Hospital Number:
NHS Number:
Patient Name:

Date of Birth:

North Central London
Joint Formulary Committee

Direct Oral Anticoagulant (DOAC) counselling checklist

(apixaban, dabigatran, edoxaban, rivaroxaban)

This patient has been counselled on the following areas of DOAC therapy by a member of the healthcare team

	Counselling points *(refer also to additional information overleaf)*	**Sign**	**Comment**
1.	**What is anticoagulation and how does it work**		
2.	**Indication for DOAC**		
3.	**Alternative anticoagulation options**		
4.	**Advantages and disadvantages of DOAC compared to warfarin**		
5.	**Expected duration of therapy** *(check with referrer if unclear)*		
6.	**How to take: including dose, frequency, timing** (aim to take at the same times every day) • Rivaroxaban MUST be taken with food to maximise absorption • Apixaban and edoxaban can be taken with/without food. • Dabigatran: take with food to minimise indigestion; capsules must NOT be opened or chewed and must NOT be removed from original packaging (i.e. do not transfer to dosette box)		
7.	**Importance of adherence and persistence with treatment**: • Fairly rapid fall in drug levels (and therefore loss of effectiveness) if poorly compliant • Ways of remembering to take the tablets/capsules e.g. calendar • Important not to stop treatment unless discussed with doctor		
8.	**What to do if a dose is missed -** *If unsure, talk to healthcare provider* • If a dose is missed take it as soon as possible. Do not take a double dose* *(but see below for rivaroxaban and acute VTE*) • **Once daily** dosing: take within12 hours of missed dose, if more than 12 hours, omit the dose and then continue at the usual time. • **Twice daily** dosing*:* take within 6 hours of missed dose, if more than 6 hours, omit the dose and then continue at the usual time. NOTE: *rivaroxaban 15mg twice daily (acute VTE): take one tablet as soon as remembered. Do not take *more than* two 15mg tabs in a single day (but can take 2x15mg at the same time to make a total of 30mg on one day). Continue with 15mg twice daily the following day		
9.	**Extra dose taken accidentally?** Contact doctor or healthcare team		
10.	**Side effects and what to do if experienced** • Signs/symptoms of excess anticoagulation *(see overleaf)* • When to seek urgent medical attention		
11.	**Monitoring** (e.g. renal function), how often and by who *(see overleaf)*		
12.	**Potential for drug interactions**: avoid over the counter medicines containing aspirin (e.g. flu remedies), NSAIDs (e.g. ibuprofen, naproxen, diclofenac) or herbals. Paracetamol is the preferred analgesic. Pt to inform healthcare professional of any new meds. *(NB: HCP must discuss any **additional antiplatelet agent with referrer & haematologist as** significantly ↑ risk of major bleeding with concurrent use)*		
13.	**Alcohol intake**		
14.	**Importance of reliable contraception in women of childbearing age and need to seek urgent medical advice in case of unexpected pregnancy** (DOACs cross placenta). **Do not breastfeed.**		
15.	**Procedures** (inc. day surgery /dental or chiropractic treatments etc); **hospital admissions**		
16.	**Leisure activities;** avoid contact sports (e.g. football, rugby, boxing) and other higher risk sports (e.g. skiing and horse riding), as increased risk of head injury/falls/bruising/bleeding		
17.	**Injections** (including immunisation): to inform relevant healthcare provider		
18.	**How to obtain further supplies**		
19.	**Who to contact for advice/ further information**		
20.	• Supply appropriate company DOAC patient information booklet • Supply completed DOAC alert card – patient to carry at all times		
21.	**Recheck patient's understanding of the above points**		

Counselled by: (Sign & print name): .....Designation:.....Date: .....

Patient's signature: .....Date: .....

