

# ONCOLOGY

Nationwide and Central Region Cancer Care Report  
2011–2012 Edition

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Because health matters.



# Introduction

Sanofi-aventis is pleased to present the sanofi-aventis Nationwide and Central Region Cancer Care Report, 2011-2012 Edition. This is one of five sanofi-aventis regional reports that explore current clinical and business practices in oncology and their likely evolution over the next few years. This year's edition includes a close look at the management of breast cancer, colorectal cancer, and prostate cancer.

Cancer is the second leading cause of death in the United States, and treatment is characterized by regional variations in patient demographics, the provision of care, costs of care, and outcomes. The five unique Cancer Care Reports draw data from areas designated as the Central, Northeast, Southeast, Southwest, and West Regions of the United States. Each report compares regional data with information gathered nationwide, offering readers the opportunity to compare their experiences with those of colleagues across the United States.

Preserving patient access to quality patient care is a key shared objective of oncologists and health plan executives. This three-part report examines current therapies in the treatment of breast cancer, colorectal cancer, and prostate cancer, and also examines clinical, business, and managed care practices that affect care delivery, costs, and patient access to care for each of the five regions.

Part 1 of each regional report consists of three sections analyzing SDI claims data on breast cancer, colorectal cancer, and prostate cancer treatments. Findings are presented both for the region and nationwide on the selection of chemotherapy and biologic treatments, payment for treatments, the practice setting where care is delivered (hospital or physician's office), and associated charges.

In Part 2, findings for a survey of oncology practices are presented on care delivery, business management, reimbursement issues, relations with health plans, and treatments for breast cancer, colorectal cancer, and prostate cancer. Regional and nationwide responses are compared.

In Part 3, managed care executives are surveyed and results presented on preferred care settings, reimbursement issues, relations with oncologists, and coverage policies for breast cancer, prostate cancer, and colorectal cancer treatments. Three types of responses are compared: regional responses, nationwide averages, and responses of health plans serving a national market.

Your sanofi-aventis account manager will be happy to provide you with any of the other four regional reports, or with additional information on oncology care in the Central Region.

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# Executive Summary

Highlights from the data analyses and survey findings:

## Central Region and Nationwide Averages Compared

- The Central Region parallels the nation as a whole in the rate of patients with a diagnosis of early stage breast cancer by payer and treatment setting. Percentages of patients with early diagnoses were within a few percentage points of nationwide averages.
- The Central Region also parallels the nation as a whole in the percentage of colorectal cancer patients with early-stage diagnoses by payer and treatment setting. Regarding prostate cancer, the Central Region was 4 percentage points below nationwide for early diagnosis in physicians' offices and among Medicare patients, but 9 percentage points above in early diagnosis of Medicaid patients.
- Proportionately more Central Region oncology practices are organized as private, single specialty practices (52% vs 46% nationwide). The Central Region has the same proportion (20%) of hospital-based practices as occurs nationwide.
- Central Region practices are larger than average practices nationwide. More than two-fifths (43%) of Central Region practices are staffed by 6 or more oncologists compared with 34% nationwide; just 12% are operated by solo practitioners in the Central Region, compared with 18% nationwide.
- Over the next five years, proportionately more Central Region practices expect to sell the practice to a group practice organization (12%), or close the practice (12%) than practices nationwide (4% and 9%, respectively).

## Electronic Medical Records (EMRs)

- Central Region practices lag practices nationwide (35% vs 44%) in the implementation of EMRs.
- EMRs are primarily used for routine business functions both in the Central Region and nationwide. EMRs are used by an average of one-quarter of practices for tracking patient outcomes, and by one-third for practice management reporting. More than half of applications are for billing, medical notes, electronic imaging, and laboratory results.

## Early versus Late Diagnosis

- Most patients with a diagnosis of early stage breast cancer, colorectal cancer, and prostate cancer were seen in hospital outpatient settings. Among breast cancer patients in the Central Region, 89% in the outpatient setting (90% nationwide) and 73% in physicians' offices (74% nationwide) were diagnosed with early stage disease. Among colorectal cancer patients, 85% in the outpatient setting (87% nationwide) and 60% in physicians' offices (59% nationwide) were diagnosed with early stage disease. Among prostate cancer patients, 96% in the outpatient setting (96% nationwide) and 59% in physicians' offices (63% nationwide) were diagnosed with early stage disease.

- Of patients seen in physicians' offices, both in the Central Region and nationwide, the proportion of patients diagnosed with early stage cancer was higher for breast cancer (73% Central Region, 74% nationwide) than for either colorectal cancer (60%, 59%, respectively) or prostate cancer (59%, 63%).
- The hospital outpatient proportion of patients with early stage diagnoses in the Central Region or nationwide was higher for prostate cancer (96% Central Region, 96% nationwide) than for breast cancer (89%, 90%, respectively), or colorectal cancer (85%, 87%).
- Patients covered under Medicaid had the highest proportion of late stage diagnosis or metastatic disease, compared with patients covered by Medicare or commercial insurance. Only 62% of Medicaid breast cancer patients seen in physicians' offices in the Central Region (62% nationwide) had a diagnosis of early stage cancer versus 75% of commercially insured patients (75% nationwide) and 71% covered under Medicare (73% nationwide). Only 46% of Medicaid patients with colorectal cancer in the Central Region (45% nationwide) had a diagnosis of early stage disease, compared with 59% of commercially insured patients (58% nationwide), and 62% covered under Medicare (62% nationwide). Only 46% of Medicaid patients in the Central Region (37% nationwide) had a diagnosis of early stage prostate cancer, versus 56% of patients covered under Medicare (60% nationwide) and 68% of commercially insured patients (70% nationwide).

## Care Delivery

- The preferred cancer care treatment settings of Central Region plans are preferred providers contracted for specific cancer services (3.9, using a scale of 1 to 5, with 5 equaling most preferred).
- Just two-thirds of all plan types report that they are actively managing cancer care in their medical and pharmacy benefits plans.
- While oncology practices do accept specialty pharmacy drugs in their practice, such utilization occurs only under specific situations, eg, for selected drugs, or for specific payers under limited circumstances.
- The most frequently cited reason by oncologists nationwide (45%) for using specialty pharmacies is that the commercial payer requires their use. Responses of Central Region practices are more variable, resulting in a three-way tie: commercial payer requires use; choose not to buy and bill drug; and convenience to practice or patient (29% each). A significant majority (Central Region, 76%; nationwide, 75%) state that they would not accept drugs from a specialty pharmacy for use in their practice without a signed liability waiver.
- Over half of practices nationwide report that they encourage the use of clinical guidelines, most frequently those of the National Comprehensive Cancer Network. The use of guidelines is required in 18% of practices (for prostate, head and neck cancers) to 25% (for breast cancer).

## Reimbursement Policies

- The largest portion of breast cancer patients treated in physicians' offices or hospital outpatient settings was covered by commercial insurance, both nationwide (physicians' offices, 53%; hospital outpatient settings, 50%) and in the Central Region (53%, 48%, respectively). The largest portion of colorectal cancer patients was covered by Medicare both nationwide (50%, 35%) and in the Central Region (54%, 35%). The largest portion of prostate cancer patients was covered by Medicare, both nationwide (66% and 50%, respectively) and in the Central Region (70%, 54%).
- Plans with national coverage (56%) report greater interest of employers seeking to participate in determining oncology reimbursement policy than do other plan types.
- Of the 17% of practices nationwide that calculate the reimbursement rate for professional services sufficient to cover costs of care delivery by using Medicare rates as a basis, the largest proportion, 22% (30% of Central Region practices), suggest that professional fees from private plans equivalent to 50% over Medicare rates would be considered fair; 56% suggest higher amounts. In contrast, 44% of all plans nationwide see Medicare rates as sufficient.
- Practices nationwide and in the Central Region report that, under the medical benefit, drug reimbursement formulas of average sales price (ASP) plus 6% or less are most common. The most frequently used drug reimbursement rate for all three plan types is ASP plus 6%. Twenty-one percent of plans with national coverage report rates of ASP plus 13%-18%, whereas fewer practices report these payment rates (7% nationwide, but 16% in the Central Region). Another 21% of plans with national coverage report still using AWP ≤ 15%, but only 4% of practices in the Central Region and 6% nationwide report this rate. However, about 11% of practices report that they don't know their reimbursement rates, which could account for some of the differences.

## The Business of Care Delivery

- About half of all oncology practices report seeing more patients than a year ago. More than half report a decrease in net profit for their practices in the same time period.
- Reimbursement formulas are presented to oncology practices with no possibility for negotiation with plans, report one-third of practices nationwide. Central Region practices are slightly more positive, with 31% agreeing with the statement: "We try to negotiate the fee schedule with payers and are sometimes successful."
- More than two-fifths of practices (Central Region, 44%; nationwide, 42%) don't know if the majority of their managed care contracts are profitable. Less than one-third of contracts (32% for the Central Region and nationwide) are considered to be profitable.

## Collaboration Among Oncologists and Health Plans

- Central Region practices are more likely to contract with payers on oncology-related programs on their own (54% vs 34% nationwide) and also to work with other private oncology practices (29% vs 15% nationwide).
- All plans nationwide show high interest (3.0, using a scale of 1 to 5) in collaborating with practices on tracking of off-label drug use and survivorship management programs.
- Potential collaborative efforts with plans that have high interest (3.1 to 3.4) among practices nationwide include: improvements in quality measures, end-of-life process, participation in the American Society of Clinical Oncology's Quality Oncology Practice Initiative (QOPI), advisory panel, and guidelines.

## Oncologist vs Plan Perspectives on Breast Cancer

- Oncologists favor treatment with multiple agents.
- Central Region plans and all plans nationwide most often indicate that they have no specific policy for treatment of breast cancer patients while most plans with national coverage approve treatment only after prior authorization requirements are met.
- Most oncologists (74%) and plans (79%) nationwide agree to provide life-long treatment for patients with positive hormone receptor findings and metastatic disease.
- Most physicians and plans would consider introducing discussion of palliative care with breast cancer patients by stage IV.

## Oncologist vs Plan Perspectives on Prostate Cancer

- Central Region oncologists' choices of treatment are similar to those of oncologists nationwide for patients with localized prostate cancer. Most common treatments are: radical nerve sparing prostatectomy and IMRT.
- LHRH is prescribed by more than half of all oncologists for stage I and II prostate cancer, treated either surgically or with radiation.
- Plans, especially plans with national coverage, are more likely to require prior authorization for treating patients with stage III and IV disease than for treating early-stage prostate cancer.

## Oncologist vs Plan Perspectives on Colorectal Cancer

- Nearly half of Central Region plans and about one-third of all plans nationwide have no specific policy concerning a range of treatments. However, more than half of plans with national coverage require prior authorization regardless of treatment.
- While most plans agree that stage III is an appropriate time to discuss the need for palliative care, most oncologists would not have that discussion until stage IV.

# Methodology

This report on oncology practice and trends compares national averages with data gathered from the Central Region. Part 1 reports and interprets claims data for chemotherapy and biologic regimens used in the treatment of breast, colorectal, and prostate cancer. Part 2 presents findings from a survey of oncology practices, and Part 3 presents findings from a survey of health plan executives. Each of the other four reports in this series compares national averages with data gathered from the Northeast, Southeast, Southwest, or West Region.

## SDI Cancer Data Analyses

The SDI analyses of claims data in Part 1 focus specifically on breast, colorectal, and prostate cancers. Reporting is based on information obtained through the use of the standard Healthcare Common Procedure Coding System (HCPCS) utilizing J-codes for the billing of chemotherapy and biologics. These cancer data are obtained from two proprietary databases that are maintained by SDI Health, LLC. One database uses claims data from physicians' offices and clinics (CMS1500); the other is based on billed hospital charges (Charge Data Master). SDI uses algorithms to project its data to national and regional levels. These two datasets are viewed in parallel but not commingled. Data presented in this section of the report are drawn from both datasets.

In comparisons of charges for hospital outpatient care with charges for care based in physicians' offices, hospital overhead charges (pharmacy, imaging, etc.) in part account for the higher charges often reported in hospital outpatient settings. Moreover, charges reported from any site of service provide only a rough approximation of costs and payments. Hospitals and physicians' offices use the same billing codes, but reimbursement rates differ. Medication charges incurred in physicians' offices are usually paid at contracted rates, which can be lower than billed charges. Hospitals generally pay less for chemotherapy agents and are reimbursed at lower rates but include overhead costs in their charges.

The data-reporting period includes the full calendar years 2008 and 2009, with a review of patients' medical histories to assign breast, colorectal or prostate cancer diagnoses. Patients diagnosed with cancer but not receiving chemotherapy were included if they visited an oncologist or hematologist in the year reported. All patients receiving chemotherapy were included regardless of the specialty of the physician providing the therapy.

## Oncology Practice Survey

To gain insights from the perspective of practicing oncologists, 165 oncology practices were surveyed on a range of clinical and business issues related to the care of cancer patients. Respondents were primarily oncologists/hematologists (74%),

followed by practice administrators (7%), and others (19%), predominantly surgical oncologists. Of the 165 survey respondents, 26 (16%) indicated that their practice was located in the Central Region. Where appropriate, comparisons were made between averages nationwide and those of the Central Region. The survey was conducted in July-August 2010.

The largest proportion, and similar percentages, of both Central Region practices and practices nationwide were private, single specialty practices (52% and 46%, respectively). Roughly two-thirds of practices were staffed by 5 or fewer oncologists (59% Central Region, 66% nationwide), with Central Region practices less likely to be operated by solo practitioners (12% compared with 18% nationwide).

Patient insurance coverage varied little between all regions nationwide and the Central Region. Oncology practices reported that almost half of patients were covered under Medicare (48% both nationwide and in the Central Region), followed by commercial insurance (34% nationwide; 37% in the Central Region, which was the highest percentage for all regions), Medicaid (9%, 10%, respectively), self-pay (3% for both), indigent (3% and 1%, respectively), and other (2% and 1%).

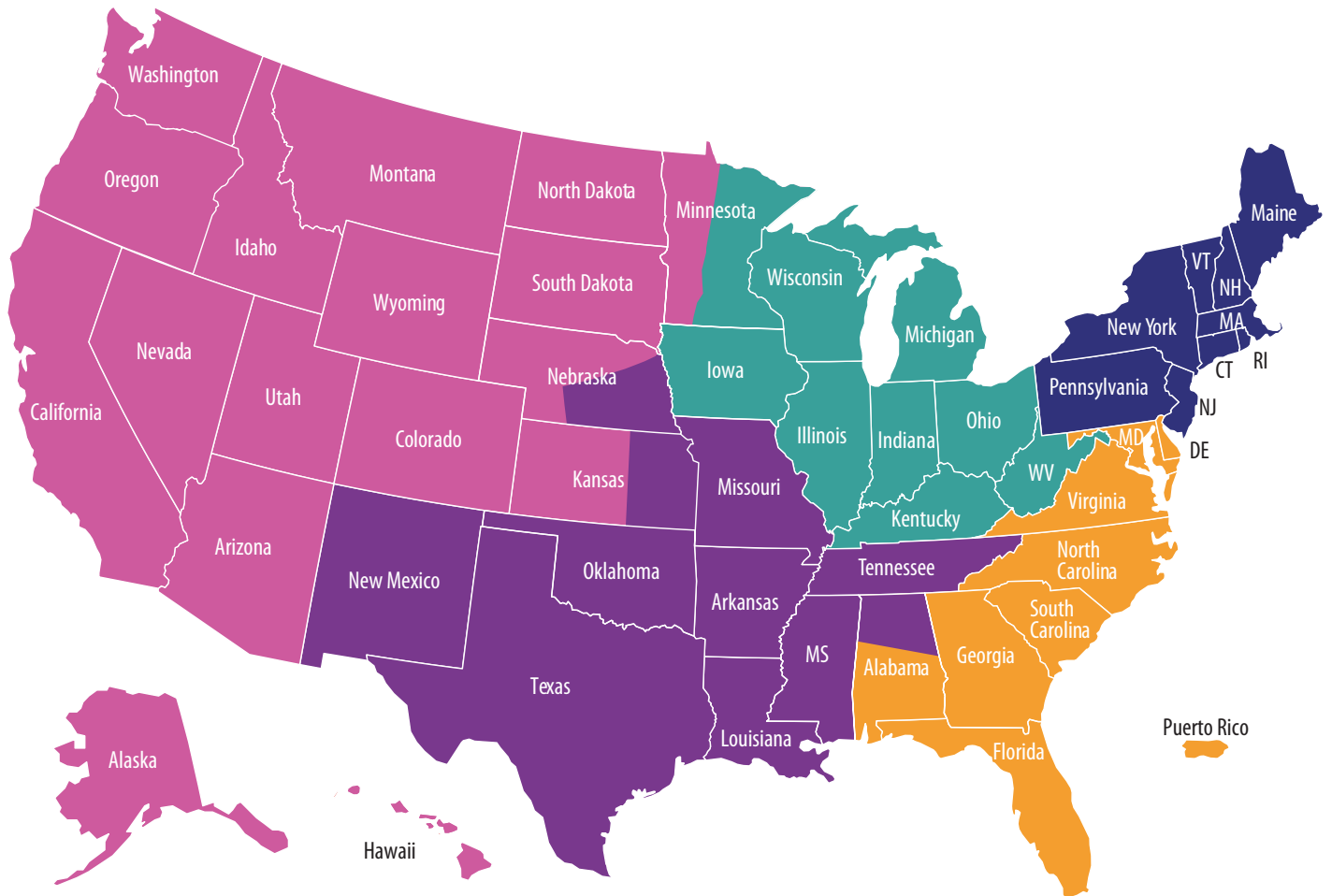
## Managed Care Survey

The managed care survey was completed by 123 health plan executives: HMO/PPO pharmacy directors (39%), HMO/PPO medical directors (15%), managed care executives (9%), and others (37%), most of whom most were clinical and staff pharmacists. Of the 123 survey respondents, 20 (16%) had members primarily in the Central Region; 18 (15%) represented plans with national coverage. Some managed care organizations reported members in more than one region, resulting in a total of more than 100%. Three datasets are compared: all plans nationwide, plans that provide national coverage, and plans in the Central Region. The managed care survey was conducted in July-September 2010.

The greatest proportion of Central Region plan members were enrolled in HMOs (31%), followed by PPOs (22%, the highest rate among all regions surveyed), Medicare (21%), Medicaid (13%), and self-insured groups (13%). Proportions for all plans nationwide were similar for HMOs (34%), PPOs (16%), Medicare (21%), Medicaid (16%), and other (3%), though higher for self-insured groups (11%). Plans with national coverage had significantly more members covered under Medicare (30%) and self-insured groups (19%), with far fewer covered under Medicaid (5%).

In some charts, percentage totals may not add up to 100% because of rounding.

# Map of Regions



**The regions of the five Oncology Nationwide and Regional Cancer Care Reports break generally at state lines, as shown on the map.**

This report compares responses from the Central Region to responses nationwide.

- Northeast
- Southeast
- Central
- Southwest
- West

# SDI Data on Patients with Breast Cancer

More than 2 million women living in the United States have been diagnosed with breast cancer at some point in their lives, and 1 in 8 women in the US will be diagnosed with breast cancer during her lifetime.<sup>1</sup> Breast cancer is initially suspected when a lump is discovered during an examination or mammography. A biopsy is used to confirm a cancer diagnosis. A breast cancer diagnosis is considered early stage when only a single cancer diagnosis has been made, while patients with metastatic disease have received both a primary diagnosis and a secondary cancer diagnosis.

The National Comprehensive Cancer Network (NCCN) provides consensus-based treatment guidelines at their Web site ([www.nccn.org](http://www.nccn.org)) that can be used, along with a practicing physician's clinical judgment, to establish a treatment plan. Under the NCCN guidelines, treatment for early stage localized breast cancer is surgical excision (lumpectomy or total mastectomy) possibly followed by risk reduction counseling, radiation therapy, genetic counseling, and tamoxifen treatment. Metastatic breast cancer is treated more comprehensively, following a workup that includes, among other considerations, determination of tumor estrogen/progesterone receptor status and HER2 (human epidermal growth factor gene) status to better predict disease aggressiveness and guide treatment options. The 5-year survival rate for female cancer patients during the period 1999 to 2006 relative to the general population was reported to be 89% overall, and 98% for those who received an early stage diagnosis.<sup>1</sup>

The data in Figures 1-6 include patients diagnosed with breast cancer in 2009, without regard to their treatment regimen. Figures 7-11 include data on chemotherapy and biologic treatments delivered in physicians' offices and hospital outpatient settings in 2009. Comparisons are made between national averages and those of the Central Region. The accompanying text describes changes from 2008 to 2009.

