is urgently required.

Some of the advantages and disadvantages of using an MDS are listed in the table below<sup>1</sup>.

Advantages	Disadvantages
Provide medicine storage which is easily accessible to the patient	Risk from secondary dispensing errors e.g. the pharmacist or dispensing doctor often has to remove medicines from their original packaging and put into the MDS
	Do not improve intentional non-compliance
Reduce the complexity of adhering to a regimen	Only suitable for solid dosage forms that are to be swallowed whole
	Long term stability of medicines in the compliance aid unknown
Minimise dose, amount and timing errors	Lack of child resistant closures
	Doses can become mixed up if the MDS is dropped (in some cases)
Act as a memory aid	Large size of MDS can make carrying difficult
Some are tamper evident	Not useful for 'when required' medication
	Not suitable for medicines with variable dosage such as warfarin
	Potential hygiene problems with reusable MDS

The NHS does not fund MDS systems such as *Manrex*, *Nomad*, *Venalink*, *Medidose*, *Dosette* and similar systems. Community pharmacists and dispensing doctors can be requested to supply medicines in an MDS but they do not have to do this and can refuse. Alternatively the care home may be asked to pay for this service and/or the equipment if this is requested by the care home. Once an MDS system has left the pharmacy or dispensing practice, it should not be sent back to the pharmacy or dispensing practice to add in additional medicines.

Individuals can be assessed within the Equality Act criteria for support to manage medicines themselves. This does not apply to entire care

<sup>1</sup> Bhattacharya D: Indications for Multi compartment compliance aids (MCA) – also known as Monitored Dosage Systems (MDS) – provision January 2005

environments, unless the resident is self-medicating, as the principal benefit is to care home staff.

The use of seven day prescriptions is only recommended where there is a clinical need for a resident and they need to receive their medicines on a weekly basis. This should not be necessary for the majority of patients within care homes.

If care homes would like further support in deciding whether an MDS system is suitable for the residents in their home, please contact one of the medicines management team at the Oxfordshire CCG or speak to your local community pharmacist.

Further information on the administration of medicines and MDS in care homes is available in the 'Good Practice Guidance B: The administration of medicines in Care Homes'.

#### **Further Information**

- Further information on managing medicines in care homes is available in Outcome 9 of the [CQC Essential Standards of Quality and Safety](#).
- Further information on [The handling of medicines in Social Care](#) can also be found on the Royal Pharmaceutical Society website: [www.rpharms.com](http://www.rpharms.com)
  - The Nursing and Midwifery Council (NMC) provides guidance and [advice on a number of topics](#) which is available on their website; [www.nmc-uk.org](http://www.nmc-uk.org)
- The National Patient Safety Agency also contains safety alerts related to medicines; <http://npsa.nhs.uk/>

*The above links are made available solely to indicate their potential usefulness to users. The user must use their own judgment to determine the accuracy and relevance of the information they contain.*

Oxfordshire CHUMS Working Group & Medicines Management Team