## PORTLAND CANCER CENTER

LEASING DECISIONS

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PORTLAND CANCER CENTER (the Center) is a nationally known not-for-profit inpatient and outpatient facility dedicated to the prevention and treatment of cancer. Specific treatment services include surgery, chemotherapy, bone marrow transplantation, radiation therapy, and photodynamic therapy.

For the past ten years, the Center has been working diligently to perfect noninvasive brain surgery techniques. One technique, Gamma Knife radiosurgery, was developed in the 1950s and 1960s by Dr. Lars Leksell, a prominent Swedish neurosurgeon. The first patient treatment site was opened in 1968 in Stockholm, while the first site in the United States was established in 1977 in Pittsburgh.

The Gamma Knife uses 201 separate radiation sources to treat certain brain cancers. Each of the radiation beams is quite weak and hence does not damage normal brain tissue, but when the separate beams are focused on a single point by a collimator helmet, the Gamma Knife delivers a dosage sufficient to be highly effective. The Gamma Knife is especially useful in the treatment of arteriovenous malformations, but it can also be used to treat certain types of benign tumors and even some small malignant lesions. The primary clinical benefit of the Gamma Knife is the significant reduction in the risk associated with traditional surgical procedures, in which the morbidity and mortality rate is substantial, especially for patients with deep lesions. In addition to treating cancer, the Gamma Knife can be used to treat functional disorders such as Parkinson's disease tremors and the pain that results

from trigeminal neuralgia. (For more information about the Gamma Knife, including an informative video on Gamma Knife surgery, see

the manufacturer's website at www.gammaknife.org.)

The procedure calls for a team approach, including a neurosurgeon, radiation physicist, radiologist, and radiation therapist. The neurosurgeon selects the patients appropriate for the procedure and performs the stereotactic process required to localize the target area. The radiation physicist works with a computer program to compute the appropriate dosimetry, while the radiologist performs a CT scan, MRI scan, angiogram, or a combination of the three to help the neurosurgeon localize the lesion.

The dosimetry calculations are especially complex. Because differing thicknesses of skull and brain will attenuate the beams in varying amounts, the amount of radiation applied is highly dependent on where the lesion is located and the size and shape of the patient's skull. The actual application of the radiation generally takes between 20 minutes and 2 hours, and the patient is generally released after only a

short period of observation.

The Center plans to acquire a new Gamma Knife to replace its current model. The equipment has an invoice price of \$3 million, including delivery and installation charges, and it falls into the modified accelerated cost recovery system (MACRS) five-year class, with current allowances of 0.20, 0.32, 0.19, 0.12, 0.11, and 0.06 in Years 1-6, respectively. The manufacturer of the equipment will provide a maintenance contract for \$100,000 per year, payable at the beginning of each year, if the Center buys the equipment. Furthermore, the purchase could be financed by a four-year simple-interest conventional (taxable) bank note that carries an interest rate of 8 percent.

Regardless of whether the equipment is purchased or leased, the Center's managers do not think that it will be used for more than four years, at which time the Center plans to open a new radiation therapy facility. Land on which to construct a larger facility has already been acquired, and the building should be ready for occupancy at that time. The new facility is designed to enable the Center to use several new radiosurgery procedures. Thus, the Gamma Knife replacement is viewed as a "bridge," to serve only until the new facility is ready four years from now. The expected physical life of the equipment is ten years, but medical equipment of this nature is subject to unpredictable techno-

logical obsolescence.

After considerable debate among the Center's managers, they concluded that there is a 25 percent probability that the residual (salvage) value after four years will be \$500,000; a 50 percent probability that it will be \$1 million; and a 25 percent probability that it will be \$2 million, which makes the residual value quite risky. Because the residual value is judged to have high risk, a 5 percentage point risk adjustment will be added to the base discount rate used on the other lease-analysis flows to obtain the appropriate rate for the residual value flows.

GB Financing (GBF), a leasing company that is partially owned by the manufacturer, has presented an initial offer to the Center to lease the equipment for annual payments of \$675,000, with the first payment due on delivery and installation and additional payments due at the beginning of each succeeding year of the four-year lease term. This rental price includes a service contract under which the equipment will be maintained in good working order. GBF will buy the equipment from the manufacturer under the same terms that were offered to the Center, and GBF will have to enter into a maintenance contract with the manufacturer for \$100,000 per year. (For more information on leasing healthcare equipment, see the GE financing website at www. gehealthcarefinance.com.)

