

ONCOLOGY

Nationwide and Southeast 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 Southeast 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 Southeast, Northeast, Central, 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 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 Southeast Region.

Table of Contents

Executive Summary	2
Methodology	4
Map of Regions	5
SDI Breast Cancer Data Analysis	6
SDI Colorectal Cancer Data Analysis	11
SDI Prostate Cancer Data Analysis	16
Oncology Practice Survey Findings	21
Managed Care Survey Findings	28
Conclusions	35
References	36

Executive Summary

Highlights from the data analyses and survey findings:

Southeast Region and Nationwide Averages Compared

- The Southeast 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 an early diagnosis were within a few percentage points of nationwide averages.
- The Southeast Region leads the nation as a whole in the percentage of colorectal cancer patients with early diagnoses in the physician's office setting by 5 percentage points but lags by 2 percentage points in the proportion of patients with early diagnoses seen in hospital outpatient settings.
- The Southeast Region has proportionally more prostate cancer patients covered under Medicare and fewer covered by commercial insurance than nationwide.
- Southeast Region oncology practices are more likely to be organized as private, single specialty practices but otherwise resemble practices nationwide, with similar proportions of hospital-owned and university-based practices.
- Southeast Region practices are slightly larger than average practices nationwide. Almost two-fifths (38%) of Southeast Region practices are staffed by 6 or more oncologists, compared with 34% nationwide; just 13% are operated by solo practitioners in the Southeast Region versus 18% nationwide.
- Over the next five years, proportionately more Southeast Region practices expect to join another practice (28%) than practices nationwide (21%). Fewer Southeast Region practices than nationwide (19% vs 25%) expect to join an institution.

Electronic Medical Records (EMRs)

- Southeast Region practices are ahead of practices nationwide (47% vs 44%) in the implementation of EMRs.
- EMRs are primarily used for routine business functions both in the Southeast 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 are seen in hospital outpatient settings. Among breast cancer patients in the Southeast Region, 90% in the outpatient setting (90% nationwide) and 74% in physicians' offices (74% nationwide) were diagnosed with early stage disease. Among colorectal cancer patients, 85% in the outpatient setting (87% nationwide) and 64% in physicians' offices (59% nationwide) were diagnosed with early stage disease. Among prostate cancer patients, 96% in the outpatient setting (96% nationwide) and 64% in physicians' offices (63% nationwide) were diagnosed with early stage disease.

- Of patients seen in physicians' offices, both in the Southeast Region and nationwide, the proportion of patients diagnosed with early stage cancer was higher for breast cancer (74% Southeast Region, 74% nationwide) than for either colorectal cancer (64%, 59%, respectively) or prostate cancer (64%, 63%).
- The hospital outpatient proportion of patients with an early diagnosis in the Southeast Region or nationwide was higher for prostate cancer (96% Southeast Region, 96% nationwide), than for breast cancer (90%, 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 60% of Medicaid breast cancer patients in the Southeast Region (62% nationwide) had a diagnosis of early stage cancer versus 75% of commercially insured patients (75% nationwide) and 73% covered under Medicare (73% nationwide). Only 44% of Medicaid patients with colorectal cancer in the Southeast Region (45% nationwide) had a diagnosis of early stage disease, compared with 65% of commercially insured patients (58% nationwide) and 65% covered under Medicare (62% nationwide). Only 36% of Medicaid patients in the Southeast Region (37% nationwide) had a diagnosis of early stage disease prostate cancer versus 61% of patients covered under Medicare (60% nationwide) and 71% of commercially insured patients (70% nationwide).

Care Delivery

- The preferred cancer care treatment settings of Southeast Region plans and plans with national coverage are freestanding infusion clinics (3.7 and 3.8, respectively, 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 (Southeast Region, 58%; nationwide, 45%) for using specialty pharmacies is that the commercial payer requires their use. A significant majority (Southeast Region, 79%; 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 by 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 Southeast Region (53% for both settings). The largest portion of colorectal cancer patients was covered by Medicare both nationwide (50%, 35%, respectively) and in the Southeast Region (52%, 31%). The largest portion of prostate cancer patients was covered by Medicare both nationwide (66%, 50%, respectively) and in the Southeast Region (70%, 58%).
- 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 fees sufficient to cover costs of care delivery by using Medicare rates as a basis, the largest single proportion, 22%, suggest that professional fees from private plans equivalent to 50% over Medicare rates would be considered fair; another 56% suggest varying higher amounts. In contrast, 44% of all plans nationwide see Medicare rates as sufficient.
- Practices nationwide and in the Southeast Region report that reimbursement formulas under the medical benefit for office-administered drugs of average sales price (ASP) plus 6% or less are most common. However, Southeast Region practices also report use of the formulas ASP plus 19%-25%, and ASP plus 26%-30% at twice the proportion of nationwide practices, suggesting higher reimbursement rates on average.
- 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 payment rates of ASP plus 13%-18%, whereas just 8% of practices report rates of ASP plus 13%-18% (as do 8% of all plans nationwide). Another 21% of plans with national coverage report still using AWP \leq 15%, but only 4% of practices in the Southeast Region and 6% nationwide report that 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 of negotiation with plans, report just 23% of Southeast Region practices but 33% nationwide. Significantly more Southeast Region practices (42% vs 30% nationwide) describe a more balanced relationship, agreeing with the statement: "We try to negotiate the fee schedule with payers and are sometimes successful."

- More than a third of practices (Southeast Region, 38%; nationwide, 42%) don't know if the majority of their managed care contracts are profitable. For Southeast Region practices, 38% of contracts are considered to be profitable vs 32% nationwide.

Collaboration Among Oncologists and Health Plans

- Southeast Region practices are more likely than practices nationwide to explore programs with payers on their own (37% vs 34%), work with other private oncology practices (23% vs 15%), and work with national oncology networks (27% vs 19%).
- All plans nationwide show high interest (3.0, using a scale of 1 to 5) in collaborating with practices in 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.
- Southeast 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

- Oncologist treatment choices for patients with localized prostate cancer vary by region. Southeast Region oncologists report proportionately more patients treated with laparoscopic prostatectomy and robotic prostatectomy than oncologists nationwide.
- LHRH is prescribed by more than half of all oncologists for stages 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

- Southeast Region plans have no specific policy for most treatments in nearly half of instances compared with about one-third for all plans nationwide. 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 Southeast 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, Central, 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 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 found 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 of 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 nationwide 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, 32 (19%) indicated that their practice was located in the Southeast Region. Where appropriate, comparisons were made between averages nationwide and those of the Southeast Region. The survey was conducted in July-August 2010.

The largest proportion, and similar percentages, of both Southeast Region practices and practices nationwide were private, single specialty practices (50% and 46%, respectively). Approximately two-thirds of practices were staffed by 5 or fewer oncologists (64% Southeast Region, 66% nationwide), with Southeast Region practices less likely to be operated by solo practitioners (13% compared with 18% nationwide).

