Medical Policy Statements prepared by CSMG Co. and its affiliates (including CareSource) are derived from literature based on and supported by clinical guidelines, nationally recognized utilization and technology assessment guidelines, other medical management industry standards, and published MCO clinical policy guidelines. Medically necessary services include, but are not limited to, those health care services or supplies that are proper and necessary for the diagnosis or treatment of disease, illness, or injury and without which the patient can be expected to suffer prolonged, increased or new morbidity, impairment of function, dysfunction of a body organ or part, or significant pain and discomfort. These services meet the standards of good medical practice in the local area, are the lowest cost alternative, and are not provided mainly for the convenience of the member or provider. Medically necessary services also include those services defined in any Evidence of Coverage documents, Medical Policy Statements, Provider Manuals, Member Handbooks, and/or other policies and procedures.

Medical Policy Statements prepared by CSMG Co. and its affiliates (including CareSource) do not ensure an authorization or payment of services. Please refer to the plan contract (often referred to as the Evidence of Coverage) for the service(s) referenced in the Medical Policy Statement. If there is a conflict between the Medical Policy Statement and the plan contract (i.e., Evidence of Coverage), then the plan contract (i.e., Evidence of Coverage) will be the controlling document used to make the determination.

Contents of Policy

MEDICAL POLICY STATEMENT .......................................................................................................................... 1

TABLE OF CONTENTS ........................................................................................................................................ 1

A. SUBJECT ......................................................................................................................................................... 2
B. BACKGROUND ................................................................................................................................................... 2
C. DEFINITIONS .................................................................................................................................................... 3
D. POLICY ............................................................................................................................................................... 3
E. CONDITIONS OF COVERAGE .......................................................................................................................... 4
F. RELATED POLICIES/RULES ........................................................................................................................... 4
G. REVIEW/REVISION HISTORY ........................................................................................................................ 5
H. REFERENCES ....................................................................................................................................................... 5
A. SUBJECT
Continuous Glucose Monitoring Systems (CGMS)

B. BACKGROUND
30.3 million or 9.4 percent of the population in the United States are estimated to have diabetes. This does not include the estimated 7.2 million adults aged 18 years or older that are considered undiagnosed. Over 90 percent of cases in the US, Canada and Europe consist of Type II DM: Type I DM accounting for an additional 5 to 10 percent and the remainder due to other causes such as: genetic defects or syndromes, diseases of the exocrine pancreas, endocrinopathies, infections and drug or chemically induced disease. Three-quarters of all cases of type 1 diabetes are diagnosed in individuals <18 years of age.

Patients with diabetes need to be closely monitored. When blood glucose levels are poorly controlled patients are at risk of complications including: heart disease, stroke, peripheral vascular disease, retinal damage, kidney disease, impotence and nerve damage. Patients should also be monitored for comorbidities that may not be present during the early stages of the disease, but develop as the disease progresses, these include: hearing impairment, fatty liver disease, sleep apnea, periodontal disease, depression, anxiety, cognitive impairment and fractures.

Reasonable glycated hemoglobin (A1C) goals for diabetic patients should be customized for the individual patient balancing established benefits with prevention of complications and risk of hypoglycemia. Goals vary depending on age, patients with comorbidities, limited lifetime expectancy and benefits of intensive therapy. Patients with type 1 diabetes and pregnancy may require stricter control.

For patients with type 1 diabetes, tight glucose control is critical because they require ongoing treatment with exogenous insulin. Self-monitoring of blood glucose (SMBG) is normally accomplished by measuring blood glucose concentration through intermittent capillary blood sampling with a reagent strip, cartridge or cuvette and a drop of capillary blood from a finger puncture. Different testing frequency may be indicated for type 1 and type 2 diabetes. Devices are available for continuous glucose monitoring from interstitial fluid, but SMBG testing must still be used in conjunction with CGM to confirm high and low continuous glucose monitoring values. CGM offers the most benefit in patients or patient’s parents that are willing to use them consistently and in patients with hypoglycemic unawareness who are at risk or have a history of severe recurrent hypoglycemia. Recent studies show that continuous glucose monitoring is associated with improved glycemic control in adult patients with type 1 diabetes.

Professional Societies
The following professional society’s recommendations are derived from the latest guidelines and scientific based literature available.

American Diabetes Association (ADA)
Continuous glucose monitoring (CGM) is useful for A1C lowering in select adults (aged ≥25 years) with type 1 diabetes who require intensive insulin regimens. CGM may be a useful supplement to SMBG among individuals with hypoglycemia unawareness and/or frequent hypoglycemic episodes. CGM should be considered in children and adolescents with type 1 diabetes, whether using injections or continuous subcutaneous insulin infusion, as an additional tool to help improve glycemic control. Benefits of continuous glucose monitoring correlate with adherence to ongoing use of the device.
National Institute of Health (NIH)
National Institute for Health and Care Excellence
In 2015, the National Institute for Health and Care Excellence released guidelines on diagnosis and management of type 1 diabetes in adults. The guidelines state:

- “Do not offer real-time continuous glucose monitoring routinely to adults with type 1 diabetes”
- “Consider real-time continuous glucose monitoring for adults with type 1 diabetes who are willing to commit to using it at least 70% of the time and to calibrate it as needed, and who have any of the following despite optimized use of insulin therapy and conventional blood glucose monitoring:
  - More than 1 episode a year of severe hypoglycemia with no obviously preventable precipitating cause.
  - Complete loss of awareness of hypoglycemia.
  - Frequent (more than 2 episodes a week) asymptomatic hypoglycemia that is causing problems with daily activities.
  - Extreme fear of hypoglycemia.
  - Hyperglycemia (HbA1c level of 75 mmol/mol [9%] or higher) that persists despite testing at least 10 times a day. Continue real-time continuous glucose monitoring only if HbA1c can be sustained at or below.

