CLINICAL MEDICAL POLICY	
Policy Name:	Artificial Pancreas
Policy Number:	MP-085-MD-PA
Responsible Department(s):	Medical Management
Provider Notice/Issue Date:	04/01/2024; 07/01/2023; 06/01/2022; 06/18/2021; 06/29/2020; 08/12/2019
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Revision Date:	01/17/2024; 04/19/2023; 04/20/2022
Products:	Highmark Wholecare℠ Medicaid
Application:	All participating hospitals and providers
Page Number(s):	1 of 14

Policy History

Date	Description
05/01/2024	Provider Effective date
03/01/2024	PARP Approval
01/17/2024	QI/UM Committee review
01/17/2024	Annual Review: No changes to clinical criteria. Updated 'Summary of Literature' and 'Reference Sources' sections.
08/01/2023	Provider Effective date
05/31/2023	PARP Approval
04/19/2023	QI/UM Committee review
04/19/2023	Annual Review: No changes to clinical criteria. Removed the word 'noncovered', replaced with 'not medically necessary'. Updated 'Summary of Literature' and 'Reference Sources' sections.
07/01/2022	Provider Effective date
05/25/2022	PARP Approval
04/20/2022	QI/UM Committee review
04/20/2022	Annual Review: Added the requirement of 'a low-glucose suspend feature' to the Procedures section. Reformatted Procedure section numbering. Updated Summary of Literature and Reference Sources sections.
07/19/2021	Provider Effective Date
06/02/2021	PARP Approval
04/21/2021	QI/UM Committee Review

04/21/2021	Annual Review: Updated Summary of Literature and References.
07/27/2020	Provider effective date
06/01/2020	Clarified language of FDA approved devices to include hybrid closed loop systems, and removed statement on hybrid closed loop systems from the noncovered section to avoid contradicting statements. Updated Hayes reference.
05/15/2020	PARP Approval
04/15/2020	QI/UM Committee review
04/15/2020	Annual Review: MiniMed 670G/hybrid closed loop systems will now be covered; Revised non-covered statement for clarity; updated summary of literature and references.
08/12/2019	Provider effective date
06/18/2019	Operational Guidelines updated indicating that services that do not meet the procedure codes (Attachment B) and covered diagnosis codes (Attachment C) are to deny as NMN. Claims for services in the noncovered diagnosis code table (Attachment C) are to deny as E/I and therefore NMN.
06/05/2019	PARP Approval
04/17/2019	QI/UM Committee Review
03/22/2019	Based on feedback, a separate artificial pancreas medical policy was created from information originally included in the CGM medical Policy, MP-040-MD-PA

Disclaimer

Highmark Wholecare℠ medical policy is intended to serve only as a general reference resource regarding coverage for the services described. This policy does not constitute medical advice and is not intended to govern or otherwise influence medical decisions.

Policy Statement

Highmark Wholecare℠ may provide coverage under the DME benefits of the Company's Medicaid products for medically necessary artificial pancreas devices.

This policy is designed to address medical necessity guidelines that are appropriate for the majority of individuals with a particular disease, illness or condition. Each person's unique clinical circumstances warrant individual consideration, based upon review of applicable medical records.

The qualifications of the policy will meet the standards of the National Committee for Quality Assurance (NCQA) and all applicable state and federal regulations.

Definitions

Prior Authorization Review Panel (PARP) - A panel of representatives from within the PA Department of Human Services who have been assigned organizational responsibility for the review, approval and denial of all PH-MCO Prior Authorization policies and procedures.

Hypoglycemic Unawareness – A complication in which a diabetic patient is unaware of a precipitous drop in blood sugar (due to failure to trigger the secretion of epinephrine that would normally generate characteristic symptoms of hypoglycemia that serve to warn the patient of decreasing blood glucose levels). Hypoglycemia unawareness may result in prolonged exposure to hypoglycemia, resulting in a seizure, loss of consciousness, or brain damage. The development of hypoglycemia unawareness may also make intensified blood glucose control more difficult and put the patient at risk for severe hypoglycemia-related complications.

Hypoglycemia – A condition characterized by abnormally low blood glucose levels, usually less than 70 mg/dL. Symptoms may include shakiness, nervousness, sweating, chills and clamminess, and confusion including delirium, hunger, nausea, and tachycardia.