Patient insurance coverage varied little between all regions and the Southeast Region, with percentages approximately the same for commercial insurance, Medicaid, and self-pay. Nationwide, oncology practices reported that almost half (48%) of patients were covered under Medicare (49% in the Southeast Region) followed by 34% with commercial insurance, 9% covered under Medicaid (7% in the Southeast Region), 3% self-pay, 3% indigent, and 2% listed as "other" (4% in the Southeast Region).

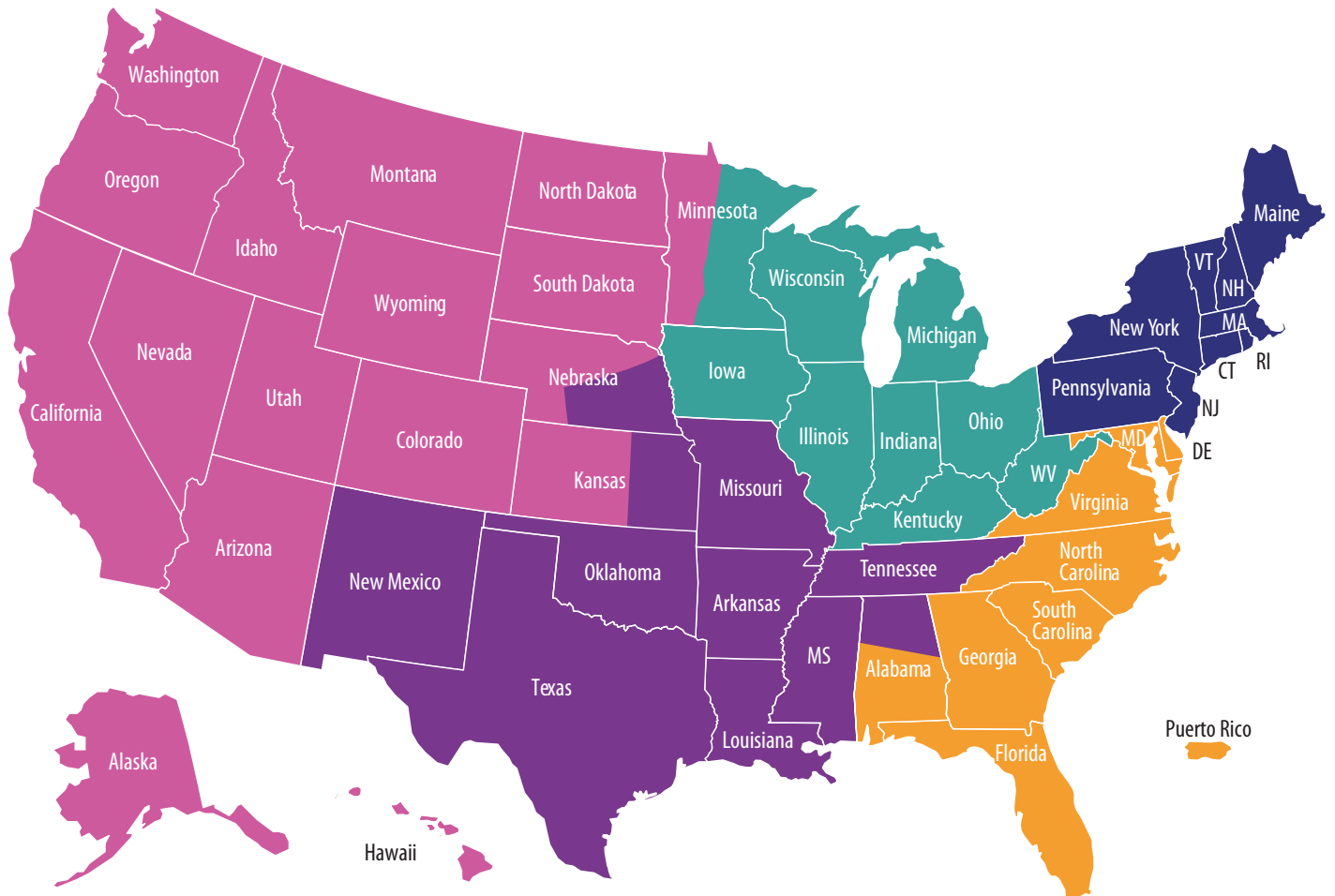
Managed Care Survey

The managed care survey was completed by 123 health plan executives nationwide: HMO/PPO pharmacy directors (39%), HMO/PPO medical directors (15%), managed care executives (9%), and others (37%), most of whom were clinical and staff pharmacists. Of the 123 survey respondents, 20 (16%) had members primarily in the Southeast 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 Southeast Region. The managed care survey was conducted in July-September 2010.

The greatest proportion of Southeast Region plan members were enrolled in HMOs (32%), followed by Medicare (24%, the highest of the five regions), Medicaid (17%), PPOs (17%), self-insured groups (5%), and other (4%). Proportions for all plans nationwide were similar for HMOs (34%), PPOs (16%), Medicaid (16%), Medicare (21%) and other (3%) though higher for self-insured groups (11%). Significantly more members of plans with national coverage were 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 Southeast 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.¹ Breast cancer is initially suspected when a lump is discovered during an examination or mammogram. 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) 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.¹

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 Southeast 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 or biologics during these visits. More than 110,000 (21%) of these patients were seen in the Southeast 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 percentages of 87% and 13%, respectively. In the Southeast Region in 2009, 90% of patients receiving hospital outpatient treatment were diagnosed at an early stage, while 10% were diagnosed with metastatic disease compared with a ratio of 85% to 15% in 2008. The Northeast Region had the highest percentage of patients with early diagnoses treated in the outpatient setting in 2009 (93%).

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

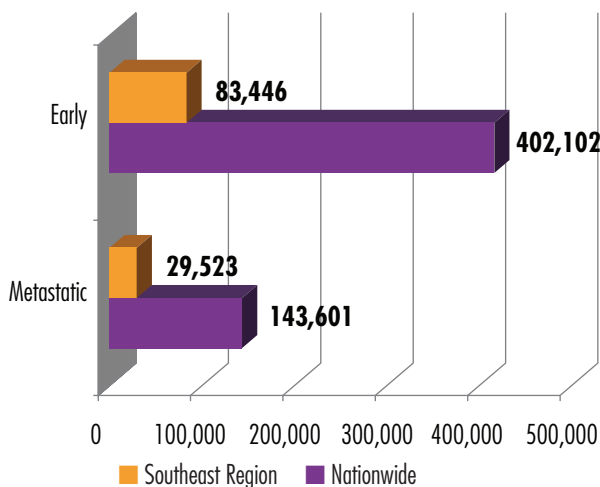
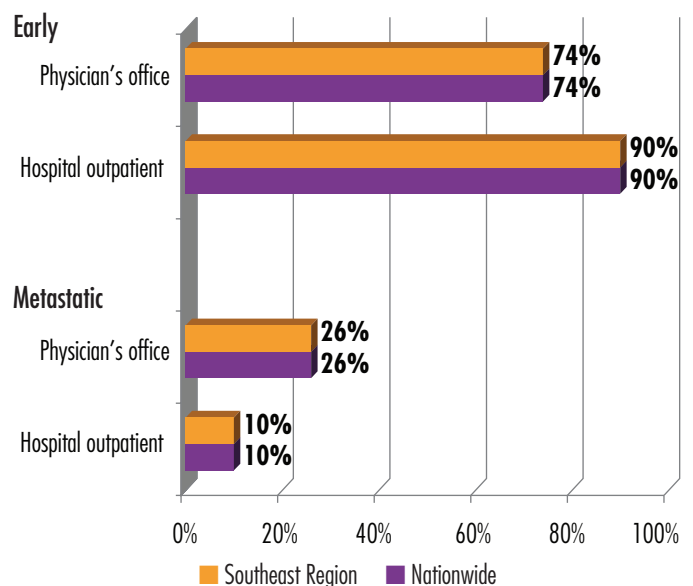