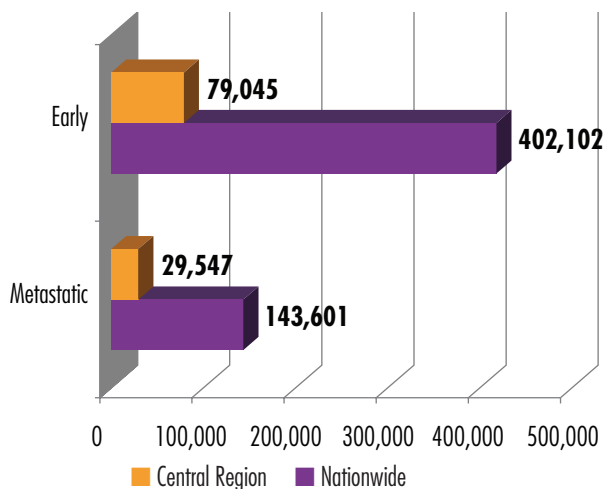
## Treatment in Physicians' Offices

Almost 550,000 patients diagnosed with breast cancer were seen in oncologists' or hematologists' offices nationwide during 2009 (Figure 1). These patients may or may not have received chemotherapy during these visits. Almost 110,000 (20%) of these patients were seen in the Central Region.

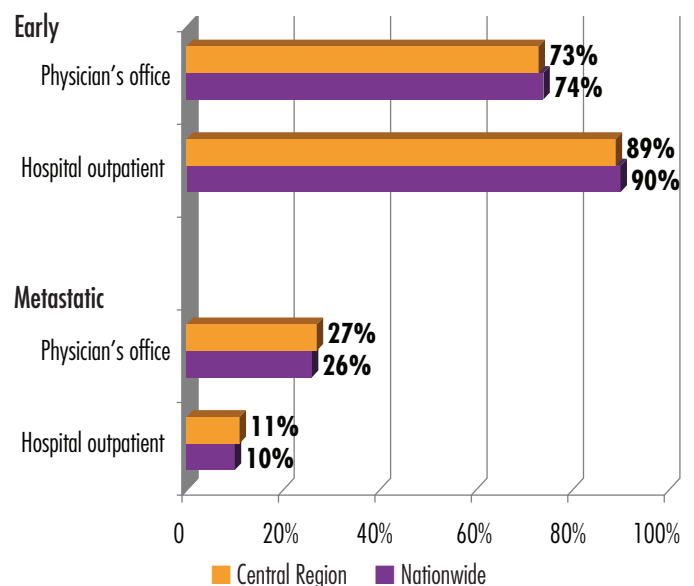
## Treatment by Setting and Cancer Stage

Nationwide in the hospital outpatient setting in 2009, of the 1.3 million patients with a breast cancer diagnosis receiving treatment, 90% were diagnosed at an early stage, while 10% were diagnosed with metastatic disease (Figure 2), an improvement from 2008 early/metastatic proportions of 87% and 13%, respectively. In the Central Region in 2009, 89% of patients receiving hospital outpatient treatment were diagnosed at an early stage, while 11% were diagnosed with metastatic disease compared with a ratio of 85% to 15% in 2008. The Northeast and Southwest Regions had percentages of early diagnoses in the outpatient setting in 2009 of 93% and 90%, respectively.

**Figure 1** Number of Patients with a Diagnosis of Breast Cancer Seen in Physicians' Offices



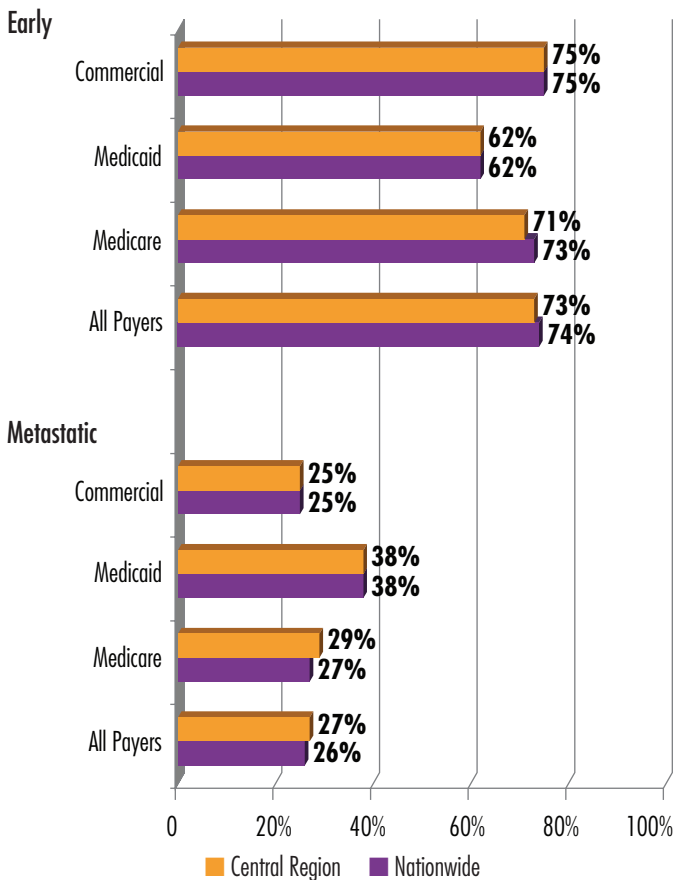
**Figure 2** Patients Diagnosed with Breast Cancer by Disease Stage and Treatment Setting





Of the almost 550,000 patients nationwide with a breast cancer diagnosis receiving treatment in physicians' offices in 2009, 74% were diagnosed at an early stage while 26% were diagnosed with metastatic disease, the same percentages as in 2008. Proportions for the Central Region were similar: 73% of breast cancer patients treated in physicians' offices were diagnosed at an early stage while 27% were diagnosed with metastatic disease in both 2008 and 2009. In the Northeast and Southeast Regions, the percentages of patients with early diagnoses seen in physicians' offices in 2009 were 78% and 74%, respectively. The proportion of cancer patients seen in physicians' offices was significantly higher for breast cancer patients than for patients with colorectal cancer or prostate cancer.

**Figure 3 Patients with Breast Cancer Seen in Physicians' Offices, by Disease Stage and Payer**



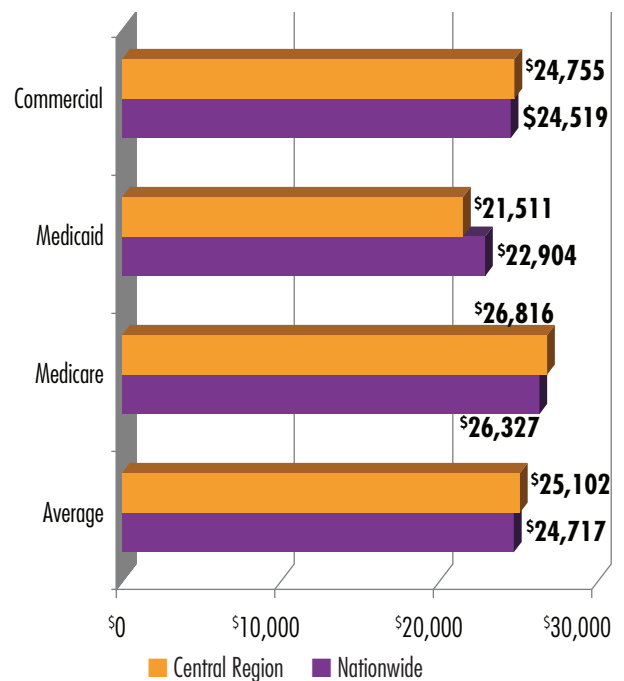
**Patients Seen in Physicians' Offices by Disease Stage and Payer**

Among patients seen in physicians' offices in 2008 and 2009, commercially insured patients had consistently higher rates of early breast cancer diagnoses than those covered by Medicare or Medicaid both in the Central Region and nationwide (Figure 3).

Nationwide in 2008 and 2009, 75% of commercially insured patients received an early-stage diagnosis. This compares with 73% of Medicare patients (72% in 2008) and 62% of Medicaid patients (61% in 2008). Lower rates of early diagnosis for persons covered under Medicaid are not surprising, says Dawn Holcombe, MBA, president of DGH Consulting. "Medicaid patients are more likely to have difficulty accessing care because of low provider reimbursement rates and/or patients may seek care on more of a reactive basis," she notes.

In the Central Region in 2009, 75% of commercially insured patients received an early-stage diagnosis (unchanged from 2008), compared to 71% of Medicare patients (unchanged from 2008) and 62% of Medicaid patients (61% in 2008).

**Figure 4 Physician's Office Average Charges for Patients with Breast Cancer, by Payer**



### Average Charges in Physicians' Offices, by Payer

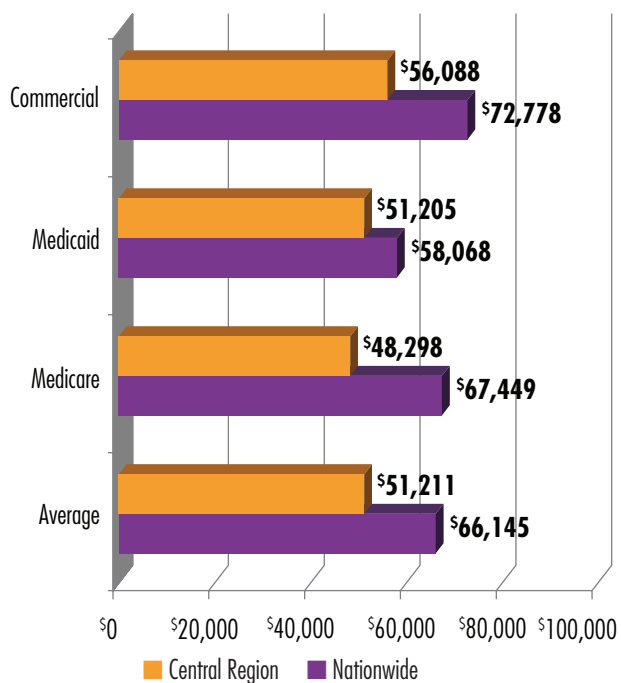
Nationwide, the average charge per patient for treatment of breast cancer in a physician's office was \$24,717 in 2009, similar to the 2008 average of \$25,000 (Figure 4). In the Central Region the average charge in 2009 was \$25,102, up 3% from the 2008 charge of \$24,480.

The increase in charges in the Central Region was led by Medicare, whose average charge for treatment in a physician's office was up 5% to \$26,816 in 2009, compared to a nationwide increase in charges to Medicare of 7%. Charges to commercial payers were up 3% in the Central Region to \$24,755, but were down 5% nationwide to \$24,519. Among the three major payers, Medicaid had the lowest average charge both in the Central Region and nationwide in 2008 and 2009.

### Hospital Outpatient Charges

According to data from Charge Data Masters (CDM), 2009 total average charges for patients diagnosed with breast cancer were similar to 2008 charges both nationwide and in the Central Region (Figure 5). The average charge to commercial payers was unchanged for the Central Region at \$56,088, and up 4% nationwide to \$72,778. Medicare average charges were essentially unchanged (down 1%) in the Central Region to \$48,298, and down 3% nationwide to \$67,449.

Figure 5 Hospital Outpatient Average Charges for Patients with Breast Cancer, by Payer (CDM)



### Patients by Payer and Treatment Setting

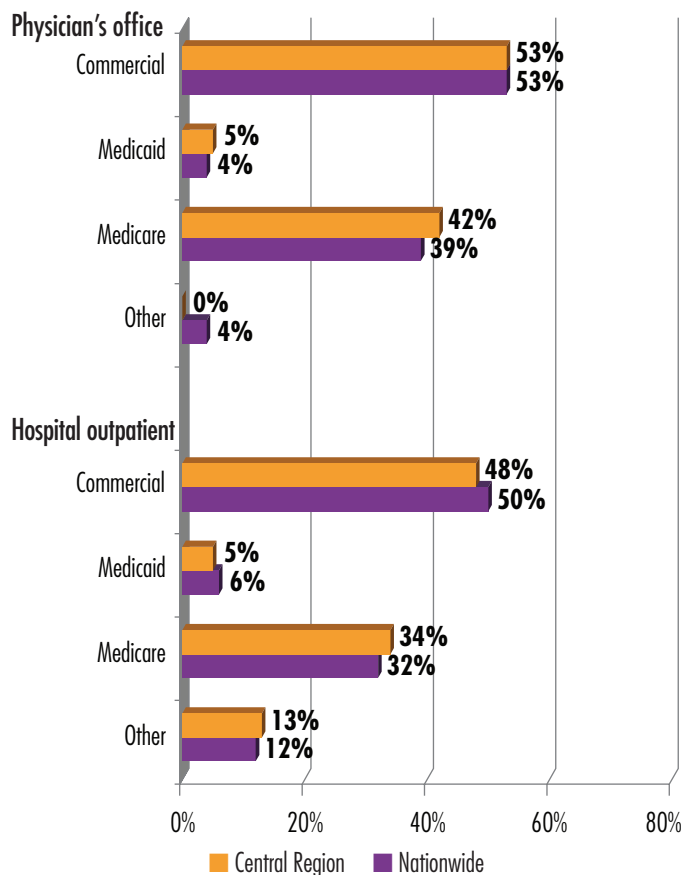
Of the three major payers, commercial payers covered the largest portion of patients treated in physicians' offices or hospital outpatient settings in both 2008 and 2009, in both the Central Region and nationwide (Figure 6). Medicare covered the next largest portion. The "other" group, which includes government employee, military and railroad retirement plans as well as cash payers, had the third largest percentage of patients in the hospital outpatient setting but accounted for a very small percentage of patients treated in physicians' offices in the Central Region and nationwide.

The percentage of patients diagnosed with breast cancer who had Medicaid as a payer in the Central Region was similar to that of the nation as a whole, accounting for 4% to 6% of patients in 2008 and 2009 and in both treatment settings.

### Compliance with NCCN Guidelines by Payer

The NCCN provides widely used guidelines for enhancing clinical decision-making, including recommendations for managing common symptoms experienced by patients with cancer. These guidelines include a set of early diagnostic

Figure 6 Patients with Breast Cancer by Treatment Setting and Payer



steps for a number of cancers, including breast cancer, along with treatment recommendations that balance potential risks and benefits.

Chemotherapy and biologic treatments administered to breast cancer patients in physicians' offices are compared by payer type with those recommended in NCCN guidelines in Figure 7. Compliance with NCCN guidelines for all payer types in 2009 averaged 98% nationwide and 99% in the Central Region, both unchanged from 2008. Guideline compliance improved or was unchanged year-to-year for all payers both in the Central Region and nationwide, with the exception of Medicaid, which declined one percentage point in both the Central Region and nationwide.

### Compliance with NCCN Guidelines by Treatment Setting

Nationwide, 98% of treatments in physicians' offices during 2009 were compliant with NCCN guidelines, unchanged from the previous year (Figure 8). In hospital outpatient settings only 87% of treatments were compliant, down from 94% in 2008.

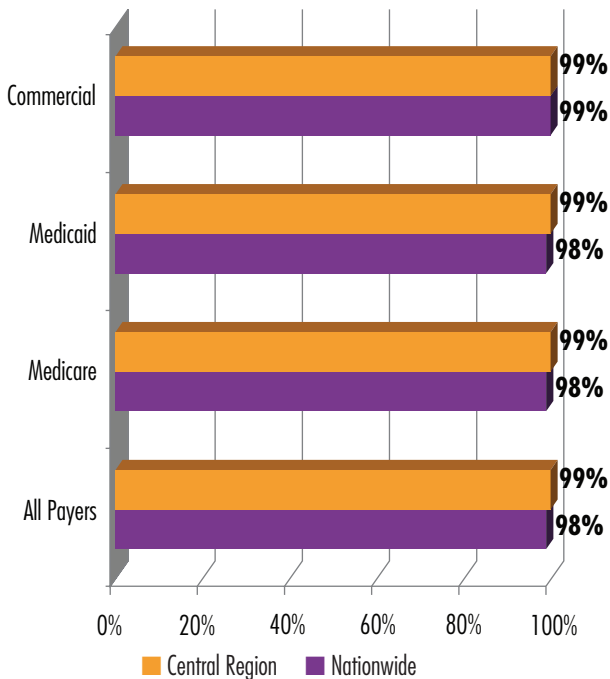
### Treatment Charges and Compliance with NCCN Guidelines

In hospital outpatient settings in 2009, noncompliance with NCCN guidelines for breast cancer care resulted in significantly elevated treatment charges nationwide, averaging \$115,294 per patient, almost double the \$58,784 charged

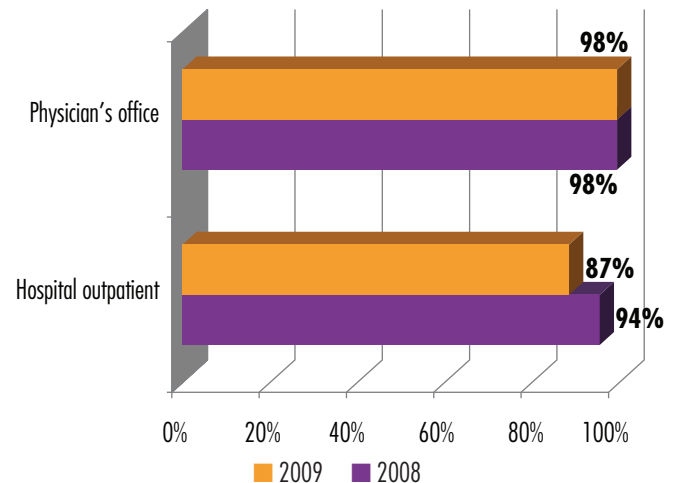
for compliant care delivered in an outpatient setting (Figure 9). For care delivered in physicians' offices in 2009, however, per-patient charges for noncompliant care were reported as almost 40% lower than for compliant care (\$15,446 and \$24,864, respectively).

This difference may indicate the movement of the most complex/costly cases to hospital outpatient treatment settings. "The drop in the average charge for noncompliant breast cancer chemotherapy in physicians' offices may reflect retention of patients receiving noncompliant but less expensive therapies," says Randy Vogenberg, PhD, RPh, principal, Institute for Integrated Healthcare. The impact on charges shown here, however, may be magnified because the number of treatments that fall outside NCCN guidelines is small in both treatment settings.

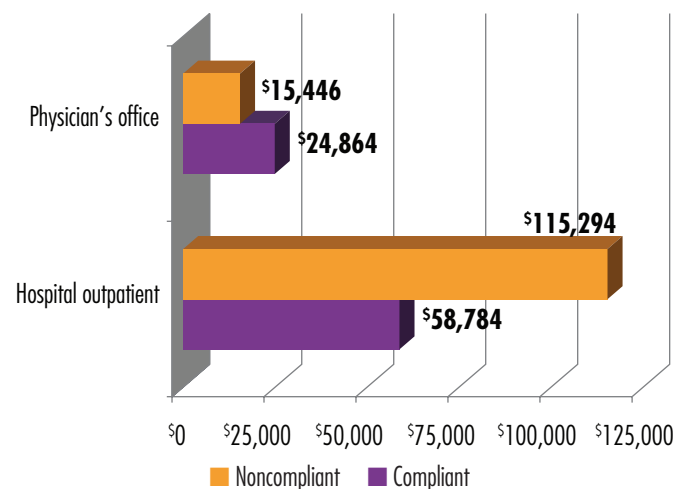
**Figure 7 Breast Cancer Treatment Compliance with NCCN Guidelines in Physicians' Offices, by Payer**



**Figure 8 Breast Cancer Treatment Compliance with NCCN Guidelines, by Setting, Nationwide**



**Figure 9 Average Charges for Breast Cancer Treatments, by NCCN Guideline Compliance, Nationwide**

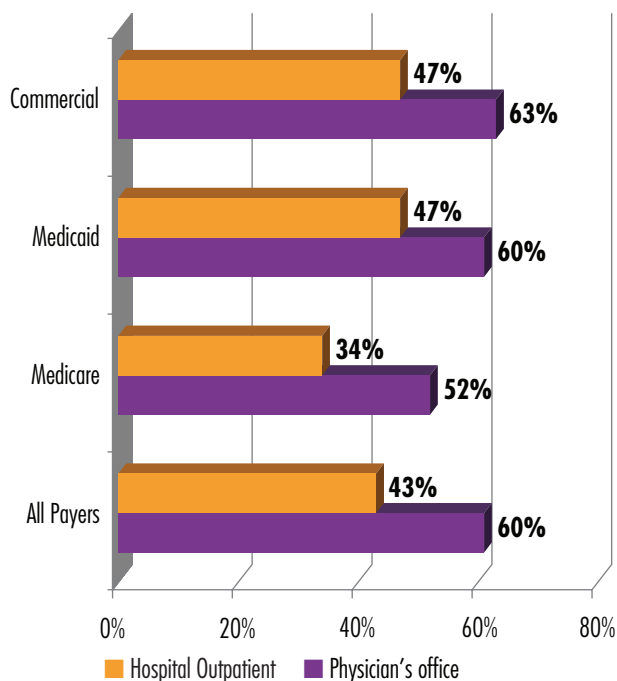


### Use of the Top 5 Regimens

Nationwide, for patients treated with chemotherapy in 2009, the five most prescribed treatment regimens accounted for 60% of chemotherapy treatments provided by physicians' offices (59% in 2008) and 43% (down from 63%) of chemotherapy treatments provided in outpatient hospital settings (Figure 10). The increased use of treatments outside of the top regimens, which are typically more costly, may reflect successful efforts by physicians to move more complex/challenging cases to hospital settings to ensure appropriate treatment while protecting the economic viability of their practices. While the percentage of use of the less costly top regimens remained similar from 2008 to 2009 in physicians' offices across payer types, it declined in hospital outpatient treatment settings by about 20 percentage points in each of the payer types examined, suggesting an increase in the number of more complex/challenging cases being treated.

