



# Expiry Dates of Medication - Good Practice Guidance for Care Homes

Version 1.4 July 2024

For local adaptation to fit within individual Care Home medication policies

Document produced by: Care Home Medicines Optimisation Team, NHS Bedfordshire, Luton and Milton Keynes Integrated Care Board (BLMK ICB)

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#### **Version Control**

| Version     | Date      | Reviewer (s)           | Revision Description                    |
|-------------|-----------|------------------------|---|
| Version 1.0 | September | Luton CCG Care Home    | -                                       |
|             | 2015      | Team                   |   |
| Version 1.1 | June 2017 | Luton CCG Care Home    | -                                       |
|             |           | Team                   |   |
| Version 1.2 | September | BLMK CCG Care Home     | -                                       |
|             | 2021      | Medicines Optimisation |   |
|             |           | Team                   |   |
| Version 1.3 | December  | BLMK ICB Care Home     | Updated- Hospital discharge and new     |
|             | 2022      | Medicines Optimisation | admissions                              |
|             |           | Team                   |   |
| Version 1.4 | July 2024 | BLMK ICB Care Home     | - Extension of guidance review date     |
|             |           | Medicines Optimisation | from 2 years to 3 years                 |
|             |           | Team                   | - Improved format of content throughout |
|             |           |                        | document – new sub-heading              |
|             |           |                        | 'Background to expiry dates on          |
|             |           |                        | medication'                             |
|             |           |                        | - Updated - Examples of different       |
|             |           |                        | wording of expiry dates with new dates  |
|             |           |                        | - Table of suggested expiry of products |
|             |           |                        | reviewed and titled as 'Appendix 1'     |
|             |           |                        | - Exceptions table for certain          |
|             |           |                        | preparations reviewed and re-formatted  |
|             |           |                        | and titled 'Appendix 2'                 |
|             |           |                        | - Updated – references section and      |
|             |           |                        | inclusion of link to SPS reference      |

#### Committee where guidance was discussed/approved/ratified

| Committee/Group       | Date                      | Status               |
|-----------------------|---------------------------|----------------------|
| Luton CCG Prescribing | Versions before June 2017 | Approved             |
| committee             |                           |                      |
| BLMK Primary Care     | 14/10/2021                | Approved Version 1.2 |
| Prescribing committee |                           |                      |
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| Prescribing committee |                           |                      |
| BLMK Primary Care     | 11/7/2024                 | Approved Version 1.4 |
| Prescribing committee |                           |                      |

#### Responsibilities

All staff responsible for ordering, receiving, storing, and administering medication in care homes must read and understand.

This guidance is primarily for care home staff, but prescribers and community pharmacists should be aware of good practice.





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## Introduction

There is much confusion around expiry dates of medication within care homes. This often leads to issues with patient safety and the unnecessary wastage of medication. In the absence of national guidance for all products, this guidance aims to enhance knowledge of expiry dates and support appropriate medicine use in care homes.

#### **Expiry Date Definition**

The expiry date is the point in time when a pharmaceutical product is no longer within an acceptable condition to be considered effective and/or safe. The medication reaches the end of its 'shelf life'.

Depending on the product, the expiry date may be set as a fixed time:

- after manufacture
- after dispensing
- after the opening of the manufacturer's container/packaging

As part of good medicines management, patients should receive medication that is "in date":

- To ensure that the active ingredients are fully effective
- To reduce the risk of contamination
- To ensure that it is safe to use

#### Reasons medicines may go "out of date" include:

- Inefficient prescribing or re-ordering systems
- Stockpiling
- Poor stock rotation
- Lack of routine expiry date checking

#### Effects of using expired stock

- The active drug could become chemically unstable
- The effectiveness of the drug may change
- The breakdown of the drug may be toxic and harmful to the patient
- Increased risk of contamination, which could be harmful to the patient





