

Evidence Based Guideline

External Insulin Pumps

File Name: external_insulin_pumps
Guideline Number: EBG.DME0060
Origination: 2/1994
Last Review: 5/2008
Next Review: 5/2010

Description of Procedure or Service

An insulin pump is a device that delivers a continuous supply of insulin into the body. The insulin flows from the pump through a plastic tube that is connected to a needle inserted into the abdomen and taped in place. The pump runs on batteries and can be worn clipped to a belt or carried in a pocket. It is generally used for patients with brittle insulin-dependent diabetes who cannot be controlled by intermittent dosing. An insulin pump is considered Durable Medical Equipment.

Evidence Based Guideline for External Insulin Pumps

External insulin pumps may be appropriate when the patient meets one of the three following criteria (A, B, or C):

- A. Patient requires multiple insulin doses, usually more than three per day and usually with mixed long-acting/short acting insulin. These multiple and mixed doses have been required for a period of
 1. at least 6 months and **all** of the following criteria are met:
 - a. Erratic blood sugar, **ketoacidosis**, or symptomatic **hypoglycemia** in spite of maximal patient compliance and intermittent dosing; **and**
 - b. Hgb A-1C is greater than 7.0% unless there is documented frequent hypoglycemia that contributes to a low or normal Hgb A-1C. **and**
 - c. The patient is involved in a comprehensive diabetes care program (e.g., the BCBSNC or other diabetes disease management program) **and**
 - d. An endocrinologist or physician with similar skill and training in the management of external insulin pumps prescribes the pump or is involved with the care of the patient. (This may include initial consult visit and phone or written follow-up)
 2. less than 6 months but more than 3 months and the patient has documented extenuating circumstances. These cases may be reviewed on an individual consideration basis.
- B. Patient with Gestational diabetes or when pregnancy occurs or is anticipated within 3 months in a previously diagnosed diabetic with **ANY** of the following indications:
 1. Erratic blood sugars in spite of maximal patient compliance and split dosing; **or**
 2. Other evidence that adequate control is not being achieved.
- C. A member with chronic renal failure and brittle diabetes could benefit from tight control with an insulin pumps as long as he/she is not having renal dialysis.

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Note: The recommended goal is for a patient's Hgb A-1C to be less than 7.

Medical Evidence regarding External Insulin Pumps indicates it is not recommended in the following situations:

External insulin pumps are not recommended when the medical guidelines shown above are not met.

Benefits Application

Please refer to certificate for availability of benefit. This guideline relates only to the services or supplies described herein. Benefits may vary according to benefit design; therefore certificate language should be reviewed before applying the terms of the policy.

An external insulin pump is considered Durable Medical Equipment (DME).

Syringes and infusion sets associated with External Insulin Pumps would be processed as medical supplies.

Billing/Coding/Physician Documentation Information

This policy may apply to the following codes. Inclusion of a code in this section does not guarantee that it will be reimbursed. For further information on reimbursement guidelines, please see Administrative Policies on the Blue Cross Blue Shield of North Carolina web site at www.bcbsnc.com. They are listed in the Category Search on the Medical Policy search page.

Applicable codes: A9274, E0784

Medical Term Definitions

Hypoglycemia

an abnormally low level of glucose in the blood.

Ketoacidosis

an acid state with the presence of ketone bodies in the body tissues and fluids.

Scientific Background and Reference Sources

Senior Director, Medical Affairs - 2/94

Physician Advisory Group - 10/95

Consultant Review 12/97

Resources provided by vendors

American Association of Diabetes Educators - "How to succeed with insulin pump patients", Bruce W. Bode, MD, FACE; Linda Frederickson, MA, RN, CDE; Volume 1, Number 2, 1999.

Medical Policy Advisory Group - 12/99

Specialty Matched Consultant Advisory Panel - 10/2000

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Medical Policy Advisory Group - 12/00
Specialty Matched Consultant Advisory Panel - 7/2002
Specialty Matched Consultant Advisory Panel - 6/2004
Specialty Matched Consultant Advisory Panel - 5/2006
Specialty Matched Consultant Advisory Panel - 5/2008

Policy Implementation/Update Information

2/94 Original policy issued

10/95 Revised: Added Hgb A-1C greater than 9.5

10/96 Reaffirmed

11/97 Reaffirmed

3/98 Revised: Changed Hgb A-1C to a level greater than 7.0.
Added requirement of 6 months for evaluation of patient compliance and intermittent dosage.
Added indication of Chronic Renal Failure. File name changed from (L)E0784.MED to (L)E0784.ALL.

8/99 Reformatted, Description of Procedure changed, Medical Term Definitions added.

12/99 Medical Policy Advisory Group

2/00 Combined 1.a. and b. under "When an External Insulin Pump is covered". Also changed the term "all" to "both" and changed criteria to include "a. "and " b".

12/00 Specialty Matched Consultant Advisory Panel review. Change criteria under when External Insulin Pump is covered based on consultant feedback to include more specific information regarding the Hgb A-1C, the involvement of an endocrinologist, and the patient's involvement in a comprehensive diabetic care program. System coding changes. Medical Policy Advisory Group review. No further changes to criteria. Approve.

3/01 Revised statement in "When External Insulin Pumps are Covered" changed from "An endocrinologist prescribes or is involved in the care of the patient." to "A physician with documented skill and training managing external insulin pumps prescribes the pump or is involved with the care of the patient. (This may include initial consult visit and phone or written follow-up)"

3/01 Revised statement in "When External Insulin Pumps are Covered" changed from "A physician with documented skill and training managing external insulin pumps prescribes the pump or is involved with the care of the patient. (This may include initial consult visit and phone or written follow-up)" to "An endocrinologist or physician with similar skill and training in the management of external insulin pumps prescribes the pump or is involved with the care of the patient. (This may include initial consult visit and phone or written follow-up)"

4/02 When an External Insulin Pumps is covered section reformatted for clarity. No change to Billing/Coding Section.

8/02 Specialty Matched Consultant Advisory Panel review 7/1/2002. No changes.

4/04 Benefits Application and Billing/Coding sections updated for consistency.

6/24/04 Speciality Matched Consultant Advisory review. Added statement, "Syringes and infusion sets associated with External Insulin Pumps would be processed as medical supplies." under Benefits Application Section. No change to criteria. References added.

09/09/04 Description of Procedure or Service updated.

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6/19/06 Specialty Matched Consultant Advisory Panel review 5/18/2006. No changes to policy statement. References added.

8/21/06 Medical Policy changed to Evidence Based Guideline.

12/31/07 Added new 2008 HCPCS code "A9274" to the "Billing/Coding" section.

7/28/08 Specialty Matched Consultant Advisory Panel review 5/29/08. No change to policy statement. References added.

Medical policy is not an authorization, certification, explanation of benefits or a contract. Benefits and eligibility are determined before medical guidelines and payment guidelines are applied. Benefits are determined by the group contract and subscriber certificate that is in effect at the time services are rendered. This document is solely provided for informational purposes only and is based on research of current medical literature and review of common medical practices in the treatment and diagnosis of disease. Medical practices and knowledge are constantly changing and BCBSNC reserves the right to review and revise its medical policies periodically.