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Best practice guidance for use of Anticoagulant medicines in care homes

What are anticoagulants?

Anticoagulants are medicines that help prevent blood clots. They are given to people at high risk of developing a blood clot, to reduce their chance of suffering from serious illness, such as strokes. There are two main types of oral anticoagulants that patients are prescribed - Warfarin or Direct Oral Anticoagulants (DOACs)

Warfarin

Careful monitoring is required for residents taking warfarin. They require frequent blood tests to measure how fast the blood clots, this test is called, International Normalised Ratio (INR). This result is then used to adjust the warfarin dose. Warfarin is available in four different strengths of tablets: 500micrograms, 1mg, 3mg and 5mg (see below). **Care must be taken to ensure the correct strength of tablet is chosen to make up dose.**

In the UK, the colours of warfarin tablets are:							
500 micrograms: white (0.5mg)		1mg: brown		3mg: blue		5mg: pink	

Direct Oral Anticoagulants (DOACs): There are four DOAC's medicines which are:
Apixaban (Eliquis®), Dabigatran (Pradaxa®), Edoxaban (Lixiana®), Rivaroxaban (Xarelto®).
DOACs are monitored at least annually, although some may be monitored more frequently if necessary. Residents usually take the same dose every day. Like warfarin, residents who are taking one of the DOACs may bleed more than normal and so a DOAC Anticoagulation Alert Card should always be carried, and staff need to be aware of the increased risk of bruising and bleeding. When completing Medicines Administration Record (MAR) audit, it is important to specifically review any gaps in DOAC administration. Contact the resident's GP or GP practice pharmacist regarding any concerns or questions.

Care planning

All residents prescribed an anticoagulant will have an individualised care plan. The plan should include details of the healthcare professional responsible for their care, details of their medication, when it should be administered, arrangements for review, and agreed measures to minimise the risks associated with anticoagulant therapy. If a resident is taking an anticoagulant and does not have a care plan in place, then their GP or GP practice pharmacist must be contacted to get this information.

Missed doses.

It is very important that doses of anticoagulants are **NOT** missed, as this can lead to a reduction in their effectiveness. Therefore, the MAR (electronic or paper version) should be checked daily to ensure that the dose has been taken as prescribed. If a resident misses a dose, it is important to know what action to take. This involves contacting GP or GP practice pharmacist for advice on the next dose. Record any missed dose in the incident book, on MAR, on care plan and include advice given by GP/ GP practice pharmacist.

Bleeding risk

As anticoagulants "thin the blood", the main side-effect is that patients bleed more than normal. **Care staff should be aware that bleeding risk is a side effect of both warfarin and DOACs.**

Table 1-

Signs/symptoms of serious bleeding

- Blood in faeces or black faeces
- Blood in urine
- Large bruises, or bruises that happen for no reason
- Blood in vomit/coughing up blood
- Severe headaches or fits (seizures)
- Changes to eyesight
- Numbness/tingling in arms or legs
- Feeling very tired, weak or sick
- Any bleeding that will not stop or slow down after 10 mins

It is important that staff are aware of the signs and symptoms of serious bleeding and look out for these in residents prescribed anticoagulants (*see table 1, page 1*). The resident's care plan should outline the action that should be taken if these are identified or **if a resident suffers a fall**. Resident's GP must be informed immediately if there are any signs of bleeding. If this occurs, out of hours, please follow individual care home protocol to contact a health care practitioner (HCP).

Action to take in case of Falls and incidents: If resident has any suspected injury or incident to the head (for example, following a fall, or resident is pushed, or resident trips, or resident hits their head on a door frame) this must be reported immediately to GP or other Health care professional for further advice and investigation.

Action when resident goes to hospital: If the resident goes to hospital, it is important to send a copy of MAR with them, so that the hospital staff know exactly what medication the resident is taking. This is particularly important if a resident is taking an anticoagulant. Where warfarin is prescribed then information about current warfarin dose is sent with them, for example, copies of most recent INR result and warfarin dose.

