



## Radiation Therapy Reimbursement: A Comparison of Hospital versus Freestanding Radiation Therapy Sites

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## **Radiation therapy reimbursement: A comparison of hospital versus freestanding radiation therapy sites**

By Carol S. Miller, M.B.A., and R. Lawrence White, M.D.

**O**ver the past decade, reimbursement changes in radiation therapy have affected both physician payment and hospital reimbursement. Often the result of change has been lower payment. Among the rapid changes are:

- reimbursement for Medicare with the implementation of Resource Based Relative Value Scale (RBRVS) for physicians
- DRG refinements for hospitals
- increased numbers of managed care programs
- the consolidation and restructuring of commercial plans
- the revised payment methodology by Medicare for capital equipment

All of these changes have reduced payment for radiation therapy services to hospitals, physicians, and patients, and will continue to do so.

Given that 50 to 60 percent of radiation therapy patients are reimbursed under Medicare and Medicaid, this article summarizes the impact of government reimbursement and compares payment mechanisms for hospital outpatient and freestanding facilities, reviews the projected reimbursement changes affecting both types of entities, summarizes a recent ACCC-sponsored survey comparing the hospital and freestanding

payment system, and, finally, reviews the impact of capital reimbursement legislation and regulations on radiation departments.

### **The history of radiation therapy reimbursement**

Hospital-based radiation therapy departments, providing diagnostic, therapeutic and palliative services, have been in existence for over 90 years. With the advent of insurance in the early '40s, hospital radiation therapy departments began to receive small indemnity payments for their services.

Over the years as the number and variety of treatment programs expanded, so did the reimbursement structure and associated payments. In addition, more insurance companies were formed; the Medicare program was initiated in 1965; and HMOs, PPOs and managed care programs evolved. The majority, if not all of these insurance companies and carriers, provided reimbursement for this service and employed a variety of payment schemes from fee schedules, to indemnity plans, to a percent of usual, customary and reasonable.

Further refinement, definition of terminology, and delineation of radiation therapy treatment services were developed by national specialty associations, such as the American College of Radiology, and the American Medical Association. Through this effort and others the Common Procedural Terminology (CPT) was adopted by Health Care Financing Administration (HCFA) in 1983, as the procedural coding of choice.

By 1985, all Medicare carriers were instructed to use this coding version and its associated descriptors for all radiation oncology billing. Likewise, most of the commercial companies and managed care programs also adopted the same terminolo-

gy. This provided consistency in the interpretation and reimbursement for all radiation therapy services.

In 1987, Congress directed HCFA to work with the American College of Radiology to develop a relative value based scale (RVS) for all of radiology. The College collected data on national experience. Its study detailed diagnostic and therapeutic radiology and was instrumental in defining the present Resource Based Relative Value Scale (RBRVS).

### **Comparison of reimbursement: Hospital outpatient v. freestanding facility**

Traditionally, hospital outpatient radiation therapy reimbursement from Medicare was based on both direct and indirect cost calculations. Throughout the year, a percentage of the hospital charge was reimbursed based on the historical cost record. At year end, Medicare audited the hospital's cost report, determining which direct and indirect costs were justifiable, and settled on an appropriate payment percentage. This resulted in the hospital refunding money to Medicare or Medicare providing the hospital with an additional payment.

However, several years ago, HCFA introduced a new payment methodology for outpatient radiation therapy technical fees (other than capital costs). This policy stated that the hospital was to be reimbursed the lower of the hospital cost formula previously used, or, a blended formula comprised of hospital cost and RBRVS payments.

Under this new form of reimbursement, the blending formula will change annually over a period of 10 years, increasing the percent of RBRVS payment and lowering the portion based upon hospital costs. Currently, approximately 42 percent of the payment is based on hospital cost with the balance,

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approximately 58 percent, based on blended RBRVS system payment rates. Of course, the intent of RBRVS is to eliminate the existing hospital cost reimbursement system.

