

# Outpatient Intravenous Insulin Treatment (NCD 40.7)

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[Terms and Conditions](#)

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Related Medicare Advantage Coverage Summary

- [Diabetes Management, Equipment and Supplies](#)

## Policy Summary

[See Purpose](#)

### Overview

The term outpatient intravenous (IV) insulin therapy (OIVIT) refers to an outpatient regimen that integrates pulsatile or continuous intravenous infusion of insulin via any means, guided by the results of measurement of:

- Respiratory quotient; and/or
- Urine urea nitrogen (uun); and/or
- Arterial, venous, or capillary glucose; and/or
- Potassium concentration; and performed in scheduled recurring periodic intermittent episodes.

This regimen is also sometimes termed Cellular Activation Therapy (CAT), Chronic Intermittent Intravenous Insulin Therapy (CIIT), Hepatic Activation Therapy (HAT), Intercellular Activation Therapy (iCAT), Metabolic Activation Therapy (MAT), Pulsatile Intravenous Insulin Treatment (PIVIT), Pulse Insulin Therapy (PIT), and Pulsatile Therapy (PT).

In OIVIT, insulin is intravenously administered in the outpatient setting for a variety of indications. Most commonly, it is delivered in pulses, but it may be delivered as a more conventional drip solution. The insulin administration is adjunctive to the patient's routine diabetic management regimen (oral agent or insulin-based) or other disease management regimen, typically performed on an intermittent basis (often weekly), and frequently performed chronically without duration limits. Glucose or other carbohydrate is available ad libitum (in accordance with patient desire).

### Guidelines

The Centers for Medicare and Medicaid Services (CMS) determines that the evidence is adequate to conclude that OIVIT does not improve health outcomes in Medicare beneficiaries. Therefore, CMS determines that OIVIT is not reasonable and necessary for any indication under section 1862(a) (1) (A) of the Social Security Act. Services comprising an Outpatient Intravenous Insulin Therapy regimen are nationally non-covered under Medicare when furnished pursuant to an OIVIT regimen. HCPCS code G9147 is to be used for billing non-covered OIVIT and any services comprising an OIVIT regimen. CPT codes 99199 or 94681 (with or without diabetes related conditions) are not to be used on claims billing for non-covered OIVIT and any services comprising an OIVIT regimen when furnished pursuant to an OIVIT regimen.

Individual components of OIVIT may have medical uses in conventional treatment regimens for diabetes and other conditions. Coverage for such other uses may be determined by other local or national Medicare determinations, and do not pertain to OIVIT. For example, see Pub. 100-03, NCD Manual, Section 40.2, Home Blood Glucose Monitors, Section 40.3, Closed-loop Blood Glucose Control Devices (CBGCD), Section 190.20, Blood Glucose Testing, and Section 280.14, Infusion Pumps, as well as Pub. 100-04, Claims Processing Manual, Chapter 18, Section 90, Diabetics Screening.

## Applicable Codes

The following list(s) of procedure and/or diagnosis codes is provided for reference purposes only and may not be all inclusive. Listing of a code in this guideline does not imply that the service described by the code is a covered or non-covered health service. Benefit coverage for health services is determined by the member specific benefit plan document and applicable laws that may require coverage for a specific service. The inclusion of a code does not imply any right to reimbursement or guarantee claim payment. Other Policies and Guidelines may apply.

CPT Code	Description
94681	Oxygen uptake, expired gas analysis; including CO <sub>2</sub> output, percentage oxygen extracted
99199	Unlisted special service, procedure or report

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HCPCS Code	Description
G9147	Outpatient Intravenous Insulin Treatment (OIVIT) either pulsatile or continuous, by any means, guided by the results of measurements for: respiratory quotient; and/or, urine urea nitrogen (UUN); and/or, arterial, venous or capillary glucose; and/or potassium concentration (Noncovered)

## References

### CMS National Coverage Determinations (NCDs)

[NCD 40.7 Outpatient Intravenous Insulin Treatment](#)

### CMS Claims Processing Manual

[Chapter 4; § 320 Outpatient Intravenous Insulin Treatment \(OIVIT\)](#)

### CMS Transmittal(s)

[Transmittal 1854, Change Request 10086, Dated 05/26/2017 \(ICD-10 Coding Revisions to National Coverage Determination \(NCDs\)\)](#)

## Guideline History/Revision Information

Revisions to this summary document do not in any way modify the requirement that services be provided and documented in accordance with the Medicare guidelines in effect on the date of service in question.

Date	Summary of Changes
04/14/2021	<ul style="list-style-type: none"> <li>Routine review; no change to guidelines</li> <li>Archived previous policy version MPG230.05</li> </ul>

## Purpose

The Medicare Advantage Policy Guideline documents are generally used to support UnitedHealthcare Medicare Advantage claims processing activities and facilitate providers' submission of accurate claims for the specified services. The document can be used as a guide to help determine applicable:

- Medicare coding or billing requirements, and/or

- Medical necessity coverage guidelines; including documentation requirements.

UnitedHealthcare follows Medicare guidelines such as NCDs, LCDs, LCAs, and other Medicare manuals for the purposes of determining coverage. It is expected providers retain or have access to appropriate documentation when requested to support coverage. Please utilize the links in the [References](#) section below to view the Medicare source materials used to develop this resource document. This document is not a replacement for the Medicare source materials that outline Medicare coverage requirements. Where there is a conflict between this document and Medicare source materials, the Medicare source materials will apply.

## Terms and Conditions

The Medicare Advantage Policy Guidelines are applicable to UnitedHealthcare Medicare Advantage Plans offered by UnitedHealthcare and its affiliates.

These Policy Guidelines are provided for informational purposes, and do not constitute medical advice. Treating physicians and healthcare providers are solely responsible for determining what care to provide to their patients. Members should always consult their physician before making any decisions about medical care.

Benefit coverage for health services is determined by the member specific benefit plan document\* and applicable laws that may require coverage for a specific service. The member specific benefit plan document identifies which services are covered, which are excluded, and which are subject to limitations. In the event of a conflict, the member specific benefit plan document supersedes the Medicare Advantage Policy Guidelines.

Medicare Advantage Policy Guidelines are developed as needed, are regularly reviewed and updated, and are subject to change. They represent a portion of the resources used to support UnitedHealthcare coverage decision making. UnitedHealthcare may modify these Policy Guidelines at any time by publishing a new version of the policy on this website. Medicare source materials used to develop these guidelines include, but are not limited to, CMS National Coverage Determinations (NCDs), Local Coverage Determinations (LCDs), Medicare Benefit Policy Manual, Medicare Claims Processing Manual, Medicare Program Integrity Manual, Medicare Managed Care Manual, etc. The information presented in the Medicare Advantage Policy Guidelines is believed to be accurate and current as of the date of publication and is provided on an "AS IS" basis. Where there is a conflict between this document and Medicare source materials, the Medicare source materials will apply.

You are responsible for submission of accurate claims. Medicare Advantage Policy Guidelines are intended to ensure that coverage decisions are made accurately based on the code or codes that correctly describe the health care services provided. UnitedHealthcare Medicare Advantage Policy Guidelines use Current Procedural Terminology (CPT®), Centers for Medicare and Medicaid Services (CMS), or other coding guidelines. References to CPT® or other sources are for definitional purposes only and do not imply any right to reimbursement or guarantee claims payment.

Medicare Advantage Policy Guidelines are the property of UnitedHealthcare. Unauthorized copying, use, and distribution of this information are strictly prohibited.

\*For more information on a specific member's benefit coverage, please call the customer service number on the back of the member ID card or refer to the [Administrative Guide](#).