



CIGNA MEDICAL COVERAGE POLICY

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Subject Spiral Computed Tomography for Lung Cancer Screening

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Computer-Aided Detection of Chest Radiographs for Lung Cancer Screening
Nuclear Imaging including Single-Photon Emission Computed Tomography (SPECT)

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Coverage Policy

CIGNA does not cover spiral (i.e., helical or low-dose) computed tomography (CT), or multislice spiral (i.e., multidetector row) CT for lung cancer screening of asymptomatic individuals because these technologies are considered experimental, investigational or unproven for this indication.

General Background

Computed tomography (CT) is a diagnostic imaging procedure that uses x-rays to obtain cross-sectional images of the body. A CT, in which the patient is moved through the scanner continuously rather than in increments, so that the path of the beam through the patient is a continuous spiral, is called spiral CT, helical, or low-dose CT (LDCT). Spiral CT emits less radiation than conventional CT. With spiral CT, the scanner takes nonstop images, one immediately following the other, as the patient is moved through the machine. Multislice spiral CT (MSCT) (i.e., multidetector row CT [MDCT]) can image multiple thin slices simultaneously.

Lung cancer is the second most commonly occurring noncutaneous cancer in the United States and is the leading cause of cancer deaths. Risk factors associated with lung cancer include tobacco smoking, exposures to environmental and occupational substances and family history of lung cancer. Most lung cancer patients are diagnosed when their disease is advanced, and nearly 90% die within two years (National Cancer Institute [NCI], 2010). Due to the prevalence and the mortality associated with lung cancer, there has been much interest in developing screening tests for lung cancer, in particular, for at-risk individuals and at an earlier and more

curable stage. Chest x-ray (CXR) and sputum cytology have been the most common methods used for screening for lung cancer; however, it has been noted that there is no good evidence that screening with these tests can reduce lung cancer mortality (NCI, 2010).

Spiral CT has been proposed as a method of screening asymptomatic individuals for lung cancer. It has been suggested that spiral CT may be an improved early lung cancer detection tool based on the advantages it appears to have over CXR and sputum cytology to detect lung cancer at an earlier stage. However, questions remain as to whether screening with spiral CT can reduce lung cancer mortality. This is the subject of ongoing randomized controlled clinical trials.

There are potential disadvantages associated with this test that include false-positive results and overdiagnosis (NCI, 2010). The findings have indicated that spiral CT detects more lung cancers than CXR, and the majority of them are in the early stage of disease. This may be due to the scan finding cancers that are often indolent in their behavior (Bach, et al., 2003). The false-positive rate is not known, but preliminary studies have indicated that this is possible. This situation may lead to anxiety, unnecessary diagnostic tests and invasive procedures (i.e., biopsies) (United States Preventive Services Task Force [USPSTF], 2004). Although it appears that screening with spiral CT scan may be the most sensitive test for lung cancer detection, there are questions regarding the specificity of this test. Spiral CT scan is associated with an increase in radiation exposure as compared to the exposure from traditional CXR, a fact which warrants consideration.

At this time, there is a lack of standards and guidelines regarding subject selection for screening, time frame for screening standards and method of handling nodules that are detected (Aberle, et al., 2001). There is no widely accepted standard to date regarding the workup of a positive screening test, nor published data based on clinical trials or other studies that demonstrate the superiority of a specific diagnostic algorithm for the follow-up of noncalcified nodules identified on screening (Pinsky, et al., 2005). In addition, it is noted that there are no guidelines for management of other suspicious findings that may result from screening.

Literature Review

Systematic Reviews: A systematic review was performed by the National Coordinating Centre for Health Technology Assessment (Black, et al., 2006) to examine the clinical- and cost-effectiveness of screening for lung cancer using CT. Twelve studies of CT screening for lung cancer were included in the study, with two randomized controlled trials and ten studies without a control group. The randomized controlled trials were less than one year's duration. The conclusion noted that there was currently no evidence that screening improves survival or reduces mortality. The review contained the recommendations that evidence with randomized controlled trials is needed regarding the effect of CT screening on mortality.

