Clinical Policy Title: Brachytherapy for cancers other than prostate

Clinical Policy Number: CCP.1183

Effective Date: January 1, 2016
Initial Review Date: August 19, 2015
Most Recent Review Date: November 6, 2018
Next Review Date: November 2019

Related policies:
CCP.1117    Brachytherapy for localized prostate cancer

ABOUT THIS POLICY: AmeriHealth Caritas has developed clinical policies to assist with making coverage determinations. AmeriHealth Caritas’ clinical policies are based on guidelines from established industry sources, such as the Centers for Medicare & Medicaid Services (CMS), state regulatory agencies, the American Medical Association (AMA), medical specialty professional societies, and peer-reviewed professional literature. These clinical policies along with other sources, such as plan benefits and state and federal laws and regulatory requirements, including any state- or plan-specific definition of "medically necessary," and the specific facts of the particular situation are considered by AmeriHealth Caritas when making coverage determinations. In the event of conflict between this clinical policy and plan benefits and/or state or federal laws and/or regulatory requirements, the plan benefits and/or state and federal laws and/or regulatory requirements shall control. AmeriHealth Caritas’ clinical policies are for informational purposes only and not intended as medical advice or to direct treatment. Physicians and other health care providers are solely responsible for the treatment decisions for their patients. AmeriHealth Caritas will update its clinical policies as necessary. AmeriHealth Caritas’ clinical policies are not guarantees of payment.

Coverage policy

AmeriHealth Caritas considers the use of brachytherapy for cancers other than prostate cancer to be clinically proven and, therefore, medically necessary for treatment of the following conditions:

- Breast cancer — as an additional conformal boost to the surgical bed and margins following standard whole breast radiotherapy; or for women > 45 years of age with infiltrating ductal carcinoma who are stage T1 or T2 with no distant metastases, with tumors less than 3 centimeters in size and node negative (American Society of Breast Surgeons, 2018; Shah, 2018; Correa, 2017; Hepel, 2017).

- Genitourinary cancers (including bladder, cervical, and endometrial) — must have locally advanced cervical cancer; or as an adjunct to surgery and/or chemotherapy for advanced ovarian cancer; or as adjunctive therapy for endometrial or vaginal cancer after surgery with or without external beam radiation (Pieters, 2017; Viswanathan, 2017; Meyer, 2015; Viswanathan, 2009).
- Respiratory cancers — when used for palliation of obstructing and inoperable endobronchial carcinomas, with or without external beam radiation (Stewart, 2016; Rosenzweig, 2013).

- Digestive tract cancers — palliation for obstructing esophageal cancers not considered operative candidates, or endoscopically treated patients with unresectable advanced gastric carcinoma (Lloyd, 2017; Spaander, 2016).

- Head, neck, and oral cancers — as primary treatment of carcinoma of the face, oral cavity, naso- and oropharynx, or paranasal sinuses (including base of skull), incomplete resections impinging on important structures, or palliation of head and neck tumors (Liu, 2013; Yamazaki, 2013).

- Penile cancers — for squamous cell carcinoma of the penis as an alternative to penectomy, provided there is no evidence of metastatic disease (Crook, 2013).

- Ocular cancers — for uveal melanoma as an alternative to enucleation or exenteration, or retinoblastoma of less than stage T4 (American Brachytherapy Society, 2014).

**Limitations:**

Except as indicated above, brachytherapy for cancers other than prostate cancer is considered investigational or experimental, and therefore not medically necessary.

**Alternative covered services:**

- Chemotherapy.
- External beam radiation.
- Radical cancer surgery.

**Background**

Brachytherapy (interstitial radiation) is a form of radiation therapy in which encapsulated sources of radiation ("seeds"), typically radioactive iodine-125 or palladium-103, are implanted directly into or adjacent to tumor tissues. Brachytherapy is based on the principle that radiation doses decrease as a function of the squared distance from the source, making it possible to deliver intensive exposure to cancerous tissue while minimizing exposure and adverse effects to surrounding healthy tissue.

Introduced in the 1960s, brachytherapy was initially used as a treatment for prostate cancer, the most common noncutaneous malignancy in men. Since then, it has been employed to treat a variety of cancers, as well as other conditions including stenotic obstruction after lung transplant, peripheral vascular disease, and angioplasty.
Brachytherapy is one of two major therapies (the other being breast-conserving surgery) that can be used to treat early stage breast cancer, as an alternative to mastectomy; an estimated 71,000 American women with breast cancer are considered candidates for brachytherapy.