Figure 2 Patients Diagnosed with Breast Cancer by Disease Stage and Treatment Setting

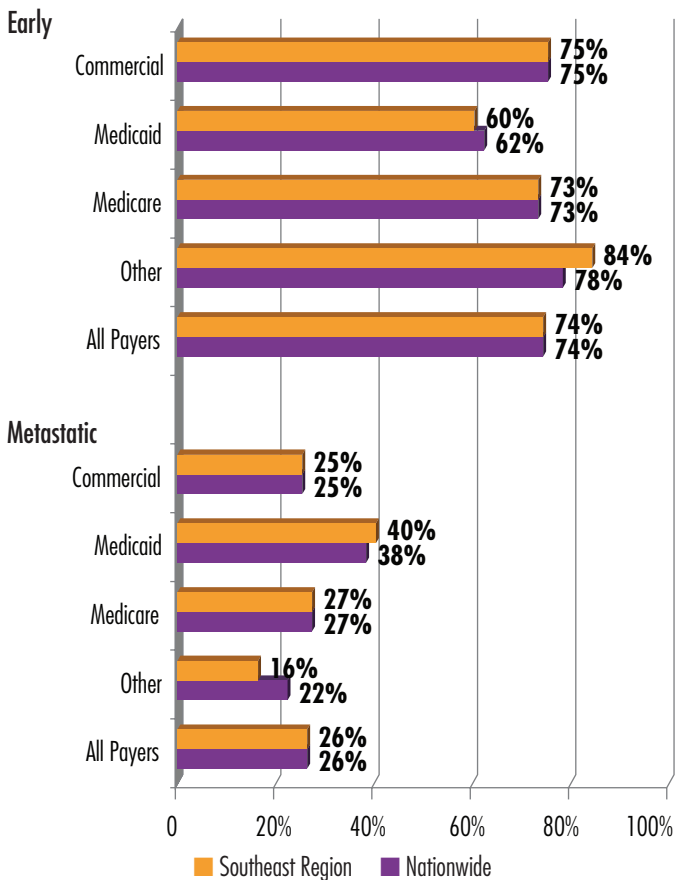


Among the almost 550,000 patients nationwide with a breast cancer diagnosis receiving treatment in physicians' offices in 2009, 74% were diagnosed at an early stage while 26% had metastatic disease, the same percentages as in 2008. Proportions for the Southeast Region were the same as the nationwide percentages in both years. Only the Northeast Region had a higher percentage of patients with early diagnoses treated in physicians' offices in 2009 (78%). 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.

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

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 Southeast Region and nationwide (Figure 3).

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



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).

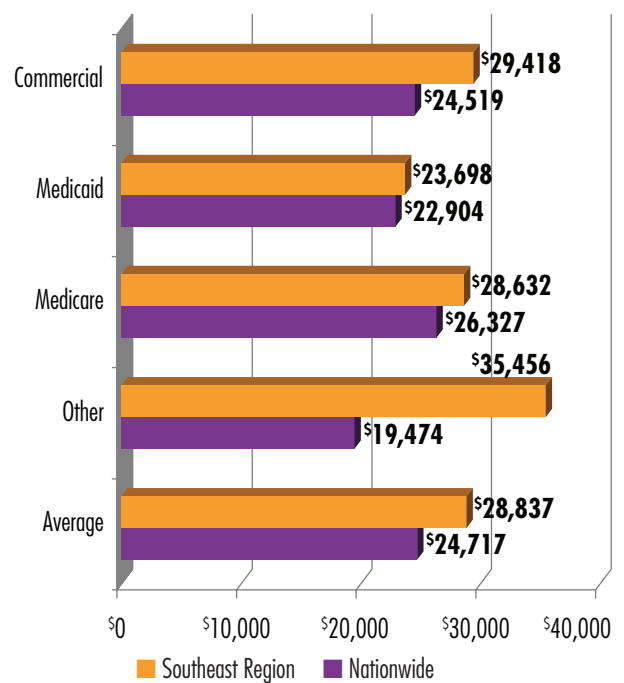
Lower rates of early diagnosis for persons covered under Medicaid are not surprising, says Dawn Holcombe, MBA, president of DGH Consulting. "Medicaid patients are more likely to have difficulty accessing care because of low provider reimbursement rates and/or patients may seek care on more of a reactive basis," she notes.

In the Southeast Region in 2009, 75% of commercially insured patients received an early-stage diagnosis (76% in 2008), compared to 73% of Medicare patients (72% in 2008) and 60% of Medicaid patients (59% in 2008).

Average Charges in Physician's 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 Southeast Region the average charge in 2009 was \$28,837, up 3% from the 2008 charge of \$28,005.

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



The increase in charges in the Southeast Region was led by Medicare, whose average charge for treatment in a physician’s office was up 7% to \$28,632 in 2009, the same as the nationwide percentage increase. Charges to commercial payers were up 1% in the Southeast Region to \$29,418 but down 5% nationwide to \$24,519. Among the three major payers, Medicaid had the lowest average charge both in the Southeast Region and nationwide in both 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 Southeast Region (Figure 5). The average charge to commercial payers increased 21% in the Southeast Region, to \$60,193, and up 1% nationwide to \$58,068. Medicare average charges were up 14% in the Southeast Region to \$52,251, and down 3% nationwide to \$67,449.

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 Southeast Region and nationwide (Figure 6). Medicare covered the next largest portion. Medicaid was the payer for the third largest percentage (6%) of hospital outpatients in the Southeast Region in 2009. The “other” group, which includes

government employee, military and railroad retirement plans as well as cash payers, had the third largest percentage nationwide (12%) of patients in the hospital outpatient setting in both 2008 and 2009, but a very small percentage of patients treated in physicians’ offices in the Southeast Region and nationwide.

The percentage of patients diagnosed with breast cancer who had Medicaid as a payer in the Southeast 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 steps for a number of cancers, including breast cancer, along with treatment recommendations that balance potential risks and benefits.

