

# Local Coverage Determination (LCD): Serum Magnesium (L36700)

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## Contractor Information

CONTRACTOR NAME	CONTRACT TYPE	CONTRACT NUMBER	JURISDICTION	STATE(S)
Noridian Healthcare Solutions, LLC	A and B MAC	02101 - MAC A	J - F	Alaska
Noridian Healthcare Solutions, LLC	A and B MAC	02102 - MAC B	J - F	Alaska
Noridian Healthcare Solutions, LLC	A and B MAC	02201 - MAC A	J - F	Idaho
Noridian Healthcare Solutions, LLC	A and B MAC	02202 - MAC B	J - F	Idaho
Noridian Healthcare Solutions, LLC	A and B MAC	02301 - MAC A	J - F	Oregon
Noridian Healthcare Solutions, LLC	A and B MAC	02302 - MAC B	J - F	Oregon
Noridian Healthcare Solutions, LLC	A and B MAC	02401 - MAC A	J - F	Washington
Noridian Healthcare Solutions, LLC	A and B MAC	02402 - MAC B	J - F	Washington
Noridian Healthcare Solutions, LLC	A and B MAC	03101 - MAC A	J - F	Arizona
Noridian Healthcare Solutions, LLC	A and B MAC	03102 - MAC B	J - F	Arizona
Noridian Healthcare Solutions, LLC	A and B MAC	03201 - MAC A	J - F	Montana
Noridian Healthcare Solutions, LLC	A and B MAC	03202 - MAC B	J - F	Montana
Noridian Healthcare Solutions, LLC	A and B MAC	03301 - MAC A	J - F	North Dakota
Noridian Healthcare Solutions, LLC	A and B MAC	03302 - MAC B	J - F	North Dakota
Noridian Healthcare Solutions, LLC	A and B MAC	03401 - MAC A	J - F	South Dakota
Noridian Healthcare Solutions, LLC	A and B MAC	03402 - MAC B	J - F	South Dakota
Noridian Healthcare Solutions, LLC	A and B MAC	03501 - MAC A	J - F	Utah
Noridian Healthcare Solutions, LLC	A and B MAC	03502 - MAC B	J - F	Utah
Noridian Healthcare Solutions, LLC	A and B MAC	03601 - MAC A	J - F	Wyoming
Noridian Healthcare Solutions, LLC	A and B MAC	03602 - MAC B	J - F	Wyoming

## LCD Information

### Document Information

**LCD ID**  
L36700

**Original Effective Date**

For services performed on or after 03/13/2017

**LCD Title**

**Revision Effective Date**

Serum Magnesium

For services performed on or after 10/01/2019

**Proposed LCD in Comment Period**

N/A

**Revision Ending Date**

N/A

**Source Proposed LCD**

DL36700

**Retirement Date**

N/A

**AMA CPT / ADA CDT / AHA NUBC Copyright Statement**

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**Notice Period Start Date**

01/26/2017

**Notice Period End Date**

03/12/2017

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**CMS National Coverage Policy**

Title XVIII of the Social Security Act; Section 1862(a)(7). This section excludes routine physical examinations.

Title XVIII of the Social Security Act, Section 1862(a)(1)(A). This section allows coverage and payment for only those services that are considered to be medically reasonable and necessary for the diagnosis or treatment of illness or

injury or to improve the functioning of a malformed body member.

Title XVIII of the Social Security Act; Section 1833(e). This section prohibits Medicare payment for any claim, which lacks the necessary information to process the claim.

## **Coverage Guidance**

### **Coverage Indications, Limitations, and/or Medical Necessity**

Note: Providers should seek information related to National Coverage Determinations (NCD) and other Centers for Medicare & Medicaid Services (CMS) instructions in CMS Manuals. This LCD only pertains to the contractor's discretionary coverage related to this service.

Magnesium is a mineral required by the body for the use of adenosine triphosphate (ATP) as a source of energy. It is also necessary for neuromuscular irritability and blood clotting. Magnesium deficiency produces neuromuscular disorders. It may cause weakness, tremors, tetany, and convulsions. Hypomagnesemia is associated with hypocalcemia, hypokalemia, long-term hyperalimentation, intravenous therapy, diabetes mellitus (especially during treatment of ketoacidosis); alcoholism and other types of malnutrition; malabsorption; hyperparathyroidism; dialysis; pregnancy; and hyperaldosteronism. The following are other conditions that may cause magnesium deficiencies

- Renal loss of magnesium occurs with cis-platinum therapy.
- Hypomagnesemia may also be induced by amphotericin or anti-EGFR (some monoclonal antibodies) toxicity.
- Magnesium deficiency is described with cardiac arrhythmias. There is evidence that magnesium may cause arrhythmias.

### **Indications:**

Utilization of certain cardiac drugs which cause adverse effects in the presence of low magnesium (i.e., quinidine, procainamide, and disopyramide phosphate or Norpace). Patients taking these drugs should have their magnesium checked approximately once every six months.

- Long term parenteral nutrition. Patients on long term parenteral nutrition that are otherwise asymptomatic should have their serum magnesium checked monthly.
- Malabsorption syndrome. The frequency should depend on the severity of the syndrome, but once the patient's level is stabilized, a monthly check should be adequate.
- Renal loss secondary to diuretic use.
- Chronic alcoholism, diabetic acidosis, and renal tubular acidosis. These patients should be followed on an as needed basis according to their symptomatology. Without symptoms, they should be checked no more than annually.
- Chronic diarrhea, otherwise unexplained and persistent.
- Prolonged nasogastric suction greater than five days. These patients should have a magnesium check every two to three weeks.
- Cisplatin treatment.
- Amphotericin treatment
- EGFR monoclonal antibodies
- Patients receiving IV magnesium therapy for a low serum level. Serum level should be monitored appropriately.

