

# ADAS- Anticoagulant Dosing and Advisory Service


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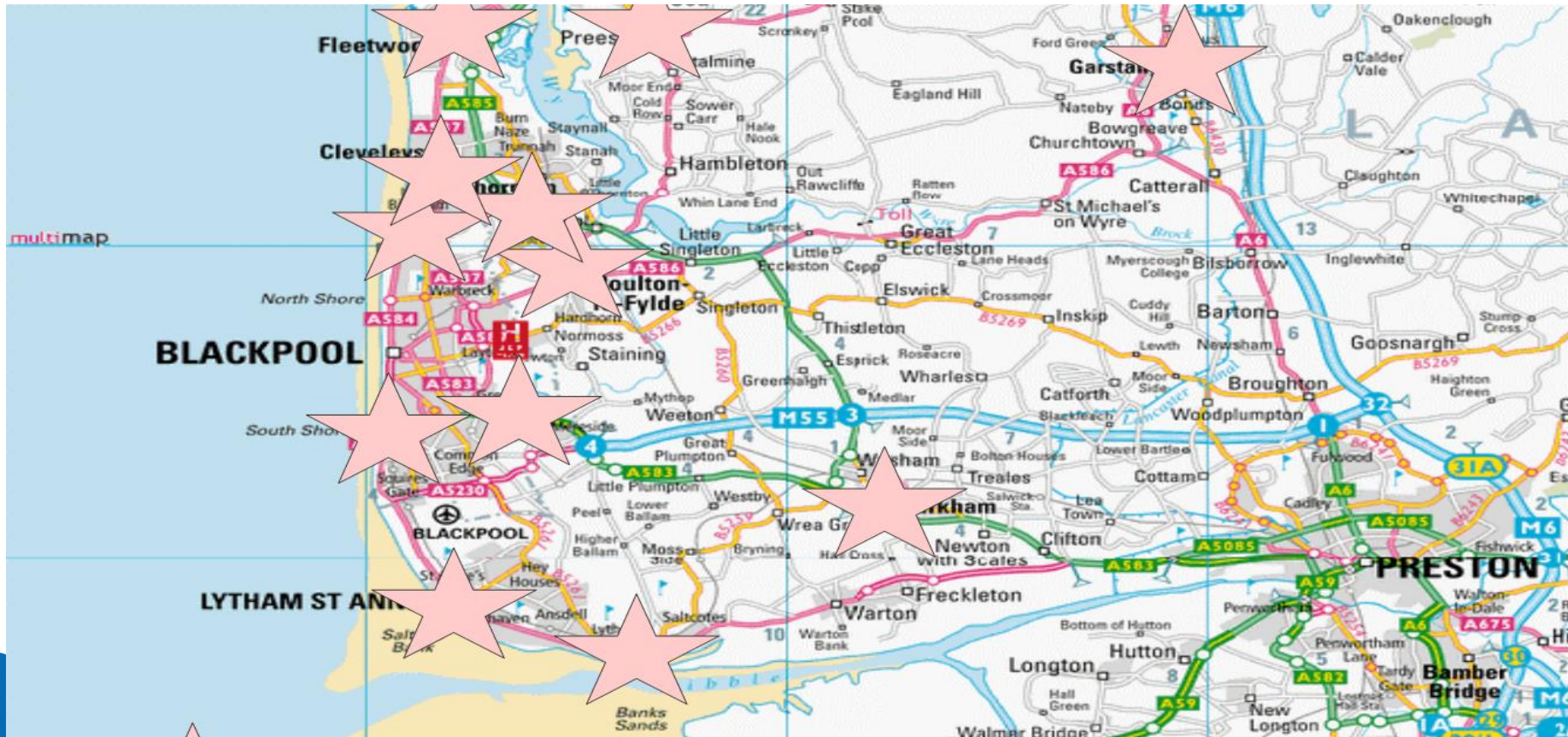
ADAS Senior Anticoagulation Practitioners



