Enable an individual with Type 1 diabetes to administer insulin by pump



Overview

This standard covers the activities associated with helping an individual to administer insulin by pump. Currently continuous subcutaneous insulin infusion is an option available in a few specialist centres and is a treatment that should be initiated only by a trained specialist team.

Users of this standard will need to ensure that practice reflects up to date information and policies.

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Performance criteria

You must be able to:

- P1 confirm the decision to commence insulin pump therapy with the individual, decide which pump to use and arrange for specific training to take place on an individual or group basis, where appropriate with a carer
- P2 provide a sample pump of the type agreed, and where available any associated training materials, for the individual to take away for familiarisation and study of the manufacturers instructions
- P3 during the training session:
 - P3.1 give detailed instruction about the programming, operation and management of the pump and provide opportunities for the individual to practise
 - P3.2 explain how the pump reservoir is filled, the infusion set is attached to the pump, where the needle or cannula can be sited and how and where the pump can be carried
 - P3.3 explain the importance of asepsis and how often the infusion set needs to be changed and needle or cannula re-sited
 - P3.4 outline the insulin regimen and its relation to physical activity, diet and carbohydrate estimation, explaining how the basal rates and bolus doses are calculated
 - P3.5 provide detailed information about glucose monitoring, checking for ketones, sick day rules and treating hypoglycaemia
 - P3.6 explain the limitations and risks of pump therapy, the action to be taken if the pump fails and how to contact the manufacturer
 - P3.7 explain when and how to return to insulin injections if the need arises
 - P3.8 explain how to obtain and store insulin and other supplies
 - P3.9 provide information about key contacts and the support available
- P4 with the individual, decide whether to trial pump therapy with saline or to initiate the regimen with insulin
- P5 agree and commence the insulin regimen and arrange for the individual to return the next day, or a few days later according to your assessment of need
- P6 agree interim telephone contact to monitor progress and provide support
- P7 at the follow-up consultation, enable the individual to change the infusion set and re-site the needle or cannula under supervision, guiding their action where necessary and assessing their competence to undertake this unsupervised
- P8 depending on your assessment of their progress, arrange for the individual to return to a one to one or group review session so that you can check progress, help them to adjust the insulin regimen and reiterate instruction about safety
- P9 arrange to continue to see or to contact the individual weekly or

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- fortnightly, according to your assessment of their competence in managing pump therapy, and do so until you are satisfied that they are able to self-manage unsupervised
- P10 make accurate records of the instruction and support you have provided, and the regimen agreed, that can be followed by other members of the healthcare team, the individual and carer

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Knowledge and understanding

You need to know and understand:

- K1 national guidelines on diabetes management, education and service delivery
- K2 national and local guidelines for continuous subcutaneous insulin infusion
- K3 theories of causes of diabetes
- K4 signs and symptoms of diabetes, including WHO criteria for diagnosis
- K5 normal and abnormal blood glucose and HbA1c values
- K6 how to monitor glucose levels, HbA1c, blood pressure
- K7 the importance and effects of patient education and self management
- K8 the psychological impact of diabetes, at diagnosis and in the long term
- K9 the psychology of teaching and learning and of behavioural change
- K10 how to work in partnership with patients and carers
- K11 the social, cultural and economic background of the patient/carer group
- K12 the impact of nutrition and physical activity on diabetes
- K13 the carbohydrate content of foods
- K14 the effects of smoking, alcohol and illicit drugs
- K15 the effects of, and how to manage, intercurrent illness or surgery
- K16 how to avoid and how to manage hypoglycaemia and hyperglycaemia
- K17 the medications used to manage diabetes
- K18 continuous subcutaneous insulin infusion pumps and their operation
- K19 the current theories for calculating insulin to carbohydrate ratios, insulin sensitivity and basal insulin doses
- K20 the long term complications of diabetes and when they are likely to occur
- K21 how to examine feet and assess risk status
- K22 how to monitor cardiovascular risk
- K23 how to monitor for renal disease
- K24 how to monitor for diabetic retinopathy
- K25 the law and good practice guidelines on consent
- K26 your role in the healthcare team and the role of others
- K27 local guidelines on diabetes healthcare
- K28 local referral pathways
- K29 local systems for recording patient information
- K30 quality assurance systems
- K31 the process of notification for legal and insurance purposes
- K32 sources of practitioner and patient information on diabetes
- K33 contact details of local and national support groups
- K34 how individuals can access local facilities for exercise and physical activity, education and community activities

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Additional Information

External Links

This standard links with the following dimension within the NHS Knowledge and Skills Framework (October 2004):

Dimension: HWB7 Interventions and treatments

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