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

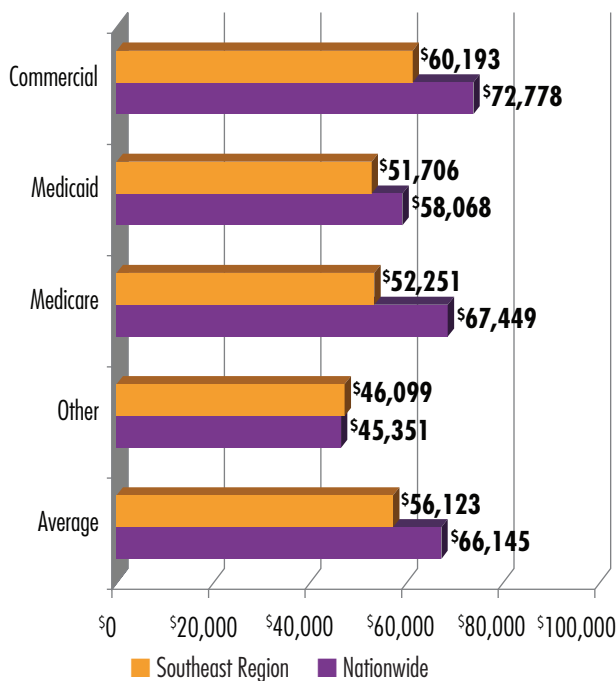
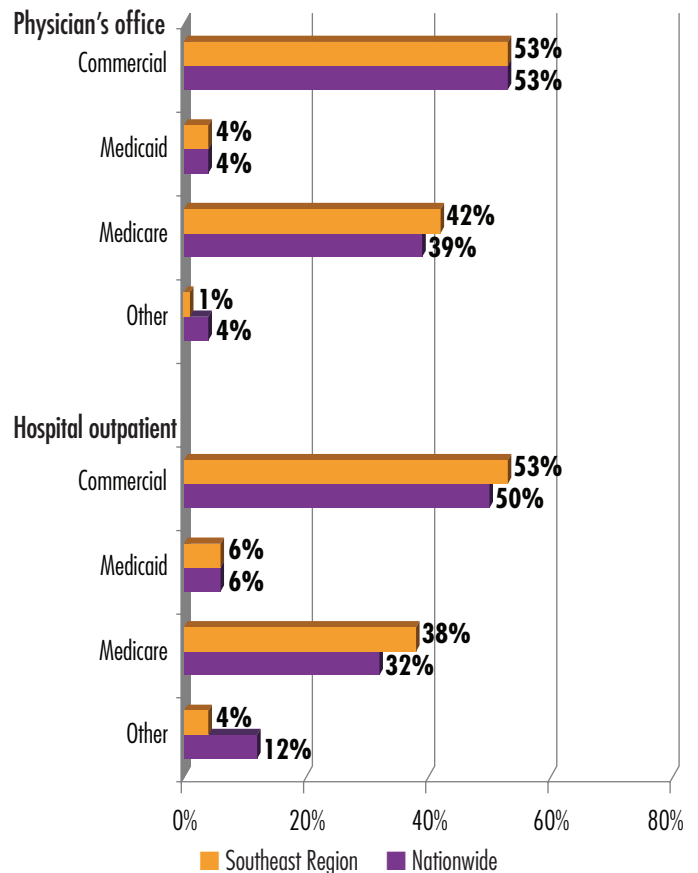


Figure 6 Patients with Breast Cancer by Treatment Setting and Payer



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 Southeast Region, both unchanged from 2008. Guideline compliance increased or was unchanged year-to-year for all payers both in the Southeast Region and nationwide, with the exception of Medicaid, which declined one percentage point 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 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 delivering care for breast cancer 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/expensive 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

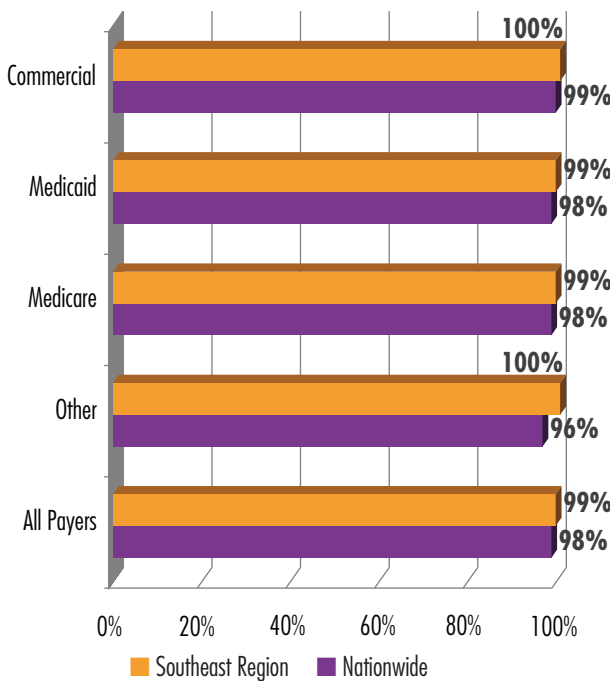


Figure 8 Breast Cancer Treatment Compliance with NCCN Guidelines, by Setting, Nationwide

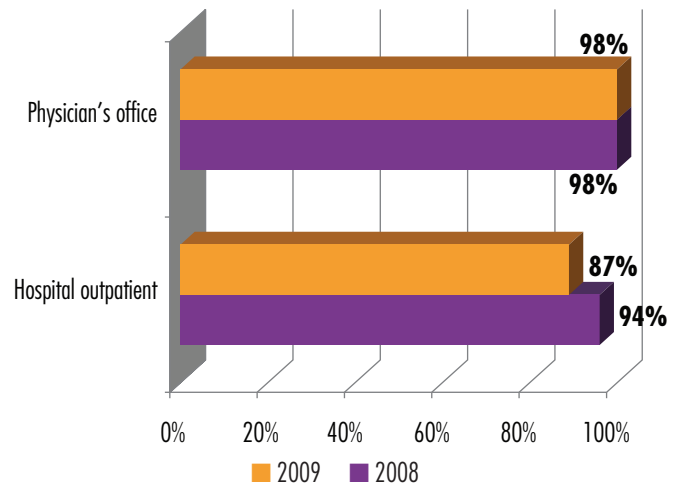
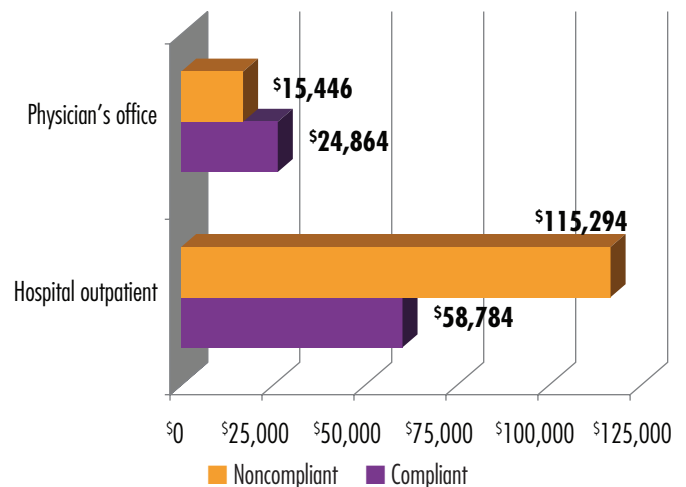