Aside from prostate and breast cancer, brachytherapy can be used for:

- Cervical cancer, as a potential alternative for surgery.
- Endometrial cancer, for inoperable or recurring cases.
- Esophageal cancer, for definitive and palliative treatment, and other digestive cancers.
- Lung cancer, as a stand-alone therapy or part of a combination therapy.
- Head and neck cancers (various).
- Penile cancer.

The treatment can also be used in conjunction with surgery or external beam radiation.

Brachytherapy can employ a variety of radioactive isotopes, including palladium-103, iodine-125 (used for permanent implantation), iridium-192, and cesium-137 (used for temporary implantation).

High and low doses are used in brachytherapy. In some studies, high doses have been found to be the preferable form of treatment. High-dose therapy is associated with patient convenience, more individualized therapy, a more accurate radiation source, and greater ability to treat on an outpatient basis (Liu, 2014).

**Searches**

AmeriHealth Caritas searched PubMed and the databases of:

- UK National Health Services Centre for Reviews and Dissemination.
- Agency for Healthcare Research and Quality’s National Guideline Clearinghouse and other evidence-based practice centers.
- The Centers for Medicare & Medicaid Services.

We conducted searches on September 19, 2018. The search term was “brachytherapy.” We included:

- **Systematic reviews**, which pool results from multiple studies to achieve larger sample sizes and greater precision of effect estimation than in smaller primary studies. Systematic reviews use predetermined transparent methods to minimize bias, effectively treating the review as a scientific endeavor, and are thus rated highest in evidence-grading hierarchies.
- **Guidelines based on systematic reviews**.
- **Economic analyses**, such as cost-effectiveness, and benefit or utility studies (but not simple cost studies), reporting both costs and outcomes — sometimes referred to as efficiency studies — which also rank near the top of evidence hierarchies.
**Findings**

Numerous guidelines on brachytherapy for cancers other than prostate exist, and some are mentioned here. Several guidelines support brachytherapy for breast cancer. One concludes that interstitial multicitheber brachytherapy is effective for early stage breast cancer (Hepel, 2017).

Guidelines for genitourinary cancers include one for bladder cancer by the Groupe Européen de Curiethérapie-European Society for Radiotherapy and Oncology / Advisory Committee on Radiation Oncology Practice, as an alternative to radical cystectomy with pelvic lymph node dissection with or without neoadjuvant chemotherapy (Pieters, 2017). A task force of the American Brachytherapy Society issued recommendations for using the technique to treat cervical cancer (Viswanathan, 2009), as well as cervical and endometrial cancer (Viswanathan, 2017).

Endobronchial brachytherapy is essentially a palliative measure for treating locally advanced non-small cell lung cancer. An American Brachytherapy Society guideline supports use of endobronchial brachytherapy for disease palliation in patients with central obstructing lesions, especially in patients who have previously received external beam radiotherapy. Brachytherapy is not recommended after sub-lobar resection, except as part of a clinical trial (Stewart, 2016). An American College of Radiology guideline supports use of brachytherapy in symptomatic endobronchial tumors (Rozenzweig, 2013).

For digestive tract cancers, high-dose brachytherapy is recommended by the American Brachytherapy Society for recurrent and primary locally advanced disease, along with gynecologic cancers, soft tissue sarcoma, and some head and neck and pediatric cancers. Fractionated brachytherapy is also acceptable for digestive tract cancer (Lloyd, 2017). A guideline from the European Society of Gastrointestinal Endoscopy states that brachytherapy can provide superior survival and quality of life compared to stents (Spaander, 2016).

For head and neck cancers, the initial focus of brachytherapy on the cure of small tumors is now also a focus on local dose escalation complementary to external beam radiation therapy, perioperative function preservation, and treating recurrent disease (Kovacs, 2015).

Research on penile cancers led the American Brachytherapy Society and the European Society of Therapeutic Radiation Oncology to recommend low doses of brachytherapy using iridium-192 for penile cancers T1, T2, and T3 (Crook, 2013).

