



BlueCross BlueShield of Louisiana

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Whole Body Computed Tomography Scan as a Screening Test Archived Medical Policy

Archived medical policies are no longer subject to periodic review, are maintained for reference, and may be returned to active status if the need is identified.

Policy # 00216
Original Effective Date: 09/20/2006
Archived Date: 10/16/2013

Applies to all products administered or underwritten by Blue Cross and Blue Shield of Louisiana and its subsidiary, HMO Louisiana, Inc. (collectively referred to as the "Company"), unless otherwise provided in the applicable contract. Medical technology is constantly evolving, and we reserve the right to review and update Medical Policy periodically.

Note: This policy addresses whole-body computed tomography (CT) scanning or whole-body CT screening as a potential preventive measure for individuals who have no signs or symptoms of disease.

Services Are Considered Investigational

Coverage is not available for investigational medical treatments or procedures, drugs, devices or biological products.

Based on review of available data, the Company considers whole body computed tomography scans as a screening test to be **investigational**.*

Background/Overview

This policy addresses whole-body CT scanning or whole-body CT screening as a potential preventive measure for individuals who have no signs or symptoms of disease.

Whole-body computed tomography scans, which encompass the body from the neck to the pelvis, have been proposed as a general screening test for diseases of the thyroid (i.e., cancer), lungs (i.e., lung cancer), heart (i.e., cardiovascular disease [CVD]), and abdominal and pelvic organs (cancer, CVD). Often the test is marketed directly to the patient and is offered through mobile CT scanners that travel from community to community. Different aspects of whole-body CT scanning as a screening test have been addressed in individual policies, i.e., spiral CT scanning as a screening test for lung cancer; CT colonography as a screening test for colon cancer; and CT scanning to detect coronary calcium.

Rationale/Source

Literature searches using the MEDLINE database through March 11, 2013 have identified a single controlled trial on whole-body CT scans. In 2007, Obuchowski et al. reported a small (50 subjects) randomized trial of whole-body screening (vs. no screening for 3 years) to determine the feasibility of a larger scale study. Ninety percent of the subjects were reported to be compliant with follow-up at 2 years. Images were interpreted independently by 6 radiologists from 2 institutions. Based on one interpretation, 16 (64%) subjects in the screening group had abnormal findings, but no cancers were detected. A second interpretation showed a similar rate of abnormal findings, although abnormalities were not in the exact same group of 16 subjects. On average, medical costs were twice as high for screened subjects. The authors concluded that a full-scale randomized controlled trial (RCT) of whole-body screening will need to account for the large variability in interpretation of the images, the high rate of incidental findings, and the low prevalence of cancers.

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Also identified were 2 retrospective reviews of findings/recommendations from 982 and 1,192 whole-body CT screenings. Both studies observed a strong association between age of the patient and the number of findings and recommendations. Actionable findings ranged from 22.5% of subjects younger than 40 years of age to 80% of patients older than or equal to 80 years of age; follow-up imaging was the most common recommendation.

Summary

Evidence has not changed substantially since a 2003 review that concluded “no published studies demonstrate that these procedures reduce morbidity or mortality when used to screen healthy, asymptomatic patients.” Moreover, the radiation dose of the CT scan itself could lead to an excess lifetime risk of fatal cancer and that radiation dose and associated risk should be included as fundamental parameters for investigating the outcomes of a CT-based screening program. Evidence reviewed in a 2010 report from the Canadian Health Services Research Foundation indicates that whole-body CT screening uses 500 to 1,000 times the radiation levels of a routine chest x-ray, without any demonstrated positive effects on life expectancy. The current literature does not support an improvement in health outcomes with whole-body CT screening. Therefore, this procedure is considered investigational.

References

1. Blue Cross and Blue Shield Association, Medical Policy Reference Manual, “Whole Body Computed Tomography Scan as a Screening Test”, 6.01.41. 4:2013.
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4. Furtado CD, Aguirre DA, Sirlin CB et al. Whole-body CT screening: spectrum of findings and recommendations in 1192 patients. *Radiology* 2005; 237(2):385-94.
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7. Canadian Health Services Research Foundation. Myth: whole-body screening is an effective way to detect hidden cancers. *J Health Serv Res Policy* 2010; 15(2-Jan):118-9.
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9. U.S. Food and Drug Administration. Whole body scanning using computed tomography. Last update 04/06/2010. Available online at: <http://www.fda.gov/Radiation-EmittingProducts/RadiationEmittingProductsandProcedures/MedicalImaging/MedicalX-Rays/ucm115340.htm>. Last accessed March, 2013.

Coding

The five character codes included in the Blue Cross Blue Shield of Louisiana Medical Policy Coverage Guidelines are obtained from Current Procedural Terminology (CPT®)‡, copyright 2012 by the American Medical Association (AMA). CPT is developed by the AMA as a listing of descriptive terms and five character identifying codes and modifiers for reporting medical services and procedures performed by physician.

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CPT is a registered trademark of the American Medical Association.

Codes used to identify services associated with this policy may include (but may not be limited to) the following:

Code Type	Code
CPT	76497
HCPCS	No code
ICD-9 Diagnosis	V76.0 thru V76.9, V81.0 thru V81.6
ICD-9 Procedure	No code

Policy History

Original Effective Date: 09/20/2006

09/06/2006 Medical Director review

09/20/2006 Medical Policy Committee approval.

10/01/2008 Medical Director review

10/22/2008 Medical Policy Committee approval. No change to coverage eligibility.

10/01/2009 Medical Policy Committee approval

10/14/2009 Medical Policy Implementation Committee approval. No change to coverage eligibility.

10/14/2010 Medical Policy Committee review

10/20/2010 Medical Policy Implementation Committee approval. Coverage eligibility unchanged.

10/06/2011 Medical Policy Committee review

10/19/2011 Medical Policy Implementation Committee approval. Coverage eligibility unchanged.

10/11/2012 Medical Policy Committee review

10/31/2012 Medical Policy Implementation Committee approval. Coverage eligibility unchanged.

10/03/2013 Medical Policy Committee review. Recommend archiving policy.

10/16/2013 Medical Policy Implementation Committee approval. Archived policy.

Next Scheduled Review Date: Archived medical policy.

*Investigational – A medical treatment, procedure, drug, device, or biological product is Investigational if the effectiveness has not been clearly tested and it has not been incorporated into standard medical practice. Any determination we make that a medical treatment, procedure, drug, device, or biological product is Investigational will be based on a consideration of the following:

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- A. whether the medical treatment, procedure, drug, device, or biological product can be lawfully marketed without approval of the U.S. Food and Drug Administration (FDA) and whether such approval has been granted at the time the medical treatment, procedure, drug, device, or biological product is sought to be furnished; or
- B. whether the medical treatment, procedure, drug, device, or biological product requires further studies or clinical trials to determine its maximum tolerated dose, toxicity, safety, effectiveness, or effectiveness as compared with the standard means of treatment or diagnosis, must improve health outcomes, according to the consensus of opinion among experts as shown by reliable evidence, including:
 - 1. Consultation with the Blue Cross and Blue Shield Association technology assessment program (TEC) or other nonaffiliated technology evaluation center(s);
 - 2. credible scientific evidence published in peer-reviewed medical literature generally recognized by the relevant medical community; or
 - 3. reference to federal regulations.

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