For commercial insurance companies, the hospital reimbursement rate for technical billing is based on a percent of charges, usually negotiated on a yearly basis. For managed care contracts, the hospital and managed care programs negotiate a financial package payment for either specific departments, such as the radiation oncology department, or for specific services, such as all oncology services.

Traditionally, most radiation oncologists have been retained by the hospital in an exclusive independent contractor relationship, although a few have entered into an employment arrangement in which the hospital bills for both the professional and technical services. As independent contractors, radiation oncologists maintain their own billing services for their professional services, and receive reimbursement similar to the private practice model, i.e., RBRVS for Medicare, a percent of charges for commercial insurance and a published or package rate for managed care programs.

In comparison, over the last several years, Medicare reimbursed the majority of freestanding facilities using the RBRVS payment methodology. A small number of these freestanding facilities received special Medicare exemptions and were reimbursed on a reasonable charge basis similar to private practice offices. Other insurance companies and managed care programs reimbursed freestanding units based on a percentage of charge basis, a set fee schedule rate, or a published or package rate.

As of January 1, 1992, all freestanding facilities were required to convert to billing global charges (professional and technical services) for Medicare based on the RBRVS payment schedule. A significant decrease in reimbursement was noted by this "exempt" group, while others noticed only a slight decline and some recognized an increase in payment.

Another acute difference between the hospital and freestanding setting for radiation oncology is the additional compensation provided to hospitals for supplies, facility costs, overhead expenses, and capital equipment payment. In contrast the freestanding center resembles the traditional private office setting, covering only actual treatments costs.

## Changes in hospitals' capital equipment reimbursement

In the past, hospitals were reimbursed by Medicare for the cost of new capital expenditures. As of this writing, this payment methodology still holds true for hospital outpatient capital costs. However, effective October 1, 1991, the Omnibus Budget Reconciliation Act of 1987 required the Secretary, by regulation, to fold inpatient capital into the current prospective payment system (PPS).

With this new requirement, over the next 10 years hospitals will receive lesser allowances for their capital equipment purchases (such as radiation therapy equipment) than under the old methodology.

Under this new reimbursement system for capital, hospitals will either be paid on a fully prospective payment methodology or on a hold-harmless methodology. The differences between the two payment arrangements are:

- **Prospective payment:** A hospital that has a hospital-specific rate below the federal rate receives capital payments per discharge based on a blend of its hospital-specific rate and the federal rate. In FY 1992, this is a blend of 90 percent hospital-specific rate and 10 percent federal rate.
- **Hold-harmless payment:** A hospital receives capital payments per discharge based on the higher of:
  - 90 percent of reasonable costs for old capital costs plus a payment for new capital costs which is a proportion of the federal rate. The proportion of the federal rate paid for new capital is based on the ratio of the hospital's Medicare inpatient costs for new capital to total Medicare inpatient capital costs and cannot exceed the national ratio of Medicare inpatient new capital to total Medicare inpatient capital, or
  - 100 percent of the federal rate (or applicable blend of its hospital-specific rate and the federal rate, if lower).

According to the guidelines, one or the other payment methodology will be consistently used for hospital reimbursement of capital equipment throughout the entire transition. Afterwards, all hospitals are to be paid the federal rate. Overall, the government believes that this capital

equipment reimbursement approach provides a more stable system with cost containment incentives. According to the government, low-cost hospitals, such as rural, governmental and New England urban hospitals, are the "winners" under this approach, while high-cost hospitals such as proprietary, heavy teaching urban DSH (Disproportion Share Hospitals) with more than 100 beds, and urban hospitals in certain areas, will have to curb their existing capital equipment spending patterns.

Given the differential in payment schemes, it appears that hospital-based radiation oncology practices have a reimbursement advantage over freestanding entities. To test this assumption, and in order to fully understand the financial impact of the blending formula compared to RBRVS, we conducted a survey of eight hospitals across the United States.

## Survey results: What really happens?

We conducted a survey of eight hospitals in various regions of the United States. A list of each of the technical services for radiation therapy (from CPT code 77280 to 77790) was provided to each of the hospitals along with their respective RBRVS technical allowance for their region. We asked each hospital to compare their present hospital outpatient technical reimbursement for Medicare with each of these codes and to indicate whether their payment was higher, lower or the same as RBRVS.

