Background
A “Multi-Compartment Aid” is a term in healthcare associated with the way that a patient can receive their medicines which have been “re-packaged” by the community pharmacist into a “box” or “blister system” which indicates the days of the week and times of day medicines should be taken. Medicines can be “re-packaged” in this way for individual patients who are thought to require assistance in the day to day management of their medicines by their pharmacist. However “re-packaging” of medicines has many complex elements from prescribing, dispensing and patient perspectives and with increasing technology can now involve automated pill dispensers e.g. Pivotell®.

Over recent years there has been a steady rise in the demand for MCAs in the community. This is despite a serious shortage of evidence surrounding its use and the benefit (if any) to the patient. MCAs have been promoted as a safe system of medicine administration but can also be a convenient form of packaging for a limited group of medicines. Safe practice is not guaranteed by use of a system alone but it can be useful for certain individuals to manage medicines who do not have carers. Caution is needed in interpreting the claimed benefits of MCA, which have not been confirmed by good research evidence.

This guidance therefore has been drawn up in order to facilitate a consistent approach across Herefordshire for referrals to health and social care professionals to ensure that finite resources available to pharmacists in re-packaging medicines are secured for those patients most likely to benefit from a range of devices.

Whenever a decision is made to provide medicines in an MCA it must be after an individual patient centred assessment within a quality framework and overall maximise independence, promote safe medicines use and be:
- Appropriate for the patient, and
- Preserve the integrity of the medicine

Summary of Key advantages of this guidance for health and social care professionals working in Herefordshire will be to:

1. Ensure that patients who are most likely to benefit of having their medicines packed in Multi-Compartment Aids receive them packaged in this way and be reserved for those patients most likely to benefit.

2. Raise awareness of a much wider range of support mechanisms which can be of benefit to patients after individual patient assessment. See Appendix 1 for possible options for support e.g. reminder charts.

3. Promote regular review of individual’s patients’ medicines by the GP to simplify their medicines regime before commencing re-packaging medicines. In some cases patients will only need short term support through these systems.

4. Recommend that patients receive a Medicines Use Review (MUR) with their community pharmacist (or DRUM - Drugs Review of the Use of Medicines in the case of a dispensing practice) in which all medicines can be reviewed and any reasonable adjustments made under the Equality Act 2010 without introducing further risks.

5. Highlight that Domiciliary care agency staff, GPs, District Nurses or other health or social care colleagues can use a local Medicines Optimisation Assessment tool for initial assessment. Initially a query to the community pharmacy or dispensing practice for advice may be helpful over dispensing or presentation of patients’ medicines.

6. Raise awareness of the clinical pharmaceutical decisions that will enable or limit medicines inclusion in these devices and the pharmacist will ultimately inform the final decision.
7. This guidance is included within and relies on other key Herefordshire documents where applicable which are available at www.herefordshireccg.nhs.uk including:

- Joint Herefordshire CCG, Hereford Council, Wye Valley Trust “Guidance for Medicines Management Services provided to people in their own homes” November 2015
- Herefordshire CCG Pharmaceutical Advice to Care Homes Scheme
- Joint Herefordshire CCG Herefordshire Council “Provision of medicines in automatic pill dispenser Service” all of which highlight the need for appropriately staff trained in medicines working with suitably documented care plans supporting safe systems for medicines use for patients.

Community Pharmacist/ Dispensing practices

Pharmacists and dispensing practices in the community are required to make “reasonable adjustments” to support persons to use their medicines safely referencing the Equality Act 2010. This could mean any of a range of support mechanisms such as large print labels, medication reminder charts & alarms, dexterity aids, winged or plain bottle caps or MDS. Patients who fall outside the pharmacist dispensing practice for an assessment may also require help to gain optimal benefit from their medication; however there is no legal obligation. Assessment on support needed around medicines only applies where the patients’ ability to carry out day to day functions is compromised and is not intended to support carers, or nursing or residential home staff.

