

NHS LANARKSHIRE

Administration of Insulin in Hospital



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In-patient insulin alternatives

A large proportion of admissions each day are either unplanned or emergency admissions meaning patients often do not have their own insulin with them. The variety of insulins available on the wards is however limited.

The table below aims to provide guidance for medical staff on which insulin to prescribe if a patient's usual insulin is unavailable at the time of admission. This table gives a guide to a suitable alternative ward stock insulin (usually **in 10ml vial**) that can be used on a dose for dose basis*/*** until the usual insulin is brought from home or it can be ordered from pharmacy.

Please note: patients being admitted to hospital may have different insulin requirements due to for example hypoglycaemia/hyperglycaemia on admission, reduced oral intake, renal failure, infection etc. so dose adjustment on that basis also needs to be considered.

Duration of action/ supply	Rapid (bolus)	Short (bolus)	Long (basal)	Very Long /Ultra-long (basal)	Mix insulin	Insulin/GL P-1 combinations
Patients usual insulin	Aspart (Novorapid, Fiasp, Trurapi) Lispro (Humalog 100 units/ml; Humalog 200 units/ml***; Lyumjev 100 units/ml; Lyumjev 200 units/ml***; Admelog) Glulisine (Apidra)	Actrapid Humulin S Insuman - rapid *Hypurin porcine neutral	Levemir Humulin I Insulatard Insuman Basal *Hypurin porcine isophane	Lantus Abasaglar Semglee Tresiba (Degludec) 100 units/ml*** Tresiba (Degludec) 200 units/ml ***/**** Toujeo (Glargine) 300 units/ml***/****	Novomix 30 Humalog mix 25 Humalog mix 50 Humulin M3 Insuman Comb (15,25,50) *Hypurin porcine 30/70 mix	Xultophy** Suliqua**
Ward stock alternative	NovoRapid	Actrapid	Humulin I	Lantus	Humulin M3	Lantus**

*When substituting porcine insulins suggest reduce dose by 20% when converting to human/analogue insulin

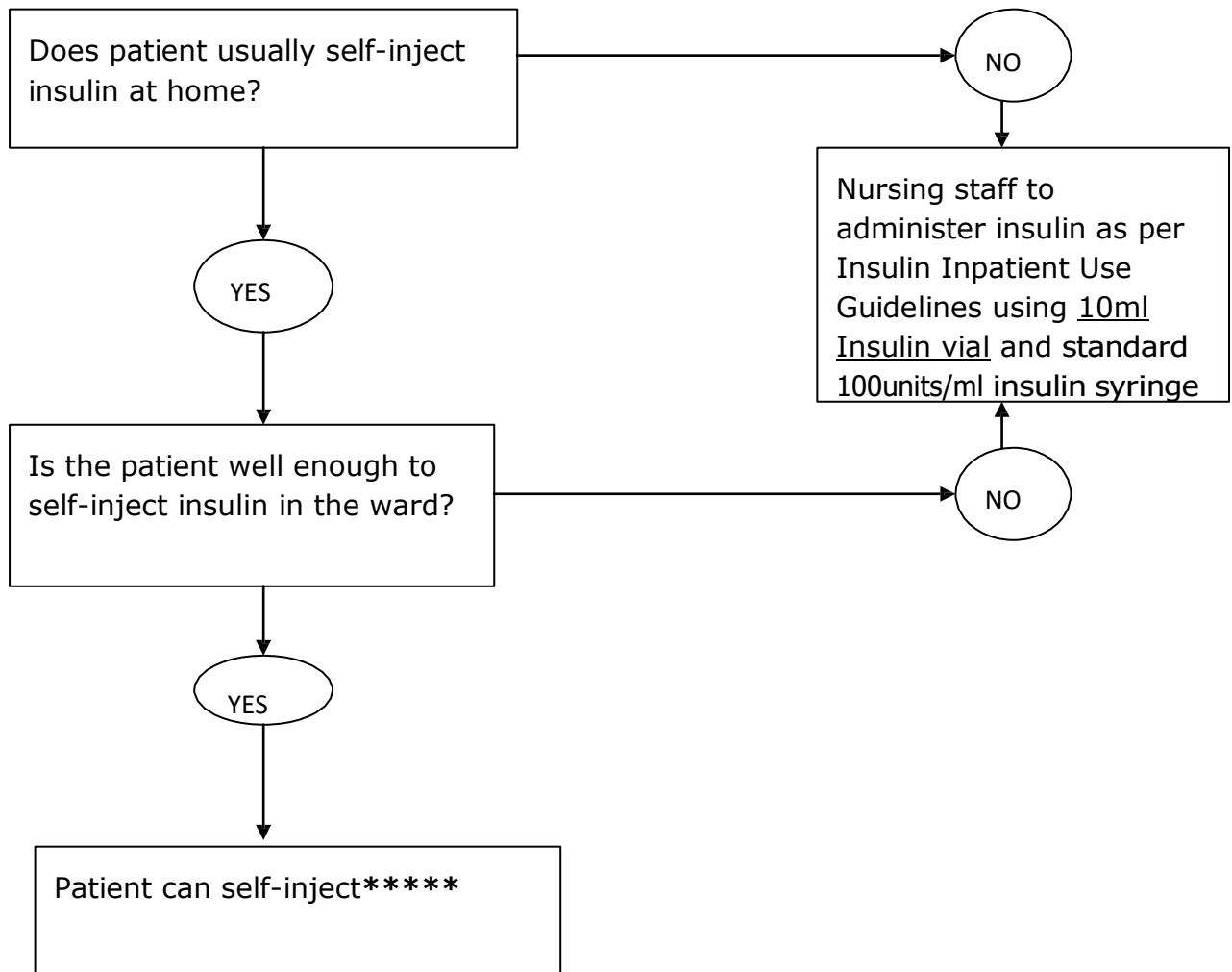
**Xultophy & Suliqua contain a very long acting basal Insulin and a GLP-1 analogue. As a short term measure Lantus alone could be given until usual preparation obtained. Please ensure usual medication remains on discharge prescription unless there has been a conscious decision to discontinue the GLP-1 component.

*** If switching from Tresiba or Toujeo to Lantus, reduce the dose by 20% as these are not directly interchangeable

******Note these are high strength insulins - Ensure patient is switched back to their usual insulin on discharge or during admission if the patient subsequently has their own supply and is able to self inject. No dose adjustments are required using an alternative to high strength insulins**

Never draw up insulin from an insulin pen or 3ml cartridge

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*****NB The term "self-inject" refers purely to the process of the patient **injecting** insulin to themselves, at the prescribed dose while being witnessed by a nurse. Each dose must still be prescribed and recorded in the usual way.

Points to remember:

³⁵₁₇ All insulin vials should be marked with the date of first use.

³⁵₁₇ Within the hospital, all vials expire 4 weeks after their first use.

³⁵₁₇ **Under no circumstances should insulin cartridges (usually 3ml) or prefilled pens be used for drawing up insulin into a syringe.**

³⁵₁₇ Always ensure a 100units/ml insulin syringe is used with the **10ml vials**