From NICE cg92 to ng89
What changes in practice for a Pharmacist on a surgical ward?
Learning outcomes

• **Pharmacy team** opportunities of impact on the patient’s journey

• Why **thrombosis** is an important area to focus on

• Impact of **NG89** on the activity of our ward

• Impact of our **thrombosis committee** on the VTE rate and patient safety
Pharmacist’s role on a ward and why **thrombosis** is a priority?

- **Opportunities for intervention:**
  - Clinical screening of prescriptions
  - Medicine reconciliation
  - Ward round with the MDT/solo
  - Discharge medication

- **Thrombosis** is the $1^{st}$ **preventable** cause of death at hospital
Opportunities for Pharmacy teams to have an impact on thrombosis
Why I chose **thrombosis** as a priority?

Our settings and surgical specialities

- 2 Sites: Emersons Green Bristol and Devizes
- Emersons: Day cases and inpatients (33 beds)
- Devizes: Day cases only
From NICE CG92 to NG89: timeline

- 2006: APPG (All Party Parliamentary Group)
- 2010: First NICE guideline CG92
- 2015: Brief review (Care-UK HC44)
- 2018: Major review (indirect Care-UK input)
  - CG92 renamed NG89

Venous thromboembolism in over 16s: reducing the risk of hospital-acquired deep vein thrombosis or pulmonary embolism

NICE guideline
Published: 21 March 2018
nice.org.uk/guidance/ng89
The impact of NG89 per speciality

**Orthopaedics**
- Elective Total Knee Replacement (TKR)
- Elective Total Hip Replacement (THR)
- Unilateral Knee Replacement and ACL
- Foot and ankle surgery

**Abdominal surgery**
- Gastrointestinal surgery (hernias, Laparoscopic cholecystectomy)
- Gynaecological surgery (major)
- Urology surgery (major)

**ENT**
Total knee arthroplasty

- Choice of **aspirin dose**: 75mg or 150mg?
- Which patient suitable for which agent?
- How can the Pharmacy team support prescribers?

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**Elective knee replacement**

1.5.11 Offer VTE prophylaxis to people undergoing elective knee replacement surgery whose VTE risk outweighs their risk of bleeding. Choose any one of:

- aspirin[^1] (75 or 150 mg) for 14 days.
- LMWH[^2] for 14 days combined with anti-embolism stockings until discharge.
- Rivaroxaban[^3], within its marketing authorisation, is recommended as an option for the prevention of venous thromboembolism in adults having elective total hip replacement surgery or elective total knee replacement surgery. [This text is from rivaroxaban for the prevention of venous thromboembolism after total hip or total knee replacement in adults (NICE technology appraisal guidance 170).] [2018]
HIP arthroplasty

- Hybrid course with patient home with aspirin and clexane -> potential risk
- Total duration 38 days -> unusual duration

**Elective hip replacement**

1.5.8 Offer VTE prophylaxis to people undergoing elective hip replacement surgery whose risk of VTE outweighs their risk of bleeding. Choose any one of:

- LMWH for 10 days followed by aspirin (75 or 150 mg) for a further 28 days.
- LMWH for 28 days combined with anti-embolism stockings (until discharge).
- Rivaroxaban, within its marketing authorisation, is recommended as an option for the prevention of venous thromboembolism in adults having elective total hip replacement surgery or elective total knee replacement surgery. [This text is from rivaroxaban for the prevention of venous thromboembolism after total hip or total knee replacement in adults (NICE technology appraisal guidance 170).] [2018]
Foot and ankle surgery

• Importance of assessment
• Balance the risk of VTE vs. risk of bleeding
• Consider local population
  • Our retrospective: 2 VTE were foot surgery

Foot and ankle orthopaedic surgery

1.5.17 Consider pharmacological VTE prophylaxis for people undergoing foot or ankle surgery:

• that requires immobilisation (for example, arthrodesis or arthroplasty); consider stopping prophylaxis if immobilisation continues beyond 42 days (see recommendation 1.5.4) or

• when total anaesthesia time is more than 90 minutes or

• the person's risk of VTE outweighs their risk of bleeding. [2018]
Abdominal surgery

• “Intermediate” risk surgery -> 7 days of LMWH
• No more single shot of LMWH…

**Abdominal surgery**

1.5.37 Offer VTE prophylaxis to people undergoing abdominal (gastrointestinal, gynaecological, urological) surgery who are at increased risk of VTE. For people undergoing bariatric surgery, follow recommendations 1.5.41–1.5.43. [2018]

1.5.38 Start mechanical VTE prophylaxis on admission for people undergoing abdominal surgery. Choose either:

- anti-embolism stockings or
- intermittent pneumatic compression.

Continue until the person no longer has significantly reduced mobility relative to their normal or anticipated mobility. [2018]

1.5.39 Add pharmacological VTE prophylaxis for a minimum of 7 days for people undergoing abdominal surgery whose risk of VTE outweighs their risk of bleeding, taking into account individual patient factors and according to clinical judgement. Choose either:

- LMWH\(^{[1]}\) or
- fondaparinux sodium\(^{[3]}\). [2018]
Some important additions/precisions

- how people can reduce their risk of VTE (such as keeping well hydrated and, if possible, exercising and becoming more mobile). [2018]

Hydrate and keep mobile

- the importance of seeking help if DVT, pulmonary embolism or other adverse events are suspected. [2018]

Signs of VTE

- the importance of seeking help and who to contact if people have problems using VTE prophylaxis. [2018]

Safety net
To date: Outcomes following our thrombosis committee’s action

• Monthly communication at Clinical Governance meetings
• Direct input in CareUK national guidance
• Creation of flowcharts to simplify our national VTE policy
• Re-design of our VTE electronic assessment
• Significant reduction of VTE event ($\chi^2$, IC 95%)
Results so far of our thrombosis committee’s action
Where we would like to be next (VTE excellence etc...)

• Follow North Bristol Trust (NBT) into gaining recognition:
• VTE exemplar centres
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Thrombosis Committee (since 2016)

Team Pharma!

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