Professionals can refer to the patient’s choice of community pharmacy for an assessment of their compliance needs. The pharmacist or GP (in the case of a dispensing practice) is ultimately responsible for deciding the patient’s status and what level of compliance support is required. Further details on the national assessment tools used by pharmacists can be found http://www.pcc.nhs.uk/disability-discrimination-act-a-resource-kit. An initial “Medicines Optimisation Assessment” tool is contained within the local commissioned service for provision of the Pivotell® device.

Patient referrals to a pharmacist/dispenser should only be for assessment not a specific compliance aid.

The NHS does not directly fund MCA systems, consequently community pharmacists & dispensing GPs cannot be compelled to provide medicines in this way. MCA systems are provided to patients in order to support independent living at home but are extremely resource intensive for the community pharmacist or dispensing practice in assembly costs. Requests from care home environments to receive medicines dispensed in this way must be discussed and agreed between the care home and pharmacy and are outside NHS terms.

Limitations to the use of MCA

For patients on many medicines not all medicines can be included and the UKMi stability database will inform the pharmacist as to suitability of medicines to be included or otherwise.

MCA can only be used for tablets & capsules (with exceptions) and so excludes liquids, soluble tablets, granules, cytotoxics (e.g. methotrexate), light-sensitive medicines (e.g. chlorpromazine), inhalers, eye drops, creams, GTN (glass bottle only), temperature controlled medicines (e.g. Ketovite).

In addition there are drugs which are not suitable for inclusion because of specific administration requirements e.g. alendronate which may easily be forgotten when included in MDS and warfarin since the dose can change and warfarin should be taken separately to other medicines. Packaging of medicines for ‘as required’ use in MDS is not suitable and should not be requested.

Due to these limitations, the impact of potentially two different systems operating must also be considered in order that further risks are not introduced into the overall medicines regime.

Stability Issues

Many manufacturers will point out that their drug(s) are not licensed for inclusion in a compliance aid based on the absence of any stability studies, and that this will affect their liability. Hence they cannot / will not advise on the suitability of inclusion in a compliance aid. Some manufacturers whilst pointing out the absence of stability information in MCA provide guidance based on the physical and chemical properties of the drug. The final decision on
whether to include or exclude a drug from a compliance aid is therefore left up to the pharmacist/ GP in a dispensing practice.

**Other medicines and changes to medicines**
Medicines such as inhaler, eye drops, creams and ointments required in addition to MCAs add further complexity. Care providers and patients will have to deal with using several different medicines administration systems which may raise questions around the appropriate use of the MCA and increases the risk of the patient not receiving their medication properly.

If changes are made to a person's medicines depending upon the urgency of the changes, it may be more practical to implement them at the end of a supply cycle. If this is not possible the prescriber should liaise with the pharmacist and patient / carer to ensure changes are made safely and promptly.

**Community Pharmacy/Dispensing practice**

**Secondary Dispensing (also known as double dispensing or “potting up”)**
Some care providers who have been unable to get medicines in MCA have taken the decision to allow care workers to re-package medicines in similar marketed or home made compliance systems. This is termed ‘secondary dispensing’ and is regarded as unacceptable due to increased risk of error. However this guidance does not preclude situations where care workers support people to fill their own compliance aid or patients simply fill them themselves.

Secondary dispensing is not allowed within the local medicines policies and therefore not acceptable for staff who should seek advice.

**Prescribing medicines for inclusion within MCA including 7 day prescriptions.**
If a prescription for 28 days treatment is issued for a patient who requires support and the pharmacy contractor decides that the adjustment required is a compliance aid then a compliance aid will be prepared on one occasion. Prescribers are only advised to issue 7 day prescriptions if the patient is not advised to be in receipt of more than 7 days medicines in the home for safety reasons or their medicines are changing frequently or because of pharmaceutical instability.

**Domiciliary care agency staff and medicines dispensed within MCA**
Compliance aids, such as a MCA, will normally be filled and labelled by the community pharmacist or dispensing practice. Normally MCA systems would only be employed where it enables a service user to self administer at Level 1 support required by the patient who largely takes responsibility for their own medication and may require some assistance in for example opening a medicines bottle. *(Reference: Joint Herefordshire CCG Council Guidance for Medicines Optimisation Services provided to people in their own homes November 2015)*
Multi-Compartment Aids (MCA) Blister packs FAQs

Q1. Who decides when to use an MCA?

