Prescribing Standards for Continuous Subcutaneous Insulin Infusion (Insulin Pump) Therapy for Patients with Type 1 Diabetes

Service Area: Chronic Disease > Diabetes

Approved By: Provincial Clinical Leadership Team

1.0 PURPOSE:

To establish prescribing standards for continuous subcutaneous insulin infusion, also called insulin pump, therapy for patients with Type 1 Diabetes (T1D) for Endocrinologists.

2.0 CLINICAL STANDARD:

To ensure the safe, effective and appropriate prescription of continuous subcutaneous insulin infusion (insulin pump) therapy, the following clinical criteria must be met prior to a patient being endorsed for a provincially funded pump:

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2.1.1 No more than one episode of unavoidable Diabetic Ketoacidosis (DKA) in the previous twelve months;

2.1.2 Three most recent Glycated Hemoglobin’s (A1Cs) under 10% (minimum of two months between each A1C);

2.1.3 Appropriate education and assessment on the following requirements for patients seeking initial and ongoing use of continuous subcutaneous insulin infusion. Patients must:

(a) Demonstrate reasonable understanding of pump technology and appropriate expectations of pump therapy;

(b) Display evidence of proficiency in carbohydrate counting;

(c) Provide evidence of glucose monitoring at least four times per day or appropriate use of a continuous or advanced glucose monitor;

(d) Be aware of guidelines for sick day management and DKA prevention, including ketone testing;

(e) Commit to a program of regular clinical follow-up with a health care provider.

2.1.4 Sign-off by an Endocrinologist that continuous subcutaneous insulin infusion is clinically appropriate.

2.2 Adult patients that do not meet clinical criteria 2.1.1 to 2.1.3, but are never-the-less felt to be clinically appropriate for continuous subcutaneous insulin infusion therapy, should be referred to the Manitoba Adult Insulin Pump Program to obtain a second opinion (consultation) to confirm the appropriateness of continuous subcutaneous insulin infusion therapy.

3.0 DEFINITIONS:

3.1 Diabetic Ketoacidosis (DKA) is a diabetes emergency characterized by acidosis, ketosis and typically hyperglycemia.

3.2 Glycated Hemoglobin (A1C) is a reliable estimate of mean plasma glucose levels over the previous 8 to 12 weeks.

3.3 Type 1 Diabetes (T1D) encompasses diabetes that is primarily a result of pancreatic beta cell destruction with consequent insulin deficiency, which is prone to ketoacidosis. This form includes cases due to an autoimmune process and those for which the etiology of beta cell destruction is unknown.
4.0 **CONTACT:**
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**Appendices/ Related Documents:**
The Diabetes Canada Clinical Practice Guidelines (CPG) are comprehensive, evidence-based guidelines intended to guide practice, inform general patterns of care, enhance diabetes prevention efforts, and reduce the burden of diabetes complications.

**References**

**Revision & Approval History**

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**DISCLAIMER:** Provincial Clinical Standards, Guidelines and Practice Tools are primarily concerned with patients and how they receive care and services and set out the responsibilities and expectations for the health care team in the delivery of clinical care. These resources do not replace, but are in addition to professional self-regulation and individual accountability for clinical judgment that are an integral part of health care.