## Background to expiry dates on medication

- The shelf life of products is determined by either the breakdown of the active drug or by risk of contamination.
- Not all drugs deteriorate at the same rate. In general, solid dose formulations have a longer expiry date than liquid preparations.
- The expiry date of a medicine is based on data, called accelerated stability data, which is gathered by the manufacturer, which shows the product will be appropriate for use for a particular period of time if stored as advised.
- It is a legal requirement for manufacturers to print the expiry date on the original container of the medication.
- The manufacturer's expiry on a container is the unopened expiry date.
- After opening, the expiry date may be affected or shortened. This should be highlighted on the medicine label or container by the person opening the container for the first time. This is especially important for liquid preparations and topical preparations. However, it is good practice to document opening date on all medicines.
- Certain external factors can affect expiry, such as contact with water, temperature, air or light. One example is antibiotics to be taken as a liquid formulation which are stored in the pharmacy as a dry powder. Once reconstituted with water, they have a shorter expiry date.
- Some products now show an expiry symbol are state a recommended period after opening e.g., discard after 3 months of opening.
- The table in Appendix 1 outlines the suggested expiry of products from the date of opening
- The table in **Appendix 2** lists a number of commonly used products with shorter shelf-life once opened
- Any product whose appearance suggests it may be unfit for use should be discarded
  irrespective of expiry date. If there is any doubt, contact the community pharmacy for advice.





## Examples of different wording of expiry dates

| Wording on packaging            | Definition                               |  |
|---------------------------------|--|--|
| Best before January 2024        | Discard 31/12/2023                       |  |
| Use before end January 2024     | Discard 31/01/2024                       |  |
| Use by January 2024             | Discard 31/12/2023                       |  |
| Discard after January 2024      | Discard 31/01/2024                       |  |
| Expires January 2024            | Discard 31/01/2024                       |  |
| Use within one month of opening | Self-explanatory (ideally every 28 days) |  |
| Discard 7 days after opening    | Self-explanatory                         |  |

## Monitored Dosage Systems (MDS)

BLMK ICB recommends and supports the practice that all medications supplied to care homes should be dispensed in original packaging – this could be a manufacturer's packaging, or pharmacy supplied packaging after larger amounts of medicines have been decanted for individual patient use. This is in line with advice from the Care Quality Commission (CQC).

Monitored Dosage Systems (MDS) should be avoided where possible. However, in the event that it is necessary for medication to be dispensed in an MDS, it is recommended that medicines are discarded after 8 weeks if they have not been used.

Please note not all medicines are suitable for inclusion in MDS and the community pharmacy may dispense these medications separately in original packaging. These include:

- Medicines that are sensitive to moisture, e.g., effervescent tablets
- Light-sensitive medicines, e.g., chlorpromazine
- Medicines that should only be dispensed in glass bottles, e.g., glyceryl trinitrate (GTN)
- Medicines that should only be taken when required, e.g., painkillers
- Medicines whose dose may vary depending on test results, e.g., warfarin

More information about stability of individual medicines in compliance aids can be found at <u>Medicines in Compliance Aids Stability Tool – SPS - Specialist Pharmacy Service – The first stop</u> for professional medicines advice





# Practical tips for Implementation of Safe Practice around Expiry Dates

## **Recommendations for Care Home Staff**

#### **Ordering medication**

- It is the responsibility of the care home staff to order the medication for their residents, not the community pharmacy.
- At least one nominated member of staff should be responsible for ordering medication with a named deputy.
- Check current stock levels and quantities of medication being ordered are appropriate for requirement in order to avoid medication waste.
- Do not forget to check medication not routinely stored in the medicines trolley e.g., PRNs, topical preparations.
- If the home is using MDS, PRNs should be supplied in original packs rather than in MDS. (MDS has reduced expiry therefore more frequent prescriptions will be necessary and more medication waste generated).

#### **Receiving medication from pharmacy**

- Check if there are any specific expiry date instructions on labels e.g., some liquid antibiotics.
- Check that all medicines decanted in non-original container have an expiry date on them. If they do not, return them to the pharmacy to be appropriately labelled.
- Check the medication is still within its expiry date.

#### **Storing medication**

- Keep all medication in the original container in which it was dispensed.
- Keep medicines in their original outer packaging, to protect from sunlight.
- Note and act on any specific storage instruction as recommended by the manufacturer check the information leaflet or access eMC at <a href="https://www.medicines.org.uk/emc#gref">https://www.medicines.org.uk/emc#gref</a>
- All medicines should be stored in a cool (below 25°C) dry place unless refrigeration is required (between 2°C and 8°C).
- Be vigilant with product expiry dates.
- Rotate stock so the earliest expiry is at the front and therefore going to be used first.
- Be aware that the expiry date of some products can change once opened.
- Record the date opened and the calculated expiry on the medicine package/label if the manufacturer's expiry date is affected by opening.