A. This should be based on a robust individual patient assessment, usually by the community pharmacist, to ascertain the most appropriate method of dispensing. MCAs may not always be the best solution; there are many other tools which can support patients with medicines use.

It would be beneficial for pharmacist and prescriber to discuss this decision.

It is useful for the prescriber to carry out a clinical medication review as part of the assessment, to see if therapy can be rationalised.

Q2. Can a prescriber request that a patient has their medicines dispensed in an MCA?

A. If a prescriber thinks a patient might benefit from an MCA, they should refer the patient to their community pharmacist for a robust assessment of their needs.

Prescribers and pharmacists should understand the potential liability issues when requesting or supplying a medicine in an MCA. Removing a medicine from the manufacturers packaging means that it is no longer licensed, and responsibility for the stability of the repackaged medicines transfers from the manufacturer to the prescriber and pharmacist.

Q3. Do prescribers have to issue 7 day prescriptions for patients with blister packs?

A. Seven-day prescriptions are only needed if a joint decision has been made by the prescriber and pharmacist, on clinical grounds, that medication should be issued to the patient on a weekly basis. This would be appropriate for patients who are managing their medicines themselves and for whom receiving more than one MCA at a time may be confusing or dangerous.

It is important to be aware that if a 28 day prescription is issued, where weekly MCAs are filled, all 4 will be issued at once. This is a legal requirement under the pharmacy terms of service.

Q4. Should prescribers issue 7 day prescriptions for care homes?

A. Patients in care homes should not be issued with 7 day scripts. This should only be considered for individual patients who manage their own medicines, as in Q3 above.

The cultural reliance on medicines supplied in monitored dosage systems (MDS) within care homes and care at home services should be challenged.

Q5. Are there any medicines which should not be put in an MCA?

A. The removal of a medicine from the manufacturer’s original packaging and its repackaging into an MCA can affect its stability.

It is difficult to produce a comprehensive list, but solid dosage forms not suitable for packing into MCAs include

- Soluble, effervescent and orodispersible tablets e.g. aspirin 75mg disp., risperidone orodispersible
- Chewable and buccal tablets e.g. Adcal D3, Buccastem
- Moisture sensitive preparations e.g. nicorandil, Madopar, dabigatran and many others
- Medicines whose dose may vary frequently depending on test results, e.g. unstable INR with warfarin
- Medicines that may be harmful when handled, e.g. methotrexate
- Medicines which are stored in the fridge e.g. fludrocortisone
- Medicines intended for “as required” use e.g. analgesics, laxatives
- Medicines that have special administration instructions and must be identified individually in order to do this safely e.g. alendronate

Individual clinical assessment may override stability concerns.
UKMI have developed a MCA stability database in order to provide advice on specific medicines available at http://www.ukmi.nhs.uk/

Q6. How should medicines that cannot be packaged in MCAs be managed?
A. Medicines such as inhalers, eye drops, creams and ointments etc required in addition to MCAs add further complexity. Care providers and patients will have to deal with using several different medicines administration systems which may raise questions around the appropriate use of the MCA and increase the risks of the patient not receiving their medication correctly.

Q7. What happens if changes are made to a patient’s medication if using an MCA?
A. Depending on the urgency of the changes, it may be more practical to implement them at the end of a supply cycle. If this is not possible, the prescriber should liaise with the pharmacist and patient/ carer to ensure changes are made safely and promptly. Prescribers should be aware that if there is a change mid-cycle, a new prescription needs to be issued for all medicines, and that the pharmacist should ensure that contents of previously issued MCAs are discarded.

Q8. How can medicines in an MCA be identified?
A. MCAs are labelled to include descriptions of each medicine it contains. However, many tablets look similar and when present in the same compartment they can be difficult to distinguish. This can lead to disempowerment of patients and carers e.g. if they are choosing not to take a medicine at a specific time for lifestyle reasons, such as a diuretic.

