# CIGNA MEDICAL COVERAGE POLICY

*The following Coverage Policy applies to all plans administered by CIGNA Companies including plans administered by Great-West Healthcare, which is now a part of CIGNA.*

**Subject** **Computed Tomography for Whole-Body Screening**

**Effective Date ..... 12/15/2009**
**Next Review Date ..... 12/15/2010**
**Coverage Policy Number ..... 0250**

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Electron Beam Computed Tomography (EBCT) and Multidetector Computed Tomography (MDCT) for Coronary Artery Calcification
Spiral Computed Tomography for Lung Cancer Screening

***INSTRUCTIONS FOR USE***

*Coverage Policies are intended to provide guidance in interpreting certain **standard** CIGNA HealthCare benefit plans as well as benefit plans formerly administered by Great-West Healthcare. Please note, the terms of a participant's particular benefit plan document [Group Service Agreement (GSA), Evidence of Coverage, Certificate of Coverage, Summary Plan Description (SPD) or similar plan document] may differ significantly from the standard benefit plans upon which these Coverage Policies are based. For example, a participant's benefit plan document may contain a specific exclusion related to a topic addressed in a Coverage Policy. In the event of a conflict, a participant's benefit plan document **always supercedes** the information in the Coverage Policies. In the absence of a controlling federal or state coverage mandate, benefits are ultimately determined by the terms of the applicable benefit plan document. Coverage determinations in each specific instance require consideration of 1) the terms of the applicable group benefit plan document in effect on the date of service; 2) any applicable laws/regulations; 3) any relevant collateral source materials including Coverage Policies and; 4) the specific facts of the particular situation. Coverage Policies relate exclusively to the administration of health benefit plans. Coverage Policies are not recommendations for treatment and should never be used as treatment guidelines. Proprietary information of CIGNA.* 

## Coverage Policy

**CIGNA does not cover whole-body (i.e., total-body or full-body) computed tomography (CT) scanning as a screening tool because it is considered experimental, investigational or unproven.**

## General Background

Whole-body computed tomography (CT) screening is a nonspecific CT scan. A number of different types of CT systems are being promoted for various types of screening, such as multi-slice CT (MSCT) and electron beam CT (EBCT), which is also called electron beam tomography (EBT). The purpose of screening is to prevent or delay, by means of early detection, the development of advanced disease and its adverse effects. Some medical imaging facilities have started using whole-body CT as a preventative or proactive measure and have promoted whole-body CT as a general screening test for healthy individuals who have no symptoms or suspicion of disease (Burk, 2003; FDA, 2003).

Researchers have estimated the radiation-related cancer mortality risk associated with repeated full-body CT scans (Brenner and Elliston, 2004). They concluded that a 45-year-old adult who plans to undergo annual full-body CT scans up to age 75 (i.e., 30 examinations) would accrue an overall estimated lifetime attributable risk of cancer mortality of about 1.9%.

**U.S. Food and Drug Administration (FDA)**

The FDA posted the following statement on their Web site: “At this time, the FDA knows of no data demonstrating that whole-body CT screening is effective in detecting any particular disease early enough for the disease to be managed, treated, or cured and advantageously spare a person at least some of the detriment associated with serious illness or premature death. Any such presumed benefit of whole-body CT screening is currently uncertain, and such benefit may not be great enough to offset the potential harms such screening could cause” (FDA, 2009a).

The FDA (2009a) reminds consumers that:

- Normal findings carry the possibility of inaccuracy and false reassurance. It is unlikely that CT screening will benefit an individual lacking signs or symptoms of disease by detecting a serious disease early enough to treat it and alter the outcome significantly.

- CT screening subjects the individual screened to radiation exposure from x-rays. For a person without symptoms, CT screening is unlikely to discover serious disease, and the potential harm to the individual may be greater than the presumed benefit.

- There are no data demonstrating that whole-body CT screening of individuals without symptoms provides a greater probability of benefit than harm. Nor is there any scientific study known to be underway to develop such data. Although there are several ongoing investigational studies of the effectiveness of using CT to screen people, the studies are focused on high-risk groups for specific diseases (e.g., cigarette smokers for lung cancer).

- The FDA has never approved, cleared, nor certified any CT system specifically for use in screening (i.e., of individuals without symptoms), because no manufacturer has ever demonstrated to the FDA that their CT scanner is effective for screening for any disease or condition.

**Literature Review**
Furtado et al. (2005) conducted a retrospective analysis to determine the frequency and spectrum of findings and recommendations reported with whole-body CT screening at a community screening center. The radiologic reports of 1192 consecutive patients who underwent whole-body electron-beam CT screening of the chest, abdomen, and pelvis were analyzed, and recommendations were retrospectively tabulated and assigned scores. Of the 1192 patients, 76% were self-referred, and 86% had at least one abnormal finding described in the whole-body CT screening report. There were a total of 3361 findings, with a mean of 2.8 per patient. Findings were described most frequently in the spine (32%), abdominal blood vessels (17%), lungs (14%), kidneys (11%), and liver (5%). Four hundred and forty-five (37%) patients received at least one recommendation for further evaluation. The most common recommendations were for additional imaging of the lungs or the kidneys. The authors stated that most findings were benign by description and required no further evaluation. The authors reported that 37% of patients had findings that elicited recommendations for additional evaluation, but further research is required to determine the clinical importance of these findings and the effect on patient care.

**Professional Societies/Organizations**
The following public health agencies, national medical agencies, and professional societies do not recommend whole-body CT screening: American College of Radiology (ACR), the American College of Cardiology/American Heart Association, the American Association of Physicists in Medicine, the Health Physics Society, the Agency for Healthcare Research and Quality's U.S. Preventive Services Task Force, and the American Medical Association (FDA, 2009a).

The ACR's position statement on total-body CT screening states, “The ACR, at this time, does not believe there is sufficient evidence to justify recommending total body CT screening for patients with no symptoms or a family history suggesting disease. To date, there is no evidence that total body CT screening is cost efficient or effective in prolonging life. In addition, the ACR is concerned that this procedure will lead to the discovery of numerous findings that will not ultimately affect patients' health but will result in unnecessary follow-up examinations and treatments and significant wasted expense. The ACR will continue to monitor scientific studies concerning these procedures” (ACR, 2002). There have been no updates to this statement since 2002.

**Summary**
There is insufficient evidence in the published medical literature evaluating the clinical utility of whole-, total- or full-body computed tomography (CT) as a screening tool. Its impact on meaningful health outcomes has not been demonstrated.

## Coding/Billing Information

**Note:** This list of codes may not be all-inclusive.

**Experimental/Investigational/Unproven/Not Covered:**

| CPT®* Codes | Description |
|---|---|
| 76497† | Unlisted computed tomography procedure (eg, diagnostic, interventional) |

**†Note: Experimental, investigational, unproven and not covered when used to report whole-body computed tomography scanning as a screening tool.**

| ICD-9-CM Diagnosis Codes | Description |
|---|---|
| | All codes |



## References

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## Policy History

| Pre-Merger Organizations | Last Review Date | Policy Number | Title |
|---|---|---|---|
| CIGNA HealthCare | 12/15/2007 | 0250 | Computed Tomography for Whole-Body Screening |
| Great-West Healthcare | 3/14/2006 | 04.213.02 | Whole-Body Computed Tomography (CT) |