Reducing the Risk of VTE in Temporary Immobilisation of Lower Limb Injuries

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The relationship between temporary limb immobilisation and venous thromboembolism (VTE) has been documented since 1944.

This link persists despite modern medical care, with lower-limb immobilisation recently implicated as an aetiological factor in approximately 1.5 –3% of all VTE events.
The actual incidence of VTE in patients with temporary plaster immobilisation is estimated anywhere between 5 – 39%, depending on the type of patient and the type of immobilisation.

When compared to an annual VTE incidence of 0.12–0.18% in a normal undifferentiated population, these figures serve as a stark reminder of risk.
The Solution?

- GEMNet produced guidelines in October 2012
  - Recommends prophylactic anti-coagulation for high risk adult (over 16) patients who require temporary immobilisation of a lower limb.

- These Guidelines were implemented within the Southern Trust on the 1\textsuperscript{st} of July 2013
All the Trusts within Northern Ireland have now implemented the GEMNet guidance for VTE Prophylaxis in Temporary Immobilisation of Lower Limbs.

Work was done between 2014 and 2016 with all the NI Trusts and the PHA to regionalise and standardise this implementation.
Incidence of confirmed DVT within the Southern Trust:

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<tbody>
<tr>
<td>Total number of DVTs in the Southern Trust</td>
<td>229</td>
<td>237</td>
<td>252</td>
<td>221</td>
<td>222</td>
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<tr>
<td>Lower Limb Fracture related DVTs</td>
<td>15 (6.55%)</td>
<td>14 (5.91%)</td>
<td>12 (4.76%)</td>
<td>11 (4.98%)</td>
<td>9 (4.05%)</td>
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Incidence of confirmed PE within the Southern Trust:

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<tr>
<td>Total number of PEs in</td>
<td>116</td>
<td>148</td>
<td>172</td>
<td>135</td>
<td>202</td>
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<td>the Southern Trust</td>
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<tr>
<td>Lower Limb Fracture</td>
<td>4</td>
<td>3</td>
<td>3</td>
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<td>3</td>
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<tr>
<td>related PEs</td>
<td>(2.7%)</td>
<td>(1.74%)</td>
<td>(2.22%)</td>
<td>(1.49%)</td>
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Is it working?
Is it working?

- Numbers of people provided with prophylaxis
  - Craigavon Area Hospital ED: 267 patients in 2016

- Complications:
  - Two cases reported:
    - Rash
    - Patient refusing to continue injections
The future?

- PHA to Regionalise
  - Standardised regional paperwork being trialled in SET currently
  - Hopefully roll out to all Trusts in NI this year

- Continue to educate and encourage staff to risk assess for VTE

- Audit?
  - Compliance with risk assessment
  - Actual VTE Risk Reduction
  - Complications
Any Questions?