



Issue: Insulin Titration

Raised by: Gaynor Garstone (TE Diabetes Educator); Sharon Johnson (CA Diabetes Educator).

Background: There are a variety of prescribing practices and insulin dose-adjustment regimes currently used in Remote Health. This raises a number of potential concerns. It is proposed to standardise practice in order to maximise effective treatment and minimise risk.

Discussion: Where insulin (with or without oral hypoglycaemic agents) has been introduced into the management plan for diabetics, it is important to tailor and maximise the treatment, achieving glycaemic control in an expedient manner, in order to achieve the greatest gain for the client (i.e. reduction of risk).

The primary concerns associated with unclear or varying prescribing regimes for insulin, and unclear direction about insulin dose adjustments include:

- difficulties for clinical staff when having to utilise different regimes
- increased risk of medication incidents
- potential for clients to receive inadequate or infrequent *upward* insulin titrations to quickly achieve best glycaemic control.
- possible inconsistencies with the current endorsed clinical protocols (CARPA STM)

Insulin treatment is set out clearly in Table 4.20 (CARPA STM 5th Ed; pp 258-9). This is the endorsed protocol for Remote Medical Practitioners (RMPs) to follow. In addition to specifying the *type of insulin, starting dose* and *maximum dose*, clear guidelines for '*Adjusting dose*' are listed in the Table. An additional notation in prescriptions such as: 'titrate' or 'adjust dose as per CARPA' will afford RANs/AHWs/all clinicians the clear direction and expectations for frequent monitoring of the morning fasting blood glucose, and secondly, will communicate the expectation of a *proactive response* by titrating the dose accordingly.

Where insulin treatment has achieved stable target glycaemic control, and there is no need for further dose adjustments, this should be made clear through a new prescription.

Consultation: Gaynor Garstone, Sharon Johnson (TE/CA Diabetes Educators); Gary Sinclair (CA SRMP – Chronic Disease); Hugh Heggie (TE A/SRMP); Arullan Naidoo (Remote Pharmacist); RH Pharmacy Group; PCIS Clinical Reference Group

References: CARPA STM (5th Edition); [Diabetes Management in General Practice](#) (2010-11)

Outcome: In addition to standard prescribing process, insulin orders must include clear direction stating *Insulin Type, starting dose, maximum dose*, and *titration* directions.

Senior RMPs will orientate all RMPs to Remote Health process for prescribing and titrating Insulin in the following areas:

- Creating MedChart orders with clear parameter ranges (PCIS Insulin URG under development)
- Titrating insulin doses according to CARPA STM 5th Ed. (table on p259)
- Use of the PCIS Insulin Service Item for all titrations of insulin

In order to maximise glycaemic control, titration of insulin dose must be considered every time the client is reviewed.