Severe Hypoglycemia – A condition that is the result of a blood sugar level that drops below 35-40 mg/dL. Assistance is required by another individual to treat this condition. If left untreated, permanent neurological damage and death can occur. Symptoms may include seizures or convulsions, loss of consciousness, coma, and hypothermia.

Artificial Pancreas Device System – This system consists of a series of devices (e.g., continuous glucose monitor [CGM], blood glucose device and an insulin pump), and a computer algorithm that communicates with all of these devices. Artificial pancreas systems are also known as closed-loop systems or autonomous systems for glucose control.

Type 1 Diabetes Mellitus (T1DM) – An autoimmune disease that was previously known as insulin-dependent diabetes mellitus (IDDM) or juvenile diabetes. This is a life-long condition that is the result of the immune system attacking the insulin-producing beta cells in the pancreas. The cause of T1DM is not known, and there is no known cure.

Type 2 Diabetes Mellitus (T2DM) – A metabolic disorder previously known as adult onset diabetes mellitus or non-insulin dependent diabetes mellitus (NIDDM). With this form of diabetes, the individual's pancreas cannot produce enough or properly use insulin.

Procedures

1. The use of an artificial pancreas device system may be considered medically necessary when ALL of the following criteria are met:
    A. The individual has a history of Type 1 diabetes mellitus; AND
    B. The selected device is FDA approved and age appropriate (including hybrid closed loop systems) with a low-glucose suspend feature; AND
    C. There is supporting clinical documentation and a prescription by an Endocrinologist; AND
    D. The individual has been using insulin pump therapy for more than six (6) months; AND

E. There is a history of recurrent hypoglycemia or nocturnal hypoglycemia or hypoglycemia unawareness; AND
F. In the previous six (6) months, the individual has experienced more than one (1) episode of severe hypoglycemia
G. The individual is motivated and knowledgeable in diabetes self-care including use of the device.

2. The replacement of an artificial pancreas device system may be considered medically necessary when the above listed criteria is met, as well as ALL of the following criteria:
   A. The current device is out of warranty; AND
   B. The current device is malfunctioning; AND
   C. The current device cannot be refurbished.

3. Artificial pancreas device systems are considered not medically necessary for ANY of the following conditions:
   - For use in individuals who have been diagnosed with Type-2 diabetes
   - For use in individuals who have been diagnosed with gestational diabetes
   - For use in individuals who are currently receiving dialysis
   - If the selected device is not an FDA-approved artificial pancreas system
   - A new or upgraded artificial pancreas system if the individual has a currently functioning device
   - Open-loop monitoring devices are considered experimental and investigational

   Note: Any requests for artificial pancreas approval that does not meet the guidelines listed above will require a review by a Medical Director on a case-by-case basis.

4. Post-payment Audit Statement
   The medical record must include documentation that reflects the medical necessity criteria and is subject to audit by Highmark Wholecare at any time pursuant to the terms of your provider agreement.

5. Place of Service
   The proper place of service for an artificial pancreas device system is outpatient.

Governing Bodies Approval

There are several FDA-approved artificial pancreas systems:
- The MiniMed 530G approved 2013
- The MiniMed 630G approved 2016
- The MiniMed 670G approved 2016
- The Tandem Diabetes Care Control-IQ approved 2019 (when used with the Tandem t:slim X2)

The use of an artificial pancreas device outside of listed FDA guidelines will require approval from a Medical Director.

CMS

There is no National Coverage Determination (NCD) or Local Coverage Determination (LCD) on the artificial pancreas systems. There is an NCD (40.3) on the closed-loop blood glucose control device (CBGCD) that allows for coverage in a hospital setting. The coverage is limited to short-term crisis management of patients with Type 1 diabetes, usually limited to a 24- to 48-hour period.

Summary of Literature

An artificial pancreas is a system made of three parts that work together to mimic how a healthy pancreas controls blood glucose in the body. An artificial pancreas is mainly used to help people with type 1 diabetes. In type 1 diabetes, the pancreas does not produce insulin. People with type 1 diabetes control their blood glucose level by checking it and taking insulin, either by injection or through an insulin infusion pump, several times a day. An artificial pancreas automatically monitors the patient's blood glucose level, calculates the amount of insulin needed at different points during the day, and delivers it (NIH, 2021).

