External Insulin Pumps
Corporate Medical Policy

Description/Summary

An external insulin infusion pump is a programmable, battery-powered mechanical syringe/reservoir device controlled by a micro-computer to deliver a continuous subcutaneous insulin infusion (CSII) into the body. Typical devices have a two to three day supply of insulin connected to an infusion set attached to a small needle or cannula programmed to deliver a steady basal amount of insulin and release a bolus dose at meals and at programmed intervals. The purpose of an insulin pump is to provide an accurate, continuous, controlled delivery of insulin, which can be regulated by the user to achieve intensive glucose control and prevent the metabolic complications of hypoglycemia, hyperglycemia and diabetic ketoacidosis. An insulin pump is considered Durable Medical Equipment (DME).

Coding Information

Click the links below for attachments, coding tables & instructions.

Attachment I - HCPCS code table & instructions
Attachment II- ICD-10 coding table

See the BCBSVT prior approval list for durable medical equipment (DME) to determine prior approval requirements for external insulin pumps.

Policy Guidelines

When a service may be considered medically necessary

External insulin pumps may be considered medically necessary in the treatment of diabetic patients who:
1. Meet the updated fasting C-Peptide testing requirement* (the patient with diabetes must be insulinopenic per the updated fasting C-peptide testing- see below) or are beta cell autoantibody positive; and

2. Satisfy the remaining criteria for insulin pump therapy as described in section II.

*Updated fasting C-peptide testing requirement:

- Insulinopenia (defined as fasting C-peptide level less than or equal to 110% of the lower limit of normal of the laboratory’s measurement method)
- For patients with renal insufficiency and creatinine clearance (actual or calculated from age, gender, weight, and serum creatinine) less than 50ml/minute, insulinopenia is defined as a fasting C-peptide level that is less than or equal to 200% of the lower limit of normal of the laboratory’s measurement method
- Fasting C-peptide levels will only be considered valid with a concurrently obtained fasting glucose less than 225 mg/dL
- Levels only need to be documented once in the medical records.
- Fasting C-peptide levels are not required for patients diagnosed at younger than 12 years of age; AND

3. There is documented evidence of the patient’s ability to comply with a pump regimen and their commitment to intensive insulin therapy.

AND

Patients must meet ONE of the 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 six months and ALL of the following criteria are met:
   - Erratic blood sugar, ketoacidosis, or symptomatic hypoglycemia in spite of maximal patient compliance and intermittent dosing.
   - Hgb A-1C is greater than 7.0% unless there is documented frequent hypoglycemia that contributes to a low or normal Hgb A-1C.
   - An endocrinologist or physician with similar skill and training in the management of an external insulin pump prescribes the pump or is involved with the care of the patient.

2. Less than six months but more than three 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 three months in a previously diagnosed diabetic with ANY of the following indications:

   - Erratic blood sugars in spite of maximal patient compliance and split dosing.
   - 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 pump as long as he/she is not having renal dialysis.

**Note:** The recommended goal is for a patient’s Hgb A-1C to be less than 7. An external insulin pump is considered Durable Medical Equipment (DME). A replacement pump will not be approved solely because the current insulin pump is out of warranty or because that model is no longer manufactured. When requesting a new pump due to a malfunction, documentation containing a complete description of the specific malfunction is required.

**When a service is considered non-covered (benefit exclusion)**

Any treatment, Durable Medical Equipment, supplies or accessories intended principally for participation in sports or recreational activities or for personal comfort or convenience.

New technology introducing improved features for existing medical equipment. Benefits are considered not medically necessary for "deluxe" features to make the equipment more versatile or easier for the member to use if the standard/conventional equipment meets the member’s functional needs.

When an external insulin pump does not provide a therapeutic benefit to a patient in need because of certain medical conditions or illnesses.

Items, add-ons, or upgrades that are intended primarily for member/caregiver convenience, or that do not significantly enhance DME functionality.