Q9. How can admin time be reduced while ensuring patients who need weekly supplies get them weekly, rather than monthly?
A. Use the repeat dispensing (batch prescribing) service, where the GP needs to sign only one form (the RA), and these can be done in batches of 4-8 weeks at a time. For further information, speak to your community pharmacist.

Q9. Can Controlled Drugs be placed into MCA systems?
A. Medicines containing controlled drugs should be assessed in the same way as other medicines before deciding whether or not to repack within an MCA. In situations where the controlled drug requires safe custody and has already been repackaged within the MCA with other medicines, the whole MCA must be stored in a controlled drug cabinet prior to collection. If an entry in the controlled drug register is necessary, this should be made at the time of supply. The addition of a controlled drug to an MCA is unlikely to be appropriate in situations where the dose and strength of the preparation may need to change rapidly to accommodate the patient’s condition, e.g. palliative care.

CCG Medicines Optimisation Team November 2015 for revision in 2017

Appendix 1- Medicines Optimisation – options for supporting patients in the day to day management of their medicines.

References
1. Royal Pharmaceutical Society: Improving patient outcomes: The better use of multi-compartment compliance aids
2. Royal Pharmaceutical Society (Scotland): Improving Pharmaceutical Care in Care Homes

5
Appendix 1 Medicines Optimisation – options for supporting patients in the day to day management of their medicines.
Please discuss these options with the community pharmacist or GP practice dispenser for advice in the first instance.