# Service Provision

- **ADAS is a Consultant led service managed by the Pathology Directorate.**
  - **Provides POCT and computer assisted dosing advice to approx. 4000 registered patients on oral anticoagulant therapy (warfarin).**
  - **Education and counselling service for DOAC initiations.**
  - **The service is delivered by Biomedical Scientists and Medical Laboratory Assistants.**
  - **All clinics are community based (6 days per week) with a daily domiciliary service.**
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# Community Clinic Sites



**Community based anti-coagulant clinics in Blackpool**

**Comprehensive Initiation / Education  
for all new starters. (WARFARIN /  
DOAC's)**  
**INR monitoring / warfarin dosing**  
**DOAC safety checks / 3 week follow up**

**Warfarin dosing for  
intermediate care units**

**Management of  
patients awaiting  
cardiovascular  
procedures**

**Cardiology**  
Ablation  
Cardioversion  
management

**BVH  
Wards  
GPs**

**Point of care  
Team**

**ADAS**  
Blackpool  
Fylde  
Wyre

**Gastro-  
Enterology**  
Colonoscopy

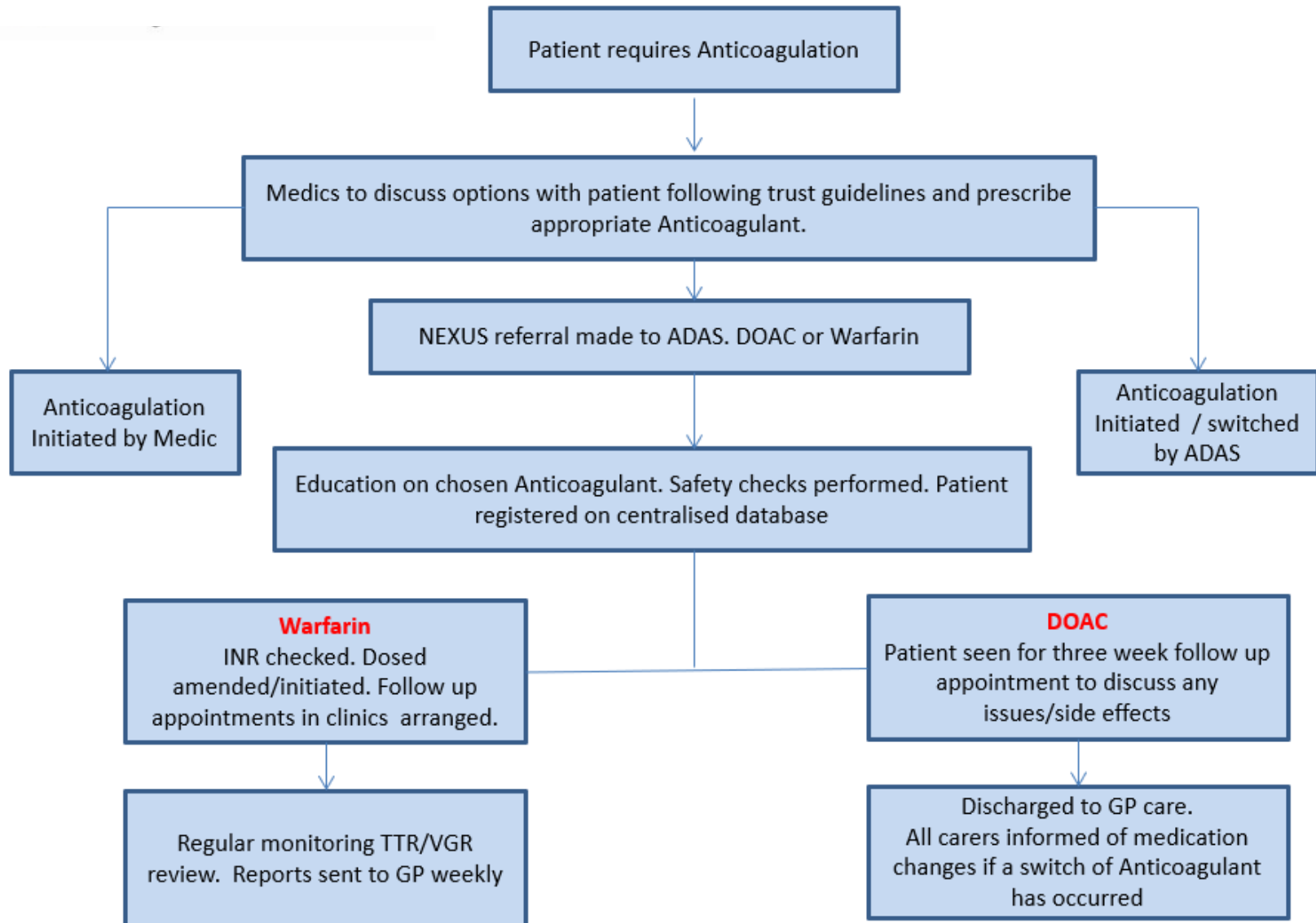
**Ambulatory  
DVT  
services.  
GP Led**

