

## Care homes - Reviewing the use of monitored dosage systems (MDS)

The use of multidose or single dose compliance aids (monitored dosage systems) (MDS) are no longer considered the best method of managing medicines in care homes; instead the use of original packs is being endorsed as the preferred option for carer administration and this resource has been developed to support changes in practice.

### Recommendations

- Review the use of compliance aids in care homes to ensure all use is based on individual residents' needs with the aim of supporting self-administration and compliance.
- Implement the use of original packs (OP) as the preferred method for staff administration of medicines through a safe transition plan.
- Making the change to original packs for all medication does need careful planning to ensure a smooth transition and care homes may require support to implement the change safely. This resource aims to summarise the key issues in relation to the use of multidose or monitored dosage systems and help Clinical Commissioning Groups (CCGs), GP practices, community pharmacists and care homes manage the transition to original packs.

### Background

Medicines administration is an area that many care homes have found difficult to manage and this has been reflected in reports from the regulatory bodies. In 2004 the National Care Standards Commission published a report, "The management of medication in care homes 2002-3",<sup>1</sup> which highlighted that only 45% of care homes met or exceeded the stated medication standard around safely and accurately administering medicines. In 2006 the then regulator, Commission for Social Care Inspection, published a follow up report entitled "Handled with Care?"<sup>2</sup> which showed that although there had been a slight improvement in standards less than half the total market met the minimum requirement for the safe management of medication. The Care Quality Commission (CQC), the current regulator, has now published a report "The State of Health Care and Adult Social Care in England 2015-16",<sup>3</sup> summarising the outcomes across all care homes; however, it is clear from individual inspection reports that handling medicines safely is still being raised as an area of concern.

In 2015 the CQC published fundamental standards of care, and considers that everybody has the right to expect the following standards:<sup>4</sup>

- Care and treatment must be appropriate and reflect service users' needs and preferences.
- Service users must be treated with dignity and respect.
- Care and treatment must only be provided with consent.
- Care and treatment must be provided in a safe way.
- Service users must be protected from abuse and improper treatment.
- Service users' nutritional and hydration needs must be met.

- All premises and equipment used must be clean, secure, suitable and used properly.
- Complaints must be appropriately investigated and appropriate action taken in response.
- Systems and processes must be established to ensure compliance with the fundamental standards.
- Sufficient numbers of suitably qualified, competent, skilled and experienced staff must be deployed.
- Persons employed must be of good character, have the necessary qualifications, skills and experience, and be able to perform the work for which they are employed (fit and proper persons requirement).
- Registered persons must be open and transparent with service users about their care and treatment (the duty of candour).

Although medicines are not specifically mentioned in the fundamental standards most are relevant to the structures and systems necessary for safe medicines management.

## Monitored Dosage Systems - the rationale for change

Many care homes use aids for administration such as MDS, e.g. Manrex®, Venalink®, or multidose compliance aids (MCA), e.g. Dosette® boxes, Medimax®. The care providers believe that their use improves the accuracy of medicines administration and provides them with a visual method of checking. However, many medicines cannot be dispensed into these devices and the Care Homes Use of Medicines Study (CHUMS) research showed that on average 40% of medicines for care home residents would be dispensed outside these systems.<sup>5</sup> This included medicines that are unstable outside their original packaging, for instance, those that are hygroscopic or light sensitive, when required medicines and those medicines that are presented in a different dosage form, e.g. liquids, inhalers, patches, external preparations, suppositories, eye/ear and nose drops etc.

There are some monitored dosage systems which use pouches, which accommodate liquid doses, e.g. Biodose® however this still does not take account of inhalers, external preparations, injectables or those medicines that need to remain in their original containers, e.g. Persantin Retard®. Additionally these systems are not suitable for medication taken when required for symptom control or for those which require specific, frequent administration like Parkinson's disease treatments.

There is no clear evidence that the use of MDS reduces administration errors overall and although there is some research that appears to provide evidence of benefit, the results are not conclusive.<sup>6,7</sup> The potential reliance of staff on MDS may contribute to the risk of administration errors of those medications, which are dispensed outside the system. CHUMS also produced evidence to show that dispensing errors are more likely to occur when dispensing into MDS/MCAs.<sup>5</sup> It is also logical to assume that dispensing errors are less likely to be identified by care staff before administration, because there is no link to the original packaging or the Patient Information Leaflet (PIL). The PIL, if supplied, is likely to be separated from the actual medication.

