How Your Cancer Program Can Survive in Today's Tough Reimbursement Environment

Knowing your costs and how your cancer program contributes to net revenue puts you in a strong position to negotiate your service lines needs

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ILLUSTRATION BY NEIL BRENNAN

Increasingly restrictive reimbursement is forcing hospitals to make tough decisions as they try to contain or cut costs. Hospital CEOs are looking closely at the financial performance of each service line to understand where they are losing money and where they are still making money. And, because of reductions in drug payments, the cancer service line is under the microscope, as programs struggle to provide therapies for which they are drastically underreimbursed.

Faced with decreasing revenues, hospital management has tightened budgets and asked for cancer program administrators to measure their program's "value or worth" to the institution before further capital is invested. To do so, today's administrators must have a clear understanding of their cancer program's financial and programmatic impact on the hospital and know how to effectively communicate this information to their hospital CEO. Cancer program administrators who use sound reporting and methodology to measure the financial and programmatic success of their cancer service line will ultimately show compelling justification for further institutional investment.

In the past, hospitals primarily identified cancer programs by two service lines—radiation therapy and

chemotherapy. Efforts to evaluate the financial performance of a cancer program and calculate its effect on the hospital system often centered solely on those two service lines. While some institutions continue to view cancer services in separate "silos," the cancer service line extends far beyond radiation therapy and chemotherapy to a broad spectrum of resources used to treat this patient population.

Calculating the financial and programmatic impact the cancer program has on the hospital is sometimes difficult precisely because of the large number of disciplines involved in treating this patient population. However, if you want to obtain a complete evaluation of your cancer service line, you must factor into the equation *all* of the hospital services used by the cancer patient, including inpatient services, operating rooms, ancillary services such as pathology and radiology, support services, and aftercare services. The evaluation must also have strong cooperation from the hospital's Information Technology Division and full buy-in from staff if it is to successfully illustrate the full financial and programmatic effect of the cancer service line.

Although financial review and the data it delivers are important, your staffing model and the degree of physician support are also key indicators of whether your cancer service line can survive current and future reimbursement reductions. The success of your program rests on fully understanding your cancer service line, the other hospital services used by cancer patients, and the relationship between the cancer program and the hospital. Completing a financial and programmatic review of your entire cancer service line is a useful step in determining the future direction of your cancer program.

Tracking Your Cancer Program's Revenue

Two key methodologies for tracking downstream revenue for cancer patients can provide a horizontal snapshot of the money generated by these patients.

The *book of business* methodology focuses on the activity of cancer patients within a specific fiscal year or 12-month time frame, identifying the patients by cancer diagnosis codes. Inpatient and outpatient charges occurring with a primary diagnosis code between 140.0-239.9 are reported. (This range includes malignant and benign neoplasm.)

Stratifying the diagnosis codes into separate tumor groups makes the data more meaningful for program development because of the rich financial reports it yields. The cancer program administrator can then extract a specific tumor group (i.e., breast) and show that group's order of magnitude compared to other cancers. This report also allows for longitudinal studies of trends in specific tumor group areas. And, because the report generates the number of people in each tumor group (inpatient, outpatient, and total), the cancer program administrator gains a better understanding of patient volume and growth over time.

Keep in mind that because the activity reported is isolated to a specific fiscal year or 12-month time frame, the patients generating the activity will be mixed with regards to their stage of diagnosis and/or treatment.

The *per case margin* methodology identifies cancer patients from the hospital's tumor registry and tracks their clinical activity for 12 months. To use this methodology, start 30 days prior to a patient's tumor registry admit date and pull clinical activity for the next 12 months. The data collected provide a complete picture of the various resources utilized and revenues generated by each specific type of cancer patient.

Table 1 shows revenue generated by tumor type at a fictional hospital. The spreadsheet includes average activity based on total volume for each of the 17 tumor groups that are listed. Table 2 shows additional revenue generated by physicians and does not include any salary costs or clinic overhead.

Maintaining the stratification of tumor groups is important, and tumor registry patients will be categorized into a specific tumor group based on their pathology. Depending upon the population served by your hospital, the cancer program administrator can drill down for data on utilization and revenues by class and stage for each tumor group.

While the per case margin methodology crosses fiscal and calendar years, when compared to the book of business methodology, it provides a more accurate picture of the financial impact a specific type of cancer patient has on the hospital system.

Know Which Services Your Cancer Patients Use

The level of hospital activity supporting a cancer patient is comprehensive and, with little exception, includes all departments.

