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ACROinsights – Therapeutic Radiopharmaceuticals: Is There Still a Role for Radiation Oncologists?

The goal of this series of articles is to ensure that radiation oncologists are aware of and provided with the knowledge to ensure day-to-day processes are being addressed in a compliant manner. This installment will discuss therapeutic radiopharmaceuticals and the role radiation oncologists may still have in the process. The information contained within this ACROinsights article is meant as general guidance and is not intended to replace appropriate legal or authoritative guidance.

Utilization of Therapeutic Radiopharmaceuticals

The availability of therapeutic radiopharmaceuticals in the armamentarium for care of cancer patients have been available for decades, but the availability of exciting new radionuclides and targeting ligands is expanding the role of this modality. The Accreditation Council for Graduate Education (ACGME) which approves residency training in radiation oncology has always included training in utilization of radionuclides as required by the US Nuclear Regulatory Commission (NRC) and Agreement States. Regrettably, practicing radiation oncologists have not frequently taken advantage of that training as practice patterns have changed over time. The emergence of these newer radiopharmaceutical agents could stimulate renewed interest in the modality. Heightened interest is such that non-radiologically related specialties such as internal medicine, medical oncology and urology have indicated interest in changing the NRC and Agreement States credentialling requirements to allow them to use the agents. The basis for their requests to the NRC for lowered training and experience (T & E) requirements is a claim that unitized dose distribution and delivery systems pose no handling or safety concerns, and the current and future number of available authorized users is insufficient to support increasing needs. In response to the NRC in opposition to this reduction of T & E requirements, stakeholder groups have demonstrated that neither of these claims are based on actionable evidence. In 2021, the NRC commissioners elected to maintain the current T & E standards, but the issue will surely be revisited in the future.

Many radiation oncologists question if there is still a role for our specialty in use of therapeutic radiopharmaceuticals or if it is best for nuclear medicine physicians to manage these agents. According to 2020 Medicare claims data Radiation Oncology is still the predominant specialty reporting the therapeutic administration CPT® codes, 77750 *(Infusion or instillation of radioelement solution (includes 3-month follow-up care)*) and 79101 *(Radiopharmaceutical therapy, by intravenous administration)*. In fact, according to Medicare data, utilization for code 77750 in 2020[1] is predominantly Radiation Oncology at 99% for just under 400 reported occurrences; however, the reporting of this code is a fraction of the more commonly reported code 79101 (slightly less than 10,000). Utilization for code 79101 shows Radiation Oncology at 39.1%, Diagnostic Radiology at 33.6%, and Nuclear Medicine at 24.0% as the top three specialties. Most cases are performed in the outpatient hospital setting, likely because of the handling and personnel requirements of their use.

Confusion About Billing for Services

Billing associated with therapeutic radiopharmaceuticals is a common area of confusion. Some radiation oncologists and coders/billers may not be aware of the potential coding for these services. This confusion or uncertainty may lead to under- utilization of this therapeutic technology.

One significant question is what the correct administration code is to bill. Currently there is a code housed within the radiation oncology family, code 77750, mentioned earlier. Because many of the administrations will take place in the Nuclear Medicine department, billing for code 77750 is typically not done. This lack of representation for a code dedicated to radiation oncology for therapeutic radiopharmaceuticals may have an impact. Often, when utilization for a code decreases over time, the code may be or is deleted or replaced with a more frequently

[1] Claims data from 2020 may be impacted by the COVID-19 pandemic and not accurately reflect patterns before 2020.

used alternative. The existence of other administration codes outside Radiation Oncology means a new code would likely not be added to the 77xxx series specific to Radiation Oncology. Radiation oncologists and their billers should be aware the location of service does not drive code utilization, but the provider does. If a radiation oncologist performs the service in a nuclear medicine department, use of 77750 is appropriate.

Some of the basics for billing therapeutic radiopharmaceuticals include:

- **Physician Clinical Treatment Plan (77261, 77262, and77263)** – similar to use with EBRT, the physician, when documenting the orders and their cognitive thought process for the course can bill for this work with the supporting documentation.
- **Calculation of Dose (77300)** – the work of calculating the dose to be administered per the patient's clinical status, weight, blood counts, etc. This calculated dose is billed both professionally and technically.
- **Administration of Radiopharmaceutical (various codes)** – the appropriate code for administration of the radiopharmaceutical is billed by both the physician and facility and will depend on the route or type of administration. Code 77750 includes a global follow up for 3 months, the other codes are found in the Nuclear Medicine CPT section, and do not include follow up. Physicians and billers should be aware that CPT codes are assigned to various "families," but are not limited in use to physicians who practice that specific specialty.
    - 77750 - Infusion or instillation of radioelement solution (includes 3-month follow-up care)
    - 79005 - Radiopharmaceutical therapy, by oral administration
    - 79101 - Radiopharmaceutical therapy, by intravenous administration
    - 79200 - Radiopharmaceutical therapy, by intracavitary administration
    - 79300 - Radiopharmaceutical therapy, by interstitial radioactive colloid administration
    - 79403 - Radiopharmaceutical therapy, radiolabeled monoclonal antibody by intravenous infusion
    - 79440 - Radiopharmaceutical therapy, by intra-articular administration
    - 79445 - Radiopharmaceutical therapy, by intra-arterial particulate administration
- **Therapeutic Radiopharmaceutical (various codes)** – there are various therapeutic radiopharmaceuticals, so selecting the correct code and quantity may be important when billing. Incorrect coding of the quantity can result in significant adverse reimbursement impacts due to varied dosing definitions. Some common therapeutic radiopharmaceuticals include the following which can be billed in both facility and nonfacility settings:
    - A9513 - Lutetium Lu 177, dotatate, therapeutic, 1 mCi
    - A9517 - Iodine I-131 sodium iodide capsule(s), therapeutic, per millicurie
    - A9530 - Iodine I-131 sodium iodide solution, therapeutic, per millicurie
    - A9600 - Strontium Sr-89 chloride, therapeutic, per millicurie
    - A9604 - Samarium Sm-153 lexidronam, therapeutic, per treatment dose, up to 150 millicuries
    - A9606 - Radium Ra-223 dichloride, therapeutic, per microCurie
    - A9699 - Radiopharmaceutical, therapeutic, not otherwise classified

Example Coding

For a patient treated with Radium Ra-223 dichloride (Xofigo®) the physician could potentially bill a complex clinical treatment plan (77263) for the course which includes one administration every four weeks for six months, specific documentation is required and is only billable once per course regardless of the number of administrations. A calculation, 77300, could be billed for each administration to calculate the amount of dose to deliver. The administration is billable with 79101 for the intravenous administration or 77750 for infusion or installation at each fraction of treatment. For the technical elements, either in the facility or nonfacility, the specific radiopharmaceutical agent can be billed. The amount of radiopharmaceutical administered is billed with

the appropriate HCPCS code specific to the radiopharmaceutical. Where necessary any waste is reported on the claim per the payer with the appropriate modifier JW. Additional coding may vary and depend on what if any additional work or services are provided.

A procedure note of the entire administration and management of the patient is required for each fraction of administration by the physician. This documentation will support the work by the technical and professional staff. Lack of detailed and appropriate documentation by the physician may result in billing which is not supported.

The Take Home Message

Therapeutic radionuclides are increasingly important in cancer care. Radiation oncologists are ideally trained and experienced to integrate this modality into the continuum of care. Issues related to handling, billing and reimbursement have been cited in the past as disincentives to use but allowing other specialties to assume primacy over the agents would ultimately be to the detriment of patients.