"These data also reflect the decline of the buy-and-bill payment model," explains Vogenberg. "Physicians cannot finance the carrying costs of new, more expensive, therapies and have to move cases that require these treatments to hospital outpatient settings, or find new ways to address these cost challenges."

**Figure 10 Breast Cancer Treatments Using Top 5 Regimens, by Setting and Payer, Nationwide**



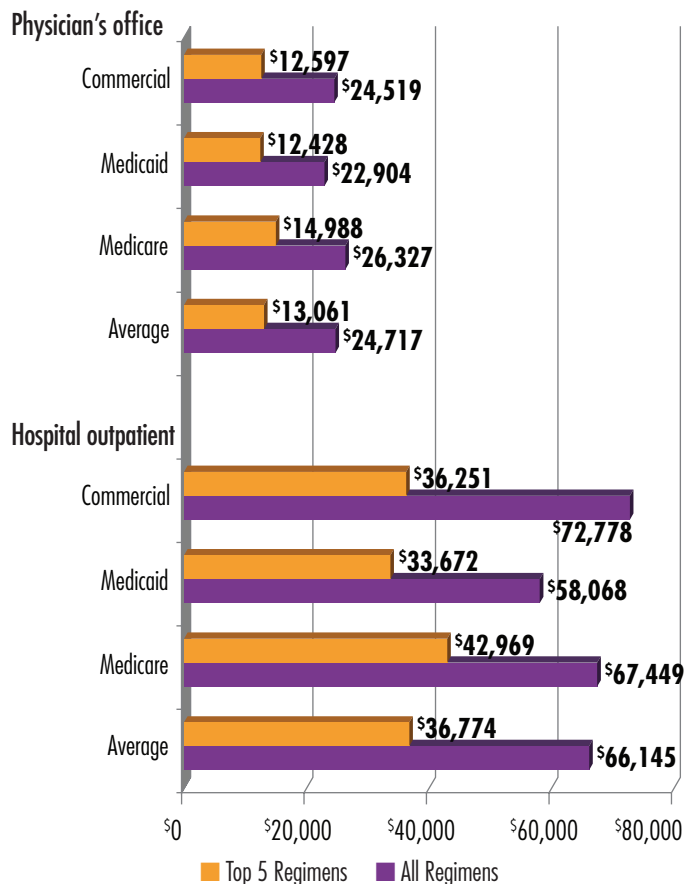
### Treatment Charges for Top 5 and All Regimens

Nationwide in 2009, average charges for treatment with all chemotherapy and biologic regimens were substantially higher than charges for the top five regimens in both physicians' offices (up 89%) and hospital outpatient settings (up 80%) (Figure 11).

The 2009 average charge of \$24,717 for all regimens in physicians' offices was consistent year-to-year (down 1%), but in hospital outpatient settings the average charge for all regimens increased by \$12,000 to \$66,145 (up 22%). Year-to-year dollar changes were lower for the top regimens, which decreased about \$1,000 to \$13,061 (down 8%) in physicians' offices, and increased \$12,000 to \$36,774 (up 47%) in hospital outpatient settings.

Chemotherapy in hospital outpatient settings, as previously noted, is typically associated with higher average charges than chemotherapy delivered in physicians' offices. The large year-to-year increases in hospital chemotherapy charges, however, seem to indicate successful transfer of complex/costly cases to this setting from physicians' offices.

**Figure 11 Average Charges for Breast Cancer Regimens, by Setting and Payer, Nationwide**



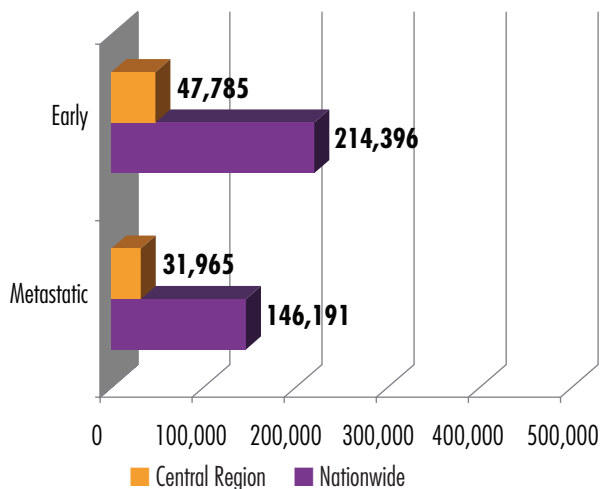
# SDI Data on Patients with Colorectal Cancer

Colorectal cancer (cancer of the colon or rectum) is the third leading cause of cancer death for both men and women in the United States, with more than 140,000 new cases diagnosed each year.<sup>2</sup> The lifetime risk for men and women of developing colorectal cancer is 1 in 20.<sup>3</sup> Approximately 39% of patients receive an early diagnosis (the disease is confined to the primary site) and among this group the 5-year survival rate relative to the general population is approximately 90%. The 5-year relative survival rate for the 37% of patients with regional lymph node involvement is almost 70%. For the 19% of patients diagnosed with late stage disease (the cancer has metastasized), the 5-year relative survival rate is below 12%.<sup>3</sup>

The National Comprehensive Cancer Network (NCCN) provides consensus-based treatment guidelines at their Web site ([www.nccn.org](http://www.nccn.org)) that can be used, along with a practicing physician's clinical judgment, to establish a treatment plan. Under the NCCN guidelines, the treatment for early stage localized colon or rectal cancer is surgical removal, followed by a minimum of 5 years of surveillance, including monitoring of carcinoembryonic antigen (CEA) levels and follow-up colonoscopies. At more advanced disease stages, radiation therapy and chemotherapy are introduced.

The data in Figures 12-17 include patients diagnosed with colorectal cancer in 2009, without regard to their treatment regimen. Figures 18-22 include data on chemotherapy and biologic treatments delivered in physicians' offices and hospital outpatient settings in 2009. Comparisons are made between national averages and those of the Central Region. The accompanying text describes changes from 2008 to 2009.

**Figure 12** Number of Patients with a Diagnosis of Colorectal Cancer Seen in Physicians' Offices



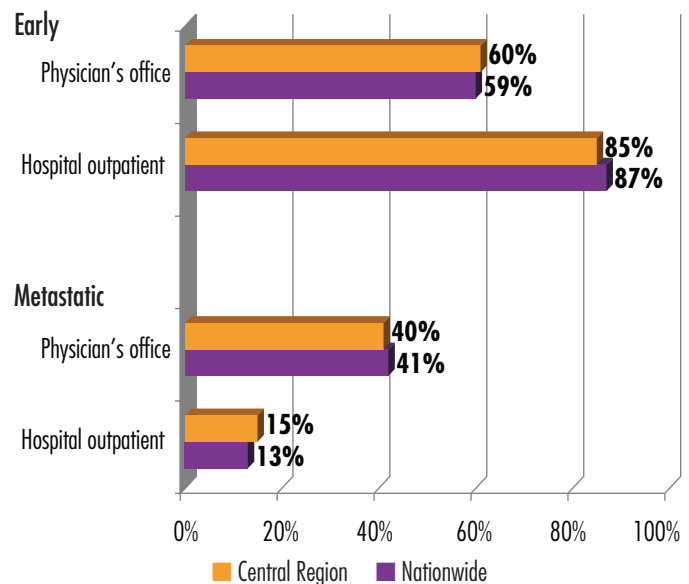
## Treatment in Physicians' Offices

SDI reports that more than 360,000 persons diagnosed with colorectal cancer were seen in physicians' offices nationwide during 2009, a 2% increase over 2008 (Figure 12). The Central Region accounted for almost 80,000 colorectal cancer patients seen in physicians' offices in 2009, up 2% from 2008 and representing 22% of the nationwide total in both 2008 and 2009. For both years, 60% of patients in the Central Region were diagnosed at an early stage; only the Southeast Region had a higher percentage of early diagnosis patients in this group (64% in 2009 and 65% in 2008).

## Treatment by Setting and Cancer Stage

In 2009, almost 340,000 patients diagnosed with colorectal cancer were treated in hospital outpatient settings nationwide (Figure 13). Among this group, 87% were diagnosed at an early stage, while 13% were diagnosed with metastatic disease, an improvement from early/metastatic proportions of 84% to 16% in 2008. In the Central Region, 85% of patients in outpatient settings were diagnosed at an early stage, compared with 87% nationwide. Only the Northeast and Southwest Regions had higher percentages of patients treated in the hospital outpatient setting who received an early diagnosis. The Central Region accounted for 14% of colorectal cancer patients treated in hospital outpatient settings nationwide in 2008 and 2009.

**Figure 13** Patients Diagnosed with Colorectal Cancer by Disease Stage and Treatment Setting



In 2008 and 2009 in physicians' offices in the Central Region, 60% of colorectal cancer patients treated were diagnosed at an early stage, while 40% were diagnosed with metastatic disease. Nationwide in physicians' offices, 59% were diagnosed early in 2009 (60% in 2008).

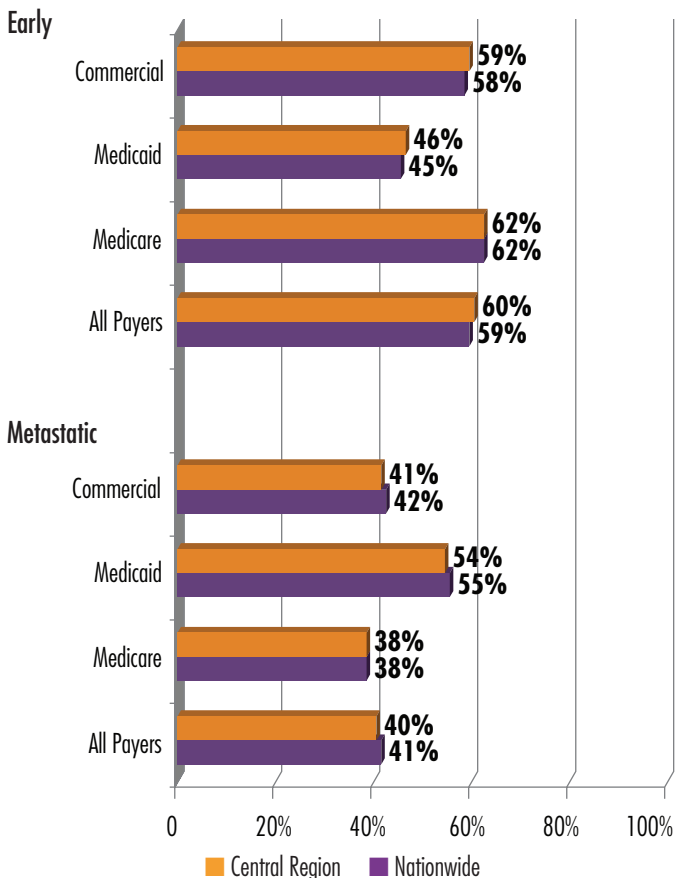
### Patients Seen in Physicians' Offices by Disease Stage and Payer

Among patients with a colorectal cancer diagnosis who were treated in physicians' offices nationwide or in the Central Region, more than 90% were covered by either commercial insurers or Medicare during both 2008 and 2009 (Figure 14).

Colorectal cancer treatment in the Central Region was most often covered by Medicare, which paid for 54% of patients treated in physicians' offices in 2009, and commercial payers, which covered 40%. Nationwide, colorectal cancer treatment was most often paid by Medicare, which covered 50% of patients treated in physicians' offices in 2009, followed by commercial payers, which covered 43%.

Nationwide in 2009, 62% of Medicare patients treated in physicians' offices received an early-stage colorectal

**Figure 14 Patients with Colorectal Cancer Seen in Physicians' Offices, by Disease Stage and Payer**



cancer diagnosis (unchanged from 2008). This compares with 58% of commercially insured patients (also unchanged from 2008). In the Central Region in 2009, 62% of Medicare patients treated in physicians' offices received an early-stage diagnosis (unchanged from 2008), compared with 59% of commercially insured patients (also unchanged from 2008).

When Medicaid was the payer, just 46% of patients treated in physicians' offices received an early diagnosis in the Central Region as did 45% of patients nationwide in 2009, suggesting that timely access to care may be an issue.

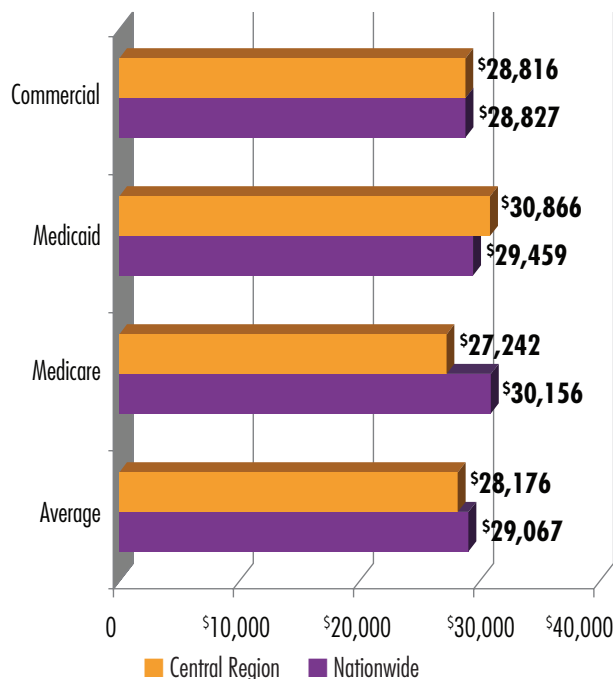
### Average Charges in Physicians' Offices, by Payer

Nationwide, the average charge for treatment of colorectal cancer patients in physicians' offices was \$29,067 in 2009, down 8% from the 2008 average of \$31,674 (Figure 15). In the Central Region, the average charge in 2009 was \$28,176, down 14% from the 2008 charge of \$32,879.

The decline in the average charge in the Central Region was led by Medicare, whose average charge for treatment in a physician's office decreased 19%, to \$27,242. This drop was related in large part to the substantial drop in charges for the top chemotherapy regimens covered by commercial payers and Medicare during the period studied.

"Figure 15 shows that commercial health plans have been the most effective of the payers at driving down physicians'

**Figure 15 Physician's Office Average Charges for Patients with Colorectal Cancer, by Payer**



charges on a national basis, although some regional variations persist,” says Vogenberg. “The result of lower authorized fees for physicians’ services is often the movement of complex and costly cases to the hospital outpatient setting.”

### Hospital Outpatient Charges

According to data from Charge Data Masters (CDM), 2009 average hospital outpatient charges for patients diagnosed with colorectal cancer were consistent with 2008 charges both nationwide and in the Central Region (Figure 16). The average charge to patients insured by commercial payers increased 2% nationwide to \$84,424, but decreased 1% in the Central Region to \$74,883. Medicare average charges increased 1% in the Central Region, to \$63,346, and decreased 1% nationwide to \$74,879. Medicaid 2009 CDM average hospital outpatient charges decreased 4% nationwide to \$72,098, and declined less than 1% in the Central Region to \$67,669.

### Patients by Payer and Treatment Setting

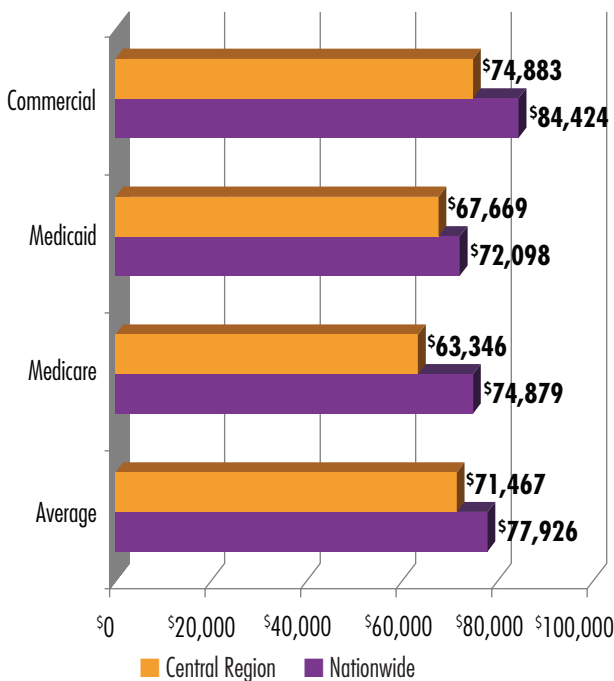
Of the three major payers, Medicare covered the largest portion of colorectal cancer patients treated in physicians’ offices or hospital outpatient settings in 2008 and 2009 both nationwide and in the Central Region, with one exception: nationwide in 2009, Medicare and commercial payers each covered 35% of patients in hospital outpatient settings (Figure 17). Nationwide and in the Central Region commercial payers

covered the next largest portion, with small year-to-year changes. Both nationwide and in the Central Region, the percentage of colorectal cancer patients covered in the “other” payer group, which includes government employee, military and railroad retirement plans as well as cash payers, increased substantially in hospital outpatient settings but continued to cover a very small percentage of patients treated in physicians’ offices nationwide and in the Central Region.

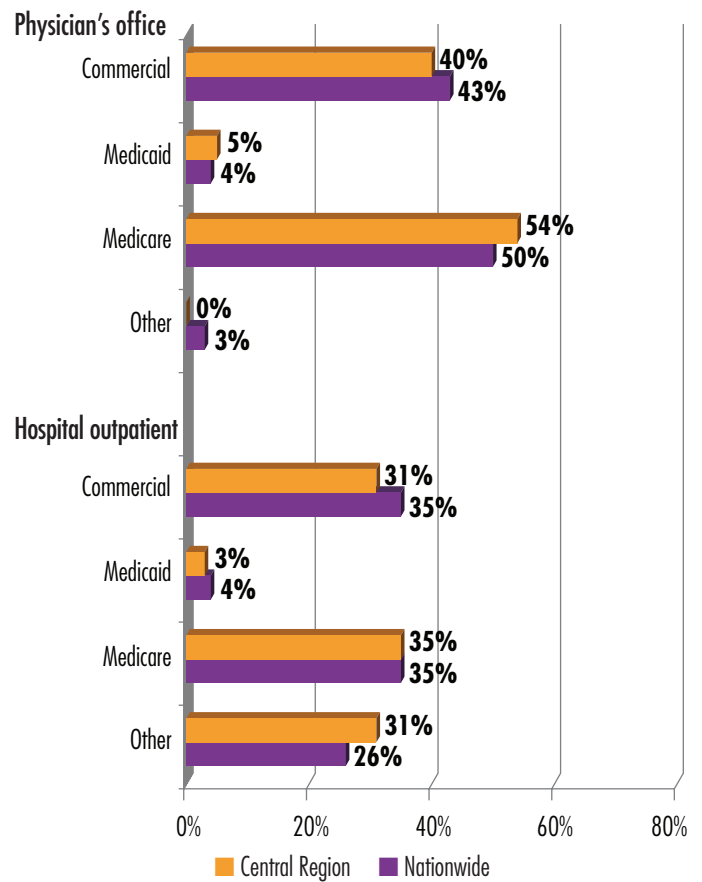
### Compliance with NCCN Guidelines by Payer

Chemotherapy treatments administered to colorectal cancer patients seen in physicians’ offices were compared with the most commonly accepted guidelines for cancer care. Compliance with NCCN practice guidelines for patients covered under Medicare and commercial insurance in 2009 increased substantially over 2008 both in the Central Region and nationwide (Figure 18). Nationwide, when a commercial insurer was the payer, NCCN compliance averaged 30% in 2009 (up from 22% the previous year), while compliance when Medicare was the payer was 38% (up from 31%). In the Central Region, NCCN compliance was 33% (up from 22%) when a commercial insurer paid, and 42% (up from 35%) when Medicare paid.

**Figure 16 Hospital Outpatient Average Charges for Patients with Colorectal Cancer, by Payer (CDM)**



**Figure 17 Patients with Colorectal Cancer by Treatment Setting and Payer**



### Compliance with NCCN Guidelines by Treatment Setting

Nationwide, only 33% of treatments in physicians' offices during 2009 were compliant with NCCN guidelines, although this was up 7 percentage points from the previous year. In hospital outpatient venues 36% of treatments were compliant, which was up 6 percentage points from the previous year (Figure 19).