Recommendations for use of oral anticoagulants in care homes,

- Care home managers should ensure that there is a written policy in place regarding warfarin and other oral anticoagulants (like DOAC's) . Both policies can be combined, or they can incorporate this guidance in their policy.
- Care home staff should receive adequate training on warfarin and other anticoagulant medicines to enable them to undertake their duties safely.
- Residents taking warfarin must have an Anticoagulant Alert Card and a record Book (Yellow Book) Residents taking DOACs must have a DOAC Alert Card which is included in the box of medication. These documents should remain with resident should they leave the care home.
- Warfarin should be administered from original pack as doses can change mid cycle.
  DOACs can be put in blister packs once the dose is stable if these systems are used in care home.
  Some DOACs cannot be put in 'blister packs' or compliance aids (Dabigatran)
- **Medicines interactions checks**:
  Warfarin interacts with many medicines. Any changes to medicines that are either stopped or started (e.g. antibiotics, homely remedies) should be discussed with INR monitoring clinic or contact the GP practice for advice.
  DOACs - it is important to contact GP practice for advice if antibiotics or a new medicine started.
- **Any other products taken by residents**: Homeopathic remedies, herbal medicines and over the counter medicines purchased by patient, or a family member can be checked for suitability with community pharmacist or GP practice pharmacist.
- **Food interactions checks** : Residents on warfarin should not drink cranberry juice, and any significant changes in diet need to be discussed with resident's GP or GP practice pharmacist or with INR clinic. There are no significant interactions with food for residents on DOACs. Alcohol should only be drunk in moderation.

Warfarin specific information

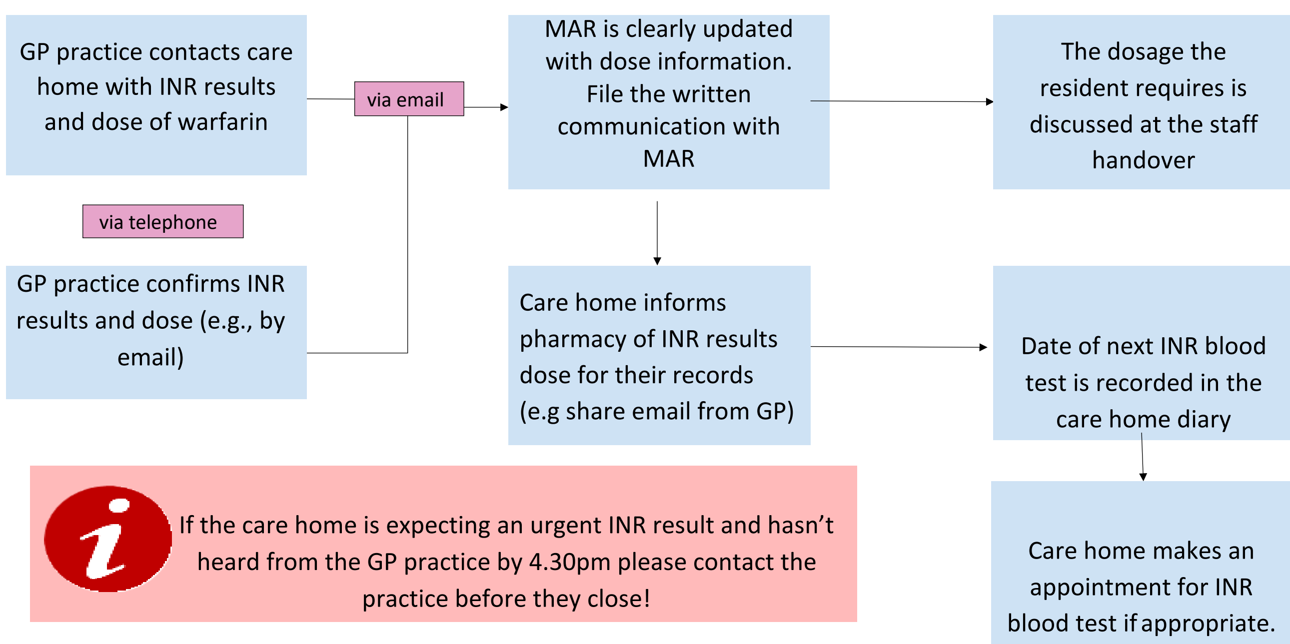
Communication

- The Yellow record book, Anticoagulant Alert Card or most recent printed INR dosage should be with the resident should they leave the home.
- Yellow record book must have the condition section (in the front) completed (by health care professional) with accurate information including indication, target INR, GP and monitoring clinic details.
- Yellow book should be updated with most recent warfarin dose, most recent INR, & next INR test date at every clinic appointment. All communication regarding INR results should be kept with the

Yellow Record Book (or alternative patient record held) and stored with resident's MAR for cross referencing.