<table>
<thead>
<tr>
<th><strong>Self help</strong></th>
<th>Description</th>
<th>Example Availability/ Source of advice</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>NHS Choices – self care guides.</strong></td>
<td>Click on a symptom to get health and medical advice.</td>
<td>Consult <a href="http://www.nhs.uk">www.nhs.uk</a> or via Tel no 0845 46 47</td>
</tr>
<tr>
<td><strong>Oral Medicines</strong></td>
<td><strong>Description</strong></td>
<td><strong>Example Availability/ Source of advice</strong></td>
</tr>
<tr>
<td><strong>Medication Reminder Charts</strong></td>
<td>Paper based chart to summarise medicines and timings of administration</td>
<td>Discuss with your Community pharmacist/ dispensing practices or via <a href="http://www.herefordshireccg.nhs.uk">www.herefordshireccg.nhs.uk</a> through “Your services,” “Community Pharmacy” then “Managing your medicines day to day.”</td>
</tr>
<tr>
<td><strong>Medication Tick Charts</strong></td>
<td>As above</td>
<td>As above</td>
</tr>
<tr>
<td><strong>Large print labels</strong></td>
<td>These are printed on to labels when the medicines are dispensed</td>
<td>As above</td>
</tr>
<tr>
<td><strong>Written down instructions</strong></td>
<td>Minimum Arial Font 16/18 classed as “large print.”</td>
<td>As above</td>
</tr>
<tr>
<td><strong>Larger containers</strong></td>
<td>These have a larger lid to improve grip in opening containers where appropriate.</td>
<td>As above</td>
</tr>
<tr>
<td><strong>Easy open tops</strong></td>
<td>Non child resistant tops can be requested by the patient and agreed with the pharmacist</td>
<td>Some medicines can be supplied in containers with easy open tops - discuss when obtaining medicines.</td>
</tr>
<tr>
<td><strong>Winged caps</strong></td>
<td>Simple device to place on the top of a medication bottle.</td>
<td>Discuss with pharmacist/dispenser</td>
</tr>
<tr>
<td><strong>The Pill Press®</strong></td>
<td>A device that enables medicines to be pushed out of blister packs.</td>
<td><a href="http://www.pillpress.co.uk">www.pillpress.co.uk</a> or Tel: 012380 730731</td>
</tr>
<tr>
<td><strong>Pill Poppa®</strong></td>
<td>A device that enables medicines to be pushed out of blister packs.</td>
<td>Example <a href="http://www.livingmadeeasy.co.uk">www.livingmadeeasy.co.uk</a> Tel 0300 999 0004</td>
</tr>
<tr>
<td><strong>Pill splitters and crushers</strong></td>
<td>Only suitable for certain medicines – consult pharmacist/dispenser. Standard pill splitter and magnifying pill splitter enables patients with poor eyesight to split medicines into two.</td>
<td>Discuss with pharmacist/dispenser suitability of medicine to be crushed and safety issues associated with splitting tablets.</td>
</tr>
<tr>
<td><strong>Oral syringes</strong></td>
<td>To measure liquid medicines accurately from medicines bottles</td>
<td>Some obtainable from dispensers/ pharmacists when dispensing prescriptions.</td>
</tr>
<tr>
<td><strong>Measuring spoon</strong></td>
<td>Discuss when obtaining medicines supply.</td>
<td>Discuss when obtaining medicines supply.</td>
</tr>
<tr>
<td><strong>Assessment for suitability for automatic pill dispenser Pivotell®</strong></td>
<td>Assessive Technology to support patient independence at home</td>
<td>Requires individual patient assessment to determine suitability and likely benefits – through Herefordshire Council Telecare Team.</td>
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<tr>
<td><strong>Eye drops</strong> Drop Dispensers</td>
<td>Some are available on prescription e.g. Opticare, Opticare Arthro 5, Opticare Arthro 10.</td>
<td>Discuss with dispenser/pharmacist. Xal-ease product for Xalatan and Xalacom eye drops available from Pfizer company representative. Travatan Eyot – for use with Travatan eye drops available from Alcon representative.</td>
</tr>
<tr>
<td><strong>Topical Creams/ointments</strong></td>
<td>Helps squeezing out of tubes and also reduces waste.</td>
<td>Consult pharmacist/ dispenser or e.g. try <a href="http://www.medicinesresources.nhs.uk">www.medicinesresources.nhs.uk</a> To purchase</td>
</tr>
<tr>
<td><strong>Medication Tube Squeezers</strong></td>
<td>Designed to help apply creams etc on hard to reach places.</td>
<td>Consult pharmacist/dispenser or e.g. try <a href="http://www.medicinesresources.nhs.uk">www.medicinesresources.nhs.uk</a> To purchase</td>
</tr>
<tr>
<td><strong>Lotion applicators</strong></td>
<td>To help patients with dexterity problems grip and actuate the canister of the MDI.</td>
<td>Available in two sizes to fit different sizes - not available on prescription. Discuss with medicines supplier.</td>
</tr>
<tr>
<td><strong>Inhalers</strong> Haleraid</td>
<td>Turbohalers are small and need to be twisted to activate.</td>
<td>Ask dispenser/pharmacist to discuss with manufacturer.</td>
</tr>
<tr>
<td><strong>Turbohaler Grip</strong></td>
<td>Easier to co-ordinate inhaler use- discuss with prescriber.</td>
<td>Discuss with prescriber</td>
</tr>
<tr>
<td><strong>Spacers</strong></td>
<td>Can be used on open toe and closed toe stockings.</td>
<td>Discuss with prescriber since available on prescription.</td>
</tr>
</tbody>
</table>

**Other Service Options:**
Consider other services which the pharmacy can provide to help patients in their medicines taking such as:

1. **Collection and Delivery of Repeat Prescriptions** (where this service is available.)

2. **Repeat Dispensing**- facility for patients upon stable medicines via community pharmacies- please ask GP.

3. **Medicines Use Reviews (MURs)**- a one to one review provided by an accredited pharmacist in an accredited pharmacy to discuss day to day management of medicines, to simplify a complex drug treatment regime and to increase patient’s understanding of what medicines they are taking and why.

4. **New Medicines Service (NMS)** – a community pharmacy service for patients who are started on certain categories of medicines where the community pharmacist will support patients for the first month to promote day to day management.

5. **DRUMS – Drug Review in the Use of Medicines**- these are provided by rural practices who supply medicines from the surgery. Please discuss further with GP or dispenser at the practice.