**Ophthalmology**  
Cataract  
patients

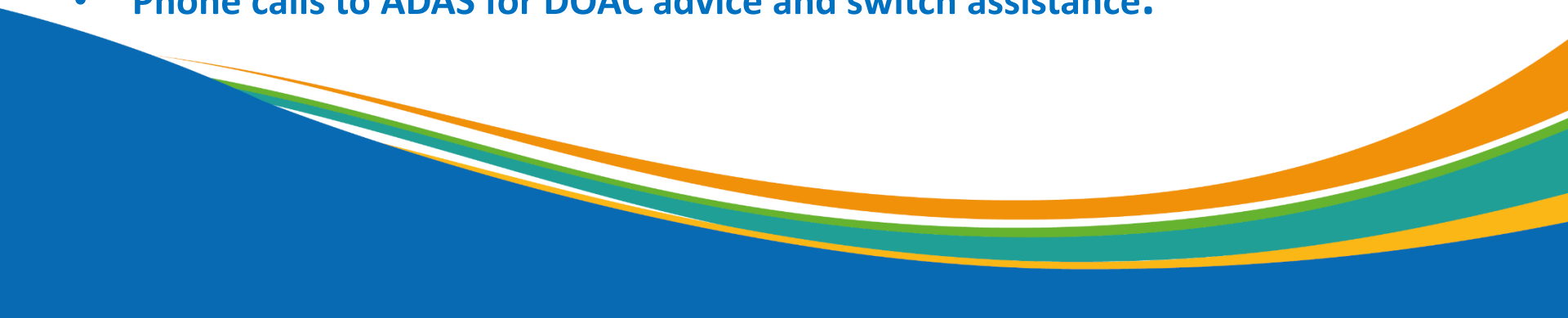
**Management of pre  
procedure INR levels**

**Direct links with DVT  
service.**

## Secondary Care Pathway for all Anticoagulants

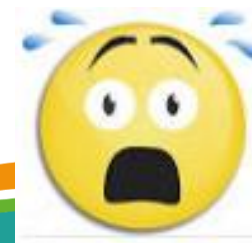


# Anticoagulant Service DOAC Concerns

- Variation in initiation in both primary and secondary care.
  - Inconsistent education for patients.
  - Patients presenting to ADAS clinics for advice and confused.
  - Patients prescribed a DOAC with contraindications.
  - Patients on BOTH warfarin and a DOAC!
  - Patient NOT on either anticoagulant!
  - Switches done without renal bloods or INR checks. NICE guidance not followed.
  - Switches done when INR is above recommended level (bleeding risks).
  - Patients on the wrong doses of DOACs / no follow up checks.
  - Phone calls to ADAS for DOAC advice and switch assistance.
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# Worrying Scenarios

- Patient admitted to CAT unit at BVH as her INR was  $>10$ .
- Discharged a day later with an INR of 7.3 following vitamin K
- ADAS had no update referral / no follow up check / no E discharge letter to GP
- ADAS performed a home visit 3 days later INR still  $>3$
- Patient had been sent home and started on Apixaban on discharge with an INR of 7.3!!
- No follow up in place, no education for patient / carers.