A Cochrane review was performed (Manser, et al., 2005) for the purpose of assessing the evidence regarding the ability of various methods to reduce lung cancer mortality and to evaluate the possible harms and costs associated with screening. Seven trials (six randomized controlled trials and one non-randomized controlled trial) with a total of 245,610 subjects were included in the review. The review noted that there were no studies with an unscreened controlled group, and there were no controlled studies of spiral CT. The reviewers concluded that the current evidence does not support regular screening for lung cancer. It is noted that the review found early detection methods such as CXR, testing sputum or CT scan do not appear to have much impact on either treatment or number of deaths from lung cancer. In addition, it is noted that the review found frequent CXR may be associated with harm. The authors concluded that there is insufficient evidence to support screening for lung cancer with any screening modality including CXR, sputum cytology, or helical CT. Further randomized controlled studies of screening methods for lung cancer are indicated.

Manser et al. (2005) conducted an evidence-based review of all published observational studies of low-dose helical CT screening for lung cancer. Eight observational studies of CT screening for lung cancer were included in the study. The study notes that evidence from previous controlled trials of chest radiography and sputum cytology does not support lung cancer screening. It has been noted that compared to CXR, low-dose CT (LDCT) is a sensitive screening tool and appears to detect a high proportion of small lung cancers at an early and resectable stage. The authors concluded that, although the studies appear promising, they are preliminary, and it remains to be proven that the early detection and treatment will lead to a reduction in mortality. The issue will be addressed by randomized controlled trials.

A systematic review found 208 articles from 1988 to August 2002 and synthesized available evidence for the efficacy of CT screening in 1) detecting potentially curative stages of lung cancer, and 2) reducing lung cancer mortality (Bepler, et al., 2003). Other outcomes of interest included detection rate of cancer and of suspicious lesions, histology and stage of cancer at detection, screening-related morbidity, and the identification of populations uniquely suited for CT screening. The researchers drew several conclusions:

- Spiral CT screening of asymptomatic patients produces three times higher detection than CXR.
- CT screening detects adenocarcinoma but may not be sufficiently sensitive to detect squamous- and small-cell carcinoma.
- An increase in the number of cases with stage I is not accompanied by a decrease in the number of cases with inoperable stages of lung cancer.

The study noted that if this last observation is confirmed in future studies, then it is unlikely that CT screening would lower lung cancer mortality rates. Also, the authors noted that it is reasonable to assume that CT scanning for lung cancer may yield a substantial false-negative rate, given the discrepancy in the distribution of histological subtypes of lung cancers detected by CT compared to those reported nationwide. The researchers were unable to answer several questions, including whether CT screening results in a decrease of resectable cases and whether it is efficacious in lowering disease-specific and overall mortality. The researchers concluded that prospective, unbiased, population-wide trials are needed before the hypothesis can be either accepted or rejected that early detection of lung cancer by CT screening will reduce lung cancer mortality.