Figure 9 Average Charges for Breast Cancer Treatments, by NCCN Guideline Compliance, Nationwide

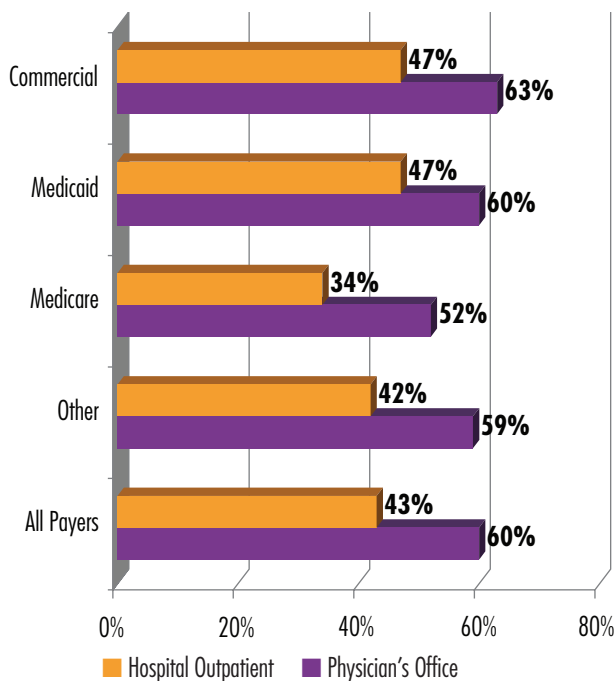


Use of the Top 5 Regimens

Nationwide, for patients receiving chemotherapy or biologic treatment for breast cancer in 2009, the five most prescribed treatment regimens accounted for 60% of treatments provided by physicians' offices (59% in 2008) and 43% (down from 63%) of 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. 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



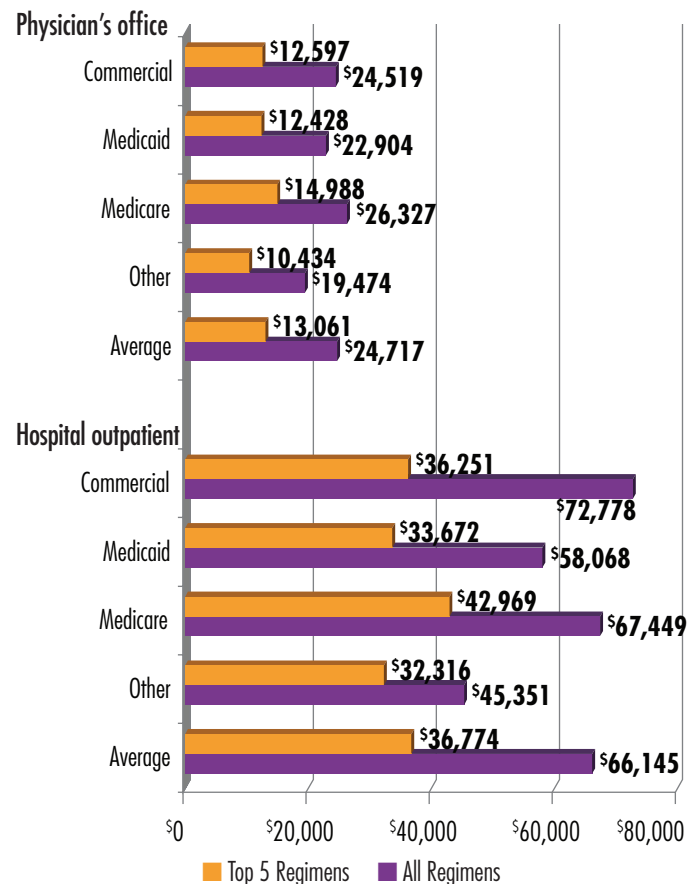
Treatment Charges for Top 5 and All Regimens

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

The 2009 average charge of \$24,717 for all regimens in physician's offices was down just 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.

Treatment in hospital outpatient settings, as previously noted, is typically associated with higher average charges than treatment delivered in physicians' offices. The large year-to-year increases in hospital treatment charges, however, seem to reflect a shifting of complex/costly cases to this setting from physicians' offices.

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



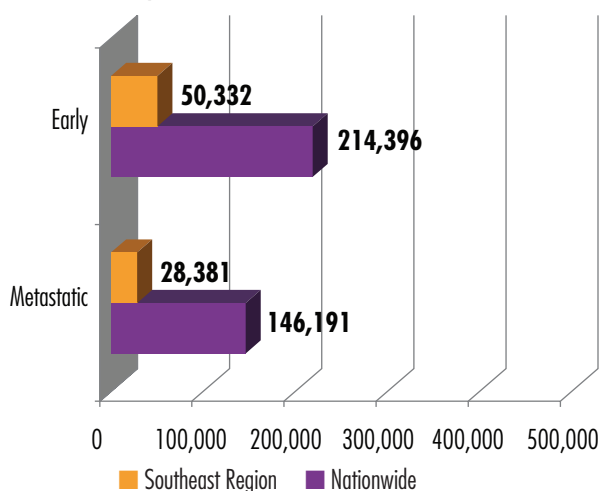
SDI Data on Patients with Colorectal Cancer

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 over 140,000 new cases diagnosed each year.² The lifetime risk for men and women of developing colorectal cancer is 1 in 20.³ 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%.³

The National Comprehensive Cancer Network (NCCN) provides consensus-based treatment guidelines at their Web site (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 Southeast 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



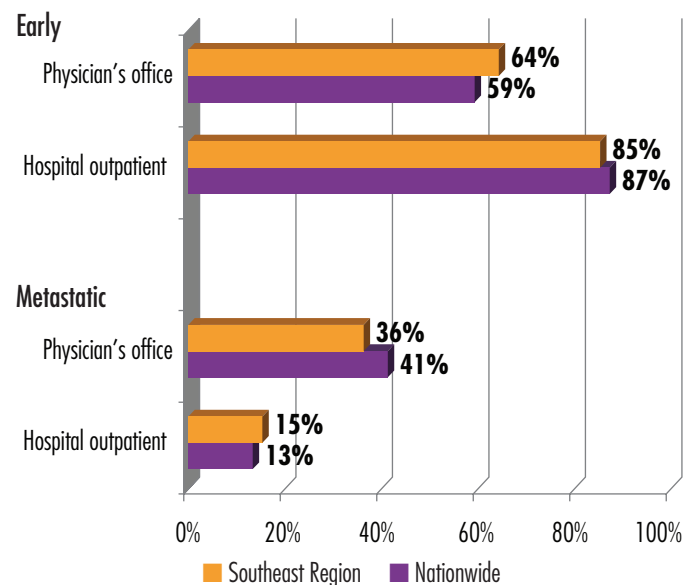
Treatment in Physicians' Offices

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 Southeast Region accounted for almost 80,000 colorectal cancer patients seen in physicians' offices in 2009, up 1% from 2008 and representing 22% of the nationwide total in both 2008 and 2009.