- Be vigilant with the expiry date of PRNs especially if they are not used frequently. It is good practice to date and initial on opening all PRN medication for audit trail purposes.
- Check expiry dates of medication stock at least once a month.
- More information regarding the storage of medications (ambient and refrigerated) can be found in the BLMK ICB Care Home Medicines Optimisation Team Guidance "<u>Medication</u> room and refrigerator temperature management guide for care homes".

#### Administering medication

- Check expiry date before each administration.
- Record the date opened and the calculated expiry on the medicine package/label where appropriate e.g., creams, eye drops.
- Some packaging does not allow for the pharmacy label to be placed on the product e.g., eye drops. In these instances, the outer packaging will have to be endorsed with the date of opening. It is essential that the product remains in the outer packaging throughout duration of the treatment.
- Highlight any short expiry as a reminder to all staff
- Any product whose appearance suggests it may be unfit for use should be discarded irrespective of expiry date. If there is any doubt, contact the community pharmacy for advice.
- Use disposable gloves per preparation per patient when applying creams or ointments. i.e., if applying more than one preparation for the patient, gloves should be changed between preparations.

#### Hospital discharge and new admissions

- If a 'date of opening' is not recorded on certain medicines (e.g., eye drops, liquids, creams etc.) following a resident's discharge from a hospital, a different care setting or if a new admission from own home, it would be reasonable for care home staff to use the 'date of dispensing' on the pharmacy label as the assumed 'date of opening'.
- The 'date of dispensing' should be marked or highlighted on the box so other staff are also aware that this is the assumed 'date of opening'.
- This is provided that the medicine has been checked as appropriate to use (e.g., in good condition, within manufacturers expiry date, clearly labelled with dose directions etc.). In this situation action taken should be recorded in the resident's care plan.
- Care homes may wish to include the above advice as part of their medicines reconciliation process within their care homes medicines policy for when residents are admitted to their home.
- If there is any uncertainly about whether a product is safe to use, please contact your community pharmacist for advice.





## **Recommendations for Prescribers**

#### Prescribing

- Prescribe the appropriate quantity of medication in order to avoid waste.
- Quantities which appear to be excessive should be queried.
- Directions should be clear rather than "as directed" or "when required".
- PRN medication should have a recommended duration of treatment.

#### **Repeat prescribing process**

• Consider nominating a named practice member to process care home prescription requests and to act as contact known to the care home to deal with queries.

## **Recommendations for Community Pharmacists**

- If decanting from bulk container, label with appropriate expiry date.
- Highlight any shortened expiry dates.
- Do not obscure expiry dates with labels.
- If the care home generally receives medicines in an MDS, inform staff if a particular medicine is unsuitable for inclusion due to problems with stability. The foil packing around individual tablets must not be cut and placed in an MDS; doing so has potential to cause harm if inadvertently swallowed by the service user