Studies: Infante et al. (2007) presented the baseline results of a prospective, randomized trial that compared screening for lung cancer with annual spiral computed tomography (CT) as compared to a yearly clinical review (DANTE trial). Secondary endpoints in the study include incidence, stage at diagnosis, and resectability. The study was started in 2001 and includes 2472 subjects, age 60–74 years old, that were smokers of at least 20 pack-years. All of the participants received a baseline medical examination, CXR and sputum cytology. The spiral CT group (n=1276) received a spiral CT scan at baseline, then yearly for the following 4 years. For the control group (n=1196), a yearly clinical examination was scheduled for the following 4 years. In the spiral CT group, 28 lung cancers were detected, 13 of which were visible in the baseline chest X-rays (overall prevalence 2.2%). Sixteen out of 28 tumors (57%) were stage I, and 19 (68%) were resectable. In the control group, eight cases were detected by the baseline chest X-rays (prevalence rate 0.67%), four (50%) were stage I, and six (75%) were resectable. There was further investigation with high-resolution CT and with PET performed in 128 (10.0%) and 35 (2.7%) patients in the spiral CT group and in 20 (1.8%) and 2 (0.2%) patients in the control group, respectively with a significant difference ($p < 0.05$) for both of these tests. In addition, a significant increase in invasive procedures was observed in the CT group compared with the control arm (52 versus 12; $p < 0.05$). Six patients in the control group underwent thoracotomy for lung cancer. In the CT group, 22 of the 32 thoracotomies were performed for lung cancer, while four patients had other disease—six of the 32 thoracotomies were performed for benign pulmonary nodules. Longer follow-up is needed to clarify the role of lung cancer screening and the impact on reducing mortality.

In 2009, Infante et al. reported on interim three year results of the DANTE trial. After median follow-up of almost three years, 60 (4.7%) patients were diagnosed with lung cancer in the low-dose CT (LDCT) group and 34 (2.8%) ($p = 0.016$) in the control group. There were more patients with stage 1 disease in the LDCT group (54 vs. 34%; $p = 0.06$). It was noted that the number of advanced lung cancer cases was the same in both groups. Twenty patients in the LDCT group (1.6%) and 20 controls (1.7%) died of lung cancer, while 26 and 25 respectively have died of other causes. A significant number of surgical procedures (13%) were performed for pulmonary lesions that ultimately turned out to be benign. There was a small stage-shift in favor of the screening arm was observed; however, resection rates, advanced case rates and disease-specific mortality were similar. The authors recommend that lung cancer screening by spiral CT should not be proposed outside research programs.

Blanchon et al. (2007) reported on baseline results of a randomized study that compared LDCT to CXR to detect early stage lung cancer (Depiscan study). The study aimed to determine the feasibility of enrollment by general practitioners, investigations and diagnostic procedures by university hospital radiologists and multidisciplinary teams, data management by centralized clinical research assistants, and anticipate the future management of a large national trial. The study included subjects who were asymptomatic males or females aged 50–75 years with a current or former smoking history of ≥ 15 cigarettes per day for at least 20 years. The study included 621 subjects. Annual LDCT (n=336) or CXR (n=285) screenings were planned at baseline and

annually for two years. At least one nodule was detected in 152 in the LDCT group (45.2%) and 21 in the CXR screening arm (7.4%). Eight lung cancers were detected in the low-dose CT (LDCT) arm and one in the CXR arm. The pilot trial estimated that non-calcified nodules are 10 times (6.3–17.07) more often detected from LDCT than from CXR. It was found that enrollment by general practitioners was more difficult than expected.

In 2007, Bach et al. reported on a longitudinal analysis that was conducted to assess whether screening may increase the frequency of lung cancer diagnosis and lung cancer resection or may reduce the risk of a diagnosis of advanced lung cancer or death from lung cancer. The study involved 3246 asymptomatic current or former smokers who were screened for lung cancer beginning in 1998, in one of three arms at either one of two academic medical centers. The follow-up was for a median of 3.9 years. Interventions included annual CT scans with comprehensive evaluation and treatment of detected nodules. The primary outcome measurements included comparison of predicted with observed number of new lung cancer cases, lung cancer resections, advanced lung cancer cases, and deaths from lung cancer. The results included: 144 individuals diagnosed with lung cancer compared to 44.5 expected cases (relative risk [RR], 3.2; 95% confidence interval [CI], 2.7–3.8; $p < .001$); 109 individuals who had a lung resection compared to 10.9 expected cases (RR, 10.0; 95% CI, 8.2–11.9; $p < .001$). It was noted that there was no evidence of a decline in the number of diagnoses of advanced lung cancers with 42 individuals as compared to 33.4 expected cases. Additionally, it was noted that there was no evidence of a decline in deaths from lung cancer, with 38 deaths due to lung cancer observed as compared to 38.8 expected (RR, 1.0; 95% CI, 0.7–1.3; $p = .90$). The authors concluded that, “Screening for lung cancer with low-dose CT may increase the rate of lung cancer diagnosis and treatment, but may not meaningfully reduce the risk of advanced lung cancer or death from lung cancer. Until more conclusive data are available, asymptomatic individuals should not be screened outside of clinical research studies that have a reasonable likelihood of further clarifying the potential benefits and risks.”