Artificial pancreas systems link a glucose monitor to an insulin infusion pump. The insulin pump automatically reduces and increases the subcutaneous delivery of insulin according to subcutaneous glucose levels based on control algorithms to mimic the glucose regulating function of a healthy pancreas. The ideal artificial pancreas system would monitor glucose levels in the body and adjust the delivery of insulin automatically in order to reduce hyperglycemia and to minimize hypoglycemic events with little to no action of the patient. There are multiple devices available which are based on various control algorithms.

There are currently three main categories of artificial pancreas delivery systems:

1) **Threshold Suspend/Predictive Suspend Device System** – can temporarily stop or 'suspend' delivering insulin if a patient's blood glucose level gets low. The threshold system stops delivering insulin when the blood glucose level drops to a pre-set level. The predictive system calculates blood glucose level and will stop delivering insulin before the blood glucose level gets too low. Neither system automatically increases insulin doses. Ending insulin delivery at the correct moment can help a patient with type-1 diabetes avoid hypoglycemia. These systems may assist patients with type-1 diabetes who develop hypoglycemia overnight, particularly pediatric patients.
2) **Insulin-Only System –** keeps blood glucose levels within the target range by automatically increasing or decreasing the amount of insulin delivered to the body based on CGM values. Insulin-only systems can increase insulin if a patient's blood glucose level is higher than the target range. One type of insulin-only system is the hybrid system. The hybrid insulin-only system automatically adjusts insulin does in response to the patient's CGM values. The patient must still count carbohydrate levels and calculate insulin doses for all meals and snacks.
3) **Dual Hormone System -** Researchers are currently developing and testing systems that use two hormones—insulin to lower glucose levels and glucagon to raise blood glucose levels. Using two hormones to control blood glucose is similar to the way the pancreas works in people who do not have diabetes. These systems may be able to tightly control glucose levels without causing hypoglycemia. Researchers are also testing how well other combinations, such rapid-acting insulin and pramlintide can control blood glucose levels (NIH, 2021).

Hybrid Closed-Loop Insulin Delivery System

Hybrid closed-loop systems are characterized by the coexistence of algorithm-driven automated insulin delivery combined with manual mealtime boluses. Used correctly, these insulin delivery systems offer better glucose control and reduced risk of hypoglycemia and represent the most advanced form of insulin delivery available for people with type 1 diabetes (Leelarathna, Choudhary, et al., 2021).

The American Diabetes Association (ADA) updated its guidelines for pharmacologic approaches to glycemic management. In this update, the ADA noted that the safety and efficacy of hybrid closed-loop systems has been supported in the literature in adolescents and adults with type 1 diabetes, and recent evidence suggests that a closed-loop system is superior to sensor-augmented pump therapy for glycemic control and reduction of hypoglycemia over 3 months of comparison in children and adults with type 1 diabetes.

In 2021, the ADA recommended intensive insulin management using a version of continuous subcutaneous insulin infusion (CSII) and continuous glucose monitoring should be considered in most patients. Automated insulin delivery systems may be considered in adults with type 1 diabetes who have the skills to use them in order to improve time in range and reduce A1C and hypoglycemia.

Bionic Pancreas

The Beta Bionics iLet ACE Pump and the iLet Dosing Decision Software was approved by the FDA for people six years of age and older with type-1 diabetes. These two devices, along with a compatible FDA-cleared integrated continuous glucose monitor (iCGM), will form a new system called the iLet Bionic Pancreas. This new automated insulin dosing (AID) system uses an algorithm to determine and command insulin delivery (FDA, 2023).

Compared to other available artificial pancreas technologies, the bionic pancreas requires less user input and provides more automation because the device's algorithms continually adjust insulin doses automatically based on users' needs. Users initialize the bionic pancreas by entering their body weight into the device's dosing software at the time of first use. Users of the bionic pancreas also do not have to count carbohydrates, nor initiate doses of insulin to correct for high blood glucose. In addition, health care providers do not need to make periodic adjustments to the settings of the device (NIH, 2022).

Hayes, Inc.

