

Upper Peninsula Health Plan Utilization Management Criteria for Automated Insulin Pump System

Applicable to the following product lines: Upper Peninsula Health Plan (UPHP) Medicaid, MICHild, Children's Special Health Care Services (CSHCS), Healthy Michigan Plan (HMP)

Automated Insulin Pump System combines continuous glucose monitoring (CGM) with an insulin pump (continuous subcutaneous insulin infusion) to help optimize glycemic control. It also helps to minimize, in real time, glucose variability and prevent extreme glucose excursions (hypo- and hyperglycemia). This objective is achieved with frequent insulin adjustment modulated by an algorithm, which takes into account CGM readings and the effects of previous insulin infusions to continuously compute the amount of insulin dose to be administered³. For hypoglycemia, the system can hold insulin delivery when sensor glucose falls below a preset threshold.

Criteria (must meet all):

- ✓ Have the diagnosis of Type 1 Diabetes
- ✓ Documentation of hypoglycemic unawareness; blood sugar less than 70mg/dl with the absence of symptoms such as sweating, tachycardia, resulting in syncope and/or seizures refractory to other treatments.

Authorization Specifics:

- ✓ Prior authorization requests must include documentation to show criteria has been met
- ✓ Documentation must include prior treatment for hypoglycemic unawareness
- ✓ For members under 18 years old, the ordering physician must be an endocrinologist
- ✓ Authorization required yearly

Exclusions:

Pregnancy is a condition that excludes a member as a candidate for the Automated Insulin Pump System.

Bibliography

1. American Diabetes Association. (July 2015). Hypoglycemia. Retrieved from <http://www.diabetes.org/living-with-diabetes/treatment-and-care/blood-glucose-control/hypoglycemia-low-blood.html>. Accessed on November 1, 2017.
2. Bergenstal, Richard et al. (July 2013). Threshold-Based Insulin-Pump Interruption for Reduction of Hypoglycemia. *The New England Journal of Medicine*. Retrieved from <https://pdfs.semanticscholar.org/995e/5275431d324ea1bd4c6769f891focdda592d.pdf>. Accessed on November 1, 2017.
3. Breton, Marc et al. (September 2012). Fully Integrated Artificial Pancreas in Type 1 Diabetes Modular Closed-Loop Glucose Control Maintains Near Normoglycemia. *Diabetes*, VOL. 61. Retrieved from <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC3425406/>. Accessed on November 1, 2017.
4. Food and Drug Administration (FDA). Final Guidance for Industry and the Food and Drug Administration Staff: The Content of Investigation Device Exemption (IDE) and Premarket Approval (PMA) Applications for Artificial Pancreas Device Systems. (2017) <http://www.fda.gov/medicaldevices/productsandmedicalprocedures/homehealthandconsumer/consumerproducts/artificialpancreas/default.htm>. Accessed November 1, 2017.
5. Trang T. Ly. et al. (September 2013). Effect of Sensor-Augmented Insulin Pump Therapy and Automated Insulin Suspension vs Standard Insulin Pump Therapy on Hypoglycemia in Patients with Type 1 Diabetes a Randomized Clinical Trial. *JAMA*, Volume 310, Number 12. Retrieved from <https://jamanetwork.com/journals/jama/fullarticle/1741822?resultClick=1>. Accessed November 1, 2017.
6. Thabit, H., Hovorka, R. (June 2016). Coming of age: the artificial pancreas for type 1 diabetes. *Diabetologia* 59:1795-1805. Doi: 10.1007/s00125-016-4022-4.