Every home will have medicines that can only be dispensed in their original packs, so staff must be competent to administer from original packs. For those homes using MDS or MCA systems there will be, by necessity, two parallel administration systems, thus making the process more complex.

In 2013 the Royal Pharmaceutical Society published guidance on the better use of multidose compliance aids (MCAs), which included the following recommendations:<sup>8</sup>

- The use of original packs of medicines with appropriate support is the preferred option of supplying medicines to patients in the absence of a specific need requiring an MCA as an adherence intervention.
- In support of independence and reablement, patients who can safely self-administer their medicines should be encouraged to do so. Where they are unable to do so, there must be appropriate training for carers so that they are able to administer medicines from original packaging.

The guidance also highlighted that removing medicines from the manufacturer's original packaging and repacking them into a dosage system may be an unlicensed use of the product and would affect the level of responsibility for risk and liability.

The NICE guideline: managing medicines in care homes lists only advantages associated with the use of original packs when considering administration, and no disadvantages, but identified several disadvantages for administration when using MDS including: over-reliance on MDS that may de-skill care home staff; possible failure of care home staff to look at the label and description of medicine; and the use of two systems - MDS and original pack dispensing.<sup>9</sup>

Monitored dosage systems (including electronic bar coding) have been produced with the aim of making the administration of medicines simpler and more accurate, but may contribute to the task of administration becoming focused more on the process and less on the choice of the individual resident and their particular needs. Electronic bar coding is used by some care homes and may save time accounting for medicine; however electronic systems can break down and staff will still need to be competent to manage medicines safely and accurately in the event of a systems failure.

Dispensing pharmacists and their staff are very important partners for care homes and can be influential in decisions taken about medicine systems. In the past the supply of MDS has been used to attract the dispensing business from care homes and pharmacies have often provided this without payment. The income from dispensing has reduced recently, so pharmacies have had to make savings, which has arguably led to a less individualised approach for each resident. At the same time there has been an increased emphasis on a more person-centred approach for those living in care homes and the new Fundamental Standards Regulations are reflected in the Care Quality Commission inspection process.<sup>10</sup> The Standard relevant to person-centred care states: "You must have care or treatment that is tailored to you and meets your needs and preferences". Pharmacy skills could be used differently to focus on the medicine management needs of individual residents rather than a single system for the care home.

The Royal Pharmaceutical Society guidance describes how a more person-centred approach can be applied to medication:<sup>4</sup>

"Consideration of alternatives to MCA should be part of an integrated assessment and care plan for the patient. In areas where this has not yet been developed, the information below may be useful in practice.

There are many ways in which patients can be helped to take their medicines safely, or carers supported to administer medicines correctly. Interventions include; medication review to reduce inappropriate polypharmacy and simplifying regimen which is particularly important as the number of prescribed medicines has been shown to be a powerful predictor of non-adherence; patient counselling to improve understanding of medicines-use; the use of reminder charts (as a memory aid); the use of medicines administration record (MAR) charts; labels with pictograms; large print labels; information sheets; reminder alarms; IT solutions and new technology such as phone apps and telemedicine. All of these interventions have a place in ensuring patients take or receive the correct medicines at the right time. The use of an MCA is just one additional intervention in a range of intervention options."

Supporting change is not easy and altering the attitudes and habits of care providers and other stakeholders cannot be done in isolation. For instance, in the past, the use of MDS/MCA has often been encouraged by social care and local authority commissioners, who have believed that their use is safer and they may have included reference to these systems in their contracts and/or key performance indicators.

Some areas have successfully managed to convert some care homes back to using original packs, however there are barriers, which need to be resolved before this can happen. This bulletin aims to highlight those potential barriers and demonstrate how they might be overcome for commissioners/ CCG care home teams and care homes. It also provides some template letters, summaries and a slide set for use by care home managers.

In addition to the appendices, stakeholders may also find the following resources useful when deciding how best to effect change in their area.