Knowing the specific services used by a cancer patient allows the cancer program administrator to measure the full financial impact of the cancer service line. These services include the following:

Ancillary Services. The cancer program drives a high percentage of patient volume in pathology, radiology, and pharmacy. Pathology services used by cancer patients may include surgical pathology, hematology, chemistry, specialty labs, and the blood bank. Cancer patients often use radiology services such as general X-ray, ultrasound, mammography, and CT. Depending on how your hospital and cancer program are organized, this measurement may also include MRI and PET. Pharmacy services are often used by both inpatient and outpatient cancer patients. Cancer program administrators who have studied the services used by their cancer patients have found that it is not uncommon for cancer patients to drive at least 50 percent of the volume in these ancillary departments.

Inpatient Services. Inpatient activity generated by the cancer service line may be as high as 25 percent of daily census if all surgery and complications of disease cases are included along with normal medical and hematology oncology patients. Even though a significant amount of cancer care has moved to the outpatient setting, inpatient service remains an important part of the total cancer program and still contributes financially to the overall cancer service line.

Table 1. Per Case Margin Methodology: Hospital Revenue Generated by Tumor Type

Tumor Group	Cases	Average Discharge Per Case	ALOS	OP Accts.	OP Surgery	ER Visits	Hospital Charges	Hospital Direct Costs	Hospital Total Costs	Hospital Collections	Hospital Contribution Margin	Hospital Net Income
Bone & Soft Tissue	148	1.78	8.64	4.92	0.16	0.01	$47,453	$11,326	$22,909	$22,459	$11,133	$(451)
Brain/CNS	220	0.91	5.48	2.79	0.34	0.01	$31,110	$7,412	$15,784	$18,038	$10,626	$2,255
Breast	220	0.46	1.70	4.79	0.23	0.00	$17,340	$4,209	$9,729	$8,004	$3,795	$(1,725)
Endocrine	69	0.90	3.45	2.38	0.06	0.00	$18,043	$4,460	$9,745	$10,449	$5,989	$705
Eye & Orbit	7	1.00	3.00	2.00	1.00	0.00	$20,167	$4,687	$9,630	$8,032	$3,345	$11,285
GI	181	0.94	10.04	1.97	0.13	0.00	$43,143	$9,670	$19,575	$23,239	$13,569	$3,664
GI-Colorectal	140	0.90	7.81	4.36	0.26	0.01	$38,570	$9,091	$18,062	$23,450	$14,358	$5,369
GU	130	0.78	8.16	3.59	0.18	0.02	$40,923	$9,138	$18,255	$20,158	$11,020	$1,903
GU-Prostate	128	0.38	1.98	4.16	0.09	0.00	$15,367	$3,747	$8,804	$7,371	$3,623	$(1,433)
GYN	204	1.10	7.76	2.22	0.10	0.01	$33,869	$7,480	$16,136	$15,673	$8,193	$2,872
Head & Neck	140	0.66	3.64	4.17	0.21	0.00	$29,304	$6,918	$17,006	$13,750	$6,832	$(3,256)
Hematologic	260	1.67	20.32	9.12	0.30	0.00	$103,863	$28,517	$51,030	$53,831	$25,314	$2,801
Lung	251	0.51	3.90	4.54	0.19	0.03	$22,933	$5,315	$11,733	$11,516	$6,200	$(218)
Oral	102	0.75	4.77	3.58	0.15	0.01	$32,927	$7,603	$18,119	$18,357	$10,754	$238
Other	50	1.00	5.36	3.00	0.18	0.00	$25,731	$5,840	$12,695	$14,290	$8,450	$1,595
Respiratory	3	1.00	3.00	0.00	0.00	0.00	$12,361	$3,042	$6,412	$8,081	$5,039	$1,669
Skin	120	0.50	2.20	3.12	0.36	0.00	$16,770	$3,768	$8,978	$8,512	$4,744	$(466)
All Patients	**2373**	**0.90**	**7.05**	**4.20**	**0.21**	**0.01**	**$37,946**	**$9,286**	**$18,872**	**$19,606**	**$10,320**	**$734**

Data Source: DSS (Hospital and Physician Data)
Methodology: Begin with all tumor registry medical record numbers for that fiscal year. Pull all activity 30 days prior to tumor registry admit date and continuing through the next 11 months to have 12 months of complete data for each patient. Combine IP and OP activity. Average activity is based on total volume for each tumor group. The collections, contribution margin, and net income are under-reported due to data limitations that do not account for Medicare and Medicaid bulk payments received for OP services.

Radiation Oncology. Although radiation oncology may be one of the areas most familiar to cancer program administrators, a full understanding of the financial impact and programmatic activity of the department is integral to the success of your cancer service line. Specifically, you should know the radiation department's direct and indirect costs, as well as the revenue it generates.