**Reference Resources**

BCBSNC Evidence Based Guideline on External Insulin Pumps 7/2011
BCBSA Policy on External Infusion Pumps 1.01.08 1:2003

**Related Policies**

Medical Equipment and Supplies (DME)
Continuous or Intermittent Glucose Monitoring (CGMS) in Interstitial Fluid

**Document Precedence**

Blue Cross and Blue Shield of Vermont (BCBSVT) Medical Policies are developed to provide clinical guidance and are based on research of current medical literature and review of common medical practices in the treatment and diagnosis of disease. The applicable group/individual contract and member certificate language determines benefits that are in effect at the time of service. Since medical practices and knowledge are constantly evolving, BCBSVT reserves the right to review and revise its medical policies periodically. To the extent that there may be any conflict between medical policy and contract language, the member’s contract language takes precedence.
Audit Information

BCBSVT reserves the right to conduct audits on any provider and/or facility to ensure compliance with the guidelines stated in the medical policy. If an audit identifies instances of non-compliance with this medical policy, BCBSVT reserves the right to recoup all non-compliant payments.

Administrative and Contractual Guidance

Benefit Determination Guidance

Prior approval is required for services outlined in this policy. Benefits are subject to all terms, limitations and conditions of the subscriber contract.

Incomplete authorization requests may result in a delay of decision pending submission of missing information. To be considered complete, see policy guidelines above.

An approved referral authorization for members of the New England Health Plan (NEHP) is required. A prior approval for Access Blue New England (ABNE) members is required. NEHP/ABNE members may have different benefits for services listed in this policy. To confirm benefits, please contact the customer service department at the member’s health plan.

Federal Employee Program (FEP) members may have different benefits that apply. For further information please contact FEP customer service or refer to the FEP Service Benefit Plan Brochure.

Coverage varies according to the member’s group or individual contract. Not all groups are required to follow the Vermont legislative mandates. Member Contract language takes precedence over medical policy when there is a conflict.

If the member receives benefits through a self-funded (ASO) group, benefits may vary or not apply. To verify benefit information, please refer to the member’s plan documents or contact the customer service department.

Policy Implementation/Update information

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<thead>
<tr>
<th>Date</th>
<th>Description</th>
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<tbody>
<tr>
<td>04/2006</td>
<td>New Policy</td>
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<tr>
<td>07/2007</td>
<td>Re-reviewed based on new controlled clinical trial information. Real time continuous glucose monitoring is considered investigational and not medically necessary.</td>
</tr>
<tr>
<td>Date</td>
<td>Description</td>
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<td>------------</td>
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<tr>
<td>02/2014</td>
<td>ICD-10 remediation. Updated standard language (document precedence, audit information added. Removed PA requirement for insulin pump supplies. RLJ.</td>
</tr>
<tr>
<td>08/2015</td>
<td>Section headers added, updated and/or clarified. Other minor format changes. Approved in MPC on 8/31/15 RLG.</td>
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**Eligible providers**

Qualified healthcare professionals practicing within the scope of their license(s), to include:

**Durable Medical Equipment (DME) Providers**

Approved by BCBSVT Medical Directors  Date Approved

Joshua Plavin, MD  Senior Medical Director  Chair, Medical Policy Committee

Robert Wheeler MD  Chief Medical Officer

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**Attachment I**

**HCPCS code table & Instructions**

<table>
<thead>
<tr>
<th>Code Type</th>
<th>Number</th>
<th>Description</th>
<th>Policy Instructions</th>
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<tbody>
<tr>
<td>HCPCS</td>
<td>E0784</td>
<td>External ambulatory infusion pump, insulin</td>
<td>See DME prior approval list for requirements.</td>
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<tr>
<td>HCPCS</td>
<td>S9145</td>
<td>Insulin pump initiation, instruction in initial use of the pump (pump not included)</td>
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Type of Service  Durable Medical Equipment

111315RLG
### ICD-10 Coding Table

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<tr>
<th>Code Type</th>
<th>Number</th>
<th>Description</th>
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<td>ICD-10</td>
<td>E11.641</td>
<td>Type 2 diabetes mellitus with hypoglycemia with coma</td>
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<tr>
<td>ICD-10</td>
<td>E13.641</td>
<td>Other specified diabetes mellitus with hypoglycemia with coma</td>
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<tr>
<td>ICD-10</td>
<td>E13.11</td>
<td>Other specified diabetes mellitus with ketoacidosis with coma</td>
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<tr>
<td>ICD-10</td>
<td>E10.641</td>
<td>Type 1 diabetes mellitus with hypoglycemia with coma</td>
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<td>Type 2 diabetes mellitus with hyperglycemia</td>
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<td>ICD-10</td>
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