Analyzing Your Radiation Service

Hospital-based or freestanding—Which model will serve you best?

by Lynn Jones, MS, and Linda Gledhill, MHA

Radiation services are an integral and expensive element of the cancer service line. Decision makers at community cancer centers have come to understand that *how* their radiation program is structured may impact their program's bottom line.

Both freestanding and hospital-based radiation services have advantages and disadvantages. A careful analysis of your program's reimbursement status can show you how well your program is performing under its current model and whether a change is merited.

Doing a comparative analysis can also help decision makers assess the opportunities offered by both models. Taking time to analyze each model in terms of your program's specific circumstances is especially important if you are planning a new radiation facility or thinking about acquiring new equipment or providing new radiation services. As with any facility planning process, you are attempting to accurately forecast whether the new facility, equipment, or treatment therapy will be able to generate return on investment.

Having an up-to-date picture of the reimbursement outlook for your radiation services—in both a freestanding model and a hospital-based model—can help in your strategic decision-making process. The cost of conducting a comparative analysis may also pay significant dividends for your program's strategic plan.

In constructing a comparative analysis of freestanding vs. hospital-based reimbursement, keep in mind that the two models are paid differently.

On one side of the equation, hospital-based radiation programs were historically paid at a higher rate due to their higher costs (i.e., supplies, buildings, and staff costs). A physician in the hospital-based program will bill for professional services as a hospital-based physician. These professional services are reimbursed at a lower rate because the radiation oncologist does not incur the program's overhead costs. One exception: radiation oncologists that pay rent and incur costs for examination rooms, staff, or other costs, can bill as an office-based physician and be paid at the higher rate.

In a hospital-based radiation program, the hospital is paid for the technical portion of the services. The hospital-based program can also charge for additional services, such as facility clinic visits provided by nurses, social workers, and nutritionists.

On the other side of the equation is the freestanding radiation program. In a freestanding facility, physicians are reimbursed at a higher rate for their professional services. This payment includes their overhead costs.

When it comes to technical and administrative services, freestanding facilities have traditionally been reimbursed less than in the hospital-based setting. However, conducting your own comparative analysis will allow you to determine if this holds true in your facility.

Unlike hospital-based radiation programs, a freestanding facility cannot charge for services provided by nurses, social workers, and nutritionists.

A Reimbursement Primer

In 2004 payment rates for hospital-based radiation services were cut significantly. Starting Jan. 1, 2004, hospitals saw about a 15 percent decrease in reimbursement for radiation services. Cancer centers that had recently purchased expensive radiation equipment or started offering expensive new radiation treatments were hit hardest by these reimbursement cuts. Table 1 shows the typical charges for one prostate external beam radiation therapy (EBRT) series and one IMRT treatment series in a hospital-based radiation program from 2003 to 2005. While payment rates for radiation services increased slightly in 2005 (approximately 4 to 7 percent), the overall impact of the decline in reimbursement has been significant for hospital-based radiation centers. The majority of this revenue decline has occurred in 77414 (daily treatment delivery-complex) and 77418 (IMRT daily treatment delivery).

In 2004, freestanding radiation facilities did not experience a decrease in payment rates. In 2005, however, radiation services provided at freestanding radiation facilities were reduced by approximately 4 percent.

The decision to structure a radiation program as hospital-based or freestanding is based on many factors—Medicare reimbursement rates are just one piece of the puzzle. Any analysis must take into account the potential for future reimbursement regulations changes, the governance needs of the organization, and the legal considerations for potential partners. All of these factors must be incorporated into a hospital-based vs. freestanding analysis to allow for the best strategic decision for the cancer center. A decision to restructure your radiation services involves a number of business and legal issues that require careful consideration. (For more on the legal perspective, see "Use Caution When Restructuring Services," *Oncology Issues*, July/August 2004.)

Crunching the Numbers

Start your comparative analysis by gathering specific volume-related data for your existing radiation services, as well as projections for your new center (if applicable) or any new services your center will offer (if applicable). Use your 2004 volumes of radiation procedures by CPT code and/or HCPCS code.

