# How Your Infusion Center Measure Up?

# RESULTS OF THE 2014 NATIONAL HOSPITAL ONCOLOGY BENCHMARK FOR INFUSION

he National Hospital Oncology Benchmark Study, conducted annually by the Oncology Management Consulting Group, gathers data from respondent hospital-based outpatient infusion and radiation centers across the country. This article presents a selection of the infusion-related survey analyses from the 47 infusion centers that submitted data.

# **Disease Mix**

Most survey respondents reported that their hospital-based infusion centers treat more than cancer patients and that the mix can have an impact on staffing, scheduling, throughput, and reimbursement. On average, 58 percent of all patients treated in the infusion center were treated for cancers, 16 percent were treated for benign hematology conditions, and 26 percent were treated for other conditions.

# **Ancillary Staff**

Table 1, right, shows the percentage of all programs that report having "dedicated" staff, although some were not necessarily full-time staff members (e.g., one social worker working half time in infusion and half time in radiation = .5 FTE for infusion). Topping the list for ancillary staff, financial counselors—47 percent of programs report having a "dedicated" financial counselor. Interestingly, even with Commission on Cancer (CoC) Standard 3.1 that requires accredited institutions to develop and implement a patient navigation process to address disparities and barriers to care experienced by cancer patients, only 22 percent of programs report "dedicated" navigators in their infusion centers. Registry data found an adjusted mean of 452 analytic cases per FTE tumor registrar.

# Table 1. Support Staff Serving Only Infusion Patients

- 47 percent of programs have dedicated financial counselors
- 40 percent have dedicated social workers
- 33 percent use licensed practice nurses/nursing assistants
- 31 percent have non-physician practitioners
- 24 percent have nutritionists
- 22 percent have oncology navigators
- 20 percent use medical assistants

For many job categories, we calculated the number of patients seen per FTEs in the infusion suite for one year. Here are the adjusted mean results:

- Total patients per financial counselor: 1,310
- Total patients per social worker: 1,506
- Total patients per licensed practice nurse/nursing assistant: 2,997
- Total patients per FTE oncology-only navigator: 3,889
- Total patients per non-physician practitioner: 866
- Total patients per nutritionist: 4,411
- Total patients per medical assistant: 732



# **Oncologists/Hematologists**

Across the country, there is a continuing trend towards integration and alignment between hospitals and oncologists/hematologists. In the 2014 study, 49 percent of programs report having only "exclusive" oncologists/hematologists (i.e., physicians who utilize only this institution's infusion suite because they are employed or under exclusive contract); 11 percent of programs report having only "private" oncologists/hematologists (i.e., physicians who use their own offices for most infusions). Figures 1 and 2, below,

shows encounters per FTE "exclusive" and "private" oncologist/hematologist.

It is not possible to accurately report the volume of services generated per oncologist/hematologist in programs where there is a mix of "exclusive" and "private" physicians. However, by comparing the number of "initial" infusion services provided to benign hematology patients and oncology patients (because only one "initial" service may be billed for any given encounter) to the number of FTE oncologists/hematologists, we see that the

Figure 1. Encounters per FTE Employed Oncologist/ Hematologist

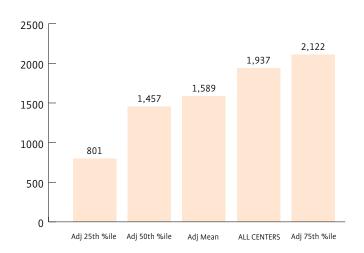
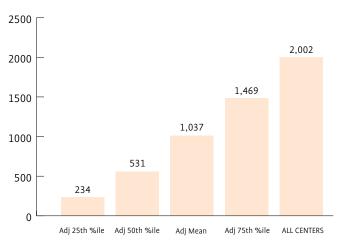


Figure 2. Encounters per FTE Private Oncologist/ Hematologist



"exclusive" physicians generate 64 percent more infusions than the "private" physicians. While this is intuitively obvious, the actual number is helpful in capacity planning for programs looking to employ or contract with private practices in the future and for programs whose private physician practices are either growing or shrinking.

## **Infusion Nurses**

Among the most commonly requested benchmarks are chairs per nurse and encounters per nurse. On average, one FTE infusion nurse handles 3.74 chairs per day and 1,162 infusion encounters per year (unique appointments—one patient on one day) (see Figures 3 and 4 below). Figure 5, below, shows the annual

hours one FTE nurse spends infusing patients. Based on survey data, we calculate one FTE infusion nurse is responsible for 1,453 hours of infusions/injections per year.

## **Chair Utilization**

While many cancer programs are facing growth in the infusion department, programs often believe that they do not have the capacity for more patients and so must plan for expansion. Before spending significant money on construction, it can be extremely valuable to look more closely at the actual utilization of those chairs. Too often, patients are seated in the infusion suite while they wait for lab results, thus taking a chair out of circulation for treatments that are ready to be given. Figure 6, below, shows that

Figure 3. Total Chairs per FTE Infusion Nurse (All Programs)

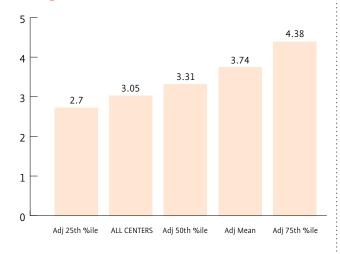


Figure 4. Encounters per FTE Infusion Nurse (All Programs)