With colorectal cancer, it can be difficult to have high compliance because of the wide variation in patients entering treatment as well as approved therapy limitations in the marketplace, says Vogenberg. "Still, compliance with NCCN guidelines increased as more health insurers promoted the use of these and other national guidelines to their physician networks. In fact, the relative gaps in compliance between the physician's office and hospital outpatient settings closed significantly within a one year period confirming a rapid dissemination of information along with incorporation of treatment guidelines into regular practice."

### Treatment Charges by Compliance with NCCN Guidelines

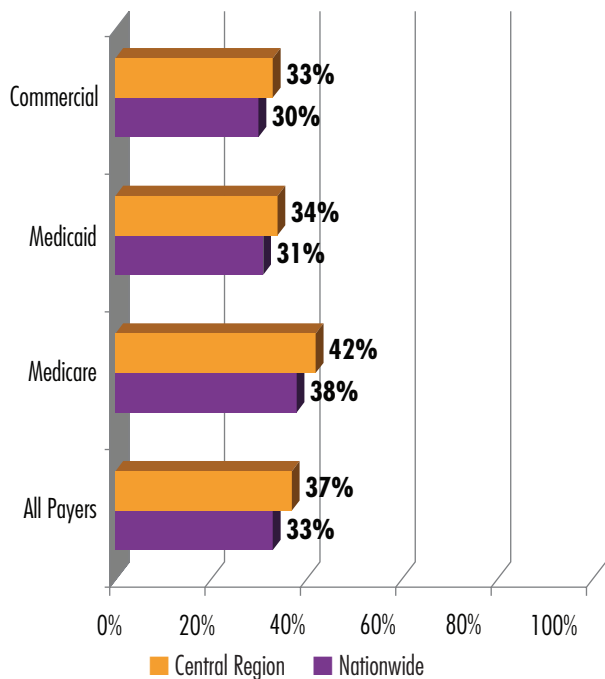
Year-to-year changes in average treatment charges suggest that more complex/costly colorectal cancer cases may have been moved from physicians' offices to the hospital outpatient setting. A result of this shift was that the average charge for delivery of care in the hospital outpatient treatment setting increased substantially in 2009, regardless of compliance with NCCN guidelines (Figure 20). The average charge for

noncompliant treatment in this setting was up almost \$32,000 (58%) to \$89,300.

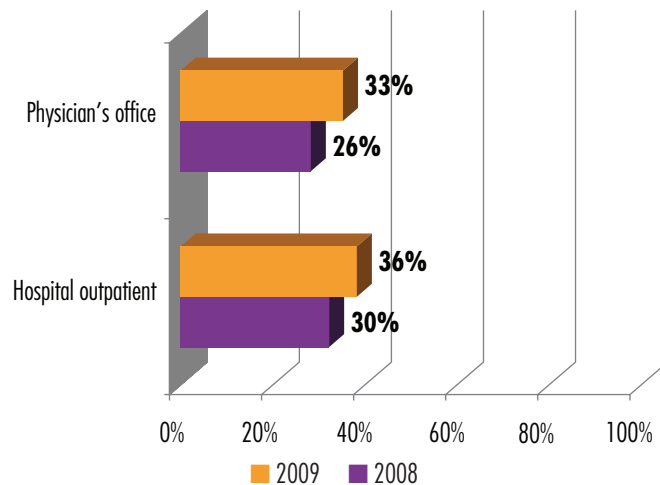
The average charge for treatment that complied with NCCN guidelines in the hospital outpatient setting increased by almost \$11,000 (23%) to \$57,387. For care delivered in physicians' offices, the average charge for noncompliant treatment was down 2% to \$19,901, while the average charge for compliant treatment was down 6% to \$33,595.

"Again, we see that the result of lower fees for physicians' services is the shifting of complex and expensive cases to the hospital outpatient treatment setting," notes Vogenberg. "In Figure 20, the reduced charges for both compliant and non-compliant treatment suggests that physicians' offices may be retaining patients receiving non-compliant but less costly treatment."

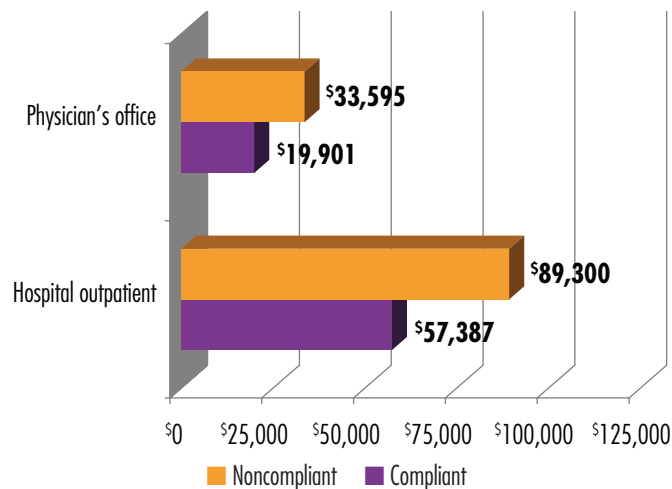
**Figure 18 Colorectal Cancer Treatment Compliance with NCCN Guidelines in Physicians' Offices, by Payer**



**Figure 19 Colorectal Cancer Treatment Compliance with NCCN Guidelines, by Setting, Nationwide**



**Figure 20 Average Charges for Colorectal Cancer Treatments, by NCCN Guideline Compliance, Nationwide**





### Use of the Top 5 Regimens

Nationwide, for colorectal cancer patients treated with chemotherapy and biologics in 2009, the five most prescribed treatment regimens accounted for 63% of treatments provided by physicians’ offices (unchanged from 2008) and 74% of chemotherapy treatments provided in outpatient hospital settings (down from 82% in 2008) (Figure 21). The consistent use of the top 5 regimens year-to-year in physicians’ offices coupled with the decline in the percentage of use of these regimens in the hospital outpatient setting suggests an increase in the percentage of more complex cases being treated in the hospital outpatient setting.

### Treatment Charges for Top 5 and All Regimens

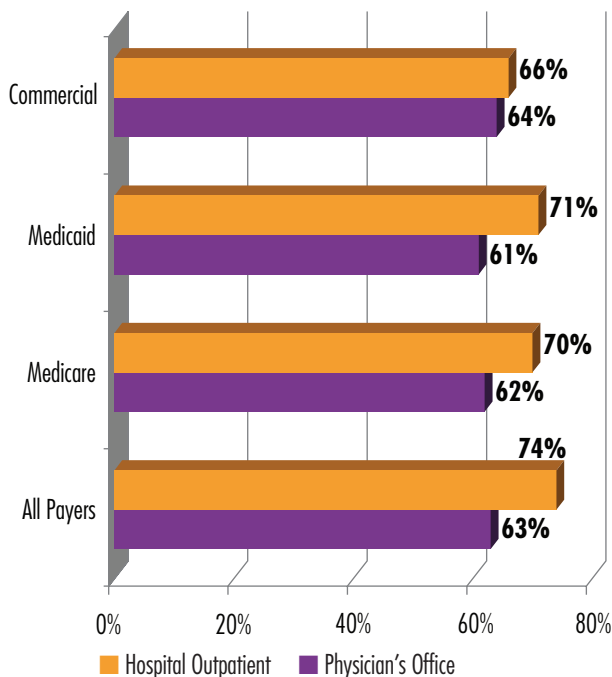
Nationwide for all payers, the average charge for treatment in physicians’ offices with all chemotherapy regimens was \$29,067 in 2009, down from \$31,674 in 2008 (Figure 22). As discussed, this was in part due to a drop in charges for the top 5 regimens in physicians’ offices during the 2008-2009 period. In hospital outpatient settings the average charge for treatment with all regimens was \$77,926, up substantially from \$41,256 in 2008. This suggests that more complex/expensive cases are being shifted from physicians’ offices to hospital outpatient settings.

By payer type, year-to-year increases in treatment charges to commercial payers were generally lower than when Medicare

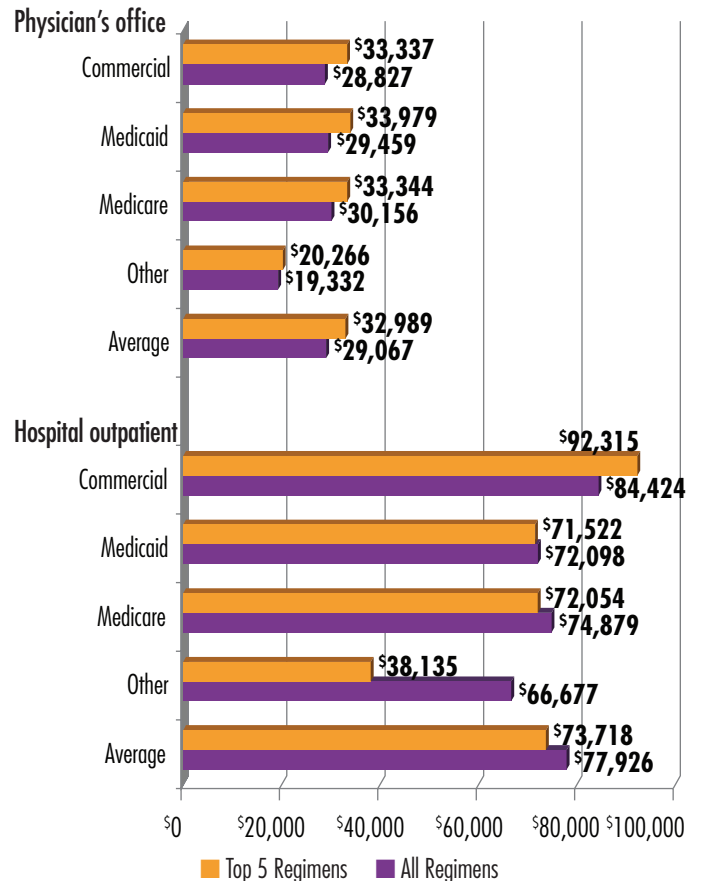
was the payer. Average charges to commercial payers for treatment with all regimens in physicians’ offices decreased from \$33,591 to \$28,827, and from \$30,573 to \$30,156 when Medicare was the payer. Average charges to commercial payers for treatments in hospital outpatient settings increased 46% to \$92,315 for the top 5 regimens and 57% to \$84,424 for all regimens. Although these were the highest charges of any payer in the hospital outpatient setting, the commercial payer 57% year-to-year increase for all regimens is modest compared to the 182% increase in the average all regimens charge when Medicare paid.

Chemotherapy in the hospital outpatient setting is typically associated with higher average charges than chemotherapy delivered in physicians’ offices, as held true in 2009. During this period the average charge per patient receiving chemotherapy treatments in the outpatient setting was \$77,926 for all regimens, more than two and a half times the \$29,067 charged for treatment in physicians’ offices. The average top regimen charge per patient was \$73,718 in outpatient settings, more than double the average treatment charge of \$32,989 in physicians’ offices.

**Figure 21 Colorectal Cancer Treatments Using Top 5 Regimens, by Setting and Payer, Nationwide**



**Figure 22 Average Charges for Colorectal Cancer Regimens, by Setting and Payer, Nationwide**



# SDI Data on Patients with Prostate Cancer

Prostate cancer currently affects more than 2 million men in the United States, and it is estimated that 1 in 6 men will be diagnosed with prostate cancer during his lifetime.<sup>4</sup> The incidence and cost of treating the condition are expected to increase as the US male population ages and new treatment options become available. Diagnosis can be challenging because it typically requires regular monitoring of a man's prostate-specific antigen (PSA) level. Additionally, early symptoms, such as frequent urination, can be ignored or minimized by those affected. In early disease, men receive a single diagnosis of prostate cancer; in metastatic disease, men receive both a primary and secondary cancer diagnosis.

The National Comprehensive Cancer Network (NCCN) provides consensus-based treatment guidelines at their Web site ([www.nccn.org](http://www.nccn.org)) that can be used, along with a practicing physician's clinical judgment, to establish a treatment plan. Under NCCN guidelines, men who receive an early diagnosis and have localized disease may initially follow an active surveillance regimen with PSA levels checked as often as every 6 months, and digital rectal exams (DRE) as frequently as every 12 months. If the disease progresses but remains localized, radiation therapy (RT) may be introduced to the treatment regimen. If the disease advances locally or metastasizes, patients may be given androgen deprivation therapy (ADT). Patients with metastatic disease are treated with systemic chemotherapy agents along with palliative RT and encouraged to explore clinical trials. As shown later in this report, because a higher percentage of patients are diagnosed at an early stage and treated with RT, the use of chemotherapy for metastatic disease is less common. During 2009, less than

3% of prostate cancer patients visiting physicians' offices and less than 1% of prostate cancer patients treated in the hospital outpatient setting received chemotherapy.

The data in Figures 23-28 include patients diagnosed with prostate cancer in 2009, without regard to their treatment regimen. Figures 29-33 include data on chemotherapy and biologic treatments delivered in physicians' offices and hospital outpatient settings in 2009. Comparisons are made between national averages and those of the Central Region. The accompanying text describes changes from 2008 to 2009.

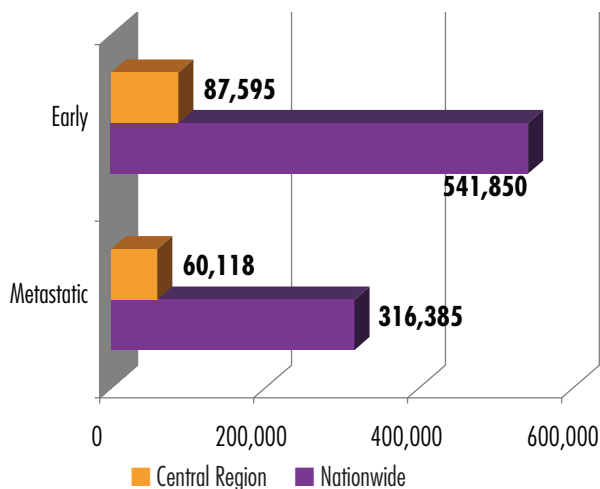
## Treatment in Physicians' Offices

SDI reports that almost 860,000 men who were diagnosed with prostate cancer were seen in physicians' offices nationwide during 2009 (Figure 23). This was a 2% increase over 2008. The Central Region accounted for almost 148,000 patients seen in physicians' offices in 2009, up 5% from 2008, and 17% of the nationwide total.

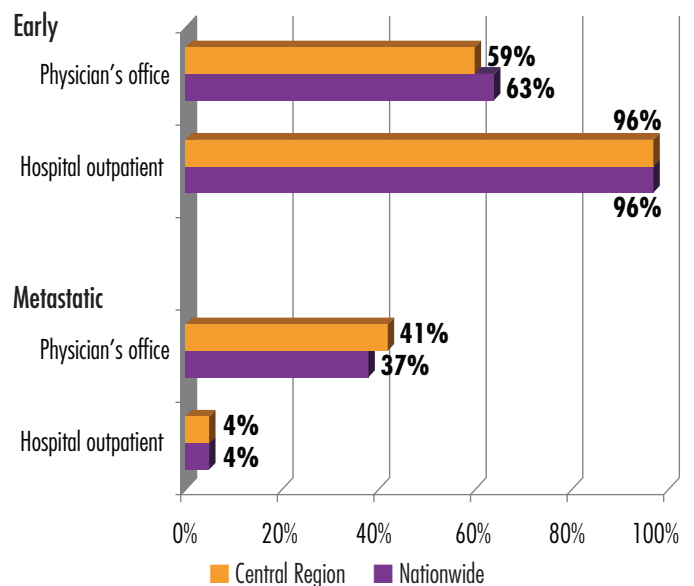
## Treatment by Setting and Cancer Stage

In 2009, almost 840,000 men who were diagnosed with prostate cancer were treated in hospital outpatient settings nationwide (Figure 24). Among this group, 96% were diagnosed at an early stage, while 4% were diagnosed with metastatic disease, unchanged from early/metastatic percentages in 2008. In the Central Region in 2009, 96% of

**Figure 23** Number of Patients with a Diagnosis of Prostate Cancer Seen in Physicians' Offices



**Figure 24** Patients Diagnosed with Prostate Cancer by Disease Stage and Treatment Setting



patients treated in hospital outpatient settings were diagnosed at an early stage (95% in 2008). Only the Northeast Region had a higher rate of early diagnosis in 2009 (97%) in the outpatient setting.

In physicians' offices nationwide in 2009 and in 2008, 63% of prostate cancer patients were diagnosed at an early stage while 37% were diagnosed with metastatic disease. In 2009, 59% of Central Region prostate cancer patients seen in physician offices were diagnosed at an early stage (60% in 2008). Only the West Region had a lower rate of patients with early diagnosis seen in physicians' offices in 2009 (57%); all other regions' rates were higher in both 2008 and 2009.

"Owing to increased screening for cancer in men overall, the rate of prostate cancer diagnoses has been inching upwards," says Randy Vogenberg, PhD, RPh, principal at the

Institute for Integrated Healthcare. "This has been especially true in hospital owned settings where affiliated physicians have steadily increased screening rates."

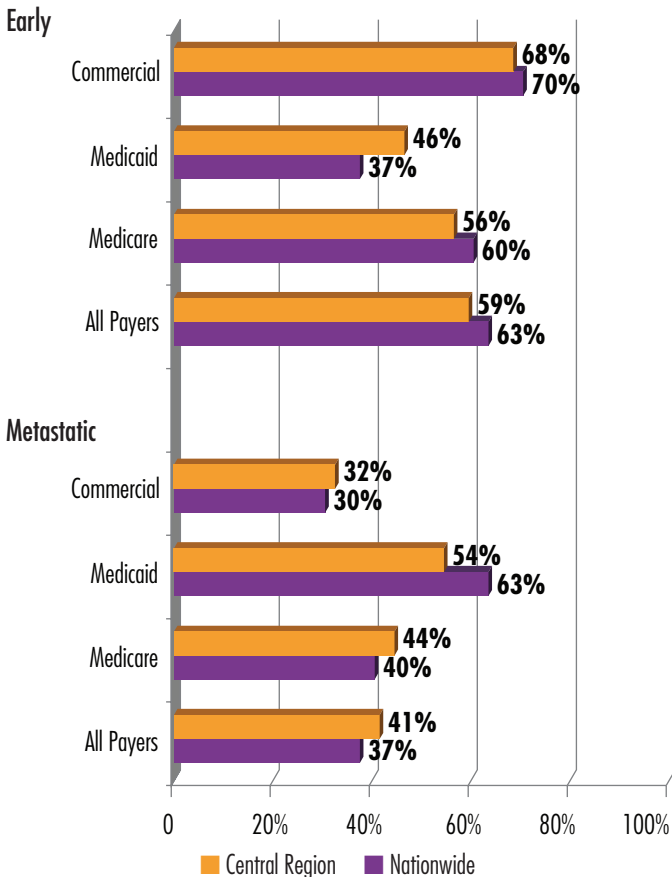
In both 2008 and 2009 the Central Region accounted for 17% of nationwide prostate cancer cases seen in physicians' offices. The region also accounted for 13% of prostate cancer patients treated in hospital outpatient settings nationwide during 2009, down from 15% in 2008.

### Patients in Physicians' Offices by Disease Stage and Payer Type

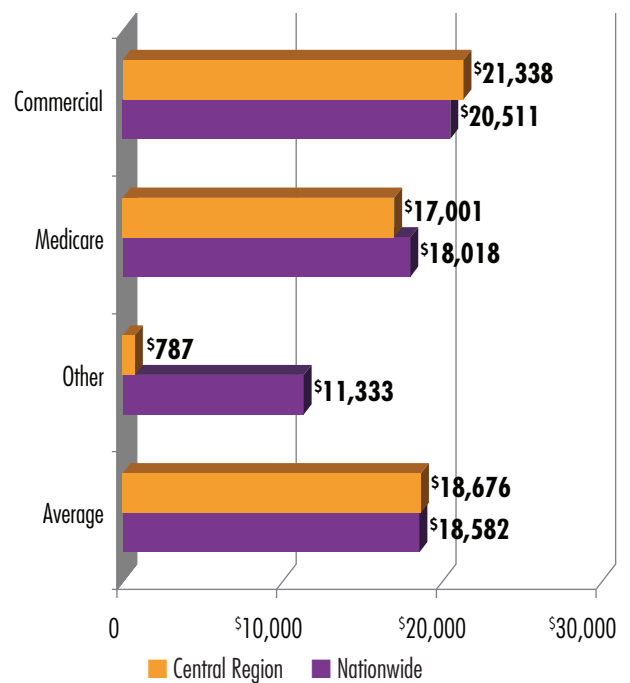
Among men seen in physicians' offices, both nationwide and in the Central Region, commercially insured patients had consistently higher rates of early prostate cancer diagnoses than those covered by Medicare or especially Medicaid (Figure 25).