Callol et al. (2007) conducted a study to evaluate the effectiveness of LDCT in diagnosing early stage lung cancer. The study included patients over 50 years of age who were active smokers, or who had stopped smoking up to six months previously, who had smoked more than 30 cigarettes daily for at least 15 years, or 20 cigarettes daily for 20 years, or more than 10/packs/year and were in contact with asbestos at work. All participants were evaluated using LDCT. For those participants in whom LDCT showed no pathological findings, or in those cases classified as benign, a new scan was performed two years after the first. Among the initial 482 candidates in the study group, 466 LDCT scans were performed at baseline, revealing nine extrapulmonary lesions and 114 pulmonary lesions in 98 subjects. Of those diagnosed, doubts were raised in 32 cases. Of these, 15 were considered benign by high resolution computed tomography (HRCT). In the remaining 17 cases, stage IAp adenocarcinoma was diagnosed at baseline (0.2%). In the cases where LDCT was performed after two years, an additional four adenocarcinomas were diagnosed, all in stage IAp (0.98%). The complete study, including prevalence cut-off and incidence calculation after two years, resulted in the diagnosis of five cancers (1.1%) and two false-positive cases (28%). The authors concluded that, “The use of low-dose computed tomography in risk groups is valid for the early diagnosis of bronchogenic cancer. Nevertheless, significant problems remain, particularly those associated with false positive interpretations. The results of randomized studies on lung cancer mortality such as the US NLST trial and the Dutch-Belgian NELSON trial have to be awaited before any conclusion regarding the effectiveness of LDCT screening can be drawn.”

Fasola et al. (2007) reported on a study that evaluated the feasibility of using LDCT for the early diagnosis of lung cancer and malignant pleural mesothelioma in an asbestos-exposed population. The study involved 1,045 participants who were already enrolled in a surveillance program for asbestos-exposed workers and former workers, age 40–75. The median pack-years in smokers/former smokers was 18.5, and 34 percent had never smoked. A chest x-ray and LDCT were performed. Subjects with negative examinations were assigned to annual LDCT, while those with positive findings received high-resolution CT and additional diagnostic workup as appropriate. It was noted that with the LDCT, 834 noncalcified nodules were identified in 44% of participants, versus 43 nodules in 4% on CXR. Pleural abnormalities were observed in 70% of the LDCT group and 44% of the CXR group. The LDCT identified nine cases of non-small cell lung cancer (eight stage I, one stage IIA, one thymic carcinoid), which corresponded to 1% of the enrolled population. None of the cases of lung cancer had been detected by CXR. There were no cases of pleural mesothelioma diagnosed. The testing revealed 11 false-positive results. The authors concluded that the findings, “first suggest that LDCT may be at least as useful in asbestos workers as in heavy smokers for the early diagnosis of lung cancer; this benefit is evident even in a poor-risk population, with low rates of smoking prevalence and a previous history of radiological surveillance. The role of spiral tomography in screening for pleural mesothelioma remains uncertain.”