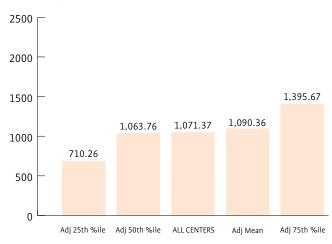
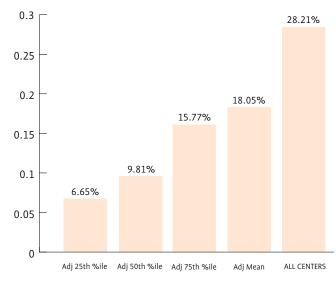


Figure 5. Infusion Hours per FTE Nurse



Figure 6. Chair Occupancy (Active Treatment) Rate



infusion chairs are utilized for active treatment only 18 percent of the total chair time available. Accordingly, there appear to be significant opportunities to streamline patient throughput and potentially reduce the need for costly expansion of the infusion suite. (Learn how one ACCC member program used a web-based patient tracker to streamline patient throughput on pages 30-38).

# **Pharmacy**

Nearly all survey respondents with "dedicated" (oncology-only) pharmacy staff reported having both pharmacists and pharmacy technicians. We combined those two job categories to determine the total pharmacy FTE complement. Next, we counted all infusion/injection codes. Although many drugs do not require a

substantial amount of time to prepare, we find that the average FTE pharmacy staffer prepares drugs for 5,941 infusions/injections annually (Figure 7, below). Tables 2-4, pages 63-64, show the most frequently ordered drugs for breast cancer, colorectal cancer, and lung cancer.

The full National Hospital Oncology Benchmark Study is given to each participating institution and is available for purchase at: http://oncologymgmt.com/nhobs/.

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Figure 7. Total Infusions/Injections per FTE Pharmacy Staff





Table 2. Drug Utilization of Breast Cancer Patients								
HCPCS Code	Top 10 J-Codes as a Percentage of all J-Codes		HCPCS Code	Percentage of all Breast Cancer Patients Receiving Drug		Average Number of Times Drug Given to Patient		
	All Programs	Mean		All Programs	Mean	HCPCS	# of TX	
J9355	25.1%	25.8%	J9355	11.8%	15.6%	J9355	9.9	
J9171	17.9%	11.6%	J9171	11.8%	11.9%	J9171	7.1	
J9265	12.7%	10.8%	J9265	8.6%	10.4%	J9265	6.9	
J9070	12.0%	11.8%	J9070	15.3%	18.5%	J9070	3.7	
J9000	8.7%	7.3%	J9000	9.6%	9.7%	J9000	4.2	
J9395	5.5%	14.0%	J9395	4.3%	6.2%	J9395	6.0	
J9045	3.8%	3.9%	J9045	4.5%	5.7%	J9045	3.9	
J9201	2.8%	3.6%	J9201	2.1%	3.6%	J9201	6.1	
J9179	2.7%	2.0%	J9179	1.5%	1.3%	J9179	8.7	
J9390	2.3%	2.0%	J9390	1.2%	1.6%	J9390	9.3	

Table 3. Drug Utilization of Colorectal Cancer Patients								
HCPCS Code	Top 10 J-Codes as a Percentage of all J-Codes		HCPCS Code	Percentage of all Colorectal Cancer Patients Receiving Drug		Average Number of Times Drug Given to Patient		
	All Programs	Mean		All Centers	Mean	HCPCS	# of TX	
J9190	38.4%	44.4%	J9190	12.5%	12.7%	J9190	7.7	
J9263	24.6%	25.4%	J9263	0.1%	0.0%	J9263	6.2	
J9206	13.8%	10.6%	J9206	3.2%	2.2%	J9206	7.6	
J9035	13.3%	13.0%	J9035	30.0%	36.1%	J9035	6.4	
J9055	4.9%	2.8%	J9055	0.1%	0.1%	J9055	9.3	
J9303	2.8%	2.2%	J9303	10.9%	9.5%	J9303	8.3	
J9280	0.6%	0.7%	J9280	23.8%	27.4%	J9280	1.8	
J9400	0.3%	0.2%	J9400	2.1%	2.7%	J9400	28.0	
J9041	0.2%	0.2%	J9041	2.0%	2.1%	J9041	21.0	
J9201	0.1%	0.1%	Ј9201	0.1%	0.0%	J9201	6.5	

Table 4. Drug Utilization of Lung Cancer Patients								
HCPCS Code	Top 10 J-Codes as a Percentage of all J-Codes		HCPCS Code	Percentage of all Lung Cancer Patients Receiving Drug		Average Number of Times Drug Given to Patient		
	All Programs	Mean		All Programs	Mean	HCPCS	# of TX	
J9045	5.9%	10.4%	J9045	26.7%	28.6%	J9045	3.7	
J9181	5.1%	5.1%	J9181	13.5%	14.2%	J9181	7.3	
J9265	5.1%	6.5%	J9265	12.9%	14.6%	J9265	4.6	
J9305	4.4%	3.2%	J9305	13.6%	12.6%	J9305	4.1	
J9201	3.8%	2.3%	J9201	8.1%	8.0%	J9201	5.8	
J9264	6.5%	7.7%	J9264	4.0%	5.7%	J9264	6.2	
J9060	3.3%	3.9%	J9060	8.1%	9.5%	J9060	3.3	
J9035	3.1%	3.5%	J9035	5.0%	5.6%	J9035	4.4	
J9171	3.3%	3.9%	J9171	5.2%	4.2%	J9171	4.5	
J9390	2.0%	2.2%	J9390	5.2%	4.0%	J9390	8.4	