Prostate cancer treatment in the Central Region in 2009 was most often covered by Medicare, which paid for 70% of patients treated in physicians' offices. Commercial payers covered just 29% of these patients in 2009. Nationwide, prostate cancer treatment was also most often covered by Medicare, which paid for 66% of patients treated in physicians' offices in 2009; commercial payers covered 33%.

**Figure 25 Patients with Prostate Cancer Seen in Physicians' Offices, by Disease Stage and Payer**



**Figure 26 Physician's Office Average Charges for Patients with Prostate Cancer, by Payer**



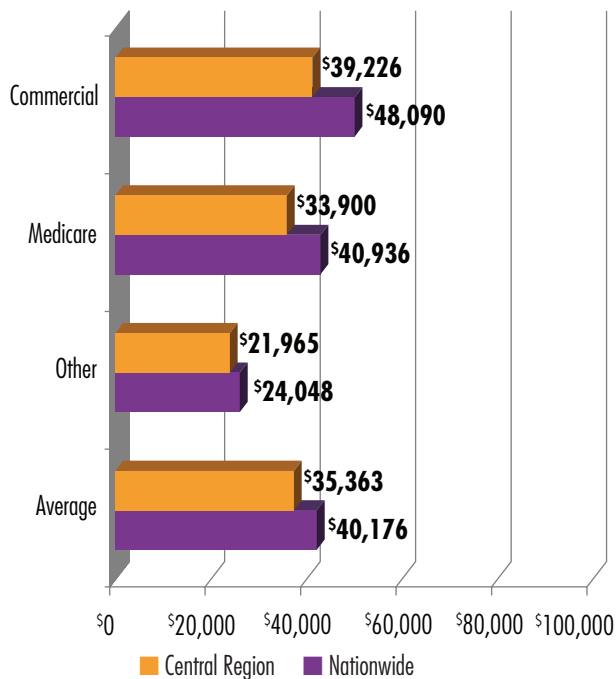
Nationwide in 2009, 70% of commercially insured patients treated in physicians' offices received an early-stage prostate cancer diagnosis (unchanged from 2008), compared with 60% of Medicare patients (61% in 2008). Also nationwide in 2009, only 37% of Medicaid patients (down from 39% in 2008) were diagnosed early.

In the Central Region in 2009, 68% of commercially insured patients treated in physicians' offices received an early-stage diagnosis (67% in 2008), compared with 56% of Medicare patients (57% in 2008). Just 46% of Medicaid patients (up from 35% in 2008) in this treatment setting received an early diagnosis. (The percentage change may be magnified by the small base of prostate cancer patients involved; Medicaid patients accounted for only 1% of patients seen in physicians' offices both regionally and nationwide during 2008 and 2009).

### Average Charge in Physicians' Offices, by Payer

Nationwide, the average charge per patient for prostate cancer treatment in physicians' offices was \$18,582 in 2009, up 2% from the 2008 average of \$18,236 (Figure 26). In the Central Region the average charge in 2009 was \$18,676, up 3% from the 2008 charge of \$18,057.

**Figure 27 Hospital Outpatient Average Charges for Patients with Prostate Cancer, by Payer (CDM)**

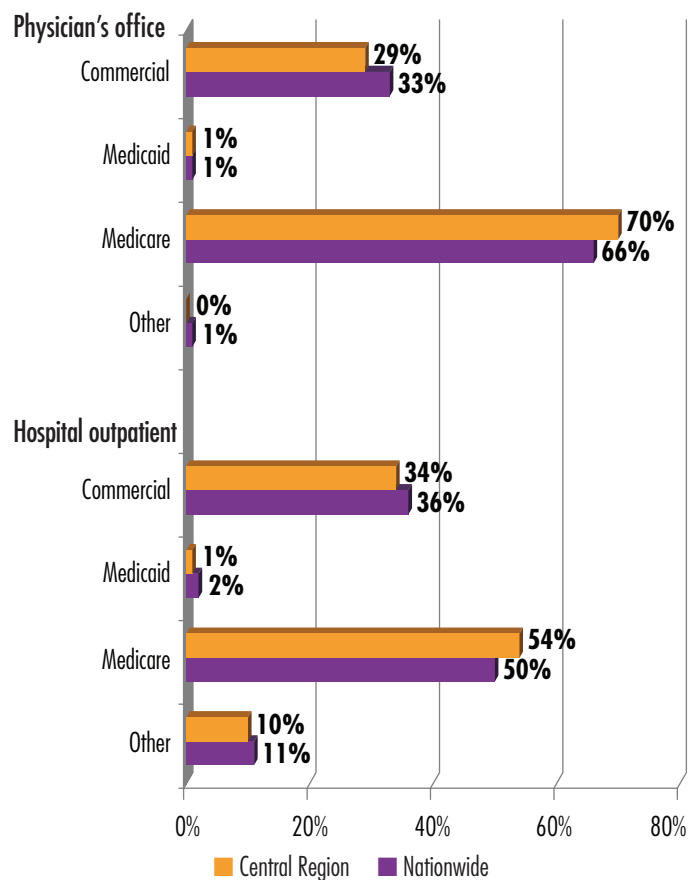


The increase in the average charge in the Central Region was led by commercial payers, for which the average charge for treatment in a physician's office increased 22% to \$21,338. Charges when Medicare was the payer decreased in the Central Region by 12% to \$17,001 from 2008 to 2009. Reliable Medicaid data is not available for the Central Region due to a small sample size (less than 1% of patients seen in physicians' offices both regionally and nationally).

### Hospital Outpatient Charges

According to data from Charge Data Masters (CDM), 2009 average hospital outpatient charges for patients diagnosed with prostate cancer were similar to 2008 charges both nationwide and in the Central Region (Figure 27). However, the average charge to patients insured by commercial payers was up 8% nationwide (to \$48,090) and down 4% in the Central Region (to \$39,226). Medicare average charges were down 2% in the Central Region (to \$33,900) and up 4% nationwide (to \$40,936). Medicaid 2009 CDM average hospital outpatient charges were up 5% nationwide (to \$36,772). Comparable Medicaid data for the Central Region were not available.

**Figure 28 Patients with Prostate Cancer by Treatment Setting and Payer**



### Patients by Payer and Treatment Setting

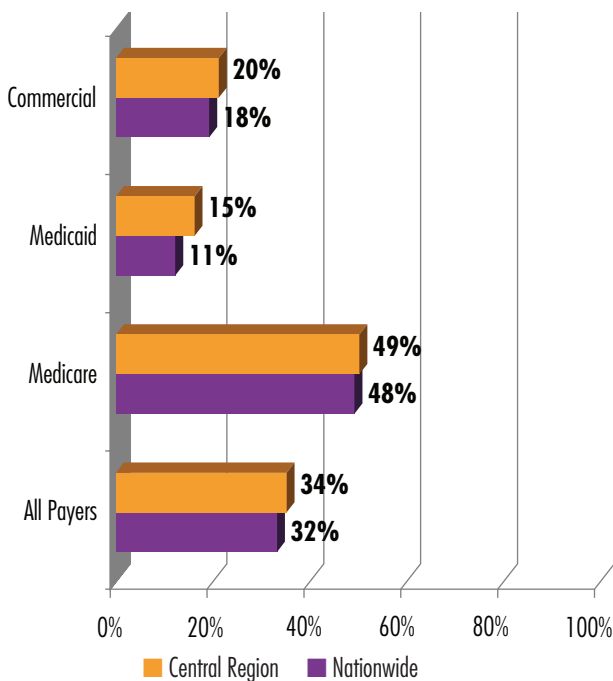
Of the three major payers, Medicare covered the largest portion of prostate cancer patients treated in physicians' offices (about two-thirds) or hospital outpatient settings (about half) in both 2008 and 2009 (Figure 28). In physicians' offices, commercially insured patients accounted for almost all of the rest, except for the 1% who were covered by Medicaid. In 2009, both nationwide and in the Central Region, approximately 10% of patients diagnosed with prostate cancer and treated in hospital outpatient settings were covered in the "other" payer group, which includes government employee, military and railroad retirement plans as well as cash payers.

### Compliance with NCCN Guidelines by Payer

Chemotherapy treatments administered to prostate cancer patients were compared with the most commonly accepted guidelines for cancer care. Compliance with NCCN practice guidelines for all payers averaged 32% nationwide in 2009 (down from 34% in 2008), and 34% in the Central Region (33% in 2008) (Figure 29).

Nationwide and in the Central Region, treatments for prostate cancer patients seen in physicians' offices covered by Medicare had the highest compliance levels in 2009: 49% in

**Figure 29 Prostate Cancer Treatment Compliance with NCCN Guidelines in Physicians' Offices, by Payer**

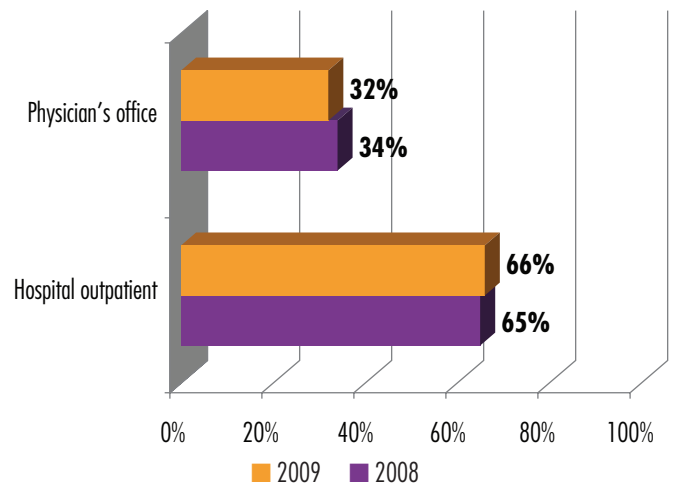


the Central Region and 48% nationwide Both were down one percentage point from the previous year. The relatively high rate of guideline compliance for care covered by Medicare is because Medicare will pay for treatments detailed in five compendia, one of which is NCCN, but will not pre-approve other care plans. Thus, physicians may be more likely to limit treatment to approved compendia when Medicare is the payer, explains Dawn Holcombe, MBA, president of DGH Consulting.

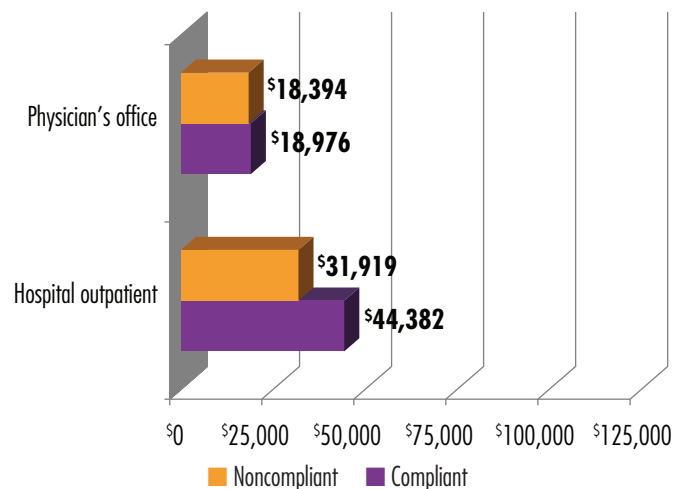
### Compliance with NCCN Guidelines by Treatment Setting, Nationwide

Nationwide, only 32% of treatments for prostate cancer in physicians' offices during 2009 were compliant with NCCN guidelines (34% in 2008). In hospital outpatient settings, 66% of treatments were compliant (65% in 2008) (Figure 30).

**Figure 30 Prostate Cancer Treatment Compliance with NCCN Guidelines, by Setting, Nationwide**



**Figure 31 Average Charges for Prostate Cancer Treatments, by NCCN Guideline Compliance, Nationwide**



### Treatment Charges by Compliance with NCCN Guidelines, Nationwide

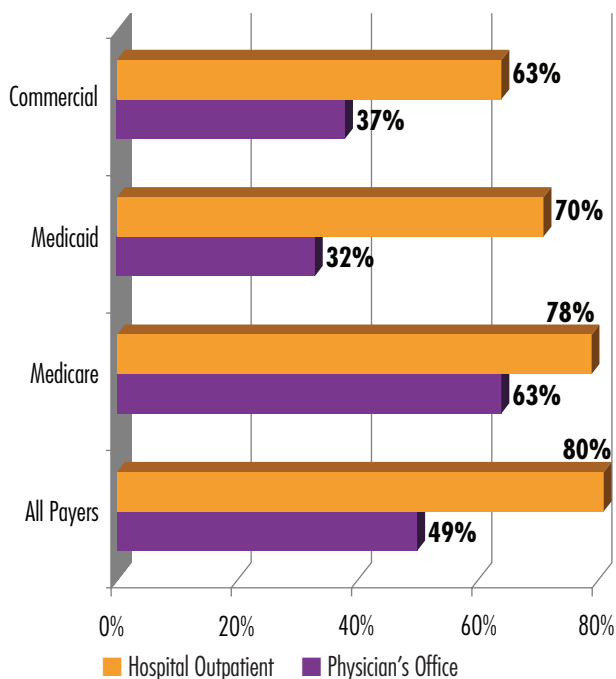
Nationwide in 2009, noncompliance with NCCN guidelines for hospital outpatient care for prostate cancer was associated with reduced treatment charges, averaging \$31,919 per patient, \$12,463 lower than the \$44,382 charged for compliant care delivered in the hospital outpatient setting (Figure 31), although still significantly higher than charges for either compliant or non-compliant care in the physicians' office setting. These lower average charges are surprising, given that non-compliant care is usually associated with more complex cases and higher charges.

For care delivered in physicians' offices in 2009, noncompliant per-patient charges were similar to those for compliant care (\$18,394 and \$18,976, respectively).

### Use of the Top 5 Regimens, by Payer, Nationwide

Nationwide, for prostate cancer patients treated with chemotherapy in 2009, the top five most prescribed treatment regimens accounted for 49% of chemotherapy treatments provided by physicians' offices (50% in 2008) and 80% (93% in 2008) of chemotherapy treatments provided in outpatient hospital settings (Figure 32). While the percentage of use of the top regimens remained consistent from 2008 to 2009 in physicians' offices, the decline in the hospital outpatient treatment setting suggests an increase in the percentage of more complex cases being treated in that setting.

**Figure 32 Prostate Cancer Treatments Using Top 5 Regimens, by Setting and Payer, Nationwide**

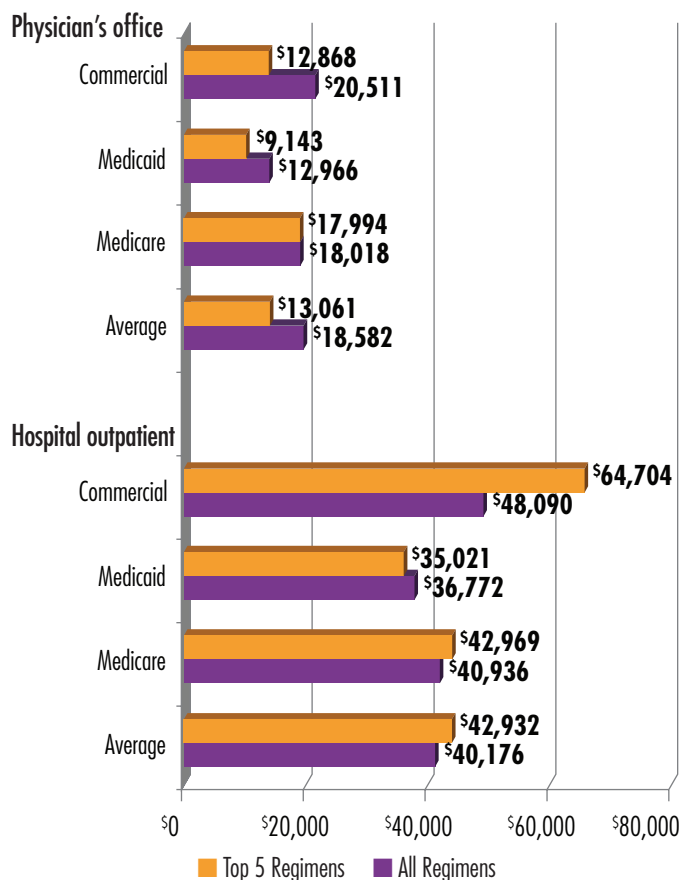


### Treatment Charges for Top 5 and All Regimens

Nationwide, the average charge for treatment of prostate cancer in physicians' offices for all chemotherapy regimens was \$18,582 in 2009, 42% higher than the average charge for the top regimens in this setting (Figure 33). The average charge for treatment for all regimens was higher than that for the top regimens in physicians' offices in 2008 as well, although only by 8%. From 2008 to 2009, the 10% increase in the average charge to hospital outpatients for all regimen treatments suggests a successful transfer of more expensive cases to this treatment setting from physicians' offices.

Chemotherapy in hospital outpatient settings is typically associated with higher average charges than chemotherapy delivered in physicians' offices, as held true in 2009. The average charge per patient receiving chemotherapy treatments in the outpatient setting was \$40,176 for all regimens, more than double the \$18,582 charged for treatment in physicians' offices. The average top regimen charge per patient was \$42,932 in outpatient settings, more than three times the charge for top regimen treatment in physicians' offices.

**Figure 33 Average Charges for Prostate Cancer Regimens, by Setting and Payer, Nationwide**



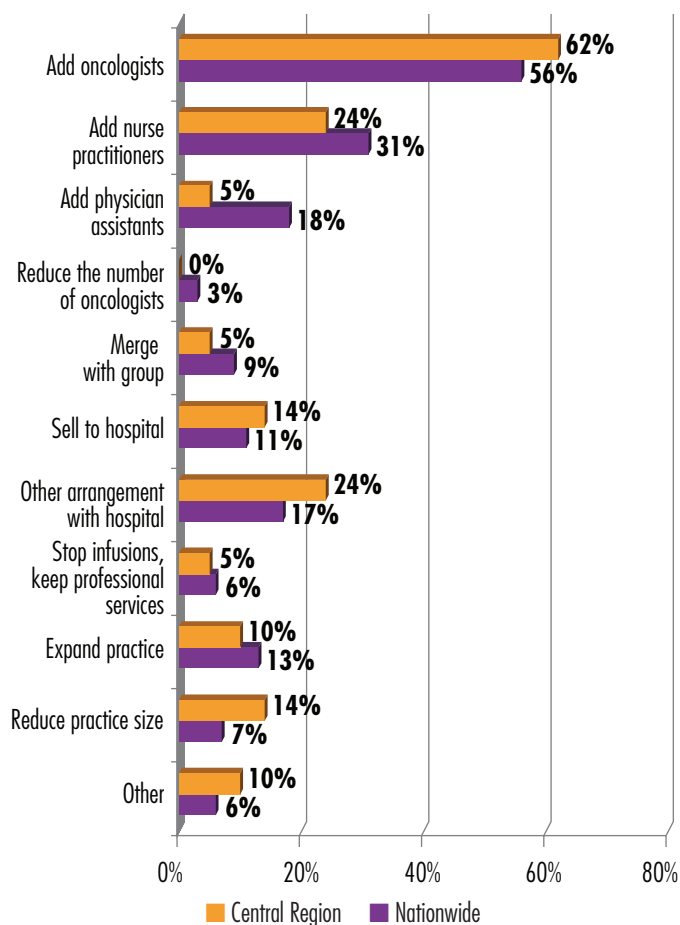
# Oncology Practice Survey Findings

Physicians are under increasing financial pressure to improve business operations and satisfy the needs of payers for oncology management programs that address cost concerns. Practices are seeking operational affiliations/mergers/collaborations and clinical management enhancements, with the expectation that such changes will better position them for negotiations and relationships with key payers.

A total of 165 oncology physicians (93%) and administrators (7%) nationwide responded to the survey. Of these, 26, or 16%, are in the Central Region. More than half of all practices are groups of five or fewer physicians.

Proportionately fewer practices in the Central Region are considering changes than practices nationwide: just 5% are considering merging with another medical group and 38% are considering selling to a hospital or developing some other collaborative hospital arrangement (Figure 34).

**Figure 34 Potential Changes to Practice**



## Commitment to Patient Care

Responses concerning payer and patient care policies demonstrate that oncologists' commitment to patient care and to preserving access to services and care in their offices exceeds their focus on the business of care delivery. About half of practices (58% in the Central Region and 49% nationwide) report that they now see more patients than a year ago. In the same time period, half of practices in the Central Region (50%) and nationwide (52%) report decreasing net profit. Despite these strains, more than two thirds of Central Region practices (69%) and 58% nationwide indicated, when asked how they would respond to proposed Medicare reimbursement cuts of as much as 20% to 30%, that they would continue to treat Medicare patients as usual. About one third (31%) of oncologists nationwide and 35% in the Central Region say they may need to identify alternative sites of service for Medicare patients, such as hospitals, which would prove more costly to Medicare and private insurers. Already many practices report that they refer some patients to a hospital-based infusion center (80% in the Central Region and 69% nationwide).

