[Your Radiation Therapy Center Name]
[Your Center's Address]
[City, State, ZIP Code]
[Phone Number]
[Email Address]
[Website]

[Date]

[Chief Medical Officer's Name]
Chief Medical Officer
[Insurance Company Name]
[Insurance Company Address]
[City, State, ZIP Code]

Re: Appeal for Reconsideration of CPT Code 77412 for Patient [Patient Name/Identifier]

Dear [Chief Medical Officer's Name],

I am writing on behalf of [Your Radiation Therapy Center Name] to request reconsideration of the denial or non-payment for CPT code 77412 in relation to the radiation therapy treatment provided to [Patient Name/Identifier] for breast cancer.

This code pertains to the use of active motion management, which was integral to ensuring precise and safe delivery of radiation in this case. According to the AMA CPT guidelines, CPT code 77412 involves active motion management defined as “intra-fraction imaging (real-time imaging during the treatment session), fiducials (small markers placed in or near a tumor to help track its position), or surface guidance (monitoring the patient's external body surface as a surrogate for internal motion) to track patient or tumor movement, such as during breathing, so the radiation beam can be gated or adjusted in real time.”

The ASTRO 2026 radiation oncology coding resource further clarifies that “Surface guidance for active motion management is a technique that allows the linear accelerator to perform gating (i.e., optical) during treatment delivery using the body surface contour as a surrogate for internal target motion and OAR avoidance.”

At our facility, we employ active motion management using AlignRT, which utilizes 3D stereo cameras and 6DoF intrafraction monitoring. This technology ensures that radiation is delivered only when the patient is correctly positioned, providing sub-millimetric accuracy across all skin tones, couch positions, and gantry angles. It enhances tumor coverage while sparing surrounding normal tissue and critical structures.

The NCCN Guidelines, Version XX.2026, for Invasive Breast Cancer emphasize the importance of individualizing RT planning and delivery (optimizing delivery of individual therapy section, page 60). Item 4 under this section specifically includes the use of respiratory control and cardiac blocking to protect the heart and surrounding critical structures.

Several studies support the use of active motion management via Surface Guided Radiation Therapy (SGRT) in breast radiotherapy, including:

1. Ono et al. (2021) https://doi.org/10.1186/s13014-021-01777-7 quantified motion during DIBH for breast cancer using cine EPID and variance component analysis. They calculated a PTV margin of 3.59 mm, showing that even under breath-hold conditions, motion is present and measurable.

2. Michalski et al. (https://doi.org/10.1111/j.1754-9485.2012.02434.x) conducted in 2012 a systematic review on inter- and intra-fraction motion during breast radiotherapy. With focus in intra-fractional motion, they report that while average motion remains within a 5 mm tolerance, individual variations can be significant, underscoring the need for daily motion management. This publication sets the scene while the most subsequent reviews focus more on motion management strategies (e.g. https://doi.org/10.3233/XST-180472, https://doi.org/10.1088/1361-6560/ab2ba8).

3. Gough E, Ashworth S, Moodie T, et al. https://dx.doi.org/10.1016/j.meddos.2024.03.002 shows that DIBH reduces right coronary artery and lung radiation dose in right breast cancer radiotherapy.

4. Rice L, Harris S, Green MM, Price PM https://dx.doi.org/10.1259/bjrcr.20150038 shows that DIBH used in right breast radiation therapy minimizes liver dose.

Additionally, the textbook Short Course Breast Radiotherapy, published by Springer (https://link.springer.com/book/10.1007/978-3-319-24388-7), notes: “The conventional WBI fractionation scheme is 2 Gy per fraction. Several WBI fractionation schemes, including hypofractionated WBI (HWBI), have been investigated. HWBI offers advantages to the patient such as reduced out-of-pocket costs as well as to radiation oncology departments such as the ability to schedule and treat more patients per year on a given linear accelerator. … Generally, HWBI requires better control of the patient’s motion during delivery. The reduced number of fractions in HWBI requires more precise and accurate patient positioning.”

Given the compelling evidence outlined above, we urge you to reconsider CPT code 77412 as medically necessary and payable in this case for [Patient Name/Identifier]. We believe

this aligns with established guidelines and clinical best practices to optimize patient outcomes.

Please feel free to contact me at [Your Phone Number] or [Your Email Address] if you require any additional information or documentation to facilitate this review. We appreciate your attention to this matter and look forward to your prompt response.

Sincerely,

[Your Name]
[Your Title, e.g., Medical Director or Radiation Oncologist]
[Your Radiation Therapy Center Name]
[Phone Number]
[Email Address]