NHS
Greater Glasgow and Clyde

CLINICAL GUIDELINE

Diabetes, Insulin Pump Therapy

A guideline is intended to assist healthcare professionals in the choice of disease-specific treatments.

Clinical judgement should be exercised on the applicability of any guideline, influenced by individual patient characteristics. Clinicians should be mindful of the potential for harmful polypharmacy and increased susceptibility to adverse drug reactions in patients with multiple morbidities or frailty.

If, after discussion with the patient or carer, there are good reasons for not following a guideline, it is good practice to record these and communicate them to others involved in the care of the patient.

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Lead Author:	Helen Hopkinson
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Important Note:

The Intranet version of this document is the only version that is maintained.
Any printed copies should therefore be viewed as 'Uncontrolled' and as such, may not necessarily contain the latest updates and amendments.

GUIDELINES FOR THE PROVISION OF CONTINUOUS SUBCUTANEOUS INSULIN INFUSION (CSII) THERAPY FOR PATIENTS WITH TYPE 1 DIABETES (INSULIN PUMPS)

INTRODUCTION

The National Institute for Clinical Excellence (NICE) reviewed the evidence on continuous subcutaneous insulin infusion (CSII or insulin pump therapy) and found that it improved quality of life for a small sub-group of people (1–2%) who could not achieve glycaemic control with multiple dose insulin therapy. (NICE Technology Appraisal Guidance No.57).

CLINICAL LEADERSHIP

The Scottish Government issued a Chief Executive Letter in 2012 (CEL 4 (2012)) which set out targets for each Health Board regarding the provision of insulin pump therapy. Services are provided across GGC in accordance with this CEL.

Currently initiation of pump therapy is provided at Gartnavel General Hospital, Stobhill Hospital, Southern General Hospital and Royal Alexandra Hospital. Patients who attend other hospital sites and are eligible for CSII will be referred to one of the above sites for insulin pump initiation. Once they are stabilised on CSII they will return to their referring hospital for continuing diabetes care.

Supervising consultants at pump sites will be responsible for:

- Overseeing the appropriate clinical assessment including detailed assessment by the diabetes specialist nurse responsible for CSII therapy. The DSN will provide appropriate education in the use of the pump;
- CSII Consultant leads will make the decision whether a pump is clinically indicated and whether the patient has the commitment and competence to manage use of a pump (with aid of the MCN Lead Clinician if required).

The Lead Consultants will be notified when a patient commences insulin pump therapy and will be clinically responsible for that patient during the implementation period of treatment. In accordance with NICE guidelines, insulin pump therapy will be initiated by a trained team comprising of a Physician with a specialist interest in pump therapy, a Diabetes Specialist Nurse and Dietitian.

REFERRAL CRITERIA

The guidelines for identifying patients who are suitable for pump therapy are summarised in the National Institute for Clinical Excellence Technology Appraisal, Guidance No. TA151, issued July 2008 (URL: http://www.nice.org.uk/pdf/57).

- Repeated and unpredictable occurrence of hypoglycaemia with continuing anxiety about recurrence.
- On multiple-dose insulin (MDI) therapy (including, where appropriate, the use of insulin glargine) which has failed. Patients are expected to have undergone training on carbohydrate counting/insulin adjustment via DNS/dietetic input before failing on MDI.
- People for whom MDI therapy has failed are considered to be those for whom it has been impossible to maintain HbA1c level no greater than 58mmol/mol without significant hypoglycaemia.

- Recommendations are applicable to children, adolescents, pre-pregnant and pregnant women for whom MDI is deemed to have failed.

TRANSITION ARRANGEMENTS FOR PATIENTS ALREADY ON PUMP THERAPY

- A pump user transferring from a UK Health Board (funded) to Greater Glasgow & Clyde Health Board will be invited to attend the pump clinic where they will be assessed.

- A pump user transferring from outside the UK (self-funding) to Greater Glasgow & Clyde Health Board will be invited to attend the pump user clinic for assessment. The patient will continue to self-fund.

- A pump user transferring to Greater Glasgow & Clyde Health Board with a postal address out with Greater Glasgow & Clyde, the Health Board within the pump user's postal address will be requested to fund if patient fulfils NICE criteria.

If a patient requires further assessment the MCN Clinical Lead for Greater Glasgow & Clyde (see MCN website for up to date details: http://www.nhsggc.org.uk/content/default.asp?page=s1434) will be asked to re-assess the patient.

PATIENT EDUCATION AND SUPPORT

Patients going onto pump therapy require intensive education and support to use them effectively. Initial education, on-going support and lifestyle advice will be provided by the DSN for insulin pump services. There will be a structured education and review process for months one and two of the therapy, with the expectation that from month three, the patient will self-manage their diabetes with support as they require.

MONITORING AND EVALUATION

Insulin pump therapy should be recorded on the SCI-Diabetes system, which includes a section specifically on insulin pump monitoring.

This will allow monitoring of how many people receive pumps, criteria used to guide the decision to use pumps and clinical benefits through audit.

Patients will be asked to commit to a structured training and education programme, attend clinic appointments as before but also attend the nurse led clinic if necessary for further education and support. Patient's commencing insulin pump therapy will be invited to sign an agreement prior to commencement of insulin pump therapy.

GUIDELINES FOR THE MANAGEMENT OF PATIENTS ON AN INSULIN PUMP DURING A HOSPITAL ADMISSION

Patients on an insulin pump have Type 1 Diabetes and are well trained in managing their diabetes and their pump. Insulin pumps infuse short acting insulin only so if the infusion is stopped for any reason the patient can rapidly descend into DKA. During any period the patient is unable to self manage the pump, e.g. comatose or acutely unwell, the pump should be removed and replaced with either intravenous insulin or multiple subcutaneous insulin injections as directed.

More detailed guidance on the appropriate management of inpatients on insulin pump therapy is available here:

http://library.nhsgg.org.uk/mediaAssets/My%20HSD/NHSGGC%20Guidance%20on%20pump%20during%20hosp%20admission.pdf