Practices also report that patients are choosing to delay or cancel care due to costs of treatment. Thirty-two percent of Central Region practices report that 6% to 10% of patients have requested changes in their care plan (31% of practices nationwide) or stopped taking oral medications early due to cost (17% in the Central Region and 26% nationwide).

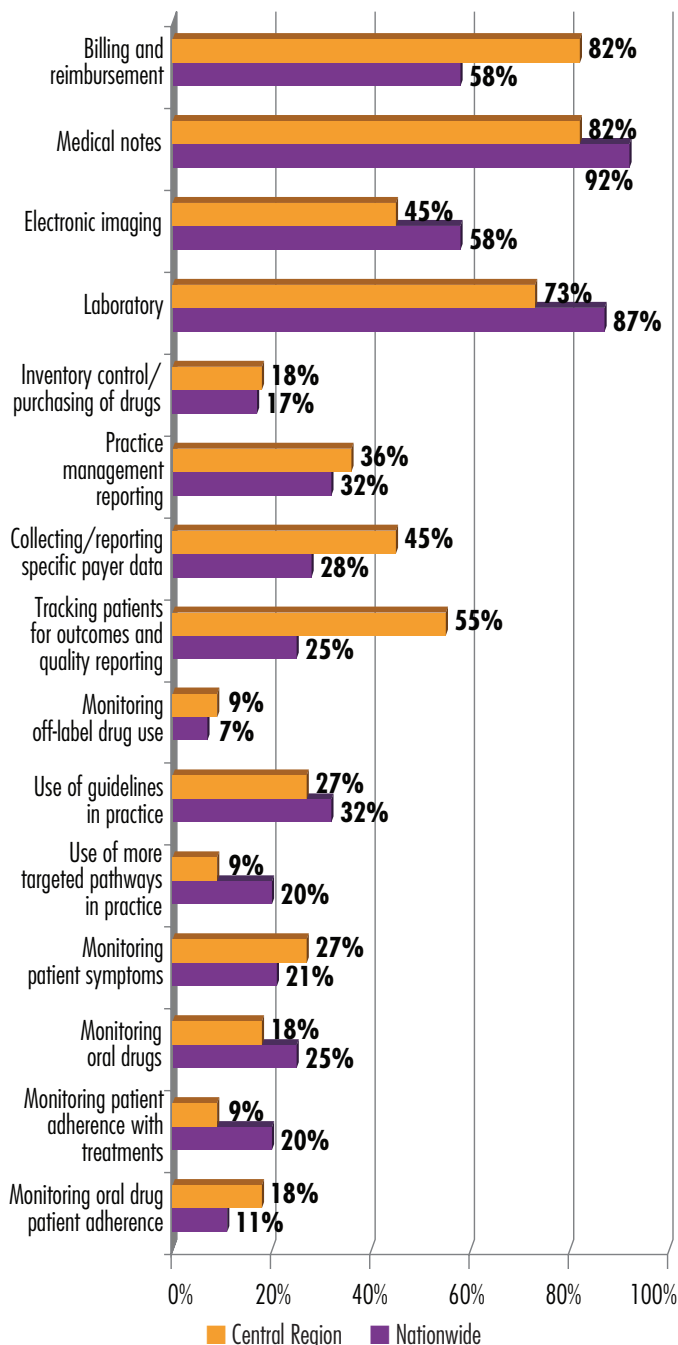
## Use of Electronic Medical Records (EMRs)

Only 35% of practices in the Central Region and 44% of practices nationwide report using an EMR system. There is considerable variation in the type of system used, with a similar proportion of practices (27% in the Central Region and 28% nationwide) using a hospital-provided/based system as use an oncology-specific EMR.

It is a lengthy process to select, install and implement an EMR. More than one third (36%) of Central Region practices and 22% of practices nationwide have not yet fully implemented an EMR. Another 36% of Central Region practices have had an EMR for two years or less (39% for practices nationwide).

Even when EMRs are fully implemented, they are being used primarily to automate routine processes rather than to improve patient outcomes and practice management. When the 44% of all survey respondents with EMRs indicate how they use their systems, more than half of reported applications are for billing, medical notes, electronic imaging, and laboratory results (Figure 35).

**Figure 35 EMR Utilization**



Almost half of practices (44% in the Central Region and 49% nationwide) do not collect data through their EMR or electronic order entry system (EOES). Of those that do, a significantly higher proportion (20% in the Central Region than nationwide (9%) have been able to sell their data or gain preferential reimbursement consideration.

**Use of Practice Guidelines**

Guidelines for the delivery of medically recognized standards of practice are widely accepted and followed. About half of all respondents (56% - 59%) and Central Region practices (46% - 54%) encourage their use in colorectal, NSC lung, breast, prostate, and head and neck cancers.

Respondents are most likely to use as a reference the National Comprehensive Cancer Network (NCCN) Guidelines (96% in the Central Region and 89% nationwide). Less than half of all respondents monitor compliance to guidelines or pathways (28% in the Central Region and 35% nationwide). Of those practices that do monitor compliance, the greatest number audit or monitor compliance every three months (33% in the Central Region and 37% nationwide).

Only 20% of practices in the Central Region and 25% nationwide report guideline integration into an EMR. While 30% in the Central Region and 33% nationwide track compliance, just 10% of practices in the Central Region and only 4% nationwide report receiving rewards from payers for guideline compliance.

**Use of Specialty Pharmacies**

While oncology practices do accept specialty pharmacy drugs in their practice, such utilization occurs only under specific situations, eg, for selected drugs, or for specific payers under limited circumstances. The majority of practices do not accept drugs from specialty pharmacies when shipped directly to the patient (68% in the Central Region, 63% nationwide), but about half will allow some specialty pharmacy drugs to be shipped directly to the practice (44% in the Central Region, and 50% nationwide). Three quarters of practices nationwide and 76% in the Central Region state that they would not accept drugs from a specialty pharmacy without a signed liability waiver.

Far fewer practices in the Central Region (29%) than nationwide (45%) use specialty pharmacy drugs because the commercial payer requires it. Nearly half (46%) of practices in the Central Region (49% nationwide) do so because of inadequate drug reimbursement margins or reimbursement



rates too low to support buy and bill. Nationwide, 34% of practices and 23% in the Central Region report using specialty pharmacies for 5% or less of their total drug orders for oral drugs; for injectable drugs, 77% in the Central Region and two thirds nationwide report ordering 5% or less from specialty pharmacies.

### Oncology Management Programs

Respondents were asked to cite oncology management programs already in place or that could be developed and presented to payers. Practices were most likely to already be doing symptom management and patient education, and have the greatest interest in developing case management, survivorship programs, end of life and review of oncology treatments over certain dollar thresholds.

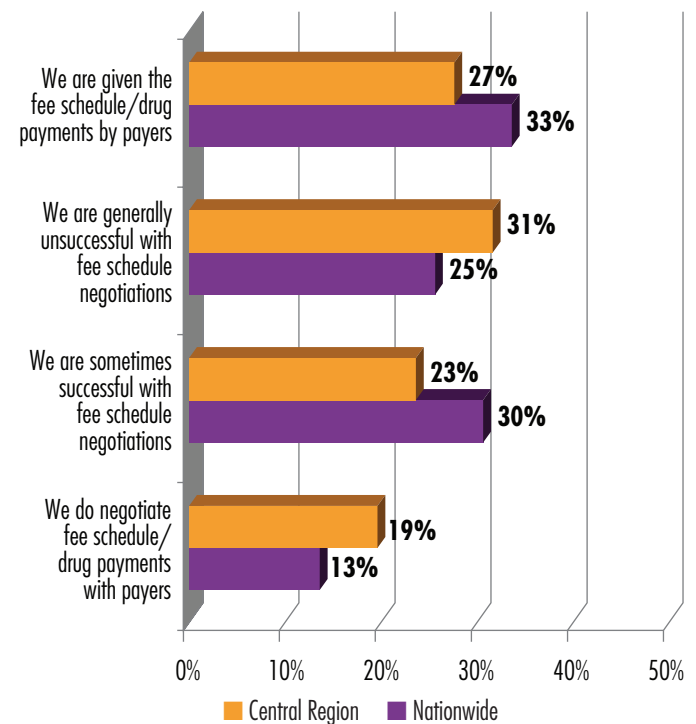
### Reimbursement Issues

Oncologists see a growing chasm between Medicare payment policy and what they deem to be acceptable reimbursement rates. Respondents were asked to estimate what rate of payment for professional services by private payers (in relation to current Medicare rates for professional services) would approximately cover their non-drug costs of care delivery if private payer drug reimbursement rates were set at cost or Medicare rates. In the Central Region, 10% stated that Medicare rates were sufficient; 10% estimated less than 50% over Medicare rates and 30% estimated 50% over, while 20% responded for both 100% and 150%. Nationwide, 19% estimated less than 50% over Medicare rates, and 22% favored 50% over.

Oncology practices report a distinct lack of success in creating effective contracts with payers (Figure 36). Many oncology practices lack basic information concerning the profitability of working with specific plans. Just 32% in each of the Central Region and nationwide feel their contracts with the majority of managed care plans are profitable. The contracts are considered unprofitable by 24% in the Central Region and 26% nationwide. The largest response, 44% in the Central Region and 42% nationwide, was “don’t know.”

The costs of oncology drugs and their handling constitute the largest component of the costs of running an oncology practice. More than three quarters (76%) of practices in the Central Region and about half (53%) nationwide report having taken steps to identify potential losses for specific

Figure 36 Practice-Payer Fee Negotiations

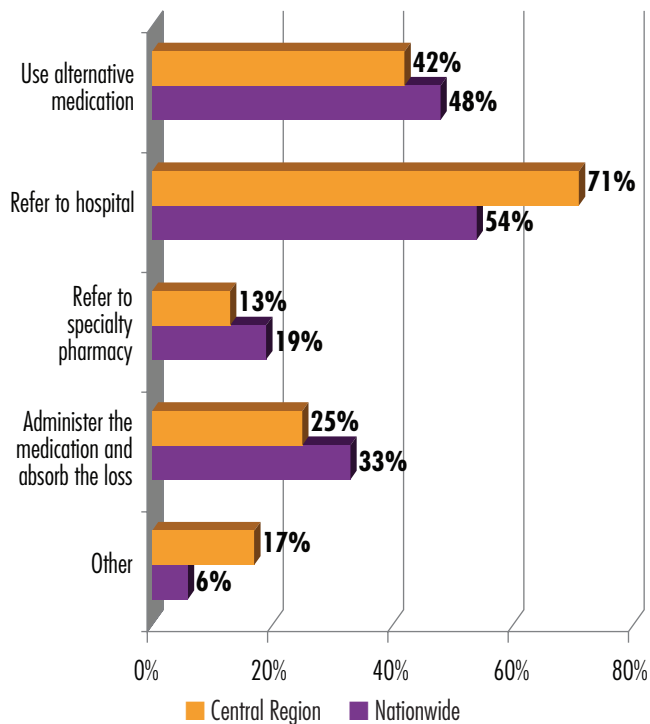


oncology infusion therapies. When asked what they would do in cases where delivery of a medication would result in a revenue loss, most would refer the patient to the more costly hospital setting or use an alternative medication if one exists (Figure 37).

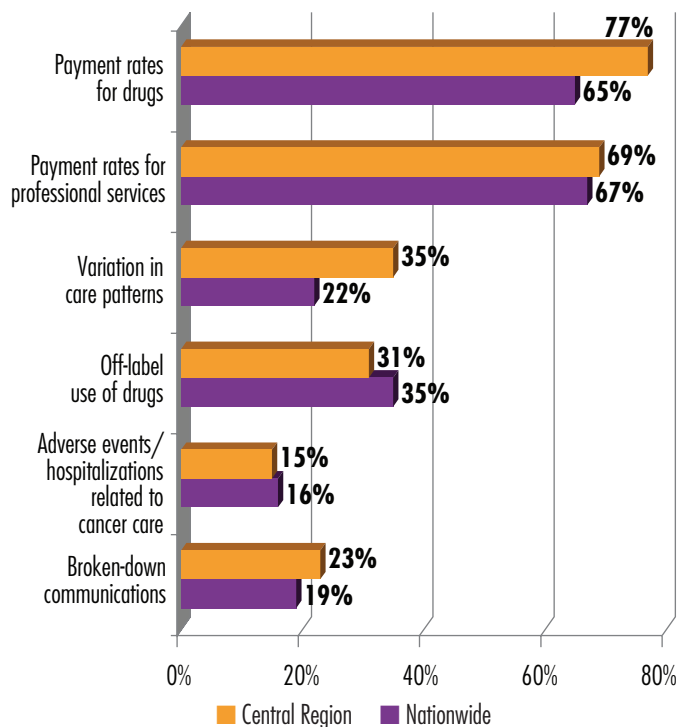
In the face of increasing fiscal and operational challenges, practices are turning to a variety of options to increase practice revenues. The most popular choices are tightening controls on coding and documentation (69% and 73% respectively in the Central Region and 60% and 56% respectively nationwide), and participating in federal performance programs such as PQRI and e-prescribing (23% and 15% respectively in the Central Region and 18% and 20% respectively nationwide). Just a few (12%) in the Central Region and 20% nationwide have made no changes.

The most commonly reported reimbursement rate (56%) in the Central Region for drugs in the physician practice is average sales price (ASP) plus 6%, with ASP plus 0-5% a close second (28%). For practices nationwide, 43% report ASP plus 6%, and 27% report ASP plus 0-5%.

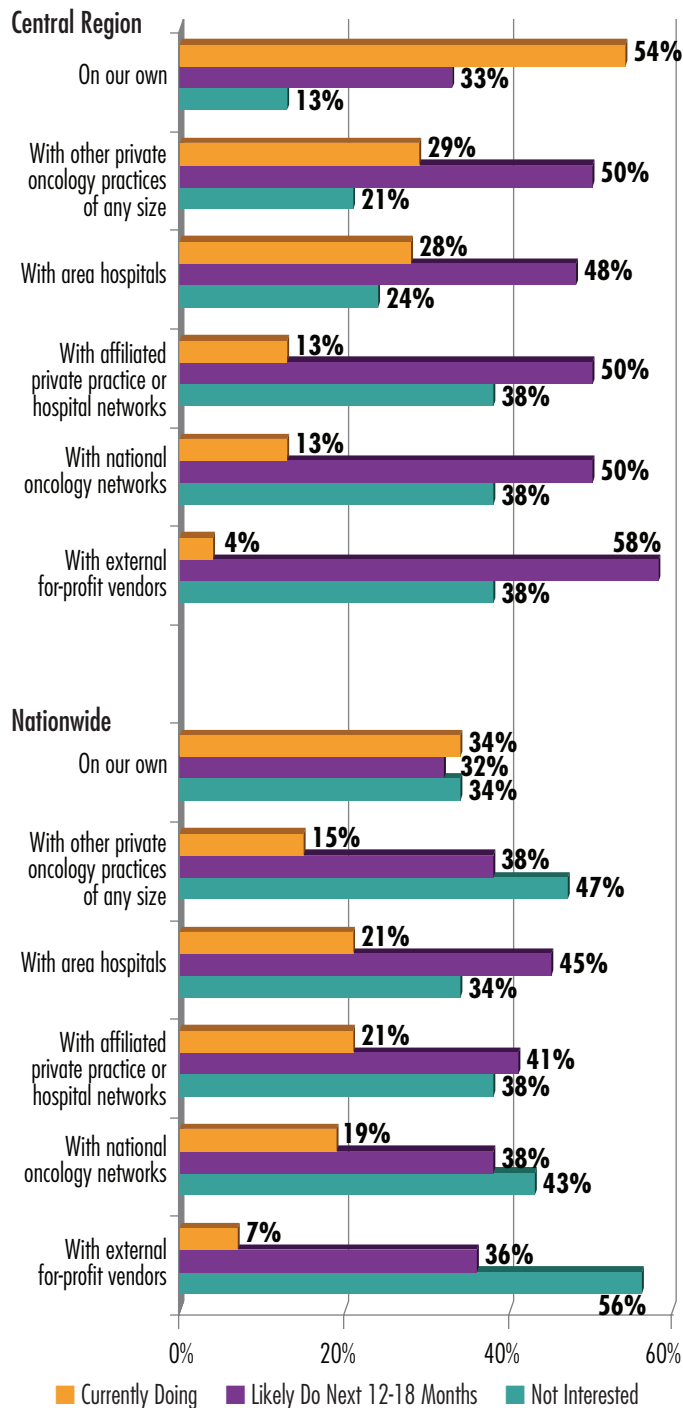
**Figure 37** When Use of a Drug Will Result in Revenue Loss



**Figure 38** Issues Affecting Provider-Payer Relations

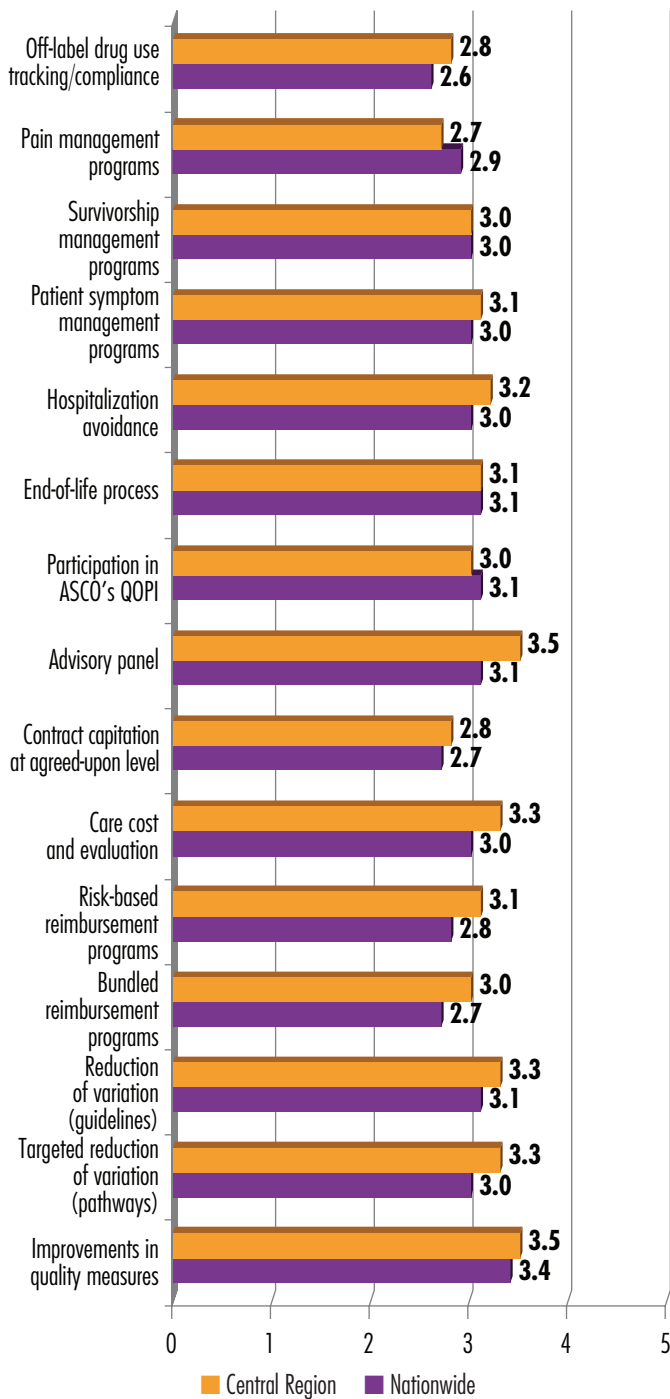


**Figure 39** Oncology Practice Interest in Payer Programs



**Figure 40 Practice-Payer Collaboration Options**

1 = Not at all interested; 2 = Slightly interested; 3 = Neutral; 4 = Moderately interested; 5 = Extremely interested

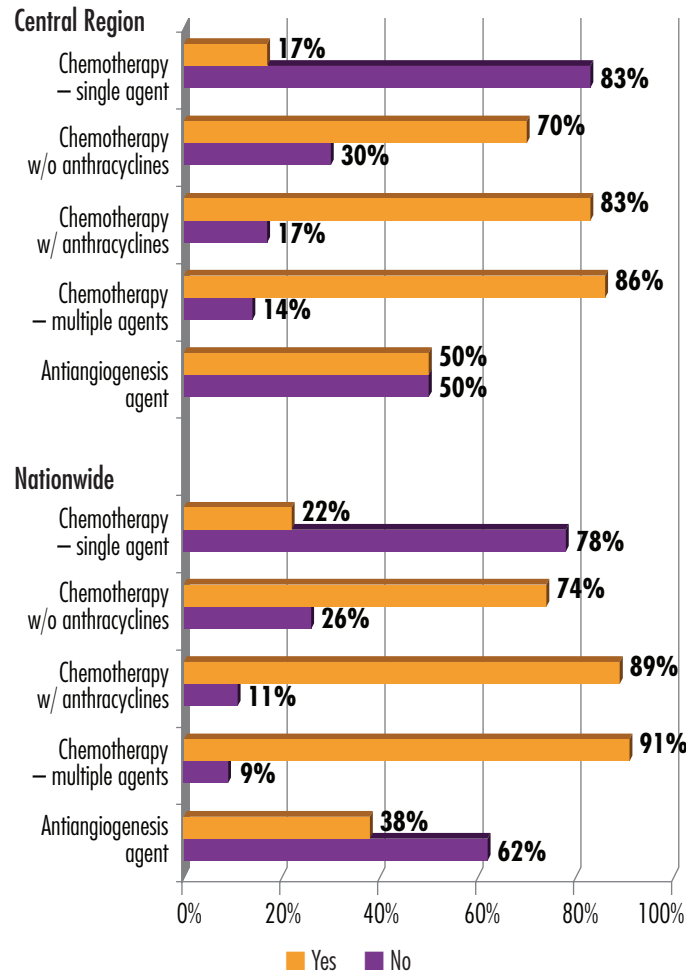


**Practice-Payer Relations**

Almost two-thirds (65%) of Central Region practices and 68% of practices nationwide state that their relationship with payers goes no further than annual contracting.