# Appendix 1 - Table of suggested expiry of products from date of opening

| Tablets & capsules in original blister strips or      container with printed expiry date      Loose tablets & capsules dispensed from original      pack without a printed expiry date. | Manufacturer expiry date (Check PIL).                              | PRN (when required) medication, wherever possible,         |  |
|---|--|--|--|
| Loose tablets & capsules dispensed from original pack without a printed expiry date.  | (Check PII.)   |  |  |
| pack without a printed expiry date.   |  | should be used from the manufacturer's original pack.      |  |
|   | 6 months after dispensing, unless                                  | 1  |  |
|   | dispenser/manufacturer advises otherwise.                          |  |  |
| Tablets & capsules dispensed into Monitored   | 8 weeks unless pharmacy advises otherwise.                         | Medication is more exposed to light and moisture when      |  |
| Dosage System (MDS)   |  | packed in an MDS.  |  |
| Oral liquids dispensed in original containers pack  | 6 months from date of opening unless manufacturer                  | Write date opened on the dispensing label.                 |  |
|   | advises otherwise  |  |  |
| Oral liquids dispensed into   | Seek dispensing pharmacist advice                                  | The pharmacy should put an expiry date on the bottle       |  |
| amber bottles   |  | before sending to the home, taking into account when       |  |
|   |  | opened in the pharmacy                                     |  |
| Tubs of creams/ointments  | 1 month from the date of opening                                   | Write the DATE when opened on the dispensing label.        |  |
| Tubes of creams /ointments  | 6 months from the date of opening                                  | Order appropriate amounts - if the product lasts longer    |  |
| Pump dispenser packs of creams/ointments  | Manufacturer expiry date   | than 3 months consider requesting a smaller pack size.     |  |
| Cream/Ointment specially made for individual  | Seek dispensing pharmacist advice                                  |  |  |
| Other topical preparations  | 6 months from the day of opening or manufacturer's                 |  |  |
| (e.g. Lotions, shampoos & bath oils)  | recommendation if shorter  |  |  |
| Multi-dose eye/ear/nose drops/ointment  | Usually 28 days but some new preparations are stable for           | Some items may need storing in the fridge once opened.     |  |
|   | longer, always check manufacturer information                      | Single use eyedrops should be discarded after use          |  |
| Inhalers  | Manufacturer expiry date unless manufacturer advises               | Some newer inhalers have a shortened expiry after          |  |
|   | otherwise  | dispensing or once opened. These should have a written     |  |
|   |  | expiry by the pharmacy                                     |  |
| Glyceryl trinitrate spray   | Manufacturer expiry date unless manufacturer advises               |  |  |
|   | otherwise  |  |  |
| Glyceryl trinitrate tablets   | 8 weeks after opening  |  |  |
| Glucose Monitoring strips   | Manufacturer expiry date unless manufacturer advises               |  |  |
| 2 .   | otherwise  |  |  |
| Insulins  | Unopened: Manufacturer's expiry date when stored in a              | Ask the GP to prescribe the nearest number of              |  |
|   | fridge between 2°C and 8°C.  | pens/cartridges needed per month to reduce stock piling.   |  |
|   | Once Opened: 4 weeks for insulin vials and pens unless             | This will depend on dosage prescribed.                     |  |
|   | otherwise stated. When in use can be kept at normal room           |  |  |
|   | temperature (less than 25°C)                                       |  |  |
| Oral Nutritional Supplements/SIP feeds  | Follow manufacturer's guidance                                     |  |  |
|   | once opened (most keep for 24 hours in fridge)                     |  |  |
| These guidelines are subject to correct storage at a  | mbient temperatures recommended by manufacturers and are           | based on general consensus and not evidence-based          |  |
| due to the lack of information available. There   | is insufficient data in published literature and no up-to-date aut | horitative resource that provides data on the stability of |  |
| medicines when stored outside of the manufacturer'  | s original packaging. Conversely there are illustrative examples   | s of degradation of medicines when stored outside of their |  |
|   | original packaging.  | <u>.</u>   |  |





#### Appendix 2

#### Exceptions - commonly used products with shorter shelf-life once opened

The table below outlines a number of products which have a shorter shelf life once they have been opened. The list is not exhaustive and is only intended to cover some of the most frequently used preparations. Please add your own products as they become known to you. Many specials will have a short shelf life.

| Product  | Shelf Life (once opened)  | Additional recommendations                    |
|--|---|---|
| Amitriptyline 25mg/ml oral solution SF                 | Rosemont – 6 months<br>Thame Labs – 30 days<br>Wockhardt UK Ltd – 1 month             |   |
| Chlorpromazine 25mg/5ml syrup                          | 6 months  |   |
| Citalopram 40mg/ml oral drops                          | 16 weeks  |   |
| Donepezil hydrochloride 1mg/ml oral solution           | 2 months  |   |
| Haloperidol 5mg/5ml oral solution (Thame Labs)         | 30 days   |   |
| Levothyroxine 100mcg/5ml oral solution                 | Ten Pharma – 28 days<br>Advanz Pharma – 8 weeks                                       |   |
| <b>Lorazepam</b> 1mg/1ml oral solution<br>(Thame Labs) | 60ml – 30 days<br>150ml – 90 days   | Store in fridge (2 – 8°C)                     |
| Madopar capsules/tablets                               | Manufacturer recommends<br>storage in original package.<br>Keep bottle tightly closed |   |
| Memantine 10mg/ml oral solution                        | 3 months  |   |
| Morphine sulphate 10mg/5ml oral solution               | 3 months  |   |
| Movicol liquid   | 30 days   | Once solution is diluted, use within 24 hours |
| Risperidone 1mg/ml oral solution                       | 3 months  |   |

In all cases, the printed manufacturer's expiry date should be used if it is earlier than the suggested guideline dates.