The International Early Lung Cancer Action Program Investigators (I-ELCAP) reported on a large, non-randomized study that involved 31,567 asymptomatic persons who were at risk for lung cancer (2006). The participants were 40 years of age and older, and were at risk of lung cancer due to a history of cigarette smoking, occupational exposure, or exposure to secondhand smoke. The participants underwent baseline CT screening, with repeat screening performed seven to 18 months after the previous screening. The 10-year lung cancer-specific survival rate was estimated for participants with clinical stage I lung cancer that was detected on CT screening and diagnosed by biopsy. The screening resulted in a diagnosis of lung cancer in 484 participants. Of these, 412 (85%) were found to have clinical stage I lung cancer with an estimated 10-year survival rate of 88%. Among participants with stage I lung cancer who underwent surgical resection within one month after diagnosis, the survival rate was 92%. The eight participants who did not receive treatment died within five years of diagnosis. The authors concluded that annual spiral CT screening can detect lung cancer that is curable. While the results of this trial are promising, this study 1) focused on high-risk individuals, 2) was not a randomized controlled trial and did not contain a comparison group, and 3) relied on specialty centers for follow-up and treatment.

A prospective cohort study was performed with 1520 at-risk individuals undergoing five (one initial and four subsequent) annual low-dose CT (LDCT) examinations of the chest and upper abdomen (Swensen, et al., 2003; Swensen, et al., 2005). This was reported at two years and five years. Two years after baseline CT scanning, 2832 uncalcified pulmonary nodules were identified in 1049 participants (69%). Forty cases of lung cancer were diagnosed: 26 at baseline (prevalence) CT examinations and 10 at subsequent annual (incidence) CT examinations. CT alone identified 36 cases; sputum cytologic examination alone, two. The mean size of the non-small cell cancers detected by CT was 15.0 mm. In 2005, Swensen et al. (2005) reported on five years' experience with this study. After five annual CT examinations, 3356 uncalcified lung nodules were identified in 1118 (74%) of the participants. Sixty-eight lung cancers were diagnosed in 66 participants. This included 31 at initial screening, 34 at subsequent screenings and three interval cancers. Thirty-eight subsequent cases of non-small cell cancers were detected, 17 of which were stage I cancers. Forty-eight participants died of various causes since enrollment. The lung cancer mortality rate for incidence portion of the trial was 1.6 per 1000 person-years. The researchers concluded that CT can identify early-stage lung cancers, although the rate of benign nodule detection is high.

Novella et al. (2005) conducted a case study of 500 subjects considered to be at high risk for lung cancer and that met the following inclusion criteria: age \geq 55 years, current daily smokers or former smokers (up to 10 years before), \geq 20 pack-years and with no personal history of malignancy. The subjects underwent annual LDCT scan for five consecutive years. Seventy-three percent of subjects were male, with a median age of 59 years, and 91% were current smokers. At baseline, nodules \geq 5 mm were detected in 114 patients undergoing LDCT. Five cases of lung cancer were detected. In two cases, a pathological diagnosis of atypical adenomatous hyperplasia was made. Three new cases of lung cancer were detected in the second and third year of the study. The authors concluded that, despite some promising data, convincing evidence from ongoing randomized trials is needed to support the routine use of LDCT as a recommended tool for screening of lung cancer.

The Lung Screening Study (LSS), a one-year special project of the Prostate, Lung, Colorectal, and Ovarian (PLCO) Cancer Screening Trial, compared the ability of single-view CXR and LDCT screening to detect lung cancer in smokers or former smokers between the ages of 55 and 74. The LSS randomized 3318 participants to receive either spiral CT or CXR and, in the absence of a cancer diagnosis, a second screening test one year later. A total of 20.5% of screened subjects in the LDCT scan arm and 9.8% of those in the CXR arm had findings that were suspicious for lung cancer (Gohagan, et al., 2004). Thirty lung cancers in subjects in the LDCT arm and seven lung cancers in patients in the CXR arm were diagnosed following a positive screening result. The study did not evaluate whether this cancer detection resulted in reduced cancer mortality. Initial data from the LSS convincingly demonstrated the feasibility of carrying out the National Lung Screening Trial (NLST), an ongoing, randomized controlled clinical trial to compare LDCT or spiral CT and CXR in detecting lung cancer (Gohagan, et al., 2004).

