Document Governance	
Document Title:	Good Practice Guidance for Care Home : Administration of warfarin
Document Purpose:	To support safer administration of Warfarin in care homes
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Version Number:	V3.1
Version approved by:	Medicines Management Committee Via TeamNet
Review information: Next review:	November 2024
Linked to:	

NHS
Buckinghamshire
Clinical Commissioning Group

Good Practice Guidance for Care Home : Administration of warfarin

For all staff responsible for administering warfarin in care homes

Definition
Warfarin is an anticoagulant drug used in the treatment and prevention of stroke and thromboembolism (blood clot). Anticoagulants are one of the medicines **most** frequently identified as causing preventable harm and admission to hospital. Nationally it is recognised that procedures promoting safe administration and monitoring of warfarin can reduce the risk of harm and improve care.

Aim or Purpose
To support safer administration of warfarin and highlight key issues to consider when care home staff administer warfarin

Background Information on why regular monitoring residents taking warfarin is so important

- Warfarin increases the time that it takes blood to clot. It is measured by monitoring a patient's International Normalised Ratio (INR)
- The INR is a ratio comparing how long it takes for an individual's blood to clot compared to an individual not taking warfarin. For example, a patient with an INR reading of 2.6 means it takes 2.6 times longer for their blood to clot compared with a person not on warfarin
- A patient's INR is measured by doing a blood test. The frequency of the blood tests depends on whether the results are within the INR target range
- The most common target INR range is 2 - 3. For every patient on warfarin, there should be a target INR range recorded in their yellow book or equivalent anticoagulant record log, as well as the reason why the patient is on warfarin and the duration of their treatment. The INR result depends on the dose of warfarin administered. It can also be affected by **changes** in medication (including Over the Counter and herbal supplements), diet, alcohol consumption, smoking, weight changes and acute illness The administration of some foods and sip feeds can also affect the INR Warfarin is available in four different strengths of tablets which are colour coded, 500micrograms (white), 1mg (brown), 3mg (blue) and 5mg (pink)

Recommendations for Care Homes Medication Policy

The care homes medicines policy should include a Standard Operating Procedure (SOP) on the safe administration and monitoring of warfarin. This should state:-

- The process for ensuring the safe administration, monitoring and communication requirements
- The requirement for cross checking the last INR result, when the next blood test is due, and the current dose **EVERY** time warfarin is administered
- That care staff who administer anticoagulants or support people to take their own **must** be trained to undertake their duties safely
- The National Patient Safety Agency (NPSA) recommends that oral anticoagulants are administered from the original packs dispensed for individual patients. Monitored Dosage Systems are not flexible enough to cope with frequent dose changes and are not recommended for anticoagulants. Care homes should make safe arrangements with their local pharmacist or dispensing doctor.

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Review Date: November 2024

Communication of Information

Responsibilities of Anticoagulant Clinic

- All residents taking warfarin must have an individual fully completed Yellow Book (NHS oral anticoagulant therapy – Important Information for Prescribers) or equivalent anticoagulant record log
- The anticoagulant service/prescriber must confirm the dose in **writing** following any INR blood test check. This is regardless of a dose change. If the prescriber wishes to make changes by telephone - this **must** be followed up by written confirmation (e.g. letter, email) stating the latest INR result and confirmation of the dose.

  Additional blood tests may be necessary if the resident has changes to other medicines that interact with the anticoagulant (e.g. Antibiotics). If this happens, the doctor/pharmacist/nurse will inform the resident and their carer. It is important for the carer to contact the anticoagulant service and identify any new monitoring requirements

Responsibilities of Care Home

- All communication regarding INR results should be kept with the residents Yellow Book or equivalent anticoagulant record log
- The yellow book or other INR record sheets (if not kept by the patient themselves) and any written confirmation must be stored with the residents Medication Administration Record (MAR) chart for cross-referencing
- If a resident is transferred to another care setting - the yellow book (or equivalent anticoagulant record log), INR result sheets, a copy of the MAR sheet and any other written information received must be sent with the resident
  If the resident is temporarily transferred (e.g. admitted to hospital) then copies of the above information must be sent with the resident
- Any missed doses within the last two weeks will affect the INR result. The anticoagulant service **MUST** be informed of any missed warfarin doses. It must also be informed if a resident is refusing or unable to take warfarin
- It is important for warfarin to be taken at the same time each day. If a dose is missed or a higher than the recommended dose is taken, the anticoagulant clinic and the GP **MUST** be informed.
- The Anticoagulant clinic should be notified of any changes in medication, diet, hydration and lifestyle that could affect the warfarin.
- If there are any issues with adherence of blood monitoring, seek further advice from GP and anticoagulant clinic to see if alternative anticoagulants may be more suitable if clinically appropriate

Recording of Information - Recommendations
• The dose of warfarin intended for the resident must be clearly stated on the Medication Administration Record (MAR) chart - it is good practice to have the Medication Administration Record (MAR) chart checked and signed by a second member of staff for accuracy after this information has been added • Ensure the number of milligrams (mg) of warfarin required is stated on the Medication Administration Record (MAR) charts, not the number of tablets • Warfarin should never be administered without adequate and regular monitoring of the INR • It is essential that there is a safe system to ensure that information on INR results and dose to be taken via any written communications, yellow book, INR result sheets and MAR chart are cross-referenced for correlation that the correct dose is being taken

References:	• BJCP Feb. 2007 R.L. Howard et al • Anticoagulants: advice for social care providers – National Patient Safety Agency 2007 http://www.nrls.npsa.nhs.uk/resources/?entryid45=59814 • Scenario: Warfarin | Management | Anticoagulation - oral | CKS | NICE https://cks.nice.org.uk/topics/anticoagulation-oral/management/warfarin/ • Anticoagulant medicines - Dosage - NHS (www.nhs.uk)