# Worrying Scenarios

- Clinic patient attended confused about her anticoagulation.
  - Started on rivaroxaban 3 days previously.
  - INR performed just for safety and a closing INR for records
  - INR was >8
  - Patient previously on 3mg warfarin daily and had been Rx'd 15mg rivaroxaban.
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- **She had taken 15mg of Warfarin and 15 mg Rivaroxaban**
  - Oral Vit K administered
  - Consulted with GP re stopping and restarting Riva when INR<2
  - She and her carer had not received any information the drug switch or counselling on DOAC





# E- Discharge Flag

Discharge Medications:

Drug	Dose, Route, Frequency, Duration	GP to Continue?	Comments	Status
Adcal D3	TT po OD	Yes <input type="button" value="v"/>	New <input type="button" value="Remove"/>	<span style="background-color: green; color: white;"> </span>
Apixaban	10mg po BD (to start 31/7 pm) then decre	Review <input type="button" value="v"/>	New - DVT	<span style="background-color: green; color: white;"> </span>
Omeprazole	20mg po OM	Yes <input type="button" value="v"/>	New - gastroprotection, rheumatok	<span style="background-color: green; color: white;"> </span>
Doxycycline	100mg po BD 5/7 total	No <input type="button" value="v"/>	please supply 2 more days	<span style="background-color: green; color: white;"> </span>

Anticoagulation medication status on discharge?

Does this require Pharmacy verification?\*

Verification of Pharmacist:

Signed off by: helen.sampson1@nhs.net at 31/07/2019 13:27

Unlock Medications:

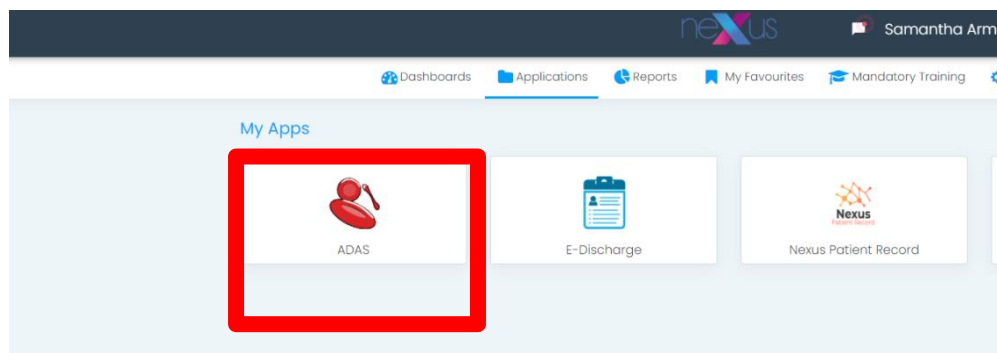
Transcribed by natalie.appleyard@nhs.net on 31/07/2019 13:13

Allocated Pharmacist:

Additional Comments for Medications...

# ADAS NEXUS Referral App

The login form features the Nexus logo at the top. Below it are three input fields: 'Email Address or shortName', 'Windows Password', and a dropdown menu for 'Blackpool Teaching Hospitals'. There are three main buttons: 'Login' (blue), 'Reset Form' (red), and 'SmartCard Login' (purple). At the bottom, there are two smaller buttons: 'Help' and 'Reset/Unlock Account'.