- Artificial Pancreas with the MiniMed 670G for the Management of Diabetes Mellitus
    - **C Rating** - for use of the MiniMed 670G Insulin Pump System for management of type 1 diabetes mellitus. An overall low-quality body of evidence suggests that the MiniMed 670G system is associated with clinically and statistically significant increases in the percentage of time spent in the target glycemic range, as well as clinically and statistically significant reductions in HbA1c compared with baseline. However, substantial uncertainty remains regarding the comparative and long-term benefits of the system. Only 1 study compared the MiniMed 670G system with a clinical alternative, and there was limited follow-up beyond 6 months across studies. Furthermore, study populations varied in the age of eligible patients, and it is unclear which populations may benefit most from MiniMed 670G. Additional comparative studies with longer-term follow-up periods are needed to establish the comparative effectiveness and safety of the MiniMed 670G and to inform patient selection criteria.

- Artificial Pancreas with the t:slim X2 for the Management of Diabetes Mellitus

- **C Rating** - For use of t:slim X2 Insulin Pump with Control-IQ closed loop control (CLC) technology for the management of type 1 diabetes mellitus (DM). An overall low-quality body of evidence suggests that Control-IQ CLC is associated with statistically and clinically significant increases in the proportion of time spent in the target glycemic range and reduced time in the hypoglycemic and hyperglycemic ranges. Findings also suggest that benefits are significantly greater than those associated with SAP therapy. Limited evidence suggests a potential improvement in HbA1c. However, there is currently no evidence to inform conclusions about the impacts of treatment on patient-centered outcomes (e.g., disease-related morbidity or quality of life), and the lack of follow-up evaluation beyond 6 months precludes conclusions regarding longer-term impacts on diabetes-related morbidity.

- **D2 Rating** - For use of t:slim X2 Insulin Pump with Basal-IQ predictive low-glucose suspend (PLGS) technology for the management of type 1 DM. An overall very-low-quality body of evidence is insufficient to draw conclusions regarding the effectiveness and safety of Basal-IQ PLGS. Limited evidence from single-arm studies and a crossover trial suggest that switching from SAP therapy to Basal-IQ PLGS may be associated with statistically significant decreases in time spent in the hypoglycemic range, as well as small increases in time spent in the target range. However, evidence revolving around the effect of Basal-IQ PLGS on glycated hemoglobin and comparative effectiveness is insufficient to draw conclusions. Substantial uncertainty remains regarding the impacts of Basal-IQ PLGS on longer-term diabetes-related morbidity.

Coding Requirements

Procedure Codes

HCPCS Code	Description
S1034	Artificial pancreas device system (e.g., low glucose suspend (LGS) feature) including continuous glucose monitor, blood glucose device, insulin pump and computer algorithm that communicates with all of the devices
S1035	Sensor, invasive, (e.g., subcutaneous), disposable, for use with artificial pancreas device system
S1036	Transmitter, external, for use with artificial pancreas device system
S1037	Receiver, (monitor); external, for use with artificial pancreas device system

Diagnosis Codes

ICD-10 Code	Description
E08.39	Diabetes mellitus due to underlying condition with other diabetic ophthalmic complication
E08.40	Diabetes mellitus due to underlying condition with diabetic neuropathy unspecified
E08.41	Diabetes mellitus due to underlying condition with diabetic mononeuropathy
E08.42	Diabetes mellitus due to underlying condition with diabetic polyneuropathy
E08.43	Diabetes mellitus due to underlying condition with diabetic autonomic (poly) neuropathy
E08.44	Diabetes mellitus due to underlying condition with diabetic amyotrophy