At the outset, it is important to note that the regional RBRVS payment schedules for radiation services vary by as much as 33 percent. This range of variation was consistent for each of the procedures surveyed.

Second, the majority of technical radiation services for the hospitals surveyed were higher than the RBRVS reimbursement for their region. There were several variables to this theme:

- ◆ 77280—Therapeutic radiology simulation-aided field setting. Simple; AND
  - ◆ 77285—Therapeutic radiology simulation-aided field setting. Intermediate.
- Three of the eight hospitals stated their reimbursement for these two procedures is less than RBRVS. However, for the Complex code (77290), the majority of hospitals receive a higher reimbursement than RBRVS.
- ◆ 77401—Radiation therapy delivery superficial and/or orthovoltage, AND
  - ◆ 77407—Radiation therapy delivery,

single treatment area, single port or parallel opposed ports, simple blocks or no blocks, up to 5 Me, AND

- ◆ 77412—Radiation therapy delivery, three or more separate treatment areas, custom blocking, tangential ports, wedges, rotational beam, compensators, special particle beam (i.e., electron or neutron), up to 5 MeV

For each of these last three procedures, three hospitals reported payments less than RBRVS, and one reported receiving the

same reimbursement as RBRVS.

- ◆ 77781—Remote afterloading high intensity brachytherapy, 5–8 source positions or catheters AND
- ◆ 77782—Remote afterloading high intensity brachytherapy, 9–12 source positions or catheters.

Approximately half of the respondents indicate their reimbursement is higher than RBRVS, whereas others indicate reimbursement lower than RBRVS. However,

as more complex codes for Remote afterloading brachytherapy are used, specifically CPT 77783 (9–12 source positions or catheters) and 77784 (more than 12 source positions or catheters), the majority of hospitals report higher payments than the RBRVS schedule of payments.

It is obvious from the results of this limited survey that the majority of U.S. hospitals are receiving a higher reimbursement for hospital-based radiation therapy services, than the RBRVS reimbursement

## Final RBRVS rules benefit oncologists

Oncologists will experience increased Medicare payments due to the Health Care Financing Administration's (HCFA's) revision to the 1993 Medicare physician fee schedule. Despite a 2.8 percent across-the-board reduction imposed because of an increased volume of total physician services in 1992, oncologists will benefit from HCFA's adoption of a number of payment changes recommended by ACCC, ASCO, and other oncology-related organizations.

### Pushes and infusions

Under HCFA's policy, oncologists could not charge for a chemotherapy push and infusion during the same office visit. Effective January 1, 1993, HCFA reversed this policy and Medicare will now allow a separate chemotherapy administration payment for both procedures. However, the final rule continues to disallow payment for multiple pushes.

### Chemotherapy management

Based on the results of Harvard's Phase III study of hematology and oncology vignettes, HCFA has stated that the data suggest that there is more physician work involved in chemotherapy administration than other types of physician visits. However, the Agency believes the data to be inconclusive and, therefore, it has declined to establish new chemotherapy management codes at this point in time. Leadership of ACCC and ASCO intend to continue negotiations with HCFA on this matter and remain optimistic that new codes will be created in the future.

HCFA did rule that oncologists may bill a Level I visit Evaluation and Management (E/M) code, even if they do not have face-to-face contact with the patient, as long as they are actively involved in managing the patient's chemotherapy administration. The medical record must reflect these activities (i.e., reviewing laboratory results, consultations with nursing personnel, dosage adjustments, etc.). HCFA has also stipulated that the service must be provided in the office setting and under the oncologist's direction.