A guideline from the American Brachytherapy Society Ophthalmic Oncology Task Force advises that ophthalmic plaque radiation therapy is most suitable in subspecialty brachytherapy centers, by subspecialty-trained surgeons. The group agreed that most melanomas of the iris, ciliary body, and choroid, but not tumors with gross orbital extension and blind painful eyes or those with no light perception vision, can be treated with brachytherapy (American Brachytherapy Society, 2014).
The following systematic reviews, meta-analyses, and other large-scale or randomized trials provide information on efficacy and safety of brachytherapy for various (non-prostate) cancers:

- **Breast cancer.**
  - A review of 67 articles found that five-year local failure rates ranged from 1.4 percent to 6.1 percent for multicatheter interstitial brachytherapy, and 0 percent to 5.7 percent for single-entry brachytherapy catheters. Infection rates were 0 percent to 12 percent. Symptomatic fat necrosis was documented in 0 percent to 12 percent and 0 percent to 3.2 percent of patients treated with the two catheters, respectively (Shaitelman, 2017).
  - A MammoSite breast brachytherapy catheter to deliver accelerated irradiation, on cases deemed suitable and unsuitable for this treatment. Five-year recurrence rates were not significantly different for the 176 unsuitable cases (5.25 percent) and the 1,273 suitable cases (3.6 percent, $P = 0.16$) (Beitsch, 2010b).
  - Long-term outcomes were studied on 157 patients receiving accelerated partial breast irradiation with balloon-and-catheter-based (MammoSite) brachytherapy after breast-conserving surgery and axillary staging. Five- and seven-year ipsilateral breast control rates were both 98 percent, and nodal control rates were 99 percent and 98 percent. Rates of ipsilateral breast recurrence, nodal failure, and distant failure were low (2.5 percent, 1.9 percent, and 0.6 percent). Survival rates were 89 percent and 86 percent (overall) and 100 percent and 99 percent (breast cancer) (Vargo, 2014).

- **Genitourinary cancers.**
  - A review of 30 studies ($n = 18,937$) of women with cervical cancer given high- or low-dose brachytherapy produced similar five-year survival and disease-free survival rates (effect sizes 1.1350 and 1.0777). Pelvic recurrence and rectal or bladder complications were also similar between the two groups (Lee, 2015).
  - A Cochrane review of four studies ($n = 1,265$ women with cancer of the uterine cervix) compared high- and low-dose rate brachytherapy (combined external beam and intracavity). Those in the high-dose group had lower overall survival rates at three, five, and 10 years (risk ratios 0.95, 0.93, and 0.79), and similar disease-specific survival rates at five and 10 years (0.95 and 1.02). The only significant difference ($P = 0.04$) was a higher small bowel complication rate for high-dose patients (Liu, 2014).
  - A review of 24 studies ($n = 892$ women with pelvic malignancies undergoing transposition to preserve ovarian function) compared outcomes between those who had brachytherapy and surgery with and without external beam radiotherapy. The group that received external beam radiotherapy had a higher rate of preserved ovarian function (94 percent versus 65 percent), a lower rate of those not developing ovarian cysts (84 percent versus 95 percent), and the same rate of those who did not suffer transposed ovary metastasis (both 100 percent) (Gubbala, 2014).
  - A review of five randomized trials ($n = 2,065$) of women with cervical cancer given high- and low-dose brachytherapy found that the high-dose group had no significant increase of
mortality \( (P = 0.52) \), local recurrence \( (P = 0.68) \), or late complications in the rectum, bladder, or small intestine (Viani, 2009).

- A review of 19 studies \( (n = 672) \) of perineal-based interstitial brachytherapy for cervical cancer patients who received 3D image-based planning found that patients with a lower total dose had an inferior local control. Procedure-related complications were rare (seven infections and seven episodes of bleeding) and limited (Mendez, 2017). Another review of 13 studies \( (n = 1,299) \) also linked higher doses with higher chances of local control (Mazeron, 2016).

- A systematic review of 13 studies \( (n = 888 \text{ women age } > 65 \text{ with medically inoperable endometrial cancer}) \) showed any type of radiotherapy was more successful than no local therapy. Brachytherapy alone had a hazard ratio of 0.499, superior to external beam radiation therapy \( (0.694) \) but slightly less effective than a combination of the two \( (0.442) \) (Dutta, 2017).