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 2008 early/metastatic proportions of 84% to 16%. In the Southeast 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 Southeast Region accounted for 23% of colorectal cancer patients treated in hospital outpatient settings nationwide in 2009, up from 19% in 2008.

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



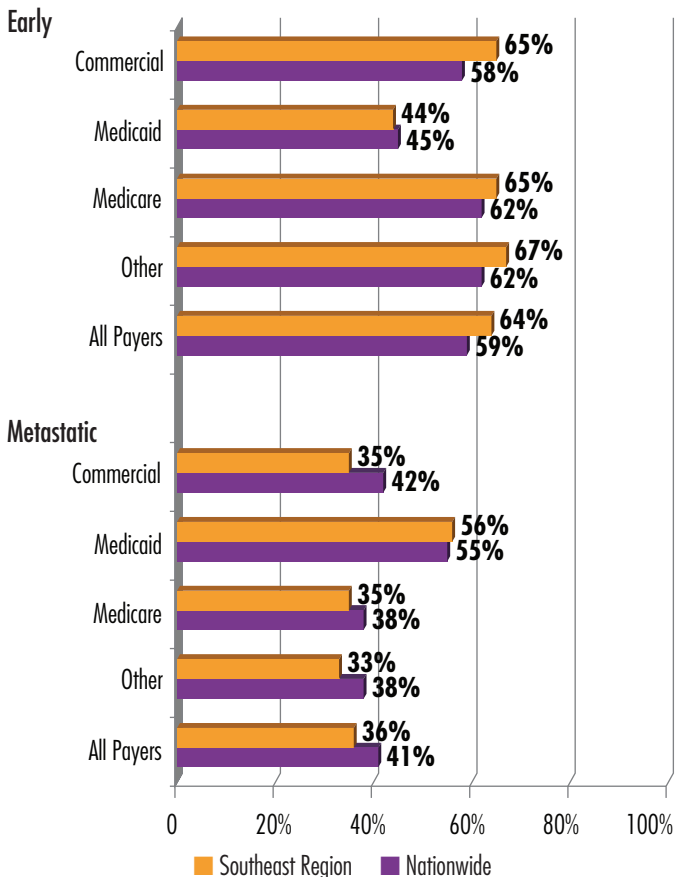
In 2009 in physicians' offices in the Southeast Region, 64% of colorectal cancer patients treated were diagnosed at an early stage (65% in 2008). Nationwide in physicians' offices, 59% were diagnosed at an early stage in 2009 (60% in 2008).

Patients in Physicians' Offices by Disease Stage and Payer Type

Nationwide in both 2009 and 2008, 62% of Medicare patients treated in physicians' offices received an early stage colorectal cancer diagnosis (Figure 14). This compares with 58% of commercially insured patients (also unchanged from 2008).

In the Southeast Region in 2009, 65% of Medicare patients treated in physicians' offices received an early stage diagnosis (unchanged from 2008), as had 65% of commercially insured patients (also unchanged from 2008). When Medicaid was the payer, just 44% of patients treated in physicians' offices received an early diagnosis in the Southeast Region (45% nationwide) in 2009, suggesting issues related to timely access to care for this patient population.

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



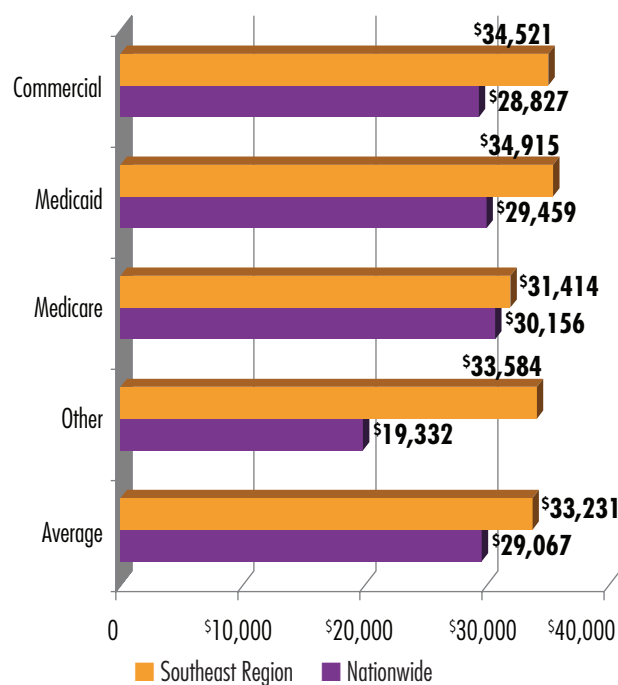
Average Charges in Physicians' Offices, by Payer

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 Southeast Region the average charge in 2009 was \$33,231, down 7% from the 2008 charge of \$35,699.

Nationwide, the decline in the average charge was led by commercial plans, down 14% to \$28,827 in 2009. The decline in the average charge in the Southeast Region was led by Medicare, whose average charge for treatment in a physician's office decreased 6% to \$31,414, and by "other" payers, which include government employee, military and railroad retirement plans as well as cash payers.

"Figure 15 shows that commercial health plans have been the most effective of the payers at driving down physicians' charges on a national basis, although some regional variations persist," says Randy Vogenberg, PhD, RPH, principal, Institute for Integrated Healthcare. "The result of lower authorized fees for physicians' services is often the movement of complex and expensive cases to the hospital outpatient treatment setting."

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



Hospital Outpatient Charges

According to data from Charge Data Masters (CDM), 2009 total average hospital outpatient charges for patients diagnosed with colorectal cancer were virtually unchanged from the previous year both nationwide and in the Southeast Region (Figure 16). The average charge to patients insured by commercial payers increased 2% nationwide to \$84,424, and increased 4% in the Southeast Region to \$70,633. Medicare average charges increased 12% in the Southeast Region, to \$71,787, 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 Southeast Region to \$58,437.

Patients by Payer and Treatment Setting

Of the three major payers, Medicare covered the largest portion of colorectal cancer patients treated in physicians' offices in 2008 and 2009 both nationwide (50%) and in the Southeast Region (52%) (Figure 17). In hospital outpatient settings, Medicare and commercial payers each covered 35% of patients nationwide in 2009. In the Southeast Region, "other" payers covered the largest portion of patients (34%) treated in the hospital outpatient setting in 2009 (up substantially from 9% in 2008) followed by Medicare and commercial payers at 31% each. The "other" payer group,

which includes government employee, military and railroad retirement plans as well as cash payers, also increased substantially in hospital outpatient settings nationwide, but covered a very small percentage of patients treated in physicians' offices nationwide and in the Southeast Region.