- Specialist Pharmacy Services, have developed a very useful toolkit that can be used as a resource to help health and social care organisations work together to understand the need for change and how to achieve it.<sup>11</sup>
- A 'frequently asked questions' document developed for NHS Lambeth is available, which highlights the groups most likely to benefit from MCAs, potential problems and some of the legal aspects which are not always considered when these are being used.<sup>12</sup>

## **Recommendations to support commissioners/medicine optimisation/care home teams considering transitioning to original pack (OP) dispensing from MDS/MCA supply**

This first section looks at the role of medicine optimisation teams in commissioning organisations and how they might influence the preferred use of original packs in their local care homes.

Stakeholders involved in medicines in care homes come from a variety of organisations, for instance Local Authorities may commission social care beds, NHS CCGs may commission NHS funded continuing care, some residents may receive some nursing care as well as personal (social) care. Intermediate care beds may also be commissioned from nursing homes as an alternative to hospital care for those people who need short term additional care, for instance, to recover from an operation, or to prevent a hospital admission.

Following the implementation of the Care Act 2014, Local Authorities (LA) also have a responsibility for any adult who has care needs, not just those who are eligible for social care funding, so this would also include those who are self-funding care home residents.

Other major stakeholders include residents and relatives as well as the care home management and staff, pharmacies and GP practices. Hospital pharmacies will have an interest in this area because requests for discharge medication to be put into MDS may delay the discharge process due to the additional time required for dispensing.

The table on page 5 describes how medicine optimisation teams and care homes teams can facilitate and support others to meet the aim of reducing unnecessary use of MDS/MCA and make support more patient-focused.

Issues/potential barriers	Possible solution/s
<p>Stakeholders and decision makers may be unaware of any concerns with the use of MDS/MCA and might have considered it good practice.</p> <p>This includes commissioners, care home staff and management, GPs and practice staff, pharmacy staff and Local Authority care managers.</p>	<ul style="list-style-type: none"> <li>• Consider what forums currently exist to raise the issues and influence opinion: <ul style="list-style-type: none"> <li>» The Local Authority may run care home forums for managers/ staff so that you can present there.</li> <li>» Identify and liaise with any care home support teams that operate in your local area to ensure a consistent message.</li> <li>» Consult with and discuss the issues with the Local Pharmaceutical Committee - they are the statutory representative body for local Community Pharmacy contractors.</li> </ul> </li> <li>• Look at the Specialist Pharmacy Services toolkit- it will help you develop a framework. You may not need to use all of it and elements can be adapted for local use depending on need.<sup>7</sup></li> <li>• Identify key decision makers in contracting/commissioning within the Local Authority to effect a change in the contracts to remove reference to MDS/MCA systems.</li> <li>• Establish and develop the relationship and links with commissioners and care managers within the Local Authority. Offering expertise for safeguarding panels where medication issues have been raised is often an effective way of building the relationship and trust.</li> <li>• Include GPs and practice staff when circulating information. Highlight potential issues of waste, e.g. financial resources: when doses are changed and a new prescription has to be issued; the shortened expiry date for medicines dispensed into an MDS, and human resources: managing the extra workload if weekly MDS are requested.</li> </ul>
<p>Hospital pharmacies may be pressurised into dispensing into MDS/MCA for care home residents resulting in delayed discharge.</p>	<ul style="list-style-type: none"> <li>• Liaise with the Chief Pharmacist in your local hospitals and across neighbouring areas to agree a joint statement informing them that the hospital will no longer provide medicines in MDS for people being discharged into a care home. See template letter - attachment A.</li> <li>• Identify who will provide support for dealing with issues/complaints from care providers.</li> <li>• Ensure that the LA commissioners and care managers are aware of the decision and the rationale behind it.</li> <li>• Review hospital processes for assessing the individual's need for an MDS</li> </ul>
<p>Many care homes are independently owned and may have limited access to a support structure.</p>	<ul style="list-style-type: none"> <li>• Consult with your local care homes to discuss the support that they might need, how it could be provided, by whom and how it would be accessed.</li> </ul>