Radiation oncology is clearly a profitable part of the cancer service line and enables the cancer program to support less profitable services such as social work and nutrition counseling. Having this financial information at your fingertips will help you make your case to the hospital CEO about the contribution of both the radiation department and the total cancer service line and the value they bring to the hospital.

Chemotherapy/Infusion Services. While infusion services have been a major financial contributor to the cancer service line in the past, drug reimbursement has decreased significantly. Today, most cancer programs are losing money or, at best, seeing marginal revenue in their chemotherapy/infusion departments. Cancer program administrators must clearly understand the financial performance of their infusion service. Conducting an analysis of the cost and reimbursement for each cancer drug used is the best way to obtain a good snapshot of this department's financial status. Once you have this information, you can monitor your drug purchasing and, hopefully, minimize the financial loss to your program. Of course, cancer program administrators must also focus on improving coding and billing for services to ensure maximum reimbursement.

Support Services. An important part of the cancer patient experience, these services typically include social work, nutrition, complementary medicine, and other programs. If your hospital has an inpatient hospice unit, it should be included in your evaluation of services used by cancer patients. Generally, support services generate very little revenue and depend on support from other parts of the cancer program that do generate positive margins. Today, cancer programs dealing with lower profit margins are finding it difficult to fund these programs. If current trends continue and other cancer services experience the same dramatic reductions in reimbursement that infusion services have experienced, cancer centers will be challenged to provide such services.

Surgery. Surgery remains a significant revenue generating service used by a high percentage of cancer patients. General surgery, urology, surgical oncology (breast and

GI), thoracic, as well as other surgical specialties performing cancer surgery all log significant operating room time.

Attract Committed Physician Leaders

While today's challenging reimbursement environment has forced cancer programs to be more fiscally sound, the hospital's relationship with its medical staff is the single most critical component for determining success or failure of the program.

In their role as individual practitioners, the physicians refer patients for cancer services. As members of the cancer team, these same physicians provide the medical expertise that drives the quality of cancer care and the program's reputation. The physicians' preeminence is an extremely important factor for patients choosing where they wish to receive care. The physicians' support for and involvement in the cancer program's organization and activities are critical to ensure the success of the cancer service line.

Hospital-based cancer programs may have different types of relationships with their medical staff. These relationships will determine how a program is organized, how it functions, and how successful it will be. The two "purest" hospital-medical staff models are the closed staff and the open staff, and many institutions have a blend of both models.

The *closed staff model* has the advantage of tying physicians to the hospital-based program both organizationally and economically. In this model, physicians are committed to support the program professionally, to use the program's services, and to help the program grow. Defining the cancer program's organizational structure and the responsibilities of the physician leadership is less complicated under the closed staff model. Programmatic strategic planning, financial and operations decision-making, and capital investment are also easier to accomplish. (Table 2 is a fictional example that shows how physicians employed at a hospital contributed to the hospital's bottom line.)

Under a closed staff model, institutions can recruit new physicians based on capacity as well as expertise needs. Even with these benefits, cancer program administrators who use a closed staff model must carefully manage the overall vision and needs of the program, focusing on coordination of services and avoiding treating programs as separate silos.

The *open staff model* poses many different challenges for the hospital-based program because the physicians have significant influence or control over where the patient receives cancer treatment and related services. Often, hospitals are competing with each other for an individual physician's loyalty and patients. For its cancer program to succeed, a hospital must court key physicians while guarding against physician inurement. Stark regulations and IRS not-for-profit tax status control what relationships can exist between private practice physicians and hospitals, and these regulations may limit what would otherwise be mutually beneficial business relationships.

Even more challenging is that lower reimbursement rates and rising costs of operations are driving both private practice physicians and hospitals to capture as much outpatient services and accompanying revenue as possible. As a result, hospitals and physician practices can end up competing with each other for financially profitable services such as diagnostic radiology, radiation therapy, ambu-

Table 2. Per Case Margin Methodology: Hospital Revenue Generated by Physicians

Tumor Group	Number of Professional Invoices (Per Patient)	Professional Charges (Per Patient)	Professional Payments (Per Patient)
Bone & Soft Tissue	72.89	16,100	6,705
Brain/CNS	42.77	17,091	7,461
Breast	38.58	8,360	3,039
Endocrine	26.94	9,081	3,968
Eye & Orbit	33.57	11,285	2,890
GI	36.45	8,348	3,159
GI-Colorectal	62.14	10,605	3,757
GU	46.75	9,437	3,213
GU-Prostate	28.95	8,246	3,011
GYN	27.39	8,319	2,872
Head & Neck	47.91	14,203	5,966
Hematologic	237.71	18,064	7,511
Lung	42.99	8,513	2,944
Oral	48.25	18,169	6,640
Other	37.94	9,800	4,400
Respiratory	4.33		
Skin	32.22	10,007	3,722
Grand Total	**63.82**	**11,818**	**4,620**