Unlike the Center, GBF forecasts a \$1.5 million residual value. Its estimate is based on the following facts: (1) No technology currently exists that will make the Gamma Knife obsolete; (2) the equipment has a physical life estimated to be two and one-half times longer than the four-year lease term; and (3) GBF is more skilled than the Center in selling used equipment, especially Gamma Knives. GBF's federal-plus-state tax rate is 40 percent, and if the lease is not written, GBF could invest the funds in a four-year term loan of similar risk that yields 8 percent before taxes.

Randall Williams, the Center's chief financial officer, has the final say on all of the business's lease-versus-purchase decisions, but the actual analysis of the relevant data will be conducted by the Center's capital funds manager, Vanessa Seagle. In the past, Randall and Vanessa have more or less agreed on analytical methodologies, but in discussing this lease analysis, they ended up in a heated discussion about the appropriate discount rate to use in the analysis.

Randall argued that the cash flows associated with performing stereotactic radiosurgery are uncertain. He is convinced that payers are not going to be nearly as generous in the future as they have been in

the past in funding such procedures, so the revenue stream is highly speculative. Accordingly, he thinks that a high discount rate should be used in the analysis. Vanessa, on the other hand, believes that leasing is a substitute for other financing, which means a blend of debt and equity capital. Consequently, she believes that the lease-analysis cash flows should be discounted at the Center's corporate cost of capital, 10 percent. However, both Randall and Vanessa are possibly wrong. In addition to the discount rate dispute, there is also some disagreement about how the lease would be handled on the Center's financial statements, so that has to be resolved.

Both Randall and Vanessa think that lessees should not blindly accept the first offer made by potential lessors but should conduct a complete analysis from the viewpoint of both parties and then, using this knowledge, negotiate the best deal possible. Thus, knowing the range of lease payments that is acceptable to both parties is important.

There is a possibility that the Center will move to its new radiation facility earlier than anticipated and hence prior to the expiration of the lease. Furthermore, if the neurosurgeon who is the primary user of this procedure leaves the staff and is not immediately replaced, the equipment will be useless. Thus, Randall is considering asking GBF to include a cancellation clause in the lease contract. Under such a clause, the Center will be able to return the equipment to GBF at any time during the lease term after giving a minimum 30-day notice. Before negotiations begin, the Center must assess the impact of such a clause on the riskiness of the lease to both parties and any consequences it might have on the terms of the lease.

In addition to a cancellation clause, Randall is aware that many lessors are now writing per-procedure leases, in which the lease payment is tied to the number of procedures performed rather than a fixed amount. Randall wonders what the consequences would be for both the lessee and lessor if this type of lease were used instead of a conventional lease. GBF has quoted a per-procedure lease rate of \$7,000 based on an expected annual volume of 100 procedures. However, past experience indicated that volume could easily be as low as 70 or as high as 130 procedures. Based on current charges and reimbursement rates, the Center expects to realize net revenue per procedure of roughly \$10,000.

There also has been some discussion about obtaining tax-exempt financing for the Gamma Knife should it be purchased. If so, the cost

of tax-exempt (municipal) debt would be only 5 percent. To complicate matters even more, the Center currently has more than \$5 million in excess funds invested in marketable securities that earn 3 percent, and these funds, rather than debt financing, could be used to purchase the equipment.

Finally, Randall's brother-in-law, who works at GBF, found out that GBF will probably obtain a \$1.5 million simple-interest loan, which GBF will use to leverage the lease. The terms of this loan have not been finalized, but the bank has indicated that the interest rate would be in the range of 7–9 percent. Such leveraging could affect the Center's ability to negotiate lower lease payments, so understanding the impact of leveraging from the perspectives of both the lessee and the lessor is important.

Assume that you have been hired as a consultant to recommend a course of action for the Gamma Knife acquisition. Prepare a report that addresses all of the issues raised by the parties involved and makes a final recommendation regarding the acquisition.