

## **Whole Body Dual X-Ray Absorptiometry (DEXA or DXA) to Determine Body Composition**

**Published:** 09/01/2023

**Next Review:** 07/2024

**Last Review:** 07/2023

**Medicare Link(s) Revised:** N/A

### **IMPORTANT REMINDER**

*The Medicare Advantage Medical Policy manual is not intended to override the member Evidence of Coverage (EOC), which defines the insured's benefits, nor is it intended to dictate how providers are to practice medicine. Physicians and other health care providers are expected to exercise their medical judgment in providing the most appropriate care for the individual member, including care that may be both medically reasonable and necessary.*

*The Medicare Advantage medical policies are designed to provide guidance regarding the decision-making process for the coverage or non-coverage of services or procedures in accordance with the member EOC and Centers of Medicare and Medicaid Services (CMS) policies and manuals, along with general CMS rules and regulations. In the event of a conflict, applicable CMS policy or EOC language will take precedence over the Medicare Advantage Medical Policy. In the absence of a specific CMS coverage determination for a requested service, item or procedure, the health plan may apply CMS regulations, as well as their Medical Policy Manual or other applicable utilization management vendor criteria developed with an objective, evidence-based process using scientific evidence, current generally accepted standards of medical practice, and authoritative clinical practice guidelines.*

*Some services or items may appear to be medically indicated for an individual, but may be a direct exclusion of Medicare or the member's benefit plan. Medicare and member EOCs exclude from coverage, among other things, services or procedures considered to be investigational (experimental) or cosmetic, as well as services or items considered not medically reasonable and necessary under Title XVIII of the Social Security Act, §1862(a)(1)(A). In some cases, providers may bill members for these non-covered services or procedures. Providers are encouraged to inform members in advance when they may be financially responsible for the cost of non-covered or excluded services. Members, their appointed representative, or a treating provider can request coverage of a service or item by submitting a pre-service organization determination prior to services being rendered.*

## **DESCRIPTION**

Measurements of body composition may be used to study how lean body mass and body fat change during health and disease and have provided a research tool to study the metabolic effects of aging, obesity, and various wasting conditions (e.g., AIDS or post-bariatric surgery). A variety of techniques have been researched, including dual X-ray absorptiometry (also known as DXA or DEXA) scans. DEXA/DXA measurements are based in part on the assumption that the hydration of fat-free mass remains constant at 73%. Hydration, however, can vary from 67%–85%, and can be variable in certain disease states. Other assumptions used to derive body composition estimates are considered proprietary by DXA manufacturers (e.g., Lunar, Hologic, and Norland).

## MEDICARE ADVANTAGE POLICY CRITERIA

**Note:** This policy only addresses use of DEXA (or DXA) to determine body composition. It does not address the use of DEXA/DXA to determine bone mass or bone mineral density (BMD), which may be considered medically necessary under the *Medicare Benefit Policy Manual, Chapter 15, Section 80.5*.

<b>CMS Coverage Manuals*</b>	None
<b>National Coverage Determinations (NCDs)*</b>	None
<b>Noridian Healthcare Solutions (Noridian) Local Coverage Determinations (LCDs) and Articles (LCAs)*</b>	None
<b>Medical Policy Manual</b>	<i>Medicare coverage guidance is not available for whole body DXA scans used to determine body composition. Therefore, the health plan's medical policy is applicable.</i>

Whole Body Dual X-Ray Absorptiometry (DXA) to Determine Body Composition, Radiology, [Policy No. 41](#) (see "NOTE" below)

**NOTE:** If a procedure or device lacks scientific evidence regarding safety and efficacy because it is investigational or experimental, the service is noncovered as not reasonable and necessary to treat illness or injury. ([Medicare IOM Pub. No. 100-04, Ch. 23, §30 A](#)). According to Title XVIII of the Social Security Act, §1862(a)(1)(A), only medically reasonable and necessary services are covered by Medicare. In the absence of a NCD, LCD, or other coverage guideline, CMS guidelines allow a Medicare Advantage Organization (MAO) to make coverage determinations, applying an **objective, evidence-based process, based on authoritative evidence**. ([Medicare IOM Pub. No. 100-16, Ch. 4, §90.5](#)). The Medicare Advantage Medical Policy - Medicine Policy No. M-149 - provides further details regarding the plan's evidence-assessment process (see Cross References).

## POLICY GUIDELINES

### REGULATORY STATUS

Body composition software for several bone densitometer systems have been approved by the U.S. Food and Drug Administration (FDA) through the premarket approval process. This includes:

- Lunar DXA systems (GE Healthcare, Madison, WI);
- Hologic DXA systems (Hologic, Bedford MA); and,
- Norland DXA systems (Norland Corp., Fort Atkinson, WI).

All of these are commercially available for use in measurement of bone mineral content, estimation of bone mineral density (BMD), comparison of measurements with reference databases, estimation of fracture risk, body composition analysis, and measurement of periprosthetic BMD. Note, the fact a service or procedure is FDA approved for a specific indication does not, in itself, make the procedure medically reasonable and necessary. The FDA determines safety and effectiveness of a device or drug, but does not establish medical necessity. While Medicare may adopt FDA determinations regarding safety and effectiveness, CMS or Medicare contractors evaluate whether or not the drug or device is reasonable and necessary for the Medicare population under §1862(a)(1)(A).

## CROSS REFERENCES

[Investigational \(Experimental\) Services, New and Emerging Medical Technologies and Procedures, and Other Non-Covered Services](#), Medicine, Policy No. M-149

[Whole Body Computed Tomography \(CT\) Screening](#), Radiology, Policy No. M-40

## REFERENCES

None

## CODING

**NOTE:** There is no specific code for whole body DEXA/DXA. The appropriate code for reporting this service is 76499.

Codes	Number	Description
CPT	76499	Unlisted diagnostic radiographic procedure
HCPCS	None	

**\*IMPORTANT NOTE:** Medicare Advantage medical policies use the most current Medicare references available at the time the policy was developed. Links to Medicare references will take viewers to external websites outside of the health plan's web control as these sites are not maintained by the health plan.