## **Further support**

The BLMK ICB Care Home Medicines Optimisation team provides pharmacist and pharmacy technician advice and support in implementing this guidance. They can be contacted via email:

Luton based care home team:

Pharmacist: Kaylie McNaughton - <u>kaylie.mcnaughton@nhs.net</u> Pharmacy Technician: Lisa Woods - <u>Lisa.woods5@nhs.net</u> Care Home Team Email: <u>blmkicb.lutoncarehometeam@nhs.net</u>

Milton Keynes based care home team:

Pharmacist: Hazel Gervais – <u>hazel.gervais2@nhs.net</u> Pharmacy Technician: Kasia Wolska – <u>k.wolska@nhs.net</u> Care Home Team Email: <u>blmkicb.mkcarehomespharmacy@nhs.net</u>

Central Bedfordshire based care home team:

Pharmacist: Courtenay Amos – <u>courtenay.amos@nhs.net</u> Pharmacy Technician: Sharon Tansley – <u>sharontansley@nhs.net</u> Care Home Team Email: <u>blmkicb.bedsmocarehometeam@nhs.net</u>

Bedford Borough care home team

Pharmacist: Harprit Bhogal – <u>Harprit.bhogal1@nhs.net</u> Pharmacy Technician: Lindsey Jones - <u>lindsey.jones33@nhs.net</u> Care Home Team Email: <u>blmkicb.bedsmocarehometeam@nhs.net</u>

All BLMK ICB Medicines Optimisation Care home guidance documents can be found on the <u>BLMK</u> <u>ICB Medicines Optimisation Team website</u>.





## References / Resources used in this guidance

- Joint Formulary Committee, British National Formulary. Online version: BMA and Royal
  Pharmaceutical Society; accessed via <a href="https://www.medicinescomplete.com/mc/bnf/current/">https://www.medicinescomplete.com/mc/bnf/current/</a>
- The Pharmaceutical Journal "How stable are medicines moved from original packs into compliance aids", Jan 2006, Vol 276
- Royal Pharmaceutical Society (RPS). Improving patient outcomes. The better use of multicompartment compliance aids July 2013
- Good practice guidance for care homes expiry dates for medicines use in care homes Sheffield Clinical Commissioning Group and NHS Berkshire East June 2021
- Good Practice Guidance: Medication Expiry dates for use in Care Homes NHS Wales University Health Board March 2020
- Arden and Greater East Manchester Medicines Management Best Practice Guidance for Care Homes – Bulletin 10 Guidance on Expiry of Medications June 2021
- Summary of product characteristics (SmPC) for Chlorpromazine Hydrochloride 25mg/5ml Oral Syrup, last updated on eMC 16 Nov 2020 <u>https://www.medicines.org.uk/emc/product/6699#SHELF\_LIFE</u>
- Summary of product characteristics (SmPC) for Morphine Sulfate 10mg/5ml Oral Solution, last updated on eMC 11 Oct 2023 <u>https://www.medicines.org.uk/emc/product/2629</u>
- Summary of product characteristics (SmPC) for Risperidone 1mg/ml Oral Solution, last updated on eMC 04 Aug 2020
   https://www.medicines.arg.uk/emp/product/4264/empottSLIELE.LIEE

https://www.medicines.org.uk/emc/product/4364/smpc#SHELF\_LIFE

- Summary of product characteristics (SmPC) for Movicol Liquid, last updated on eMC 11 Oct 2019 <u>https://www.medicines.org.uk/emc/product/4641/smpc#SHELF\_LIFE</u>
- Summary of product characteristics (SmPC) for Memantine 10mg/ml Oral Solution last updated March 2020 <u>https://www.medicines.org.uk/emc/product/3312/smpc</u>