- A review of 15,201 women with early stage endometrial carcinoma demonstrated that adjuvant vaginal brachytherapy is being used more often \( (17.1 \text{ percent of patients in 1995 – 2000 versus 57.1 percent of patients in 2007 – 2012}) \), and the use of pelvic external beam radiation therapy is declining \( (54 \text{ percent to } 25.5 \text{ percent}) \), both significant at \( P < 0.0001 \). The use of both in the same patient also declined, from 28.9 percent to 17.4 percent, \( P < 0.0001 \) (Modh, 2016).

- A Cochrane review included a comparison of 427 women with stage I endometrial cancer classified as high-to-intermediate risk, and given either external beam radiotherapy or brachytherapy. The brachytherapy group had an insignificantly higher loco-regional relapse rate \( (5.1 \text{ percent versus } 2.1 \text{ percent}, P = 0.17) \) (Kong, 2012).

• Respiratory cancer.
  - A meta-analysis of 15 studies \( (n = 1,188) \) compared outcomes for patients with advanced non-small cell lung cancer who were given chemotherapy with or without brachytherapy \( (\text{iodine-125}) \). The group that received brachytherapy had significantly greater response rate, disease control rate, and overall survival; significantly higher risk of pneumothorax, bloody sputum, and pneumorrhagia; and similar rates of gastrointestinal symptoms, leukopenia, myelosupression, and hemoglobin reduction (Zhang, 2018).
  - A meta-analysis of five randomized controlled trials \( (n = 296 \text{ patients with advanced lung cancer}) \) compared those given chemotherapy with and without brachytherapy \( (\text{iodine-125}) \). The brachytherapy group had significantly greater complete response, partial response, overall response, disease control rate, and progressive disease \( (all \ P < 0.001) \). Survival was significant at one year \( (P = 0.006) \), but not two years \( (P = 0.39) \). Pneumothorax was the only adverse event that was significantly higher in the brachytherapy group \( (P = 0.001) \) (Qui, 2017).
  - A Cochrane review of 14 studies \( (n = 953) \) explored outcomes for palliative external beam radiation therapy and endobronchial brachytherapy in non-small cell lung cancer. Authors concluded that symptom palliation was superior in patients given external beam versus
those given brachytherapy. No evidence was sufficient to recommend brachytherapy to relieve symptoms, either alone or with external beam therapy (Reveiz, 2012).

- Digestive tract cancer.
  - A systematic review of 12 studies of operable rectal cancer compared high-dose pre-operative brachytherapy with and without chemoradiation. Brachytherapy alone was similar to combination therapy in pathologic complete response (weighted mean rate 23.8 percent versus 22.2 percent); R0 resection rate (96.5 percent versus 95.5 percent); and sphincter-preservation rate (59.4 percent versus 46.4 percent). Overall survival for brachytherapy alone was lower (70.8 percent versus 81.5 percent), as was progression-free survival (66.6 percent versus 68.1 percent) (Buckley, 2017).
  - A systematic review of six studies (n = 623) addressed the palliation of dysphagia in esophageal cancer with brachytherapy. Dysphagia-free survival rates one, three, six, nine, and 12 months after treatment were 86.9 percent, 67.2 percent, 47.4 percent, 37.6 percent, and 29.4 percent, respectively. The severe adverse events rate was 22.6 percent. The authors concluded that brachytherapy should be used for dysphagia in patients with esophageal cancer (Fuccio, 2017).
  - A Cochrane review of 53 studies (n = 3,684) found that for palliation of dysphagia in patients with esophageal cancer, brachytherapy may be a suitable alternative to self-expanding metallic stents (Dai, 2014).

- Head, neck, and oral cancers.
  - A meta-analysis of six trials (n = 607) of early-stage oral cancer compared outcomes after low- and high-dose brachytherapy. No significant differences were observed between the groups for local recurrence (odds ratio = 1.12), overall mortality (1.01), and grade 3/4 complications (0.86). Authors contend that high-dose brachytherapy is a comparable alternative to low doses, and may eventually become a routine choice (Liu, 2013).
  - A literature review asserts that while low doses were originally used in treating head and neck cancer with brachytherapy, initial experience with high-dose treatment is a viable option (Yamazaki, 2013).