For Central Region physicians and all physicians nationwide, the most sensitive issue that may affect current and future relationships with payers is payment rates for professional services (Figure 38).

**Figure 41 Adjuvant Treatment for Breast Cancer**

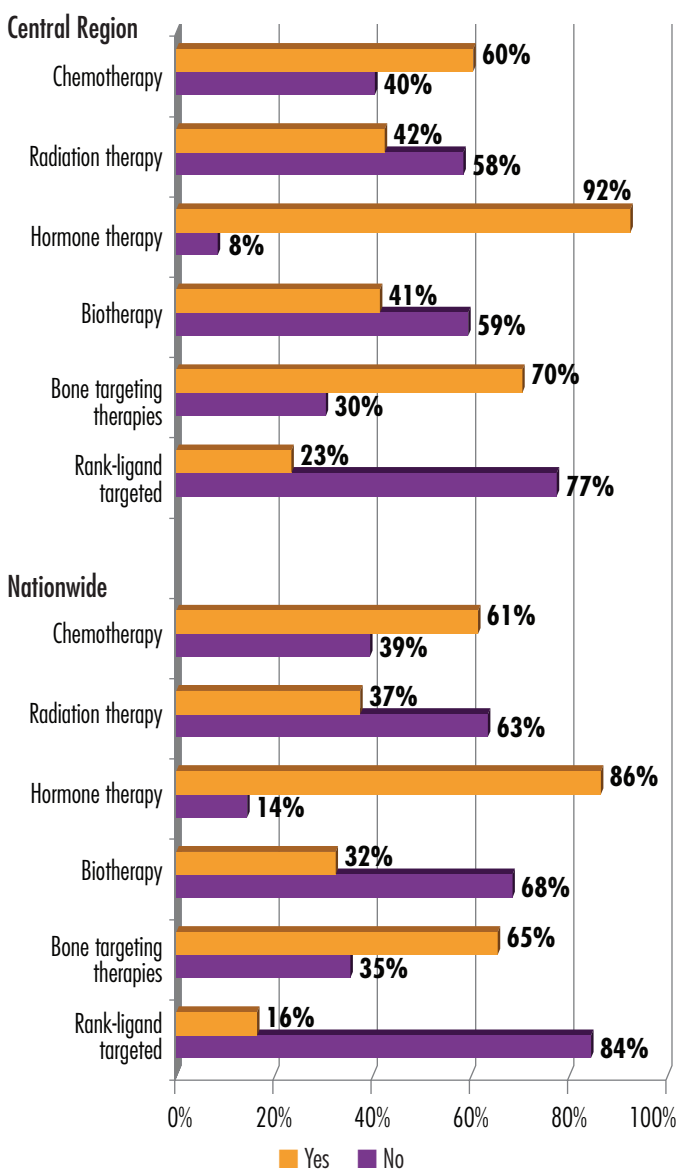


### Collaborative Prospects

When asked about collaborating with other care providers in exploring key payer programs related to oncology, Central Region practices show a much higher interest (76%, combining currently doing and likely to do) in working with area hospitals than do practices nationwide (66%) (Figure 39).

Practices are also looking at programmatic collaborations and innovative programs with payers. All practices show the most interest in improvements in quality measures programs, care cost and evaluations, hospitalization avoidance and advisory panels (Figure 40).

**Figure 42 Breast Cancer Treatment for Patients with Positive Hormone Receptor Findings and Metastatic Disease**



### Breast Cancer Treatment

Treatment of cancer is complex, usually involving more than one drug. When asked about adjuvant treatment generally followed for breast cancer patients, practices clearly show a trend toward chemotherapy with multiple agents (86% in the Central Region and 91% nationwide) and chemotherapy with anthracyclines (83% for the Central Region and 89% nationwide) (Figure 41). If the patient is HER2 positive, treatment is most likely to include HER2 inhibitors (96% and 97%, respectively).

Most physicians indicate that if they have patients with positive hormone receptor findings and metastatic disease, they generally continue to treat for the life of the patient (80%, Central Region; 74% nationwide).

Choices for treatment of breast cancer patients with recurrent metastatic disease vary by treatment and region (Figure 42).

Most physicians in the Central Region and nationwide consider introducing discussion of palliative care with breast cancer patients by stage IV or at the third line of therapy.

**Figure 43 Patients Treated for Localized Prostate Cancer at Respondent’s Hospital or Center**

Treatment	0%–25%	26%–50%	51%–75%	76%–100%
Radical nerve sparing prostatectomy				
Central Region	54%	25%	17%	4%
Nationwide	58%	23%	16%	3%
Laparoscopic prostatectomy				
Central Region	63%	33%	4%	0%
Nationwide	60%	30%	9%	2%
Robotic prostatectomy				
Central Region	67%	17%	13%	4%
Nationwide	56%	25%	13%	5%
Brachytherapy				
Central Region	58%	38%	4%	0%
Nationwide	47%	39%	13%	2%
Conformal RT				
Central Region	59%	32%	9%	0%
Nationwide	52%	34%	12%	2%
IMRT				
Central Region	45%	41%	9%	5%
Nationwide	44%	31%	19%	5%

## Prostate Cancer Treatment

Oncology physicians report variations in treatment choices for patients with localized prostate cancer (Figure 43). Patients in the Central Region are most likely to receive radical nerve sparing prostatectomy while patients nationwide are more likely to receive IMRT.

Physician choices for treatment of prostate cancer by stage are generally consistent between the Central Region and nationwide (Figure 44).

When asked if they currently had patients receiving immunotherapy for metastatic, hormone-refractory prostate cancer, 78% in the Central Region said no, as did 76% nationwide. When asked if physicians expected to have such patients in the next 12 months, significantly more responded in the affirmative (50% in the Central Region and 37% nationwide).

**Figure 44 Treatment of Prostate Cancer by Stage**

Stage 1,2 surgically treated adjuvant					
Central Region	55%	18%	27%	0%	0%
Nationwide	60%	14%	25%	0%	1%
Stage 1,2 RT treated adjuvant					
Central Region	35%	23%	35%	8%	0%
Nationwide	52%	20%	25%	2%	1%
Recurrent/metastatic first line therapy					
Central Region	28%	23%	31%	10%	8%
Nationwide	37%	21%	31%	7%	4%
Hormone refractory therapy					
Central Region	22%	13%	9%	26%	30%
Nationwide	24%	17%	17%	23%	18%

■ LHRH 
 ■ ADT 
 ■ Anti-androgen 
 ■ Immunotherapy 
 ■ Antiangiogenesis

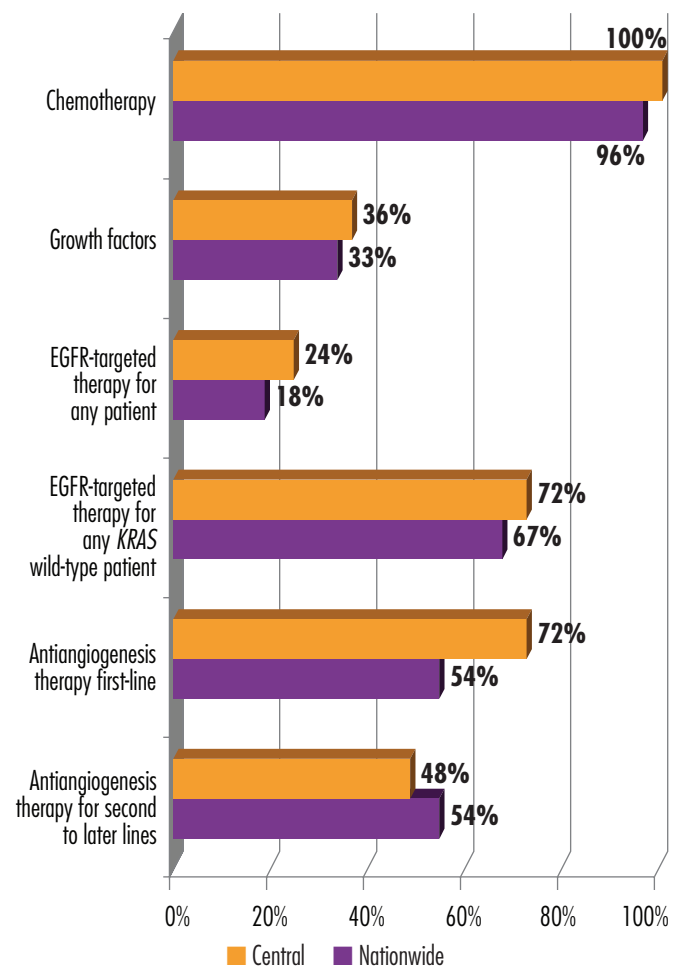
Physicians, when asked about expectations for trends in therapeutic medication volume for stage IV prostate cancer patients, showed variation in expectations for individual treatment options between the Central Region and nationwide.

## Colorectal Cancer Treatment

Chemotherapy is the most frequent treatment choice for colorectal cancer patients in the Central Region and nationwide (Figure 45).

Three quarters of oncologists (75% in the Central Region, 77% nationwide) agree that introducing discussion of palliative care is appropriate with stage IV colorectal cancer patients.

**Figure 45 Preferred Treatments for Colorectal Cancer Patients**



# Managed Care Survey Findings

Health plans are seeking more information in order to make better-informed decisions concerning coverage and patient management, placing greater emphasis on access to data, such as obtaining and interpreting lab values. A related trend is the growing emergence of companion diagnostic use in guiding and supporting treatment decisions.

Health plans are also seeking ways to reduce costs associated with the delivery of cancer care by encouraging but not mandating use of specialty pharmacy for oral and self-injectable oncology agents. In this effort they are moving cautiously so as not to antagonize oncologists with whom they seek to maintain good relationships.

A total of 123 health plans and managed care organizations responded to the survey. Of these, 20 (16%) are Central Region plans and 18 (15%) are plans with national coverage. For only this section of the report, three sets of responses are presented: those from plans in the Central Region; responses from plans with national coverage; and responses from all plans nationwide, representing all five geographic regions.

## Preferred Care Settings

The preferred cancer care treatment locations for plans with national coverage are freestanding infusion clinics (Figure 46). For Central Region plans, a contracted preferred provider is favored. Least preferred for all plan types are retail pharmacy infusion facilities.

## Medical and Pharmacy Benefits

Among Central Region plans, 63% report that they are actively managing cancer care in their medical and pharmacy benefits plans, compared with about two-thirds of other plan types.

For Central Region plans, all plans nationwide, and plans with national coverage, injectable/infused drugs make up the greatest proportion of cancer spend under the medical benefit (32%, 32%, and 31%, respectively). Hospital services are a significant component for all plan types (25%, 26%, and 29%, respectively). More than half of all plan types expect to see increased spending on injectable/infused drugs and also oral drugs under the medical benefit in the next year.

Oral drugs account for half of the pharmacy benefit cancer spend for Central Region plans and all plans nationwide, increasing to 59% for plans with national coverage. More of all plan types expect the portion allocated to oral drugs under the pharmacy benefit to increase over the next year than

expect the proportion of injectable/infused drugs to increase.

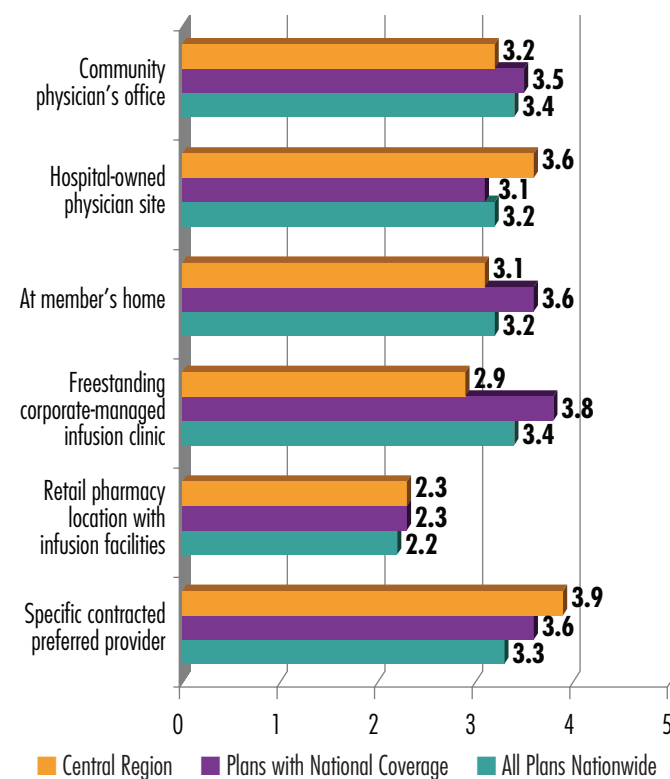
Plans with national coverage (56%) report greater concern expressed by employers regarding oncology or a desire for a role in determining oncology reimbursement policy as compared with 46% of all plans nationwide and 40% of Central Region plans. Select clients are expressing concerns but are allowing plans to determine specifics.

## Specialty Pharmacy

Central Region plans lead other plan types in allowing physicians to determine the best source of injectable/infused drugs for their patients (Figure 47). Use of a preferred specialty pharmacy in oncology is still optional, with many plans indicating that they will not force this requirement in the next 12 to 18 months.

Central plans also lead other plan types in allowing physicians to determine the best source of oral drugs (Figure 48).

**Figure 46 Preferred Cancer Care Settings**  
Scale of 1–5: 1 = least preferred; 5 = most preferred



### Access to Data

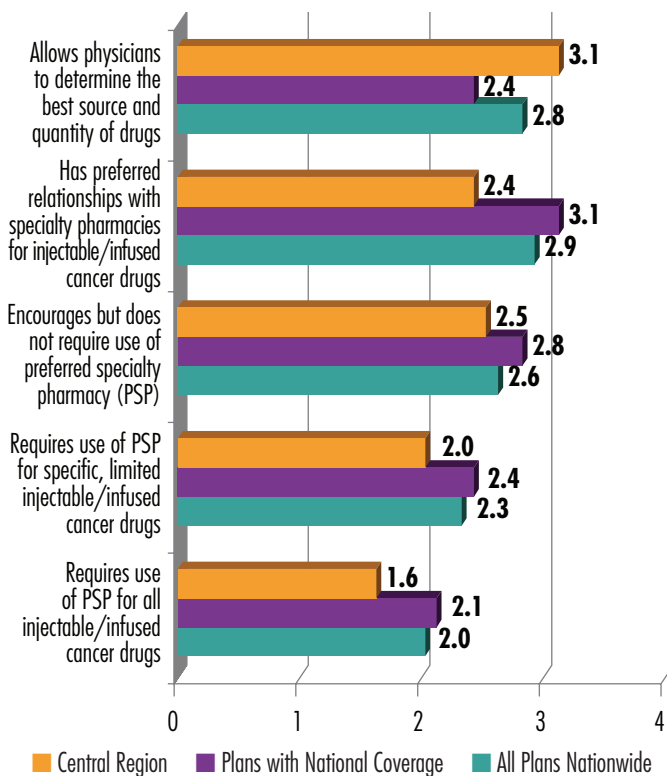
Plans are seeking more information in order to make better-informed decisions regarding coverage and patient management. Of plans that require prior authorization for cancer drugs or treatments, most review physician notes along with lab tests to determine that results are within certain parameters.

Plans with national coverage (83%) are more likely to have a medical policy regarding approved coverage of cancer treatments than are Central Region plans (80%) and all plans nationwide (75%). The policy is most often applied by drug by plans with national coverage (44%), all plans nationwide (33%), and by Central Region plans (40%).

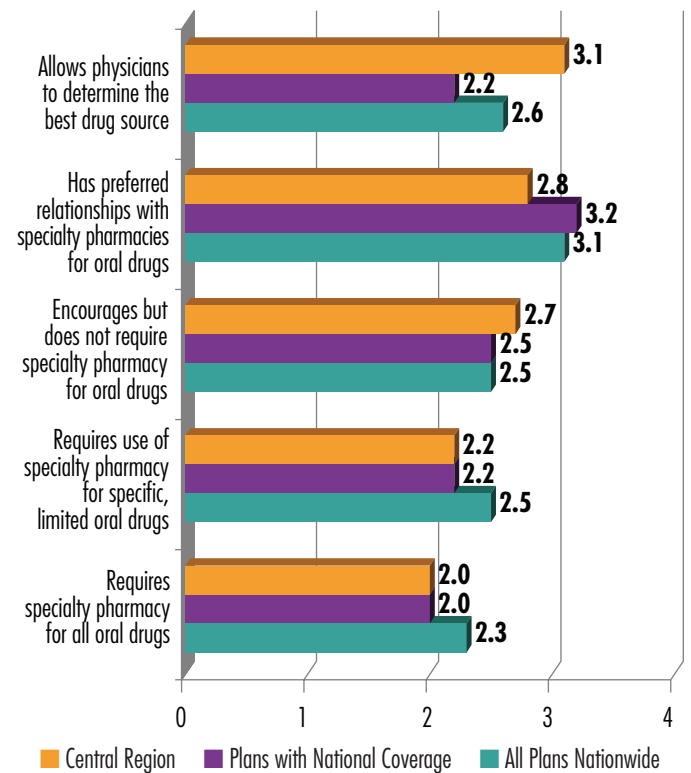
Plans rely on many different information sources on oncology treatments to determine coverage policy. All three plan types rely on FDA labeling, but particularly Central Region plans (93%), which also favor peer-reviewed journals (93%). Other sources favored by Central Region plans are NCCN Compendia (87%) and NCCN Guidelines (73%). Plans with national coverage favor FDA labeling (83%), NCCN Compendia (78%), NCCN Guidelines (78%), and US Pharmacopeia Drug Information (72%).

“The variety and use of multiple sources demonstrates the difficulty as well as the complexity for plans in managing oncology treatments,” observes Randy Vogenberg, PhD, RPh, principal, Institute for Integrated Healthcare.

**Figure 47 Policies for Acquiring Injectable/Infused Drugs**  
 1 = Will not do; 2 = Considering doing in next 12–18 months;  
 3 = Will do within the next 12–18 months; 4 = Currently doing



**Figure 48 Policies for Acquiring Oral Drugs**  
 1 = Will not do; 2 = Considering doing in next 12–18 months;  
 3 = Will do within the next 12–18 months; 4 = Currently doing



## Disease Stage Data

Two-thirds of plans with national coverage review disease stage data on members with cancer, compared with 54% of all plans nationwide and just 40% of Central Region plans. Plans with national coverage most often review disease stage data by requiring staging information on prior authorization forms (39%), while all plans nationwide and Central Region plans request and review medical records (27% and 25% respectively). Disease stage data are not retained and tracked by most respondents.

“Disease stage data offers plans the opportunity to engage oncologists in a discussion around alignment of incentives and the creation of pathways,” says Maria Lopes, MD, chief medical officer, AMC Health. “In late stage disease, where treatment options produce marginal benefit in overall survival and may not improve quality of life, engaging patients and their families around such treatment options using pathways can significantly reduce costs and variability in care. Pathways incorporate evidence-based treatment and may include biomarkers as well as supportive care treatments.”

“The lack of health IT penetration across all providers complicates efforts of plans in seeking more detailed and accurate staging data,” adds Vogenberg.

## Reimbursement Formulas

The most commonly used reimbursement rate under the medical benefit in the non-Medicare setting for plans with national coverage (37%), and all plans nationwide (22%) is average sales price (ASP) plus 6%. For Central Region plans a reimbursement rate of average wholesale price (AWP) less than or equal to 1.5% was most frequent (21%). More than half of all plan types, including 75% of Central Region plans, did not adjust professional fees in conjunction with a move to ASP-based reimbursement.

Just 32% of Central Region plans see Medicare rates as sufficient reimbursement for professional services compared to 44% of both plans with national coverage and all plans nationwide. More Central Region plans regard 50% over Medicare rates as fair (42%), as do 44% of plans with national coverage and 38% of plans nationwide.