Compliance with NCCN Guidelines by Payer

Treatments administered to colorectal cancer patients in physicians' offices were compared with the most commonly accepted guidelines for cancer care to determine compliance in the delivery of care. Compliance with NCCN practice guidelines for patients covered under Medicare and commercial insurance in 2009 increased substantially over 2008 both in the Southeast 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 Southeast Region, NCCN compliance was 37% (up from 25%) when a commercial insurer paid, and 42% (up from 36%) when Medicare paid.

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

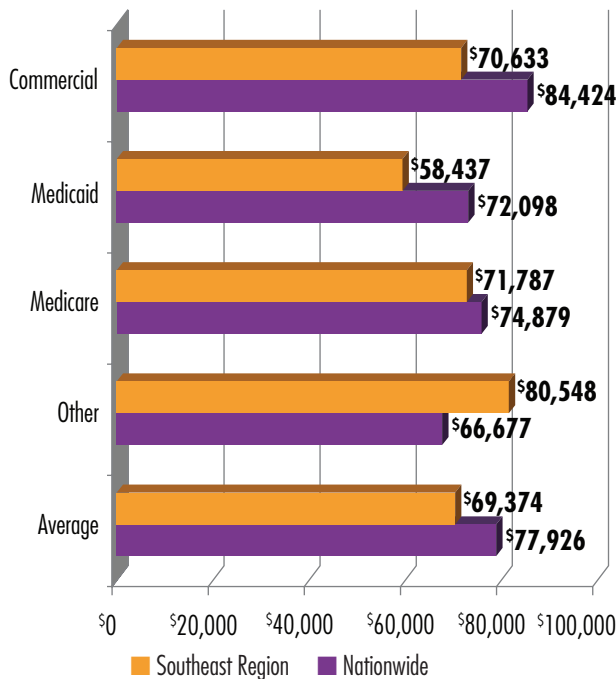
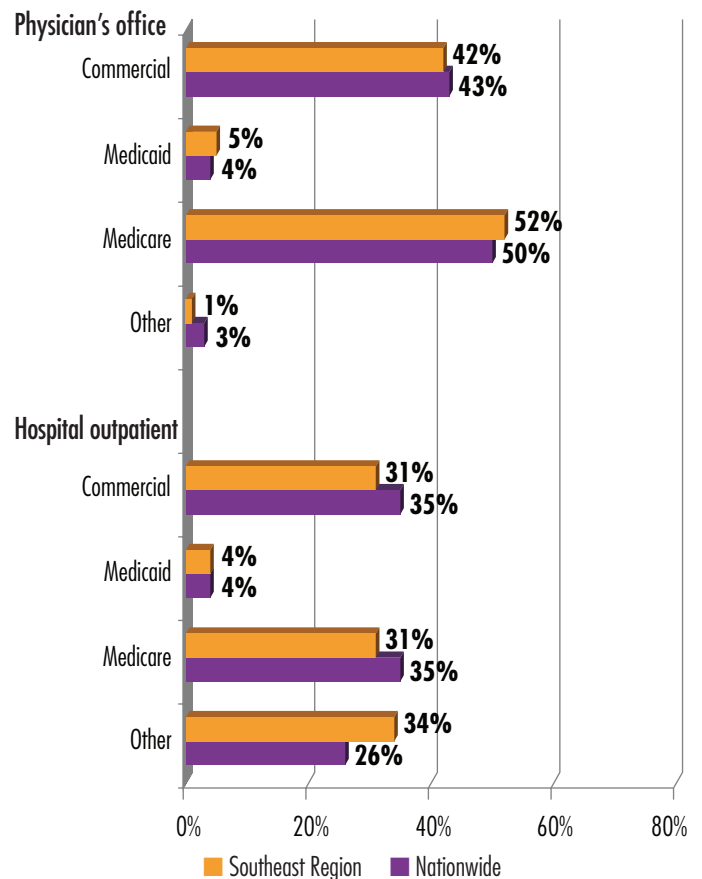


Figure 17 Patients with Colorectal Cancer by Treatment Setting and Payer



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 2008. In hospital outpatient venues 36% of treatments were compliant, which was up 6 percentage points (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 and 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.

"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 suggest 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

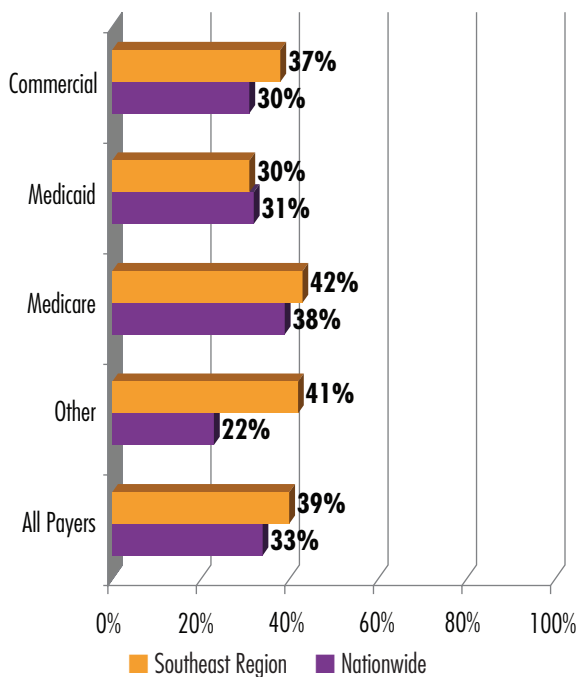


Figure 19 Colorectal Cancer Treatment Compliance with NCCN Guidelines, by Setting, Nationwide

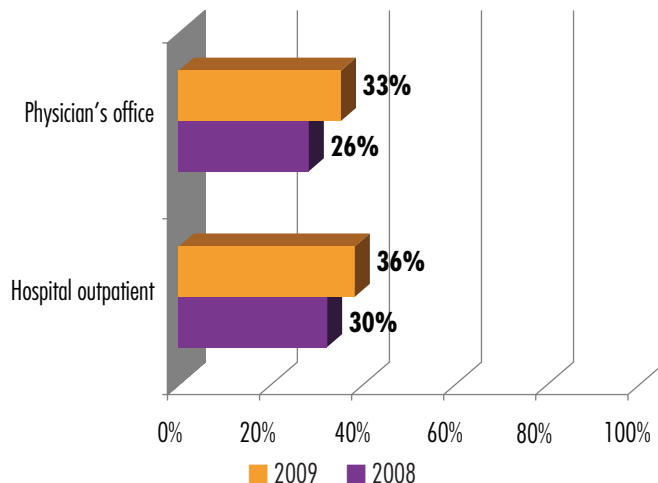
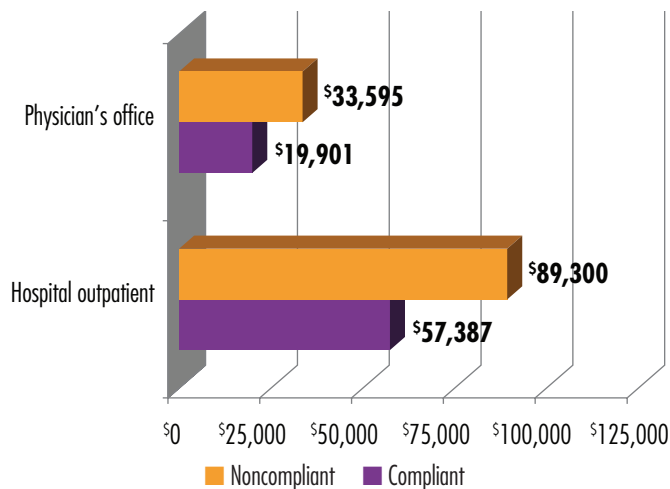