Data Source: DSS (Hospital and Physician Data)
This chart represents all billable activity described in the invoice column. Each invoice represents a billable activity. The two remaining columns describe physician charges and the payments received.

latory surgery, and clinical laboratory services. While one trend is for individual private practice physicians to band together organizationally to compete with hospitals for lucrative outpatient services, another trend is for physician practices to align themselves more closely with a hospital—financially and organizationally.

Aligning incentives is often difficult in the open staff model. Creating trust and balanced, mutually beneficial outcomes is also difficult. Hospitals view health care as a business, while private practice physicians tend to view their practice personally, as an extension of their own identities. Nonemployment relationship options for hospitals and physicians include joint ventures around services or technology purchases, management contracts, professional services contracts, and space lease agreements. These types of relationships help align incentives between the physicians and the cancer programs, conserve scarce resources, and develop commitment to the cancer program.

Many hospitals use a medical staff comprised of both employed physicians and individual private practice and/or multispecialty physician clinic practices. This mixed staffing model provides additional challenges when defining the medical staff component of the hospital cancer program. Programs can be inclusive or exclusive and can promote the employed physician group with whom they have a financial bond to the exclusion of the private practice physicians. Successful mixed staffing models strive to create a balance of priorities for the sake of promoting the overall quality and financial benefit of all parties, while working to continually acknowledge and manage conflicting interests and agendas.

Regardless of its medical staff economic model, a successful hospital-based cancer program requires committed physician leadership in order to survive in today's challenging reimbursement climate. The most essential leadership role is the medical director, who must have vision, leadership skills, respect as a clinician, and knowledge of health care management and financial matters. The medical staff must respect the medical director as a peer physician, and the hospital administration must respect the medical director's unique ability to see the clinical side of planning and operational issues.

In addition to the medical director, a successful cancer program also provides leadership opportunities for other key physicians on staff. Such opportunities allow physicians the chance to lead and build programs, as well as gain the respect of their peers. Support and involvement from these key physician leaders can help build a broader base of support among the entire medical staff. These key physician opinion leaders must be involved in strategic planning decisions, program development, and problem resolution.

The hospital should also create forums for organizational discussions with its physicians, and the entire cancer program medical staff should be invited to provide input into important decisions. Opening issues up to the entire cancer team can reveal valuable, previously unidentified concerns.

To attract top tier physicians to its cancer program, a hospital needs to provide clinical opportunities for its physicians and patients that the practitioners cannot provide on their own. Capital for new technology, patient support services, and management services are common bonuses that hospitals can offer their physicians.

Many professionally driven physicians value their identity with a prestigious cancer program, the opportunity to collaborate more closely with peers, the ability to offer patients comprehensive services, and the opportunity to increase their knowledge and do clinical research. An inclusive hospital-based cancer program will benefit from the commitment of time and talent from their physician supporters.

Optimal cancer care is multidisciplinary, so many different types of physicians are involved with the screening, diagnosis, treatment, and supportive care of each cancer patient. The truly comprehensive cancer program consists of more than medical oncology and radiation oncology. Surgeons, diagnostic radiologists, pathologists, rehabilitation and palliative care physicians, psychiatrists, and a variety of medical and surgical subspecialists are all essential and significant participants in the cancer service line. The cancer program administrator needs to help the hospital CEO recognize the financial and programmatic contributions of these other specialists. On their part, these specialists must be active participants and commit to the cancer program as a significant part of their professional and clinical activities.

Watch Your Numbers

The national trend for cancer programs shows that specific service areas will generate revenue, others will generate minimal revenue, and some will even lose money. As a rule of thumb, radiation therapy usually generates the most revenue for a hospital, followed by inpatient and outpatient surgery and diagnostics. Revenues brought in from inpatient stays and hospice palliative care usually are at break even or slightly above. However, lower reimbursement for hospital-based chemotherapy services has resulted in revenue rates that are at break even or lower.

At minimum, your cancer service line must sustain the cost of its operation. In most cases, the program should also contribute to the net revenue of the organization. As you evaluate your cancer service line, pay close attention to your numbers and know which programs remain financially solvent, which ones are generating marginal revenue, and which ones are losing money. Having this information at your fingertips puts you in a strong position to negotiate with your hospital CEO for your financial and programmatic service line needs.

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