- Penile cancer.
  - A lengthy literature review determined that low-dose brachytherapy using iridium-192 results in a 10-year penile preservation rate of 70 percent (Crook, 2013).
  - A meta-analysis of 22 studies (n = 2,560) compared brachytherapy and penectomy for patients with penile cancer. The penectomy group had superior rates of five-year local control (85 percent versus 80 percent), five-year disease-free progression (77 percent versus 72 percent), and lymph node positive rates (24 percent versus 20 percent). No significant difference was observed for five-year survival rate (76 percent versus 74 percent) (Hu, 2017).
A meta-analysis on penile cancer compared 1,505 men who had penectomy with 673 who had brachytherapy. Brachytherapy patients had an insignificantly lower five-year survival (73 percent versus 76 percent, \( P < 0.13 \)). The penectomy group had a higher five-year local control rate (84 percent versus 79 percent, \( P = 0.009 \)). No significant difference was observed for overall survival or local control for early stage disease (Hasan, 2015).

- Ocular cancers.
  - A systematic review and meta-analysis comparing charged particle therapy with brachytherapy for uveal melanomas included 27 studies (n = 8,809). The local recurrence rate for charged particle therapy was significantly lower (odds ratio = 0.22), as were retinopathy and cataract formation rates. No significant differences exist for mortality or enucleation rates. The quality of evidence is low, suggesting more and better evidence is needed (Wang, 2013).
  - A systematic review of 15 studies (n = 2,662) of iodine-125 brachytherapy for uveal melanoma revealed a dose range of 62.5 – 104 gray (average 85), and local recurrence rates ranging from 0 percent to 24 percent. A 1-gray increase in average study dose was associated with a 0.14 percent decrease in local recurrence rate, not significant \( (P = 0.336) \) (Echegaray, 2017).

Policy updates:

In September 2018, 12 guidelines/other and 18 peer-reviewed references were added to this policy, and seven guidelines/other and 15 peer-reviewed references were removed.

Summary of clinical evidence:

<table>
<thead>
<tr>
<th>Citation</th>
<th>Content, methods, recommendations</th>
</tr>
</thead>
<tbody>
<tr>
<td>Zhang (2018)</td>
<td><strong>Key points:</strong></td>
</tr>
</tbody>
</table>
| Lung cancer patients given chemotherapy with versus without brachytherapy | - A meta-analysis of 15 studies (n = 1,188) of advanced non-small cell lung cancer.  
- Comparison of patients given chemotherapy with or without brachytherapy (iodine-125).  
- Brachytherapy group had significantly greater response rate, disease control rate, and overall survival.  
- Brachytherapy group also had significantly higher risk of pneumothorax, bloody sputum, and pneumorrhagia.  
- Two groups had similar rates of gastrointestinal symptoms, leukopenia, myelosuppression, and hemoglobin reduction. |
| Fuccio (2017) | **Key points:**                                                                                                                                               |
| Brachytherapy palliation of dysphagia in esophageal cancer | - Systematic review of six studies (n = 623) of patients with esophageal cancer.  
- Dysphagia-free survival rates one, three, six, nine, and 12 months after treatment were 86.9%, 67.2%, 47.4%, 37.6%, and 29.4%, respectively.  
- The rate of severe adverse events was 22.6%.  
- Authors conclude that brachytherapy should be used for dysphagia in patients with esophageal cancer. |
<table>
<thead>
<tr>
<th>Study</th>
<th>Title</th>
<th>Key points</th>
</tr>
</thead>
</table>
| Hu (2017) | Comparison of outcomes of brachytherapy and penectomy for penile cancer | **Key points:**  
| | | • Meta-analysis of 22 studies (n = 2,560) compared brachytherapy and penectomy for patients with penile cancer.  
| | | • Penectomy group had better five-year local control (85% versus 80%, \( P = 0.003 \)).  
| | | • Penectomy group had better five-year disease-free progression rate (77% versus 72%).  
| | | • Penectomy group had higher lymph node positive rates (24% versus 20%, \( P = 0.028 \)).  
| | | • No significant difference observed for five-year survival rate (76% versus 74%, \( P > 0.05 \)).  |
| Shaitelman (2017) | Outcomes for brachytherapy for breast cancer | **Key points:**  
| | | • Literature review of 67 articles on brachytherapy and breast cancer.  
| | | • Comparison of five-year outcomes for multicatheter interstitial brachytherapy and single-entry brachytherapy catheters.  
| | | • Local failure rates ranged from 1.4% to 6.1% for multicatheter interstitial brachytherapy, and from 0% to 5.7% for single-entry brachytherapy catheters.  
| | | • Infection rates were 0% to 12%.  
| | | • Symptomatic fat necrosis was documented in 0% to 12% (multicatheter) and 0% to 3.2% (single-entry).  |
| Liu (2013) | High- versus low-dose brachytherapy for early-stage oral cancer | **Key points:**  
| | | • Meta-analysis of six trials (n = 607) of early stage oral cancer.  
| | | • Comparison of outcomes after low- and high-dose brachytherapy.  
| | | • No significant differences were observed between the groups for local recurrence (OR = 1.12), overall mortality (1.01), and grade 3/4 complications (0.86).  
| | | • Authors contend that high-dose brachytherapy is a comparable alternative to low doses, and may eventually become a routine choice.  |
| Wang (2013) | Charged particle therapy compared to brachytherapy for uveal melanomas | **Key points:**  
| | | • Systematic review and meta-analysis of 27 studies (n = 8,809) for uveal melanoma.  
| | | • Charged particle therapy compared with brachytherapy.  
| | | • Local recurrence rate for charged particle therapy was significantly lower (OR = 0.22), as were retinopathy and cataract formation rates.  
| | | • No significant differences exist for mortality or enucleation rates.  
| | | • The quality of evidence is low, suggesting more and better evidence is needed.  |
| Kong (2012) | Treating stage I endometrial cancer with external beam radiotherapy or brachytherapy | **Key points:**  
| | | • A Cochrane review of 427 women with stage I endometrial cancer classified as high-to-intermediate risk.  
| | | • Patients given either external beam radiotherapy or brachytherapy.  
| | | • The brachytherapy group had an insignificantly higher loco-regional relapse rate (5.1% versus 2.1%, \( P = 0.17 \)).  |