Issues/potential barriers	Possible solution/s
<p>Dispensing pharmacies may be concerned about losing business.</p>	<ul style="list-style-type: none"> <li>• Consider how you will encourage pharmacies, that dispense for your local care homes, to support the initiative. Consider what opportunities there are to use their skills more effectively, for instance, locally commissioned services to: <ul style="list-style-type: none"> <li>» Assist care homes to assess individual patient's needs and to provide the support required, e.g. easy open tops, large labels, reminder charts.</li> <li>» Identify potentially inappropriate medicines for review.</li> <li>» Reduce wasted medicines in care homes.</li> </ul> </li> <li>• Link with your Local Pharmaceutical Committee to speak at one of their meetings and answer questions.</li> <li>• Investigate other local pharmacy forums or training events for you to speak at and if none exist consider facilitating one yourself.</li> </ul>
<p>The decision makers for individual pharmacies are not always the ones working day to day in the pharmacy.</p>	<ul style="list-style-type: none"> <li>• Get details of the owners/managers of your pharmacies so you can approach them directly - you might want to arrange a meeting/ forum to discuss the proposals.</li> <li>• Many care homes obtain their medicines from one of the large multiples or from distance selling/internet pharmacies and it is important that you involve all relevant personnel, e.g. <ul style="list-style-type: none"> <li>» Area/district/head office representative.</li> <li>» Management/pharmacist in the local branch of pharmacy.</li> <li>» Pharmacy staff/technicians etc involved in dispensing for care homes.</li> </ul> </li> </ul>
<p>Care homes may sign contracts with a pharmacy to provide a specific type of MDS for a specified period.</p>	<p>A joint approach from Local Authority and CCGs advising all care homes that original packs are the preferred option for managing medicines for their population and the reasoning behind that choice. See template letter (attachment B).</p>

Issues/potential barriers	Possible solution/s
<p>Polypharmacy - an issue for most care homes is the number of medicines that they have to manage.</p>	<ul style="list-style-type: none"> <li>• Review what medicines optimisation plans are in place in your care homes to identify gaps and areas for improvements.</li> <li>• If your local CCG(s) commission an 'enhanced' GP service for care homes, or commission other health care professionals to provide a similar service, ensure that clinical medication review is included in the service specification. Ideally these will be multi-disciplinary<sup>5</sup> but could be through a dedicated pharmacist aiming to: <ul style="list-style-type: none"> <li>» Reduce the number of unnecessary medicines prescribed.</li> <li>» Consider any formulation changes that might assist with self-administration.</li> <li>» Enable a patient centred approach to decisions about treatment.</li> </ul> </li> <li>• Useful information is included in the Polypharmacy webkit <a href="https://www.prescqipp.info/polypharmacy-deprescribing-webkit">https://www.prescqipp.info/polypharmacy-deprescribing-webkit</a> <ul style="list-style-type: none"> <li>» Consider locally commissioned services for community pharmacists to identify patients for medication review.</li> </ul> </li> </ul>
<p>Lack of specialist knowledge of the care home environment in your team or local community pharmacy network.</p>	<ul style="list-style-type: none"> <li>• Facilitate the development of local pharmaceutical skills around care homes. There are two main areas of knowledge and skills - medicines management/handling and clinical medication reviews. The needs will vary depending on background, but consider what the following can provide:</li> <li>• CPPE - distance learning/local workshops/learn at lunch/focal point/local training (contact your local tutor).</li> <li>• Optimise – CPPE or 'do your own' if you have an expert on care homes/medication review. <a href="https://www.cppe.ac.uk/trainers/optimize">https://www.cppe.ac.uk/trainers/optimize</a></li> <li>• Include relevant learning in Personal Development Plans/Continuing Professional Development for your team.</li> <li>• Include relevant training in the service level agreements for commissioned services.</li> <li>• Consider the potential of pharmacy technicians as well as pharmacists.</li> </ul>

## Recommendations to support care homes considering transitioning to OP dispensing from MDS/MCA supply

This second section aims to look at some of the issues that might arise for care home managers and owners when changing to original pack (OP) dispensing and gives suggestions and tools to overcome potential problems.

Medicines management is considered a high risk area for most care homes and to address this risk many have previously chosen to use monitored dosage systems; however it is now widely recognised that dispensing in original packs is the preferred method of managing medicines in care homes and is endorsed by expert opinion. In addition, MDS systems implemented across the home for staff do not offer an individualised approach that supports choice and independence for residents.