E08.49	Diabetes mellitus due to underlying condition with other diabetic neurological complication
E08.51	Diabetes mellitus due to underlying condition with diabetic peripheral angiopathy without gangrene
E08.610	Diabetes mellitus due to underlying condition with diabetic neuropathic arthropathy
E08.618	Diabetes mellitus due to underlying condition with other diabetic arthropathy
E08.620	Diabetes mellitus due to underlying condition with foot ulcer
E08.622	Diabetes mellitus due to underlying condition with other skin ulcer
E08.628	Diabetes mellitus due to underlying condition with other skin complications
E08.630	Diabetes mellitus due to underlying condition with periodontal disease
E08.638	Diabetes mellitus due to underlying condition with other oral complications
E08.641	Diabetes mellitus due to underlying condition with hypoglycemia with coma
E08.65	Diabetes mellitus due to underlying condition with hyperglycemia
E08.69	Diabetes mellitus due to underlying condition with other specified complication
E08.8	Diabetes mellitus due to underlying condition with unspecified complications
E08.9	Diabetes mellitus due to underlying condition without complications
E09.01	Drug or chemical induced diabetes mellitus with hyperosmolarity with coma
E09.10	Drug or chemical induced diabetes mellitus with ketoacidosis without coma
E09.11	Drug or chemical induced diabetes mellitus with ketoacidosis with coma
E09.21	Drug or chemical induced diabetes mellitus with diabetic nephropathy
E09.311	Drug or chemical induced diabetes mellitus with unspecified diabetic retinopathy with macular edema
E09.319	Drug or chemical induced diabetes mellitus with unspecified diabetic with retinopathy without macular edema
E09.39	Drug or chemical induced diabetes mellitus with other diabetic ophthalmic complication
E09.40	Drug or chemical induced diabetes mellitus with neurological complications with diabetic neuropathy, unspecified
E09.41	Drug or chemical induced diabetes mellitus with neurological complications with diabetic mononeuropathy
E09.42	Drug or chemical induced diabetes mellitus with neurological complications with diabetic polyneuropathy
E09.43	Drug or chemical induced diabetes mellitus with neurological complications with diabetic autonomic (poly) neuropathy
E09.44	Drug or chemical induced diabetes mellitus with neurological complications with diabetic amyotrophy
E09.49	Drug or chemical induced diabetes mellitus with neurological complications with other diabetic neurological complication
E09.51	Drug or chemical induced diabetes mellitus with diabetic peripheral angiopathy without gangrene
E09.610	Drug or chemical induced diabetes mellitus with diabetic neuropathic arthropathy
E09.618	Drug or chemical induced diabetes mellitus with other diabetic arthropathy
E09.620	Drug or chemical induced diabetes mellitus with diabetic dermatitis
E09.622	Drug or chemical induced diabetes mellitus with other skin ulcer
E09.628	Drug or chemical induced diabetes mellitus with other skin complications
E09.630	Drug or chemical induced diabetes mellitus with periodontal disease

E09.638	Drug or chemical induced diabetes mellitus with other oral complications
E09.641	Drug or chemical induced diabetes mellitus with hypoglycemia with coma
E09.649	Drug or chemical induced diabetes mellitus with hypoglycemia without coma
E09.65	Drug or chemical induced diabetes mellitus with hyperglycemia
E09.69	Drug or chemical induced diabetes mellitus with other specified complication
E09.8	Drug or chemical induced diabetes mellitus with unspecified complications
E09.9	Drug or chemical induced diabetes mellitus without complication
E10.10	Type 1 diabetes mellitus with ketoacidosis without coma
E10.11	Type 1 diabetes mellitus with ketoacidosis with coma
E10.21	Type 1 diabetes mellitus with other diabetic kidney complication
E10.22	Type 1 diabetes mellitus with diabetic chronic kidney disease
E10.29	Type 1 diabetes mellitus with other diabetic kidney complication
E10.311	Type 1 diabetes mellitus with unspecified diabetic retinopathy with macular edema
E10.319	Type 1 diabetes mellitus with unspecified diabetic retinopathy without macular edema
E10.3211	Type 1 diabetes mellitus with mild nonproliferative diabetic retinopathy with macular edema, right eye
E10.3212	Type 1 diabetes mellitus with mild nonproliferative diabetic retinopathy with macular edema, left eye
E10.3213	Type 1 diabetes mellitus with mild nonproliferative diabetic retinopathy with macular edema, bilateral
E10.3291	Type 1 diabetes mellitus with mild nonproliferative diabetic retinopathy without macular edema, right eye
E10.3292	Type 1 diabetes mellitus with mild nonproliferative diabetic retinopathy without macular edema, left eye
E10.3293	Type 1 diabetes mellitus with mild nonproliferative diabetic retinopathy without macular edema, bilateral
E10.3311	Type 1 diabetes mellitus with moderate nonproliferative diabetic retinopathy with macular edema, right eye
E10.3312	Type 1 diabetes mellitus with mild nonproliferative diabetic retinopathy with macular edema, left eye
E10.3313	Type 1 diabetes mellitus with mild nonproliferative diabetic retinopathy with macular edema, bilateral
E10.3391	Type 1 diabetes mellitus with moderate nonproliferative diabetic retinopathy without macular edema, right eye
E10.3392	Type 1 diabetes mellitus with mild nonproliferative diabetic retinopathy without macular edema, left eye
E10.3393	Type 1 diabetes mellitus with mild nonproliferative diabetic retinopathy without macular edema, bilateral
E10.3411	Type 1 diabetes mellitus with severe nonproliferative diabetic retinopathy with macular edema, right eye
E10.3412	Type 1 diabetes mellitus with severe nonproliferative diabetic retinopathy with macular edema, left eye
E10.3413	Type 1 diabetes mellitus with severe nonproliferative diabetic retinopathy with macular edema, bilateral
E10.3491	Type 1 diabetes mellitus with severe nonproliferative diabetic retinopathy without macular edema, right eye