- Patients with hypocalcemia. If the hypocalcemia persists, the level should probably be checked on a six-month basis as long as the patient does not have symptoms of arrhythmias that would warrant closer follow up.
- Lethargy and confusion that are not otherwise explained. Once a patient has been diagnosed with mental health processes such as Alzheimer or psychotic depression, etc., there is no indication to follow their magnesium level on a regular basis.
- Patients receiving oral magnesium in the face of impaired renal function should have their magnesium level checked on a monthly basis.

Other clinical situations:

- Pre-eclampsia
- Unexplained muscular paralysis
- Neuromuscular irritability
- Blood clotting abnormalities
- Evidence (mixed) that magnesium levels are low and increased magnesium may benefit patients with sickle cell anemia, beta thalassemia and hypersplenism- more recent articles dispute this.
- Long Q-T syndrome, torsades de pointes and ventricular arrhythmias.

### Summary of Evidence

NA

### Analysis of Evidence (Rationale for Determination)

NA

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## General Information

### Associated Information

N/A

### Sources of Information

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16. Noridian Carrier Advisory Committee members

## Bibliography

NA

# Revision History Information

REVISION HISTORY DATE	REVISION HISTORY NUMBER	REVISION HISTORY EXPLANATION	REASON(S) FOR CHANGE
10/01/2019	R4	<p>The LCD is revised to remove CPT/HCPCS codes in the Keyword Section of the LCD.</p> <p>At this time 21st Century Cures Act will apply to new and revised LCDs that restrict coverage which requires comment and notice. This revision is not a restriction to the coverage determination; and, therefore not all the fields included on the LCD are applicable as noted in this policy.</p>	<ul style="list-style-type: none"> <li>• Other (The LCD is revised to remove CPT/HCPCS codes in the Keyword Section of the LCD. )</li> </ul>
10/01/2019	R3	<p>10/01/2019: At this time 21st Century Cures Act will apply to new and revised LCDs that restrict coverage which requires comment and notice. This revision is not a restriction to the coverage determination; and, therefore not all the fields included on the LCD are applicable as noted in this policy.</p>	<ul style="list-style-type: none"> <li>• Revisions Due To Code Removal</li> </ul>

REVISION HISTORY DATE	REVISION HISTORY NUMBER	REVISION HISTORY EXPLANATION	REASON(S) FOR CHANGE
		Update to revision number 2: Added ICD-10 code R15.11 is a typo. The correct code is R11.15.	
10/01/2019	R2	<p>Effective 10/1/2019. Added and deleted the following ICD-10 codes per the 2019/2020 annual ICD-10-CM updates.</p> <p>Added:</p> <ul style="list-style-type: none"> <li>• I26.93 Single subsegmental pulmonary embolism without acute cor pulmonale</li> <li>• I26.94 Multiple subsegmental pulmonary emboli without acute cor pulmonale</li> <li>• I48.11 Longstanding persistent atrial fibrillation</li> <li>• I48.19 Other persistent atrial fibrillation</li> <li>• I48.20 Chronic atrial fibrillation, unspecified</li> <li>• I48.21 Permanent atrial fibrillation</li> <li>• R15.11 Cyclical vomiting syndrome unrelated to migraine</li> </ul> <p>Deleted:</p> <ul style="list-style-type: none"> <li>• I48.1 Persistent atrial</li> <li>• I48.2 Chronic atrial fibrillation</li> </ul> <p>09/16/19: At this time 21st Century Cures Act will apply to new and revised LCDs that restrict coverage which requires comment and notice. This revision is not a restriction to the coverage determination; and, therefore not all the fields included on the LCD are applicable as noted in this policy</p>	<ul style="list-style-type: none"> <li>• Creation of Uniform LCDs Within a MAC Jurisdiction</li> <li>• Revisions Due To ICD-10-CM Code Changes</li> </ul>
10/01/2017	R1	<p>08/24/2017: At this time 21st Century Cures Act will apply to new and revised LCDs that restrict coverage which requires comment and notice. This revision is not a restriction to the coverage determination; and, therefore not all the fields included on the LCD are applicable as noted in this policy.</p> <p>Effective DOS 10/01/2017 the following ICD-10-CM codes were added and deleted:</p> <p>Add:</p>	<ul style="list-style-type: none"> <li>• Revisions Due To ICD-10-CM Code Changes</li> </ul>

REVISION HISTORY DATE	REVISION HISTORY NUMBER	REVISION HISTORY EXPLANATION	REASON(S) FOR CHANGE
		<ul style="list-style-type: none"> <li>• K56.50</li> <li>• K56.51</li> <li>• K56.52</li> </ul> <p>The following ICD-10 codes were deleted from the ICD-10 Codes that Support Medical Necessity field: K56.5 was deleted from Group 1</p>	

## Associated Documents

### Attachments

N/A

### Related Local Coverage Documents

Article(s)

A57198 - Billing and Coding: Serum Magnesium

A55362 - Response to Comments: Serum Magnesium

LCD(s)

DL36700

- (MCD Archive Site)

### Related National Coverage Documents

N/A

### Public Version(s)

Updated on 01/29/2020 with effective dates 10/01/2019 - N/A

Updated on 09/20/2019 with effective dates 10/01/2019 - N/A

Updated on 08/31/2017 with effective dates 10/01/2017 - 09/30/2019

Updated on 01/11/2017 with effective dates 03/13/2017 - N/A

## Keywords

- Serum
- Magnesium
- Mag
- MG++