



## Basic Example of Oncology Case Study to be Submitted with ACE Oncology Certification Application

NOTE: Appropriate supporting documentation should be included as noted

### **Executive Summary**

Analysis of NCDB data showed significantly higher outmigration of oncology patients for this 15-hospital health system than for the state as a whole. A comprehensive study of the reasons for this disparity was conducted using cancer registry data. Once the causes were determined, a corrective action plan was designed and implemented at those hospitals where the issue had the most impact. A follow up study two years later demonstrated conclusively that at least forty patients were retained in the system annually who would have gone elsewhere had the changes not been implemented. This represented a minimum of \$600,000 additional contribution margin to the oncology service line, based upon a study previously conducted by the Oncology Roundtable.

### **Introduction**

Urban Health is a newly-merged 15 hospital system in the state of Texas. The author was selected to become the new system Vice President for Oncology. While reviewing a variety of internal data, it was noticed that the system's Class 00 patient category for the most recent year was over 12%, while the NCDB data showed the Class 00 percentage for the state of Texas was approximately 6%. Class of case 00 has a number of definitions according to FORDS and the AJCC Staging Manual, but the most relevant in this instance involves patients who are diagnosed at the original facility but receive all of their care elsewhere. With the system's annual analytical case load approximating 7,000, this involved a significant number of patients. A study by the Oncology Roundtable indicates that the economic value of a cancer patient to the bottom line is approximately \$15,000.

### **Analysis**

The study began with a review of cancer registry data at all fifteen hospitals. Candidly, not all registries were operating efficiently (those issues were later corrected), but enough valid data was available upon which to base an action plan.

First, all Class 00 patients were identified for the most recent complete year. Next, we eliminated those who received no treatment anywhere (another definition of Class 00), either because the malignancy was found upon autopsy or there was no record of any treatment. Then those patients who were transferred within the Urban Health System were removed from the study (these patients would show up as Class 00 if they were diagnosed at Urban Hospital A and received treatment at Urban Hospital B).

The system wasn't really 'losing' those patients. Finally, for the remaining patients, we looked at: a) where the treatment occurred, b) what was the first course of treatment and c) if known, who was the referring physician.

Upon detailed review, three of the system's hospitals accounted for over 75% of the problem.

- Urban A was losing a significant number of radiation patients to a single local competitor
- Urban B was losing colorectal surgery patients to a single local competitor
- Urban C was losing radiation patients to a number of local competitors

Detailed analysis of these issues, including personal interviews, led to the following conclusions:

- The radiation equipment at Urban A was outdated, but more importantly, the referring physicians had little respect for our primary radiation oncologist and therefore did not refer
- At Urban B, surgery scheduling was problematic and there was not a well-respected colorectal surgeon on staff
- At Urban C, a number of patients were not even aware that the hospital had radiation therapy available

Appropriate corrective actions were taken over the next twelve months:

- Equipment was replaced at Urban A, which consisted of a transfer from Urban D, since they had already been approved for a new linear accelerator. The transferred linac was function seven years newer than the equipment it replaced, and even though used, was a significant upgrade.
- Also at Urban A, a new radiation oncology physician group was recruited to lead the department there, as well as several other system hospitals.
- Surgery scheduling and room turnover was improved at Urban B, and a new colorectal surgeon was recruited.
- A patient navigator was hired at Urban C. One of her primary responsibilities involved attending cancer conferences and working with physician offices to determine those patients who were going to be receiving radiation treatment and scheduling those patients for such treatment at Urban C. The navigator was responsible for keeping 5 patients within the system during her first six month on the job.

Two years later, the outmigration of patients was significantly reduced and detailed analysis demonstrated that at least forty patients stayed in the system who would have gone elsewhere had the changes not been implemented. These actions contributed approximately \$600,000 to the bottom line, more than enough to pay for any added expense resulting from the changes made

### **Conclusion**

Having a successful and profitable service line does not only mean attracting new patients; it also involves avoiding patient outmigration by ensuring that operational obstacles to care are identified and removed. This was done with great success at Urban Health.

### **References**

AJCC Staging Manual 8<sup>th</sup> Edition  
Oncology Roundtable Study of Economic Value, dated xx/xx/xx

**Appendix**

Table listing detail of Class 00 patients upon original review