

## Advantages and Disadvantages of Multi-compartment compliance aids (MCAs)

National guidance focuses on medicine taking/administration from original packs, with an individualised approach for each patient to support medicines adherence. The default should be to supply medicines in original packaging with appropriate adherence aids and targeted support provided where needed, with the aim of maintaining patient independence as much as possible.

Routine requests for MCAs with no prior assessment by a health professional does not promote patient independence and choice.

Use of an MCA for ease / convenience does not constitute a reasonable adjustment, and some suppliers may charge for this service.

Advantages	Disadvantages
<p>Following a health professional assessment (usually by the community pharmacist), an MCA may be considered when a patient is struggling to manage a complex medicine regimen that cannot be simplified and primarily consists of regularly scheduled, solid oral dose forms that are suitable for repacking. Ideally the medication regimen should be stable and unlikely to change frequently.</p>	<p>There is insufficient evidence to support the benefits of MCA in improving outcomes or medicines adherence (whether a patient is self-administering or receiving carer support).</p> <p>Regulators do not promote the routine use of MCAs as good practice.</p>
<p>May help some people to maintain independent healthy living so they are able to remember to take their medicines, and they take the correct ones at the right dose.</p>	<p>MCAs reduce a patient's knowledge, skills and understanding of medicines and their use, including how, why and when they should be administered.</p> <p style="text-align: right;"><i>Table continued...</i></p>

Advantages	Disadvantages
<p>More than one medicine can be put together (however, the identification of each medicine should be confirmed before they are administered, therefore if a compartment contains a large number of white tablets this can become a disadvantage).</p>	<p>Not suitable for all medicines, for example:</p> <ul style="list-style-type: none"> <li>• Some medicines may not be stable (e.g. some anti-epileptic drugs, some blood thinning drugs)</li> <li>• When required medicines (e.g. painkillers)</li> <li>• Medicines with frequent or variable doses (e.g. some anti- Parkinson drugs, warfarin)</li> <li>• Short courses (e.g. antibiotics)</li> <li>• Large tablets or capsules that do not fit</li> <li>• Soluble or chewable tablets</li> <li>• Light / moisture sensitive</li> <li>• Medicines for separate administration e.g. weekly alendronic acid</li> </ul>
<p>Provides a quick visual clue whether the medication has been taken.</p>	<p>Only trained and competent care staff should support patients to take their medicines.</p>
<p>May work when a patient is motivated to take their medicines, has the vision, cognition and dexterity to use the MCA.</p>	<p>Because all medicines are not suitable for inclusion in an MCA, patients must then manage two medicine systems in parallel which may lead to confusion and error.</p>
	<p>Introduction of an MCA without cognitive skills to learn how to use properly can lead to harm through incorrect use – or not using medicines at all.</p>
	<p>Disempowers patients who may wish to identify specific medicines to not be taken e.g. diuretics or medicines prescribed as 1-2 e.g. laxatives.</p>
	<p>Takes significantly longer (around 10x) to prepare an MCA than dispense original packs.</p>

Advantages	Disadvantages
	<p>Repackaging medicines into an MCA reduces medicine stability, and may introduce contamination and errors during the dispensing process.</p>
	<p>If there is a change in medication mid cycle, this leads to drug wastage as a complete new MCA has to be prepared.</p>
	<p>Increased administrative burdens for both GP practice and medicines supplier when medication changes require preparation of new prescriptions.</p>
	<p>If the contents of the MCA are accidentally spilled this may lead to 1) errors if the MCA is refilled incorrectly or 2) may lead to drug wastage if a complete new MCA has to be prepared.</p>
	<p>The MCA may not be able to accommodate enough dosing instructions to support safe use of the medicine.</p>
	<p>PILs may not be close at hand to check for necessary information to support safe use of the medicine.</p>
	<p>Most multicompartiment compliance devices are not child or tamper resistant.</p>
	<p>Increased use of single-use plastics as devices are disposed after use.</p>
	<p>Devices that contain multiple tablets in a section cannot be used in hospital admission as part of a patient's own supply of medicines and will be wasted.</p>

Advantages	Disadvantages
	Removal of medicines from the original manufacturers packaging is usually an unlicensed use of the medicine, impacting responsibilities.
	Medicines packed together in sections of the MCA may impact on their stability which can impact on chemical or physical integrity
	Perception of the MCA as being safe and effective without ongoing support / evidence
	Care staff still have a legal responsibility if the wrong drug has been dispensed and is subsequently given.