It is recognised that care home managers must be able to assure the regulator that they have safe systems in place for managing medicines and that both management and staff must have confidence in any changes. The following table identifies some of the barriers for care home managers that may need to be addressed with possible solutions to overcome those barriers.

Issues/potential barriers	Possible solution/s
Ensuring a safe and legal framework.	<p>Look at your medicines policies and procedures to check whether they will need to be updated. If so refer to NICE guidelines.<sup>5</sup> For an extract of the areas that need to be included (attachment C). N.B. If your policies are produced centrally there should be a process to make amendments relevant for individual homes.</p> <p>Liaise with your local medicines optimisation team/care homes team (in the CCG or their Commissioning Support Unit) or CQC inspector if you need assurance.</p> <p>Review your compliance with the CQC fundamental standards of care (attachment D) considering each of them and their relevance to the management of medicines for individual residents. <a href="http://www.cqc.org.uk/content/fundamental-standards">http://www.cqc.org.uk/content/fundamental-standards</a></p>
The care home staff will be reluctant to change from a system they have used for a long time and may not understand the need to change practice.	A slide set (attachment E) has been produced to help care managers raise the issues with care staff and to encourage discussion about how medicines management can be made more person-centred in line with the fundamental standards of care.

Issues/potential barriers	Possible solution/s
<p>Length of time taken to do the medicine round.</p>	<ul style="list-style-type: none"> <li>• Many care home residents would benefit from a medication review and often this would result in medicines being stopped and would consequently reduce the time taken for care home staff to administer medicines. <ul style="list-style-type: none"> <li>» Work with your GP/s to make sure that you and your staff feel confident about when to ask for reviews of medicines.</li> <li>» Review your staff's knowledge of the adverse effects of medicines and what symptoms to look out for.</li> <li>» Set up a rota for medication review - some care homes use the date of admission or date of birth to ensure that reviews are done at least annually. N.B. Most care home residents will require a more frequent review.</li> </ul> </li> <li>• Train more staff to administer/help support fewer residents. Suitably trained and competent carers can administer medicines in nursing homes, freeing up nursing time for more specialised tasks, e.g. assessing residents. N.B. Nurses will still retain accountability as they have delegated responsibility; however they already do this for most external preparations and thickeners etc. without concern.</li> <li>• Make sure that where residents can self-administer any of their medication that they are encouraged and supported to do this.</li> <li>• Liaise with your local pharmacy - they may be able to offer a range of support aids from large labels, to easy open tops.</li> </ul>
<p>Original packs take up too much space and packs are all different sizes.</p>	<p>Consider lockable cupboards/drawer space in individual rooms to keep medicines safe and secure for those who may be able to self-administer, or to enable staff to administer/support in the privacy of the person's own room.</p>

Issues/potential barriers	Possible solution/s
<p>The risks of using original pack dispensing in place of MDS/ MCAs are too great.</p>	<p>There is no conclusive evidence that risks will increase when original packs are used.</p> <ul style="list-style-type: none"> <li>• Consider if your staff (nurses and senior carers) need a training update. They should be competent to administer from original packs. Consider if a refresher may be beneficial.</li> <li>• Check that your training provider meets the needs of your staff, that their training is up to date and that they are able to answer any questions your staff might have. Some training programmes have accreditation from organisations like the Royal Pharmaceutical Society or CPD accreditation.</li> <li>• Review your risk assessment for self-administration - does it allow for partial self-administration and ensure there is a balance between risk and independence.</li> <li>• Audit errors/omissions etc. before and after changing your system for added reassurance.</li> <li>• Establish a blame-free process for discussing any concerns/ issues.</li> </ul>
<p>The change from the current MDS system to original packs will be too disruptive to manage safely.</p>	<ul style="list-style-type: none"> <li>• Plan well ahead and make the change to coincide with a new medicines cycle.</li> <li>• Start with one unit or a number of selected residents and make the step-wise change.</li> <li>• Ensure that you have established strong links with a named person at your local pharmacy and GP practice to deal with queries as they arise.</li> <li>• Identify a medicines champion in the care home to deal with issues.</li> </ul>

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## Additional PrescQIPP resources



Letters, policy, presentations

Available here: <https://www.prescqipp.info/resources/category/389-care-homes-use-of-monitored-dosage-systems>

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