E10.3492	Type 1 diabetes mellitus with severe nonproliferative diabetic retinopathy without macular edema, left eye
E10.3493	Type 1 diabetes mellitus with severe nonproliferative diabetic retinopathy without macular edema, bilateral
E10.3511	Type 1 diabetes mellitus with proliferative diabetic retinopathy with macular edema, right eye
E10.3512	Type 1 diabetes mellitus with proliferative diabetic retinopathy with macular edema, left eye
E10.3513	Type 1 diabetes mellitus with proliferative diabetic retinopathy with macular edema, bilateral
E10.3521	Type 1 diabetes mellitus with proliferative diabetic retinopathy with traction retinal detachment involving the macula, right eye
E10.3522	Type 1 diabetes mellitus with proliferative diabetic retinopathy with traction retinal detachment involving the macula, left eye
E10.3523	Type 1 diabetes mellitus with proliferative diabetic retinopathy with traction retinal detachment involving the macula, bilateral
E10.3531	Type 1 diabetes mellitus with proliferative diabetic retinopathy with traction retinal detachment not involving the macula, right eye
E10.3532	Type 1 diabetes mellitus with proliferative diabetic retinopathy with traction retinal detachment not involving the macula, left eye
E10.3533	Type 1 diabetes mellitus with proliferative diabetic retinopathy with traction retinal detachment not involving the macula, bilateral
E10.3541	Type 1 diabetes mellitus with proliferative diabetic retinopathy with combined traction retinal detachment and rhegmatogenous retinal detachment, right eye
E10.3542	Type 1 diabetes mellitus with proliferative diabetic retinopathy with combined traction retinal detachment and rhegmatogenous retinal detachment, left eye
E10.3543	Type 1 diabetes mellitus with proliferative diabetic retinopathy with combined traction retinal detachment and rhegmatogenous retinal detachment, bilateral
E10.3551	Type 1 diabetes mellitus with stable proliferative diabetic retinopathy, right eye
E10.3552	Type 1 diabetes mellitus with stable proliferative diabetic retinopathy, left eye
E10.3553	Type 1 diabetes mellitus with stable proliferative diabetic retinopathy, bilateral
E10.3591	Type 1 diabetes mellitus with proliferative diabetic retinopathy without macular edema, right eye
E10.3592	Type 1 diabetes mellitus with proliferative diabetic retinopathy without macular edema, left eye
E10.3593	Type 1 diabetes mellitus with proliferative diabetic retinopathy without macular edema, bilateral
E10.36	Type 1 diabetes mellitus with diabetic cataract
E10.37X1	Type 1 diabetes mellitus with diabetic macular edema, resolved following treatment, right eye
E10.37X2	Type 1 diabetes mellitus with diabetic macular edema, resolved following treatment, left eye
E10.37X3	Type 1 diabetes mellitus with diabetic macular edema, resolved following treatment, bilateral
E10.39	Type 1 diabetes mellitus with other diabetic ophthalmic complication
E10.40	Type 1 diabetes mellitus with diabetic neuropathy, unspecified
E10.41	Type 1 diabetes mellitus with diabetic mononeuropathy