DOAC - additional counselling information *(apixaban, dabigatran, edoxaban, rivaroxaban)*

2. **Indication for treatment doses**: Prevention of stroke and systemic embolism in adult patients with non-valvular AF (NVAF*) with additional risk factor(s); treatment of DVT /PE in adults and prevention of recurrent VTE.
   **NVAF - considered to be AF in the absence of a mechanical valve replacement or moderate to severe mitral stenosis usually of rheumatic origin; Ref Heidelbuch et al. Eurospace 2015*
3. **Alternative anticoagulants**: eg. warfarin/acenocoumarol,low molecular weight heparin (e.g. dalteparin), other DOACs

4. **Advantages (vs. warfarin):** fixed dose, INR monitoring not required, more stable anticoagulation control if taken reliably, favourable major bleeding profile overall, lower incidence of intracranial haemorrhage, less drug/diet interactions, easier to manage around surgery/procedures
   Disadvantages (vs. warfarin):not appropriate for all pts (e.g extremes of body weight, renal impairment), some monitoring still required (eg renal function) although less frequent compared to INR monitoring,higher incidence of GI side-effects (dabigatran, rivaroxaban), no specific drug antidote (except dabigatran; others under development), limited long-term data

10. **Side effects** (and what to do if experienced)
    - Seek medical attention: Bloody /black tarry stools, coughing/vomiting up blood, bloody urine, nose bleeds (lasting for > 5-10mins or if pt does not usually suffer from nose bleeds), severe or spontaneous bruising, unusual headaches, excessive vaginal bleeding, cuts that take longer than 5 minutes to stop bleeding, blood shot eye.
    - Seek immediate medical attention: involved in major trauma, significant blow to the head or are unable to stop bleeding
    - GP/anticoagulation clinic: any other side-effects e.g. gastrointestinal (higher risk of GI bleeding with dabigatran 150 mg, rivaroxaban or edoxaban 60 mg vs warfarin)

11. Monitoring: dose will need to be reduced / stopped if renal function deteriorates. Frequency of monitoring usually depends on the level of renal function (but also other parameters); may vary from minimum 3monthly (more frequently if potentially brittle renal function) to 6-12monthly. Also, FBC (when renal function checked) and LFTs (minimum annually).

12. Potential for drug interactions: may be affected by some medicines / herbal preparations (see SPC for relevant DOAC):
- Always let doctor/dentist/pharmacist know that s/he is on anticoagulation
- Avoid over the counter medications containing aspirin (e.g. cough &cold remedies) and NSAIDs such as ibuprofen, aspirin, naproxen, diclofenac etc. Paracetamol is preferred. Avoid herbal medications (unknown interactions)
- *NB: <u>any proposed/concurrent prescription of an antiplatelet MUST be discussed with referrer and haematologist</u>; if aspirin or clopidogrel are unavoidable, consider using DOAC with lowest GI bleeding risk and add PPI cover. Avoid use with prasugrel / ticagrelor.*

13. Alcohol: is not expected to affect DOAC levels per se. Excess alcohol consumption and binge drinking not advised, due to risks of alcohol associated acute injuries (e.g. head injuries) and chronic liver disease (which may affect coagulation). Also at higher risk of GI bleeding

14. Contraception, pregnancy, hormone replacement therapy, breastfeeding (if relevant): Women should not become pregnant nor breast feed whilst taking DOAC. Reliable contraception is required. For women with current or PMH VTE, oestrogen containing preparations are generally avoided (progesterone only preparations are preferred). Women taking a DOAC and who may be pregnant, should be switched urgently to low molecular weight heparin and referred for urgent review by a haematology consultant / obstetrician for discussion re potential implications. If planning to become pregnant, then patient should discuss with GP for onward referral to a haematologist to be advised on switch to alternative anticoagulant BEFORE conception.

15. Surgical procedures (including dental treatment) and **hospital admission**: patient must inform healthcare professional that s/he is taking DOAC especially as:
- patient will need management of anticoagulation around procedures and
- VTE thromboprophylaxis (e.g. LMWH) is often prescribed on admission to hospital.

18. Obtain further supplies of DOAC from the hospital (or GP once care transferred). Not to run out of supplies, especially when on holiday.

19. Further advice/info from local A/C clinic, GP, Hospital pharmacy medicines info dept or in an emergency, A&E dept