**References**
Professional society guidelines/other:


**Peer-reviewed references:**


Centers for Medicare & Medicaid Services National Coverage Determinations:

No National Coverage Determinations identified as of the writing of this policy.

Local Coverage Determinations:

No Local Coverage Determinations identified as of the writing of this policy.

Commonly submitted codes

Below are the most commonly submitted codes for the service(s)/item(s) subject to this policy. This is not an exhaustive list of codes. Providers are expected to consult the appropriate coding manuals and bill accordingly.

<table>
<thead>
<tr>
<th>CPT Code</th>
<th>Description</th>
<th>Comment</th>
</tr>
</thead>
<tbody>
<tr>
<td>19296</td>
<td>Placement of radiotherapy afterloading expandable catheter (single or multichannel) into the breast for interstitial radioelement application following partial mastectomy, includes imaging guidance; on date separate from partial mastectomy</td>
<td></td>
</tr>
<tr>
<td>+19297</td>
<td>concurrent with partial mastectomy (list separately in addition to code for primary procedure)</td>
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<tr>
<td>19298</td>
<td>Placement of radiotherapy afterloading brachytherapy catheters (multiple tube and button type) into the breast for interstitial radioelement application following (at the time of or subsequent to) partial mastectomy, includes imaging guidance</td>
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<tr>
<td>20555</td>
<td>Placement of needles or catheters into muscle and/or soft tissue for subsequent interstitial radioelement application (at the time of or subsequent to the procedure)</td>
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<td>41019</td>
<td>Placement of needles, catheters, or other device(s) into the head and/or neck region (percutaneous, transoral, or transnasal) for subsequent interstitial radioelement application</td>
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<tr>
<td>49321</td>
<td>Laparoscopy, surgical; with biopsy</td>
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<tr>
<td>+49327</td>
<td>Laparoscopy, surgical; with placement of interstitial device(s) for radiation therapy guidance (e.g., fiducial markers, dosimeter), intra-abdominal, intrapelvic, and/or retroperitoneum, including imaging guidance, if performed, single or multiple (list separately in addition to code for primary procedure)</td>
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<td>+49412</td>
<td>Placement of interstitial device(s) for radiation therapy guidance (e.g., fiducial markers, dosimeter), open, intra-abdominal, intrapelvic, and/or retroperitoneum, including image guidance, if performed, single or multiple (list separately in addition to code for primary procedure)</td>
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<td>55920</td>
<td>Placement of needles or catheters into pelvic organs and/or genitalia (except prostate) for subsequent interstitial radioelement application</td>
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<td>57155</td>
<td>Insertion of uterine tandems and/or vaginal ovoids for clinical Brachytherapy</td>
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<tr>
<td>57156</td>
<td>Insertion of a vaginal radiation afterloading apparatus for clinical brachytherapy</td>
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<tr>
<td>61770</td>
<td>Stereotactic localization, including burr hole(s), with insertion of catheter(s) or probe(s) for placement of radiation source</td>
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<tr>
<td>77316</td>
<td>Brachytherapy isodose plan; simple (calculation[s] made from 1 to 4 sources, or remote afterloading brachytherapy, 1 channel), includes basic dosimetry</td>