E10.42	Type 1 diabetes mellitus with diabetic polyneuropathy
E10.43	Type 1 diabetes mellitus with diabetic autonomic (poly) neuropathy
E10.44	Type 1 diabetes mellitus with diabetic amyotrophy
E10.49	Type 1 diabetes mellitus with other diabetic neurologic complication
E10.51	Type 1 diabetes mellitus with diabetic angiopathy without gangrene
E10.52	Type 1 diabetes mellitus with diabetic peripheral angiopathy with gangrene
E10.59	Type 1 diabetes mellitus with other circulatory complications
E10.610	Type 1 diabetes mellitus with diabetic neuropathic arthropathy
E10.618	Type 1 diabetes mellitus with other diabetic arthropathy
E10.620	Type 1 diabetes mellitus with diabetic dermatitis
E10.621	Type 1 diabetes mellitus with foot ulcer
E10.622	Type 1 diabetes mellitus with other skin ulcer
E10.628	Type 1 diabetes mellitus with other skin complications
E10.630	Type 1 diabetes mellitus with periodontal disease
E10.638	Type 1 diabetes mellitus with other oral complications
E10.641	Type 1 diabetes mellitus with hypoglycemia with coma
E10.649	Type 1 diabetes mellitus with hypoglycemia without coma
E10.65	Type 1 diabetes mellitus with hyperglycemia
E10.69	Type 1 diabetes mellitus with other specified complications
E10.8	Type 1 diabetes mellitus with unspecified complications
E10.9	Type 1 diabetes mellitus with without complications
O24.011	Pre-existing diabetes mellitus, Type 1, in pregnancy, first trimester
O24.012	Pre-existing diabetes mellitus, Type 1, in pregnancy, second trimester
O24.013	Pre-existing diabetes mellitus, Type 1, in pregnancy, third trimester
O24.019	Pre-existing diabetes mellitus, Type 1, in pregnancy, unspecified trimester
O24.02	Pre-existing diabetes mellitus, Type 1, in childbirth
O24.03	Pre-existing diabetes mellitus, Type 1, in the puerperium
Z79.4	Long term (current) use of insulin

Non-covered Diagnosis Codes

Requests for the following diagnosis codes requires review by a Medical Director

ICD-10 Code	**Description**
E16.9	Disorder of pancreatic internal secretion, unspecified [nesidioblastosis]
O24.111	Pre-existing diabetes mellitus, Type 2, in pregnancy, first trimester
O24.112	Pre-existing diabetes mellitus, Type 2, in pregnancy, second trimester
O24.113	Pre-existing diabetes mellitus, Type 2, in pregnancy, third trimester
O24.119	Pre-existing diabetes mellitus, Type 2, in pregnancy, unspecified trimester
O24.12	Pre-existing diabetes mellitus, Type 2, in childbirth
O24.13	Pre-existing diabetes mellitus, Type 2, in puerperium
O24.410	Gestational diabetes mellitus in pregnancy, diet controlled
O24.414	Gestational diabetes mellitus in pregnancy, insulin controlled
O24.419	Gestational diabetes mellitus in pregnancy, unspecified control
O24.420	Gestational diabetes mellitus in childbirth, diet controlled

O24.424	Gestational diabetes mellitus in childbirth, insulin controlled
O24.429	Gestational diabetes mellitus in childbirth, unspecified control
O24.430	Gestational diabetes mellitus in the puerperium, diet controlled
O24.434	Gestational diabetes mellitus in puerperium, insulin controlled
O24.439	Gestational diabetes mellitus in puerperium, unspecified control

Informational

Hypoglycemia Awareness Questionnaire

Question	Never	Rarely	Occasionally	Usually
I get tired or exhausted				
I forget things easily				
I feel sleepy during the day				
I get down or depressed				
I get down over nothing				
I have trouble concentrating				
I get nervous or shaky				
I easily get angry				
I eat or crave sweets, or once used to				
I awaken during the night				
Total				

Scoring

Total the number of checks in each column for RARELY, OCCASIONALLY, AND USUALLY and then calculate as follows:

Rarely (Total) x 1=	
Occasionally (Total) x 2 =	
Usually (Total) x 3 =	
Total Score	

If the **TOTAL SCORE** is:

- **Less than 8**: Hypoglycemic disease is unlikely.
- **Between 8 to 15**: Hypoglycemic disease is possible.
- **Above 15**: Hypoglycemic disease is present.

Reimbursement

Participating facilities will be reimbursed per their Highmark Wholecare℠ contract.

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