Hospital-based radiation technical reimbursement is available in the CMS 2005 Part B addendum published

Table 1. Hospital-Based Radiation Facility Reimbursement for Prostate Series Radiation Treatments, 2003–2005*

	2003 Payment	2004 Payment	Percentage Change	2005 Payment	Percentage Change	Overall Change
IMRT	$20,547	$16,280	-20.8%	$17,023	4.6%	-17.1%
EBRT	$12,156	$10,615	-12.7%	$11,251	6.0%	-7.4%

*Based on National Medicare Rates. Table compiled by ELM Services, Inc., Rockville, Md.

Table 2. Comparison of 2005 Reimbursement Rates for a Hospital-Based Radiation Facility and a Freestanding Radiation Facility*

	External Beam Radiation Therapy+	EBRT and IMRT+
Hospital-based Radiation Program	$1,120, 900	$1,471,000
Freestanding Radiation Center	$1,200,690	$2,157,690

*Based on National Medicare Rates. Table compiled by ELM Services, Inc., Rockville, Md.
+Based on approximately 165 patients.

in the November 15, 2004 *Federal Register*, Vol. 69, No. 219, section 7 and 8 or on the CMS web site (www.cms.hhs.gov/providers/hopps). You will need to make wage adjustments to these rates.

To determine freestanding facilities charges, use the 2005 Medicare Physician Fee schedule for your region. You will need to adjust these national rates by your region's geographic adjustment factor.

To prepare the comparison, you will also need to know your program's payer mix and your rates for commercial payers. Remember commercial payers reimburse for services and procedures differently.

ELM Services, Inc., ran a comparison between a hospital-based and a freestanding radiation program that provide only external beam radiation therapy (EBRT). Using 2004 patient volumes (about 165 patients in this example) and 2005 payment rates and adjustments, we found the total overall reimbursement for the year to be $1,120,900 for the hospital-based radiation center and $1,200,690 for the freestanding facility. While the freestanding facility seems to "win" the analysis, the difference between the two models' revenue is minimal—only $79,790. A complete analysis must also take into consideration the "costs" of the changes required to re-structure services from hospital-based to freestanding and compare these costs with the revenue value. In this particular example and under current conditions, the "costs" of converting to a freestanding facility would probably not be worth the effort.

Looking at radiation programs that offer IMRT revealed a different picture. ELM Services, Inc., did a reimbursement comparison of one IMRT series at both a hospital-based radiation program and a freestanding radiation facility. We found that adding IMRT into the service mix increased the revenue opportunity for the freestanding program by approximately $11,000 per patient. Our comparison showed the hospital-based program received a total payment of about $19,000 for one IMRT series, while the freestanding facility was paid about $29,000 for the same service.

What does this all mean? Table 2 provides an analysis of the total 2005 payments for external beam radiation therapy alone and total 2005 payments for EBRT and IMRT in both a hospital-based radiation program and a freestanding facility. If your radiation program only offers EBRT, the reimbursement difference between the models is probably not worth making a change. If your radiation program offers IMRT or is planning on offering IMRT, you will be reimbursed at a higher rate under a freestanding model.

Clearly, revenue projections are only part of the picture. You must also consider the cost associated with adding a new service/technology or switching from a hospital-based program to a freestanding radiation facility.

You must also factor in the number of patients that would potentially use the new service/technology or new facility.

Using your existing workload, you can estimate the potential number of patients that would require IMRT (or any other new technology that you might be adding). Once this number is determined, deduct these patients from the number of patients formerly receiving EBRT. You should then estimate new revenue projections for both EBRT and IMRT in both the freestanding and hospital-based models.

The decision on whether to structure a radiation program as hospital-based or freestanding is complex and requires a careful analysis that incorporates multiple factors. Whether you are planning a new facility or adding new services to an existing program, assessing your program's reimbursement outlook from both perspectives can provide critical information to use as part of the decision-making process. Understanding and updating reimbursement trends and examining different models of care delivery are vital tools in the decision-making and strategic planning process.

Lynn Jones, MS, is managing director and Linda Gledhill, MHA, is senior associate of Consulting Services at ELM Services, Inc., in Rockville, Md.