A group of researchers reviewed screening for lung cancer, including prior trials, ongoing early-detection studies, and potential limitations, and made recommendations based on published data (Patz, et al., 2000). They strongly recommended that well-designed studies be conducted, completed, analyzed, and validated before any mass screening program is implemented. Unless and until these trials clearly confirm that early screening can reduce mortality from lung cancer, only carefully monitored studies should enroll patients for lung cancer screening.

Ongoing Studies: The National Lung Screening Trial (NLST) is a large, randomized, controlled research study currently underway and sponsored by the NCI for men and women at risk for lung cancer. Launched in 2002, the NLST is comparing two ways of detecting lung cancer: spiral CT and standard CXR. Due to the large number of individuals participating and since it is a randomized, controlled trial, the study aims to demonstrate if either test is better at reducing mortality from lung cancer. By February 2004, nearly 50,000 current or former smokers had joined the NLST at more than 30 study sites across the country. The individuals were randomized to receive either spiral CT or CXR. They will then have the same screening procedure again one and two years later, and will be contacted by the researchers at least annually to monitor their health. The trial, which is closed to further enrollment, is slated to collect and analyze data for eight years and will examine the risks and benefits of spiral CT scans compared to those of CXRs.

Another large ongoing study is the Dutch-Belgian randomized lung cancer screening trial (NELSON). The NELSON trial is investigating whether 16-detector multislice computed tomography screening will decrease lung cancer mortality compared to no screening. This trial was started in August 2003 and is expected to be completed in December 2015. The trial aims to establish in a randomized controlled trial if screening for lung cancer by multislice low-dose CT in high-risk individuals will lead to a 25% decrease in lung cancer mortality and to estimate the impact of lung cancer screening on health-related quality of life and smoking cessation. It is expected to include 15,600 participants. The participants will receive CT screenings or usual care. It differs from the NLST in that the control arm will not receive x-rays or screening. Another difference is that the two annual incidence screens will occur one year and three years after the first prevalence screen (Black, 2007).

Professional Societies/Organizations

American Cancer Society (ACS): The ACS does not recommend lung cancer screening for asymptomatic individuals at risk for lung cancer (Smith, et al., 2005). Individual physicians and patients may decide, however, that the evidence is sufficient to warrant the use of screening tests, including CXR, low-dose CT (LDCT) (i.e., spiral or helical CT), sputum cytology, or molecular screening, on an individual basis.

American College of Chest Physicians (ACCP): A multidisciplinary panel was convened by the ACCP to develop clinical practice guidelines for lung cancer prevention, diagnosis and treatment. The panel conducted and published a review of literature on early lung cancer screening, evaluating CXR, sputum cytology, and spiral or LDCT (Bach, et al., 2003). The five randomized controlled trials reviewed suggest that neither CXR nor sputum cytology is beneficial as a screening test, since neither prolongs the life expectancy of an individual with lung cancer. Although some of the observational studies of spiral CT show that it detects far more early-stage lung cancer than a CXR does, better early detection does not appear to correlate with an improvement in life expectancy. Also, there are concerns regarding false-positives. The authors conclude that further research is needed to better define the role of LDCT or spiral CT in evaluating asymptomatic, high-risk individuals. The ACCP guidelines regarding screening for lung cancer (Bach, et al., 2003) note that, "For individuals without symptoms or a history of cancer, we recommend against the use of a single LDCT or serial LDCTs to screen for the presence of lung cancer. At-risk individuals who express an interest in undergoing LDCT screening should be made aware of several ongoing high-quality clinical studies of this technology."