- All dose changes or start of a new prescription must be confirmed by prescriber in a secure written format (via email- nhs.net) before next dose or first dose of warfarin is given. If the warfarin dose remains unchanged, the prescriber should still confirm dose and state dose required in writing.
- Follow best practice and update MAR and care plan as soon as possible. It is good practice for a second person to check the accuracy of any transfer of information or amendment to records.
- Any changes to medicines (started or stopped) including antibiotics should be communicated to the monitoring clinic on the same day or next day by the care home. The clinic will advise if the next INR test is needed more urgently.
- Care home must clearly note when the next INR blood test is required. It is vital that the resident has their blood test on the specified date.
- Warfarin should not routinely be issued on a verbal request only. An exception may be ifa result is phoned through out of hours. Confirmation in writing is still required as soon as possible. If a verbal only request is received, record the name and contact number of the caller, write down the details, read them back to the caller and ask them to confirm.
- It is safe practice for the pharmacy to check the latest INR result and current warfarin dose before dispensing to the care home. The care home can support this practice by sharing the latest INR result and dose with the regular pharmacy as soon as they are received. Pharmacy will indicate on the label , ' take as directed on per latest yellow book INR entry'.
- The flow chart below (Warfarin communication Flow chart) demonstrates the communication process.

Warfarin communication flow chart

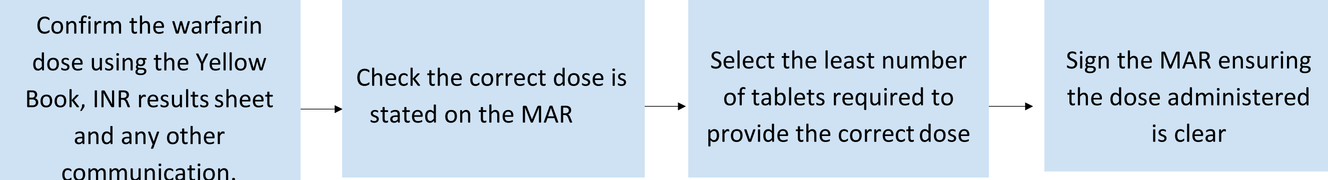


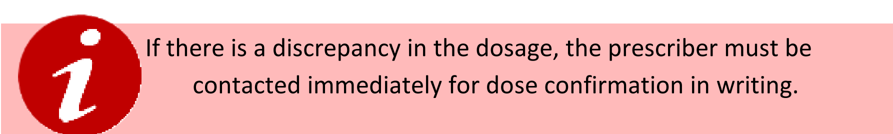
Medication Administration Records (MAR)

- MARs for warfarin are usually received from the pharmacy with 'as directed' printed as the dose. It is the care home's responsibility to ensure the correct dose is recorded on the MAR.
- Dose of warfarin intended for the resident must be clearly stated on the MAR. The words 'as before' must never be used on MAR**.** Ensure dose in milligrams (mg) of warfarin is stated on

the MAR, not the number of tablets. Tablets should not be broken or cut in half.
- It is good practice to have MAR checked for accuracy and signed by a second member of staff.
- Warfarin must never be administered before the written confirmation, Yellow Book, INR results sheet and MAR are **cross-referenced** for dose confirmation of required dose.
- Warfarin should be administered at the same time each day, usually around 6 pm.
- The flowchart on page 6 (warfarin administration chart) demonstrates the administration process.

Warfarin administration flowchart





DOACs specific information

Communication

- DOACs are taken every day regularly as prescribed, and at the same time each day.
- For residents started on and supplied with DOACs from a hospital, ensure current and all subsequent MAR charts are updated to ensure no doses are missed in error.

Responsibility of community pharmacy:

- All anticoagulant dose changes must be confirmed by the prescriber in a written format. The care home can support this process by updating their regular pharmacy with the latest information received from GP. This can be enabled by sharing the email from the GP so that audit trail exists of the communication.
- The pharmacy can then keep their records updated for residents prescribed anticoagulants. This can be facilitated digitally via introduction of 'Proxy access' to GP records.

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