C. DEFINITIONS
N/A

D. POLICY
I. CareSource will approve the use of CGM and consider it’s use medically necessary for the following:
   A. Short-term use (up to 7 days) as an addition to standard care for blood glucose evaluation to optimize therapy in patients who experience problems controlling blood glucose levels and meet the following criteria (no prior authorization is required):
      1. Patient has or is suspected of having hypoglycemia unawareness
      2. Patient has or is suspected of having recurrent hypoglycemia and hyperglycemia
      3. Patient experiences poorly controlled glucose levels although he/she is compliant with current treatment including, self-monitoring at least 4 times per day
      4. Patient requires 3 or more insulin injections per day or an insulin pump to control glucose

   Note: Although short term CGM does not require a prior authorization, CareSource may request documentation to support medical necessity. Appropriate and complete documentation must be presented at the time of review to validate medical necessity.

   B. Long-term use in patients who experience problems controlling blood glucose levels and meet ALL of the following criteria (prior authorization is required):
      1. Obtains a letter of medical necessity from a board certified endocrinologist.
      2. Has type 1 diabetes
      3. Insulin injections are required 3 or more times per day or an insulin pump is used
      4. Patient experiences poorly controlled levels although he/she is compliant with current treatment including, self-monitoring at least 4 times per day
      5. The patient meets one or more of the following:
         5.1 HgbA1C ≥7% or that does not meet documented target treatment despite diabetic education and adherence to self-monitoring of glucose levels.
5.2 History of recurrent severe hypoglycemia (<50 mg/dl) with hypoglycemic unawareness requiring assistance of another individual (administering glucagon, oral carbohydrates or other measures) despite appropriate adjustments to a physician ordered and monitored treatment plan based on previous short-term CGMS and/or self-monitoring

5.3 The patient is pregnant with poorly controlled type I diabetes
   a. Poorly controlled is defined as unexplained hypoglycemic episodes, hypoglycemic unawareness, suspected post-prandial hyperglycemia, or recurrent diabetic ketoacidosis

6. Documentation that the patient has completed a comprehensive diabetes education program within the last 12 months; and has ongoing oversight by a certified diabetes educator. Remains compliant with the insulin therapy recommended by an endocrinologist as demonstrated by monitoring logs maintained for at least 3 months.

C. Continuation of CGMS use after one year or device replacement is considered medically necessary for the following:
   1. If for replacement, the device is malfunctioning and out of warranty
   2. There is objective documented evidence of improvement in control of diabetes (specific to baseline status of disease for individual patients)
   3. There is documented evidence of compliance to CMGS defined as at least 80% use rate of device (must be based on log data of the device)

D. CareSource will NOT approve the use of CGMS for the following:
   1. Type II diabetes
   2. Pregnant women with gestational diabetes
   3. Non FDA-approved devices
   4. GlucoWatch®
   5. Artificial pancreas device systems (APDS)
   6. Replacement of an existing CGMS for additional features which are not medically necessary

E. CONDITIONS OF COVERAGE

   HCPCS
   CPT

   AUTHORIZATION PERIOD

F. RELATED POLICIES/RULES

G. REVIEW/REVISION HISTORY

<table>
<thead>
<tr>
<th>DATE</th>
<th>ACTION</th>
</tr>
</thead>
<tbody>
<tr>
<td>Date Issued</td>
<td>07/17/2014 New Policy.</td>
</tr>
<tr>
<td>Date Revised</td>
<td>10/30/2014</td>
</tr>
<tr>
<td></td>
<td>07/15/2015</td>
</tr>
<tr>
<td></td>
<td>03/06/2018 Removed age criteria, added short-term use criteria</td>
</tr>
<tr>
<td></td>
<td>01/10/2018 Revised section D.I.B.5 long term monitoring criteria to: one or more of the following:</td>
</tr>
<tr>
<td>Date Effective</td>
<td>TBD</td>
</tr>
</tbody>
</table>

H. REFERENCES
Continuous Glucose Monitoring Systems
OHIO MEDICAID
MM-0031
Effective Date: 09/01/2018

In: Mulder JE (Ed). UpToDate [database on the Internet]. Waltham (MA): UpToDate; 2014.
Diabetes Statistics / NIDDK. [online] National Institute of Diabetes and Digestive and Kidney
Diseases.
diabetes mellitus. [online].
[online].
13. Information, H., Overview, D., Diabetes, M., Monitoring, C., Monitoring, C., Center, T. and
Diabetes and Digestive and Kidney Diseases.
[online].

The Medical Policy Statement detailed above has received due consideration as defined in the
Medical Policy Statement Policy and is approved.

Independent medical review – 3/2018