FREQUENTLY ASKED QUESTIONS

INTRAVENOUS UNFRACTIONATED HEPARIN RECOMMENDED STANDARD

Why was the Intravenous Unfractionated Heparin Recommended Standard developed?

The Intravenous Unfractionated Heparin Recommended Standard was developed to assist in the standardisation of intravenous unfractionated heparin management in NSW Public Health facilities. The Intravenous Unfractionated Heparin Recommended Standard can be found on the High-Risk Medicines webpage.

This Recommended Standard was developed in response to issues identified from NSW incident reports. Issues with intravenous unfractionated heparin include:

- the availability of multiple protocols across Local Health Districts (LHD) and within facilities resulting in errors when patients are transferred between clinical areas and facilities
- incorrect protocol use, including administration of a concentration of unfractionated heparin solution contrary to the protocol resulting in administration of an incorrect dose
- monitoring issues including a failure to monitor activated partial thromboplastin time (aPTT) according to protocol and failure to act on high aPTT levels.

The Recommended Standard provides advice on standard solutions, aPTT monitoring times and actions to be taken in the circumstance of a high aPTT result.

Who developed the Intravenous Unfractionated Heparin Recommended Standard?

This Recommended Standard was developed in conjunction with a multi-disciplinary Anticoagulant Medicines Working Party. The Anticoagulant Medicines Working Party members included; a Director of Clinical Governance, nurses, pharmacists, medical specialists (a cardiologist, anaesthetist, surgeon, general practitioner and haematologists), and representatives from the NSW Therapeutic Advisory Group and NPS MedicineWise.

Why does the Intravenous Unfractionated Heparin Recommended Standard include use of commercially available pre-mix infusion bags?

Consistent with NSW Health High-Risk Medicines Management policy (PD2015_029), commercially prepared pre-mixed solutions must be used wherever possible for intravenous unfractionated heparin infusions. The pre-mix infusion bag of heparin 25,000 units in 250 mL normal saline is included in the Recommended Standard to ensure that NSW facilities are using the same concentration of product, thereby reducing the risk of error from calculations based on the incorrect concentration of heparin solution when patients are transferred between facilities. In addition, commercially prepared unfractionated heparin infusion bags have a substantially longer shelf life compared with commercially prepared pre-mix unfractionated heparin syringes.

How should the Intravenous Unfractionated Heparin Recommended Standard be applied?

The contents of the Recommended Standard should be included in local intravenous unfractionated heparin protocols. The requirements for local protocols are included in PD2015_029. An example of an intravenous unfractionated heparin infusion nomogram has been included in the standard. However, a local nomogram

must be developed according to the local laboratory reference range. This is because the aPTT reference range differs between laboratories.

Do all facilities need to transition to the Recommended Standard?

We recommend all facilities review local protocols and prepare to transition to the Recommended Standard. The contents of this Recommended Standard will be used as a guide in electronic medication management system solutions to safely prescribe, administer and monitor the use of heparin.

For those critical care units where it is deemed necessary to use syringe drivers for intravenous unfractionated heparin administration, the principles outlined in this Recommended Standard should be included in local protocols.

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