



# OUT-PATIENT ANTICOAGULATION THERAPY

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A community approach

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# Atrial Fibrillation

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- Most common sustained cardiac arrhythmia
- Estimated to affect at least 1% of the population at the age of 60 and 5% at the age of 70 (National Cardiovascular Health Policy 2010)
- Research carried out by the Irish Heart Foundation estimated that 550 first ever strokes in Ireland could be avoided each year if 50% of people with the condition received adequate treatment

# Warfarin and the NOAC's

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- Historically warfarin has been under prescribed for treatment of AF
- Increased focus on Stroke prevention and AF has resulted in increased treatment of AF at same time as new treatment options come on stream
- Increased treatment = reduced strokes = reduced stroke related costs but = increased drug costs

# New Oral Anti-Coagulants (NOAC's)

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○ Dabigatran (Pradaxa®)



○ Rivaroxaban (Xarelto®)



○ Apixaban (Eliquis®)



# Warfarin vs NOAC's

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New agents require less monitoring however concerns still exist and caution required for use in special patient groups

- Renal impairment
- Pregnancy
- Morbid obesity
- Haemodialysis
- Paediatrics

# Cost Implications of NOAC's

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- ▣ Rivaroxaban – COST €73.46/mth (20mg OD)
- ▣ Dabigatran – COST €82.80/mth (150mg BD)

## Life-long therapy

Patient cost per month: **€145.00** (and include probable 3 monthly GP review for renal fxn monitoring)

## Warfarin

DRUG COST €4.20 (based on dispensing 1mg x 30 and 5mg x 30)

If patient was to pay for monitoring €20/30 euro monthly

Total monthly cost to patient approx: **€38** (more if unstable)

## Clinic cost estimates (without drug cost)

Nurse led = € 20.92 per visit

Consultant and Senior pharmacist led €40



# National Stroke Programme: Warfarin Clinic Survey 2011

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- 57,000 patients on warfarin (2010)
- Monitoring varies
  - Urban and Rural systems differ
  - Clinics v's primary care
  - No standardised system
- Testing Varies
  - Computer Assisted Dosing
  - Laboratory testing
  - INR Point of Care Test devices
  - Patient Self-testing

# NOACs

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- Approximately 10,000 patients on new agents (Dabigatran and Rivaroxaban) (2013)
- First 3 quarters 2013 cost of approximately €5.4 million





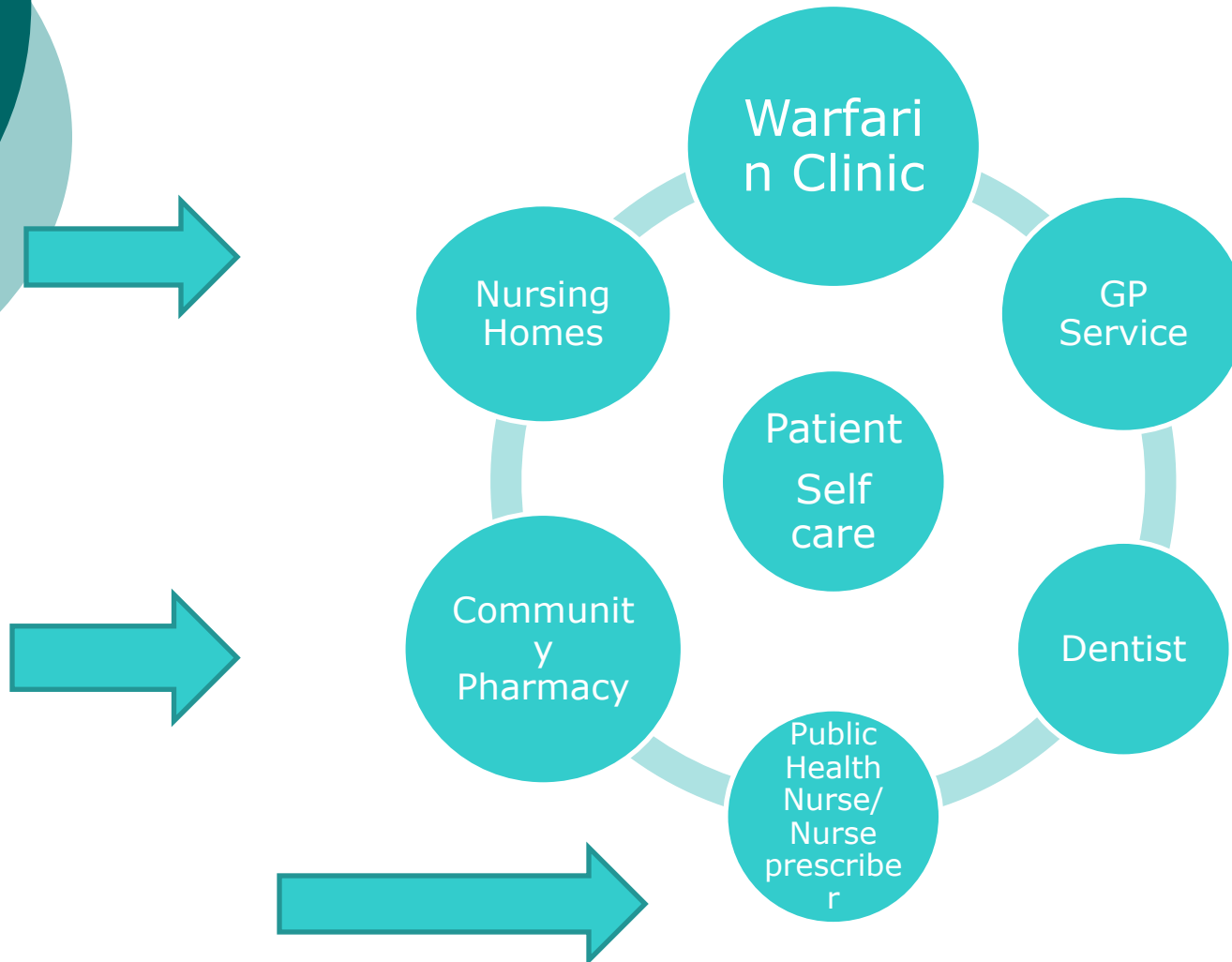
# Developing an infrastructure for safe warfarin monitoring

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- National Guideline development
- National Clinical Effectiveness Committee  
NCEC – for endorsement of guidelines
- Structured training for HCP to safely provide monitoring – Institute of Pharmacy (ICGP?)
- Audit and review
- Ensure all relevant stakeholders involved  
(GPs, Nurses, Pharmacists)
- Review international standards and services

# Warfarin service possibilities

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**Lack of hospital based warfarin services in rural areas may lead to an increased uptake of the newer agents**

**Increased drug costs will be unsustainable – can community based services improve patient accessibility to warfarin monitoring**