Reimbursement pricing of cancer products utilizes a publicly available basis (such as ASP or AWP), according to 70% of Central Region plans, 78% of plans with national coverage, and 72% of all plans nationwide. Modifications of specific drug rates to incentivize physicians or to promote use within medical policy is reported by 40%, 51%, and 56% of plans, respectively.

## Oncology Care Management

Of oncology management strategies, plans with national coverage are most likely to favor enforcing strict laboratory value thresholds as a prerequisite for product access (2.9 out of a possible 4.0). That strategy was rated 2.1 by Central Region plans, behind differential prior authorization rules to direct physicians to a preferred agent within a therapeutic class (2.2) and step therapy (2.2). Only a few plans expect to introduce a separate benefit design for oncology therapies.

Oncology management services are being strongly considered by plans for the next 12 months (at rates between 81% and 95%), most often with internal staff (65% of Central Region plans, 50% of plans with national coverage, and 56% of all plans nationwide) or specific oncology providers (30%, 31%, and 35% respectively), rather than with an external oncology management vendor (5%, 19%, and 9%, respectively).

Half or more of all plans nationwide favor mandatory prior authorization (60%) and use of guidelines (50%). Most other types of oncology management, including pathways and symptom management, are used predominantly on a voluntary basis.

## Plan-Provider Relationships

For Central Region plans (89%) and plans with national coverage (83%), the most sensitive issue that may affect current and future relations with oncology providers is off-label use of drugs (Figure 49).

“The top three concerns identified as the pressure points with providers focus on cost and misalignment of incentives,” says Lopes. “As profit margins erode on drugs, site of care and controlling appropriate use of treatments remain focal points as payers address escalating costs and the industry evolves into a better understanding of accountable care through alignment of incentives between payers and treating physicians,” she adds.



### Interest in Collaboration

Central Region plans are more likely to contract with hospital-based oncology practices (50% are currently doing so) than plans with national coverage (18%) or all plans nationwide (45%). Plans with national coverage are generally little interested in contracting with private practices of fewer than 20 oncologists.

Central Region plans and plans with national coverage show the most interest in collaborating with providers on survivorship management programs (Figure 50).

### Breast Cancer Treatment

Asked about various adjuvant treatments of breast cancer, all plans nationwide and Central Region plans often respond that they have no specific policy; plans with national coverage are about twice as likely as other plan types to “approve treatment if prior authorization requirements are met” (Figure 51).

Most plans will approve treatment for patients with positive hormone findings for the life of the patient (Central Region plans, 74%; plans with national coverage, 67%; and all plans nationwide, 79%).

Policies for treatment of breast cancer patients with recurrent metastatic disease vary by treatment and region (Figure 52).

Figure 49 Issues Affecting Provider Relations

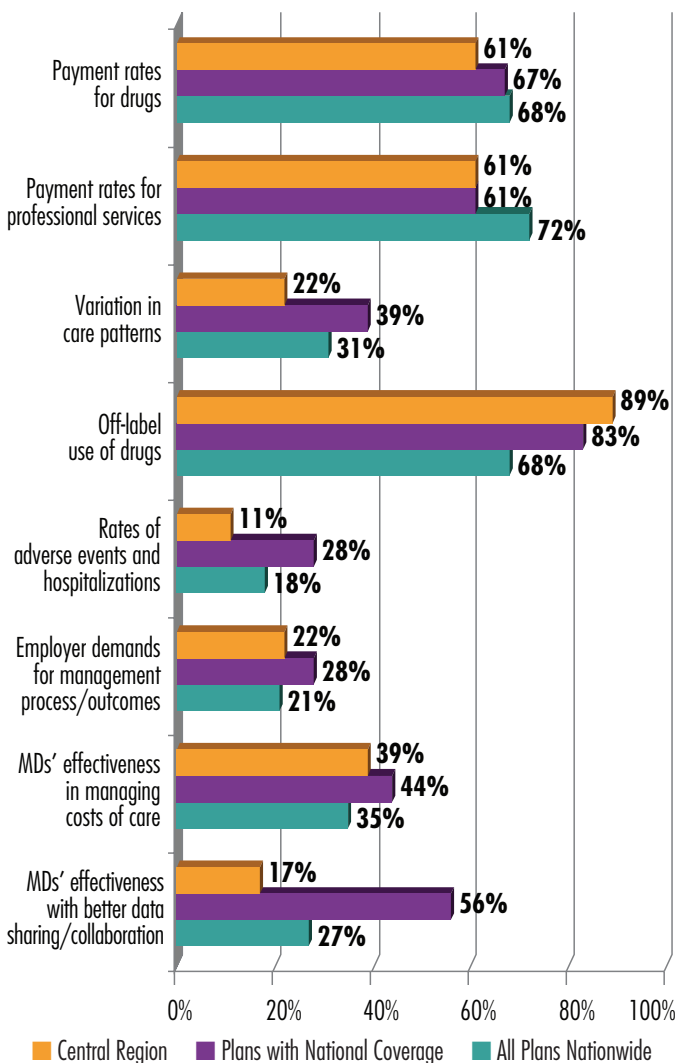
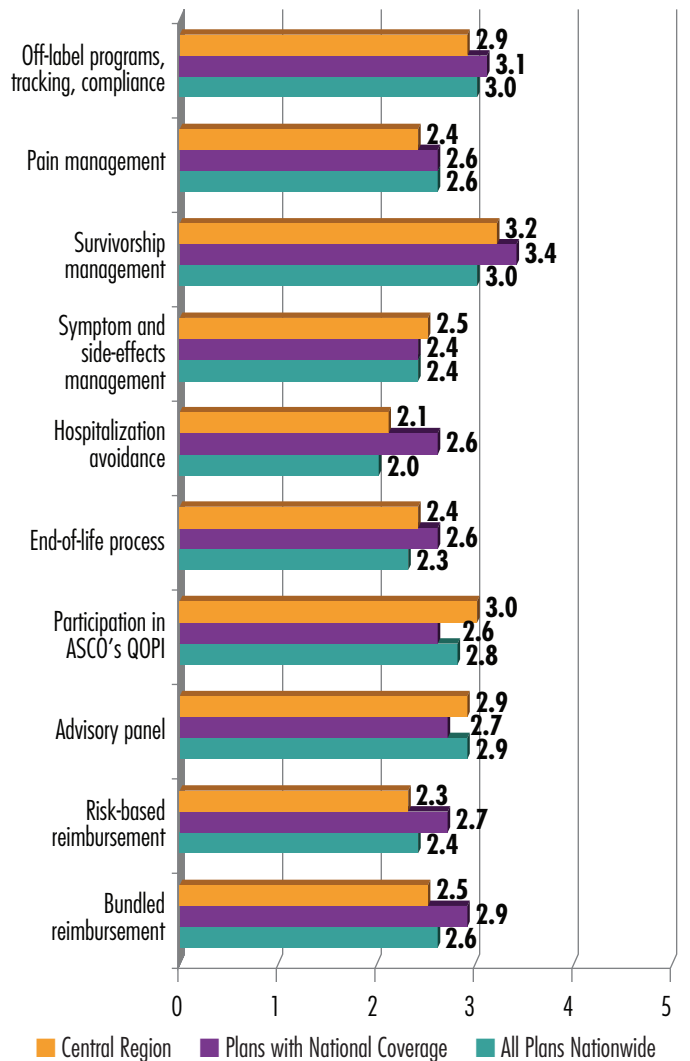


Figure 50 Interest in Collaboration with Oncology Practices or Centers by Program Type  
Scale of 1–5: 1 = little or no interest; 5 = extremely interested



Approximately three-quarters of all plan types say they would like to see physicians introduce discussion of palliative care with breast cancer patients whose disease has progressed to stage III or in whom cancer has recurred.

**Figure 51 Policy for Adjuvant Treatment of Breast Cancer**

Chemotherapy with anthracyclines					
Central Region	0%	25%	10%	15%	50%
Plans with National Coverage	0%	53%	6%	12%	29%
All Plans Nationwide	0%	29%	8%	23%	40%
Chemotherapy without anthracyclines					
Central Region	0%	25%	10%	15%	50%
Plans with National Coverage	6%	47%	6%	12%	29%
All Plans Nationwide	1%	27%	9%	23%	40%
If HER2+, HER2 pathway inhibitors					
Central Region	0%	25%	5%	25%	45%
Plans with National Coverage	0%	71%	6%	6%	18%
All Plans Nationwide	1%	35%	9%	20%	34%
HER2 pathway inhibitors					
Central Region	0%	25%	5%	25%	45%
Plans with National Coverage	0%	71%	6%	6%	18%
All Plans Nationwide	1%	34%	10%	20%	35%
Antiangiogenesis agent					
Central Region	0%	25%	15%	15%	45%
Plans with National Coverage	0%	65%	6%	6%	24%
All Plans Nationwide	0%	39%	15%	13%	34%

- Do not approve treatment
- Approve treatment if prior authorization requirements are met
- Pending treatment for medical review before approval
- Approve treatment without prior authorization or medical review
- No specific policy

**Figure 52 Policy for Treatment of Recurrent Metastatic Breast Cancer**

Chemotherapy					
Central Region	0%	19%	6%	25%	50%
Plans with National Coverage	0%	47%	18%	12%	24%
All Plans Nationwide	0%	31%	12%	22%	35%
Radiation therapy					
Central Region	0%	19%	6%	25%	50%
Plans with National Coverage	0%	35%	18%	12%	35%
All Plans Nationwide	0%	27%	11%	24%	37%
Biotherapy					
Central Region	0%	19%	6%	13%	63%
Plans with National Coverage	6%	29%	24%	6%	35%
All Plans Nationwide	6%	19%	18%	12%	46%
Bone targeting therapies					
Central Region	0%	25%	0%	25%	50%
Plans with National Coverage	0%	35%	24%	12%	29%
All Plans Nationwide	1%	29%	16%	15%	39%
Rank-ligand targeted therapies					
Central Region	0%	20%	0%	27%	53%
Plans with National Coverage	0%	41%	18%	6%	35%
All Plans Nationwide	1%	30%	14%	11%	44%

- Do not approve treatment
- Approve treatment if prior authorization requirements are met
- Pending treatment for medical review before approval
- Approve treatment without prior authorization or medical review
- No specific policy

**Prostate Cancer Treatment**

The greatest proportion of plans, especially those in the Central Region, have no specific policy regarding various treatment options for prostate cancer. Where policies are in place, most plans require prior authorization.

Plans are more likely to have a specific policy for treatment of stage III or IV prostate cancer (Figure 54). While plans with national coverage tend to favor prior authorization, most Central Region plans have no specific policy.

Most plans (78% of Central Region plans, 71% of plans with national coverage and 74% of all plans nationwide) cover the use of vaccines/immunotherapy for patients with stage IV metastatic, hormone-refractory prostate cancer.

Figure 53 Policy for Treatment of Early-Stage Prostate Cancer

Radical nerve sparing prostatectomy					
Central Region	0%	28%	6%	17%	50%
Plans with National Coverage	0%	35%	24%	6%	35%
All Plans Nationwide	2%	25%	12%	21%	39%
Laparoscopic prostatectomy					
Central Region	0%	28%	11%	11%	50%
Plans with National Coverage	0%	35%	24%	6%	35%
All Plans Nationwide	0%	24%	15%	21%	39%
Robotic prostatectomy					
Central Region	6%	22%	11%	11%	50%
Plans with National Coverage	0%	35%	24%	6%	35%
All Plans Nationwide	7%	21%	13%	19%	41%
Brachytherapy					
Central Region	0%	22%	11%	11%	56%
Plans with National Coverage	0%	35%	24%	6%	35%
All Plans Nationwide	2%	22%	17%	17%	42%
Conformal RT					
Central Region	0%	17%	17%	6%	61%
Plans with National Coverage	0%	29%	24%	6%	41%
All Plans Nationwide	1%	20%	17%	16%	46%
IMRT					
Central Region	0%	17%	11%	11%	61%
Plans with National Coverage	0%	29%	29%	6%	35%
All Plans Nationwide	1%	21%	21%	13%	44%
Antiangiogenesis drugs					
Central Region	0%	22%	6%	17%	56%
Plans with National Coverage	0%	47%	18%	6%	29%
All Plans Nationwide	2%	29%	19%	14%	36%

Figure 53 Policy for Treatment of Early-Stage Prostate Cancer (cont.)

Biologics/immunotherapy					
Central Region	0%	17%	11%	11%	61%
Plans with National Coverage	0%	47%	18%	6%	29%
All Plans Nationwide	4%	29%	14%	17%	36%
Chemotherapy					
Central Region	0%	22%	11%	17%	50%
Plans with National Coverage	0%	47%	18%	12%	24%
All Plans Nationwide	0%	27%	13%	27%	33%
Anthracycline chemotherapy					
Central Region	0%	22%	6%	17%	56%
Plans with National Coverage	0%	47%	12%	12%	29%
All Plans Nationwide	0%	25%	14%	22%	40%
ADT agents, including LHRH					
Central Region	0%	22%	17%	6%	56%
Plans with National Coverage	0%	47%	18%	6%	29%
All Plans Nationwide	0%	31%	17%	15%	37%
Antiandrogen					
Central Region	0%	22%	11%	11%	56%
Plans with National Coverage	0%	53%	12%	12%	24%
All Plans Nationwide	0%	29%	12%	21%	38%
Generic antiandrogens or ADT agents					
Central Region	0%	22%	11%	11%	56%
Plans with National Coverage	0%	47%	18%	12%	24%
All Plans Nationwide	1%	29%	10%	20%	40%

- Do not approve treatment
- Approve treatment if prior authorization requirements are met
- Pending treatment for medical review before approval
- Approve treatment without prior authorization or medical review
- No specific policy

**Figure 54 Policy for Treatment of Late-Stage Prostate Cancer**

Antiangiogenesis drugs					
Central Region	0%	22%	11%	17%	50%
Plans with National Coverage	0%	47%	24%	6%	24%
All Plans Nationwide	3%	30%	15%	18%	35%
Biologics/immunotherapy					
Central Region	0%	22%	11%	17%	50%
Plans with National Coverage	0%	47%	18%	12%	24%
All Plans Nationwide	3%	36%	11%	18%	32%
Chemotherapy					
Central Region	0%	22%	11%	17%	50%
Plans with National Coverage	0%	41%	18%	18%	24%
All Plans Nationwide	0%	30%	9%	26%	35%
Anthracycline chemotherapy					
Central Region	0%	17%	17%	17%	50%
Plans with National Coverage	0%	35%	18%	18%	29%
All Plans Nationwide	0%	24%	11%	23%	41%
ADT agents, including LHRH					
Central Region	0%	17%	17%	17%	50%
Plans with National Coverage	0%	41%	18%	12%	29%
All Plans Nationwide	1%	29%	14%	19%	38%
Antiandrogen					
Central Region	0%	17%	11%	22%	50%
Plans with National Coverage	0%	41%	18%	18%	24%
All Plans Nationwide	0%	29%	12%	20%	39%
Generic antiandrogens or ADT agents					
Central Region	0%	17%	17%	17%	50%
Plans with National Coverage	0%	41%	18%	18%	24%
All Plans Nationwide	1%	29%	12%	19%	40%

- Do not approve treatment
- Approve treatment if prior authorization requirements are met
- Pending treatment for medical review before approval
- Approve treatment without prior authorization or medical review
- No specific policy

**Colorectal Cancer Treatment**

Of the three plan types, Central Region plans are the most likely to have no specific policy for treatment of colorectal cancer (Figure 55). Plans with national coverage tend to require prior authorization regardless of treatment.

A majority of health plans agree that stage III is an appropriate time for physicians to discuss palliative care with colorectal cancer patients, though responses ranged from 65% for Central Region plans to 75% of all plans nationwide and 81% of plans with national coverage.

**Figure 55 Policy for Treatment of Colorectal Cancer Patients**

Chemotherapy					
Central Region	0%	17%	6%	28%	50%
Plans with National Coverage	0%	56%	11%	11%	22%
All Plans Nationwide	0%	32%	9%	27%	32%
Growth factors					
Central Region	0%	22%	11%	22%	44%
Plans with National Coverage	0%	61%	11%	11%	17%
All Plans Nationwide	0%	40%	12%	19%	30%
EGFR-targeted therapy for any patient					
Central Region	0%	24%	6%	24%	47%
Plans with National Coverage	0%	56%	17%	6%	22%
All Plans Nationwide	1%	36%	15%	15%	33%
EGFR-targeted therapy for KRAS patient					
Central Region	0%	22%	6%	28%	44%
Plans with National Coverage	0%	56%	17%	6%	22%
All Plans Nationwide	1%	35%	17%	13%	35%
Antiangiogenesis therapy first-line					
Central Region	0%	17%	6%	33%	44%
Plans with National Coverage	0%	50%	17%	6%	28%
All Plans Nationwide	3%	33%	11%	19%	35%
Antiangiogenesis therapy later lines					
Central Region	0%	22%	11%	22%	44%
Plans with National Coverage	0%	50%	17%	6%	28%
All Plans Nationwide	2%	33%	15%	17%	34%

- Do not approve treatment
- Approve treatment if prior authorization requirements are met
- Pending treatment for medical review before approval
- Approve treatment without prior authorization or medical review
- No specific policy

# Conclusions

These conclusions are based on findings from the SDI analyses of breast cancer, colorectal cancer, and prostate cancer treatments; the survey of oncology practices; and the survey of health plan executives.

- Patients covered under Medicaid face challenges in accessing adequate and timely cancer care regardless of cancer type or region. Medicaid patients with treatable disease have the lowest percentages of early stage breast cancer, colorectal cancer, and prostate cancer diagnoses in all five regions.
- While Central Region practices cite payment rates for drugs as the most sensitive issue in their relations with plans, for Central Region plans (and plans with national coverage) the top concern is off-label use of drugs. Practices and plans nationwide agree that the most sensitive issue is payment rates for professional services. While Central Region practices and plans do not agree on what constitutes a fair reimbursement rate, they are closer than the nationwide average. Oncologists have seen a growing distance between Medicare payment policy and what they deem to be acceptable reimbursement rates. Historically, private payers have used Medicare policies and payment rates as a basis for private reimbursement. About one-third (32%) of Central Region plans see current Medicare rates for professional services as sufficient on which to base private plan rates, as do 10% of Central Region practices. More Central Region plans (42%) and Central Region practices (30%) favor 50% over Medicare rates.
- Oncology practices are primarily focused on care delivery. However, they also need to more actively manage the business side of their practices and their relationships with health plans. Perhaps because of their larger average size, Central Region practices are slightly more successful than practices nationwide in negotiating plan contracts.
- Despite facing financial strains due to proposed Medicare reimbursement cuts of 20% to 30%, more than half of practices say they will continue to treat Medicare patients as usual. Another third expect to refer such patients to hospital-based infusion centers, which would likely prove more costly to both public and private insurers. Policymakers need to guard against unintended consequences of cost containment measures.
- More strategic use of technology could facilitate the use of clinical data and care outcomes. EMRs remain underutilized for improving patient outcomes and practice management. Incorporation of guidelines into EMRs could encourage their use and improve monitoring of compliance.
- Coverage policies of specific therapies for breast cancer patients of plans with national coverage tend to be more formalized and restrictive than those of both regional plans and all plans nationwide. Plan coverage policies and procedures for prior authorization can have a significant impact on access to care and on which therapies are prescribed.
- While plans and practices agree on the need to discuss palliative care with breast cancer patients once patients reach stage IV, there is no such consensus for colorectal cancer. Plans favor such discussions with stage III colorectal cancer patients, but oncologists would wait until stage IV.
- Physicians show more interest in collaborating with plans than plans do in collaborating with practices. For all practices and plans nationwide, using a scale of 1 to 5, physician interest in all programs ranged from 2.6 to 3.4 while plan interest ranged from 2.0 to 3.0. Several programs garnered high interest from both practices and plans, suggesting likely areas for collaboration. These include survivorship management programs (3.0 for both), advisory panel (3.1, 2.9, respectively), and participation in the American Society of Clinical Oncology's QOPI (3.1, 2.8, respectively). Collaborative efforts could promote innovation and lead to new reimbursement models.
- Nationwide, it appears that part of the impact of health care payers' efforts to drive down cost has been movement in the treatment of complex/costly breast cancer, colorectal cancer, and prostate cancer cases from physicians' offices to hospital outpatient settings. The impact of this apparent shift is significant for payers, given the consistently higher cost of treatment in a hospital outpatient setting.
- Changes in public and private payer payment models combined with higher medication costs have reduced profitability for many oncology practices. Practices that cannot finance the carrying costs of new, more costly, therapies may have to move cases that require these treatments to hospital outpatient settings, or find new ways to ensure the continued economic viability of their practices.

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## Publisher

Kikaku America International  
Washington, DC 20037  
202-338-8256  
[info@pharmaamerica.com](mailto:info@pharmaamerica.com)

**Peter Sonnenreich**, Editor

**Dawn Holcombe**, MBA, FACMPE, Project Chair

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