### Supplies

The final rule provides increased payment for specific CPT codes to reflect supply costs associated with chemotherapy administration. Data submitted to HCFA reflecting previous, separate payments by Medicare carriers for the supplies associated with chemotherapy administration convinced the Agency that a number of 1992 CPT codes did not adequately reimburse oncologists for these expenses. In specific, relative values have been increased for:


- ◆ CPT code 96408 (chemotherapy, intravenous push), resulting in an average increased payment of \$2.33;
- ◆ CPT code 96410 (chemotherapy, intravenous infusion, first hour), resulting in an average increase of \$5.47;
- ◆ CPT code 96420 (chemotherapy, intra-arterial push), with an increased payment of \$2.71; and
- ◆ CPT code 96422 (chemotherapy, intra-arterial infusion, first hour), for an average increase of \$5.39.

HCFA says these increases represent a temporary measure and that the Agency will continue to study the supply

structure in freestanding facilities. Furthermore, it is also apparent from the survey that the higher and more complex procedures receive more than RBRVS regardless of the region or hospital.

As the blending formula is gradually eliminated and hospitals convert to an RBRVS-only payment, identical to the freestanding reimbursement, the hospital financial margin for this service will be much less than under the previous compensation structure. However, the hospi-

tal setting still has two significant advantages over freestanding centers: a federal rate for inpatient capital equipment costs and cost reimbursement for outpatient capital equipment expenditures. Also, as a large entity, hospitals have the financial leverage to purchase new equipment and increase their volumes, whereas, freestanding entities rely on entrepreneurs and investors that now have to contend with the new Safe Harbor investment guidelines.

If this survey is repeated in another 5 or 10 years, other reimbursement issues, such as Ambulatory Patient Groups (APGs) will have affected the payment system for hospitals and freestanding facilities, especially as the Clinton health care reform package goes into effect. If the past decade is any gauge of the future, one can only predict further reductions in payment and more refinement in services: one that will surely affect radiation therapy. 

costs associated with chemotherapy administration.

Oncologists will also see increased payments for the expensive procedure trays (lumbar puncture, thoracentesis, venous access catheters, bone marrow aspiration, catheter insertion, and surgical trays). HCFA's slight increase in the conversion factor (0.8 percent) will increase reimbursement for these items to \$31.25 in 1993.

### Evaluation & Management visits

The relative values for the middle and higher levels of E/M codes has been increased. Physicians successfully argued that physician work per unit of time per visit is constant. Initially, HCFA contended that the amount of work decreased as the length of the visit increased. The final rule, which now reflects work per unit of time as a constant value, results in slight payment increases for visit levels 3, 4, and 5.

### Other chemotherapy changes

The relative values for specialized chemotherapy codes requiring needle placement have been increased by HCFA. CPT code 96440 (chemotherapy requiring thoracentesis) has been increased from 2.50 to 3.32; CPT code 96445 (chemotherapy requiring paracentesis) has been increased from 3.00 to 3.34; and CPT code 96450 (chemotherapy requiring lumbar puncture) has been increased from 2.25 to 2.89.

In addition, the final rule contains a new code for subarachnoid or intraventricular chemotherapy administration of single or multiple agents via a subcutaneous reservoir. The new

code—96542—has been assigned a relative value of 2.70.

Finally, HCFA lowered the practice expense components for two chemotherapy codes, because limited charge data were available for these infrequently used codes in 1992. The practice expenses for CPT codes 96423 (intra-arterial infusion, after the first hour) and 96445 (chemotherapy requiring paracentesis) have both been downgraded.

### Overall Changes to RBRVS

In 1992, the volume of physician services exceeded the level of total Medicare expenditures allowed by Congress. As a result, HCFA has reduced the 1993 inflation adjustment by 2.8 percent. This decrease, which is tempered by the 0.8 percent increase in the conversion factor, will result in slightly lower fee schedule amounts for most RBRVS codes this year. Overall, the conversion factor changed from \$31.001 in 1992 to \$32.249 in 1993.

### Summary

Despite the decrease in overall relative values for Medicare physician services, the primary codes used by oncologists will provide a higher level of reimbursement for this specialty in 1993. In addition, it is hoped that future changes, such as the creation of chemotherapy management codes, will further benefit oncologists as HCFA continues to fine-tune the system. All provisions in the final rule are subject to instructions being issued to carriers from HCFA. Please contact your local carrier regarding implementation of new policies. 