<td></td>
</tr>
<tr>
<td>ICD-10 Code</td>
<td>Description</td>
<td>Comment</td>
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<td>----------------------------------------------</td>
</tr>
<tr>
<td>C08-C08.9</td>
<td>Malignant neoplasm of other and unspecified major salivary glands</td>
<td></td>
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<tr>
<td>C15.3-C15.9</td>
<td>Malignant neoplasm of esphagus</td>
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<td>C16.0-C16.9</td>
<td>Malignant neoplasm of stomach</td>
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<td>C34.00-C34.92</td>
<td>Malignant neoplasm of lung</td>
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<td>C50.011 – C50.929</td>
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<td>C53.0</td>
<td>Malignant neoplasm of endocervix</td>
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<tr>
<td>Code</td>
<td>Description</td>
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<tr>
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<td>C53.1</td>
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<td>C53.8</td>
<td>Malignant neoplasm of overlapping sites of cervix uteri</td>
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<tr>
<td>C53.9</td>
<td>Malignant neoplasm of cervix uteri, unspecified</td>
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</tr>
<tr>
<td>C69.90-C69.92</td>
<td>Malignant neoplasm of eyeball</td>
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<table>
<thead>
<tr>
<th>HCPCS Code</th>
<th>Description</th>
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<tbody>
<tr>
<td>C1715</td>
<td>Brachytherapy needle</td>
</tr>
<tr>
<td>C1716</td>
<td>Brachytherapy source, non-stranded, gold-198, per source</td>
</tr>
<tr>
<td>C1717</td>
<td>Brachytherapy source, non-stranded, high dose rate iridium-192, per source</td>
</tr>
<tr>
<td>C1719</td>
<td>Brachytherapy source, non-stranded, non-high dose rate iridium-192, per source</td>
</tr>
<tr>
<td>C2616</td>
<td>Brachytherapy source, non-stranded, yttrium-90, per source</td>
</tr>
<tr>
<td>C2634</td>
<td>Brachytherapy source, non-stranded, high activity, iodine-125, greater than 1.01 mCi (NIST), per source</td>
</tr>
<tr>
<td>C2635</td>
<td>Brachytherapy source, non-stranded, high activity palladium-103, greater than 2.2 mCi (NIST), per source</td>
</tr>
<tr>
<td>C2636</td>
<td>Brachytherapy linear source, non-stranded, palladium-103, per 1 mm</td>
</tr>
<tr>
<td>C2637</td>
<td>Brachytherapy source, non-stranded, ytterbium-169, per source</td>
</tr>
<tr>
<td>C2638</td>
<td>Brachytherapy source, stranded, iodine-125, per source</td>
</tr>
<tr>
<td>C2639</td>
<td>Brachytherapy source, non-stranded, iodine-125, per source</td>
</tr>
<tr>
<td>C2640</td>
<td>Brachytherapy source, stranded, palladium-103, per source</td>
</tr>
<tr>
<td>C2641</td>
<td>Brachytherapy source, non-stranded, palladium-103, per source</td>
</tr>
<tr>
<td>C2642</td>
<td>Brachytherapy source, stranded, cesium-131, per source</td>
</tr>
<tr>
<td>C2643</td>
<td>Brachytherapy source, non-stranded, cesium-131, per source</td>
</tr>
<tr>
<td>C2698</td>
<td>Brachytherapy source, stranded, not otherwise specified, per source</td>
</tr>
<tr>
<td>C2699</td>
<td>Brachytherapy source, non-stranded, not otherwise specified, per source</td>
</tr>
<tr>
<td>C9725</td>
<td>Placement of endorectal intracavitary applicator for high intensity brachytherapy</td>
</tr>
<tr>
<td>C9726</td>
<td>Placement and removal (if performed) of applicator into breast for radiation therapy</td>
</tr>
<tr>
<td>Q3001</td>
<td>Radioelements for brachytherapy, any type, each</td>
</tr>
</tbody>
</table>