To assess whether venous thromboprophylaxis in Covid-19 patients is prescribed according to trust guidance on the Acute Medical Unit (AMU) and Larch C (elderly care) wards.

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## **Background**

Patients with Covid-19 are known to be at a higher risk of developing a venous thromboembolism (VTE) or a pulmonary embolism (PE) <sup>(1)</sup>.

Use of low molecular weight heparins (LMWH) is recommended <sup>(2)</sup>. It was suspected that the trust guidance on thromboprophylaxis in covid-19 patients was not being followed.

# **Methodology**

- Data was easily obtained.
- Collected over 4-weeks.
- Data collection form created, trialled and amended; and stored in a locked drawer.
- Data collected: bed number, hospital number, gender, age, weight (kg), estimated glomerular filtration rate (eGFR), creatinine, creatinine clearance (CrCl), VTE risk assessment completion, whether enoxaparin is prescribed and the dose.
- Data was entered into a password protected spreadsheet allowing CrCl to be calculated, establishing if the dose was appropriate.

## <u>Results</u>

- ✤ A total of 29 patients were included.
- ✤ 48% of patients were incorrectly prescribed VTE prophylaxis.
- ✤ 21% of patients were prescribed an underdose of enoxaparin.
- ✤ 14% had been over-prescribed enoxaparin
- 13% were not prescribed any prophylaxis.

\*Refer to figure 1 below

Breakdown of Enoxaparin Prescribed Incorrectly



#### <u>References:</u>

Middeldorp, S., Coppens, M., Haaps, T., Foppen, M., Vlaar, A., Müller, M., Bouman, C., Beenen, L., Kootte, R., Heijmans, J., Smits, L., Bonta, P. and Es, N. Incidence of venous thromboembolism in hospitalized patients with COVID-19. Journal of Thrombosis and Haemostasis, [online] 18(8), pp.1995-2002. 2020 Available at: <a href="https://onlinelibrary.wiley.com/doi/full/10.1111/jth.14888s">https://onlinelibrary.wiley.com/doi/full/10.1111/jth.1488s</a>> [Accessed 8 March 2021].

(2) Nice.org.uk. 1 Patients with COVID-19 pneumonia managed in hospital | COVID-19 rapid guideline: reducing the risk of venous thromboembolism in over 16s with COVID-19 | Guidance | NICE. [online]. 2021 Available at: <a href="https://www.nice.org.uk/guidance/ng186/chapter/1-Patients-with-COVID-19-pneumonia-managed-in-hospital">https://www.nice.org.uk/guidance/ng186/chapter/1-Patients-with-COVID-19 rapid guideline: reducing the risk of venous thromboembolism in over 16s with COVID-19 | Guidance | NICE. [online]. 2021 Available at: <a href="https://www.nice.org.uk/guidance/ng186/chapter/1-Patients-with-COVID-19-pneumonia-managed-in-hospital">https://www.nice.org.uk/guidance/ng186/chapter/1-Patients-with-COVID-19-pneumonia-managed-in-hospital> [Accessed 8 March 2021].</a>

# **Discussion**

The results reflect that the main issue on the wards were patients being underdosed on VTE prophylaxis.

Improvements made:

- Doctors were emailed the guidance, as well as it being displayed in the doctors office, allowing accessibility.
- Pharmacy staff asked to note issues when reviewing and conducting a medicines reconciliation for such patients.

### Limitations:

- No weight recorded unable to work out CrCl, resulting in data being discounted. Discussed with ward managers in the nursing daily huddle and nursing staff were aiming to improve.
- Reducing number of Covid-19 patients -Determined the length of the study, as well as making it difficult to re-audit.

Future work: Implement covid guidance within the current VTE prophylaxis guidance for non-covid patients, as the numbers decrease, a separate guidance may not be required.

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