In 2007, the ACCP published an update of the existing lung cancer screening guidelines, focusing on recent developments and recent new studies of screening technologies (Bach, et al., 2007). The guidelines note that, "the evidence to date does not support offering LDCT screening for individuals, irrespective of their risk for lung cancer, in the absence of an experimental protocol that has been approved by and is being overseen by an institutional review board." The recommendation regarding screening with LDCT is, "We do not recommend that low-dose CT be used to screen for lung cancer except in the context of a well-designed clinical trial."

Canadian Coordination Office for Health Technology Assessment (CCOHTA): The Canadian Coordination Office for Health Technology Assessment (CCOHTA) conducted a review of the literature regarding the use of multislice/helical CT for lung cancer screening (CCOHTA, 2003). The findings included:

- Compared to chest radiography, multislice/helical CT is able to detect lung cancers of smaller size and at an earlier stage.
- The rate of detecting benign lung nodules is high using this technology. False-positives may result in undue anxiety and performance of additional testing.
- Currently, the evidence does not exist to suggest that detecting early stage lung cancer reduces mortality. Randomized controlled studies are investigating this issue.

- At the present time, screening for lung cancer with multislice/helical CT would be premature.

Society of Thoracic Radiology: A consensus statement of this organization, Screening for Lung Cancer with Helical Computed Tomography (Aberle, et al., 2001), states that appropriate studies need to be performed to address lung cancer mortality and cure rates. It recommends against mass screening for lung cancer at this time, strongly encouraging appropriate subjects to participate in trials instead.

United States Preventive Services Task Force (USPSTF): The USPSTF concluded that the evidence is insufficient to recommend for or against screening asymptomatic persons for lung cancer, whether with low-dose CT (LDCT), CXR, sputum cytology, or a combination of these tests (USPSTF, 2004). A systematic review of the literature was conducted to aid the current USPSTF in updating its lung cancer screening recommendation (Humphrey, et al., 2004). The authors noted that “Current data do not support screening for lung cancer with any method.” It is noted that there are two randomized trials of screening with chest radiography or LDCT currently underway and that should provide additional critical information.

Summary

While there is some evidence to suggest that spiral (i.e., helical or low-dose) computed tomography (CT), or multislice spiral (i.e., multidetector row) CT scan may be more sensitive than conventional chest radiography and sputum cytology testing for the detection of early-stage lung cancers, the impact on mortality from lung cancer is unknown at this time. The clinical utility of spiral CT as a screening tool for lung cancer in asymptomatic individuals needs to be evaluated by randomized controlled trials designed to measure changes in survival.

Coding/Billing Information

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

Experimental/Investigational/Unproven/Not Covered when used to report spiral (i.e., helical or low-dose) or multislice spiral (i.e., multidetector row) computed tomography (CT) for lung cancer screening:

CPT* Codes	Description
71250	Computed tomography, thorax; without contrast material
71260	Computed tomography, thorax; with contrast material(s)
71270	Computed tomography, thorax; without contrast material, followed by contrast material(s) and further sections
76497	Unlisted computed tomography procedure (eg, diagnostic, interventional)

HCPCS Codes	Description
S8092	Electron beam computed tomography (also known as Ultrafast CT, Cine CT)

ICD-9-CM Diagnosis Codes	Description
V76.0	Special screening for malignant neoplasms; respiratory organs

*Current Procedural Terminology (CPT®) © 2010 American Medical Association: Chicago, IL.

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Policy History

<u>Pre-Merger Organizations</u>	<u>Last Review Date</u>	<u>Policy Number</u>	<u>Title</u>
CIGNA HealthCare	12/15/2007	0007	Spiral Computed Tomography for Lung Cancer Screening

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Connecticut General Life Insurance Company has acquired the business of Great-West Healthcare from Great-West Life & Annuity Insurance Company (GWLA). Certain products continue to be provided by GWLA (Life, Accident and Disability, and Excess Loss). GWLA is not licensed to do business in New York. In New York, these products are sold by GWLA's subsidiary, First Great-West Life & Annuity Insurance Company, White Plains, N.Y.