# Common DOAC Referral Issues



**Blackpool Teaching  
Hospitals**

NHS Foundation Trust

- **No clotting screen (INR/ PTT)/ renal, liver (creatinine, LFTs U/E) bloods at initiation**
- **No weight on referral/ inaccurate weight on referral**
- **Patient weight < 40kg – no data on efficacy**
- **Patient weight >120 Kg – Rivaroxaban or Apixaban only**
- **Renal function not appropriate for DOAC use <15 ml/min Apix / Riva / Edox and <30ml/min Dabigatran**
- **E- GFR being used instead of Cockcroft- Gault assessment for dosage, using actual body weight**
- **Patients switched who are higher range 3-4 warfarin – APA / Clot whilst on warfarin / mechanical valve**

# Common Warfarin Referral Issues

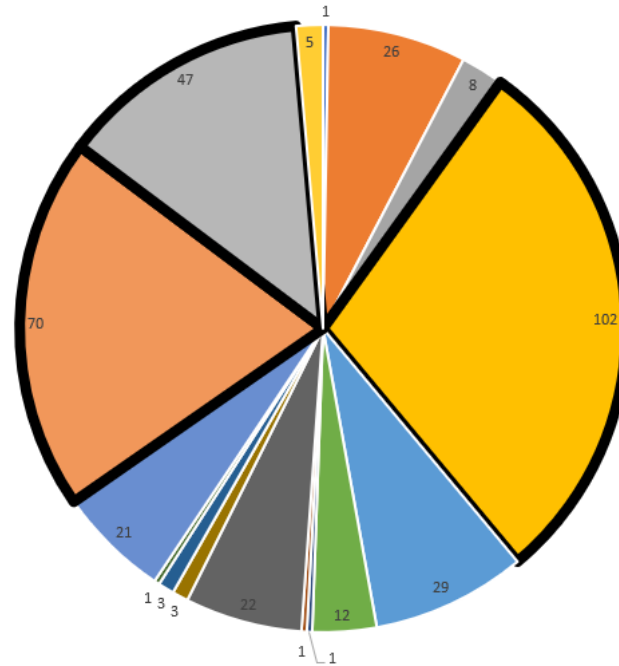


Blackpool Teaching  
Hospitals

NHS Foundation Trust


- No referral sent or no update referral sent/ no follow up appointment **(reportable as clinical incidents)**
- Insufficient dose history/ information
- Inappropriate/ incorrect detailed indication/ range/ duration
- Being discharged with **insufficient LMWH**
- No instructions on referral with regards to LMWH stopping
- Inappropriate dosing- Trust **Warfarin Guide CORP/ GUID/ 147** DVT and AF Protocols

# Reported ADAS Errors 2022-2023



- Error in entering patient details / episode on Dawn
- NHS Barcode mis-scan
- Details Manually entered incorrectly on Coaguchek
- Problem with patient switch to DOAC e.g. inappropriate INR level, on 2 anticoags etc
- Dosing Errors/Mistakes eg inappropriate, wrong label, not following protocol
- Failure in testing procedure eg Identification of patient, visit report form issues
- Patient discharged with no follow up appointment
- Patient not given warfarin
- Other
- Patient not discharged with anticoagulant pack/ warfarin /or dose advice
- Patient discharged on inappropriate dose
- Patient lost in system, found through suspended list
- Referral incomplete (i.e. no dosage, INR results, signature for GP referrals)
- Referral with incorrect range, diagnosis, duration, stop date
- Referral not sent
- Wrong dose written in patients book when dosed over phone

# Benefits of the pathway

- Centralisation of all anticoagulant patients (universal anticoagulant database).
  - Auditable, consistent, comprehensive education for all patients/carers.
  - Less Medic time/confusion on who is educating patients.
  - Safe anticoagulation switches. DOAC-DOAC and Warfarin-DOAC etc
  - Secondary safety check to ensure:
    - no contraindications (drugs or conditions)
    - bloodwork complete and results appropriate
    - correct dosage
    - appropriate treatment duration
  - 3- week DOAC review including repeat bloods
  - Compliance for NRLS (NPSA) / NICE recommendations.
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# ADAS Contacts

Email- [bfwh.anticoagadmin@nhs.net](mailto:bfwh.anticoagadmin@nhs.net)

Tel- (01253) 956719

Sharepoint Site – Anticoagulation in Divisions and  
Departments Trust Homepage

NEXUS ADAS App for referrals- Warfarin and DOAC