Figure 20 Average Charges for Colorectal Cancer Treatments, by NCCN Guideline Compliance, Nationwide



Use of the Top 5 Regimens

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

Treatment Charges for the Top 5 and All Regimens

Nationwide for all payers, the average charge for treatment in physicians' offices with all regimens was \$29,067 in 2009, down from \$31,674 in 2008 (Figure 22). 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.

Year-to-year increases in treatment charges were generally lower for commercial payers than for Medicare. From 2008 to 2009 average charges to commercial payers for treatment with all regimens in physicians' offices decreased

from \$33,591 to \$28,827 (down 14%); for Medicare the average charges decreased from \$30,573 to \$30,156 (down 1%). For treatment in hospital outpatient settings, average charges to commercial payers increased 46% to \$92,315 for the top 5 regimens, and 57% to \$84,424 for all regimens. Although these were the highest charges to any payer in the hospital outpatient setting, the 57% year-to-year increase for commercial payers in the average charge for all regimens was modest compared to the 182% increase when Medicare paid.

Treatment in hospital outpatient settings is typically associated with higher average charges than treatment delivered in physicians' offices, as held true in 2009. During this period the average charge per patient receiving 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

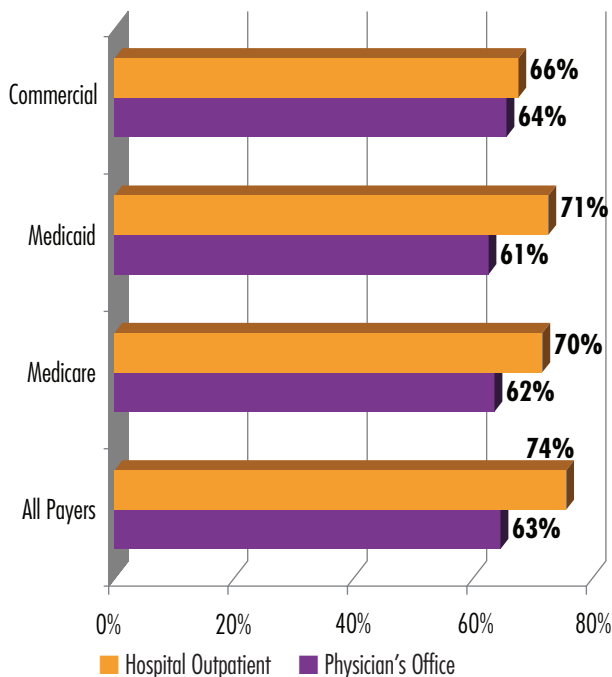
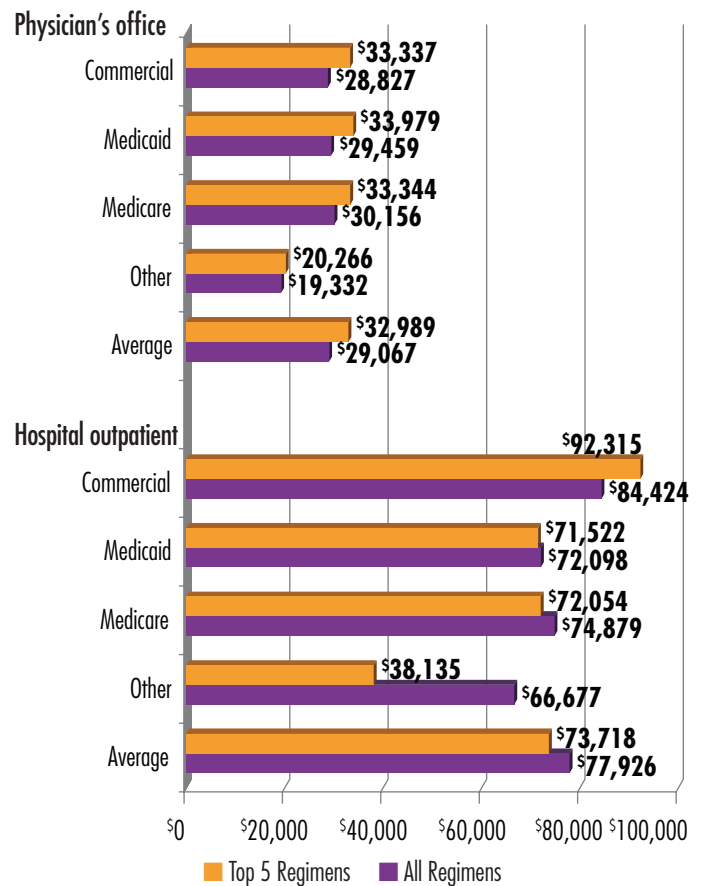


Figure 22 Average Charges for Colorectal Cancer Regimens, by Setting and Payer, Nationwide



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.⁴ 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) 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 Southeast 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 Southeast Region accounted for almost 205,000 patients seen in physicians' offices in 2009, up 3% from 2008, and 24% 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, proportions unchanged from 2008. In the

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

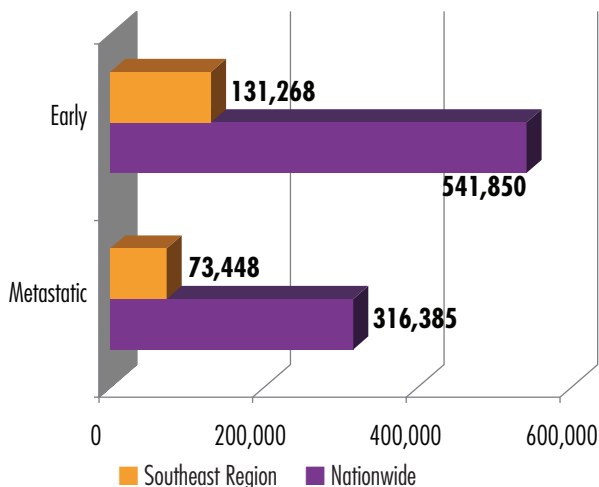
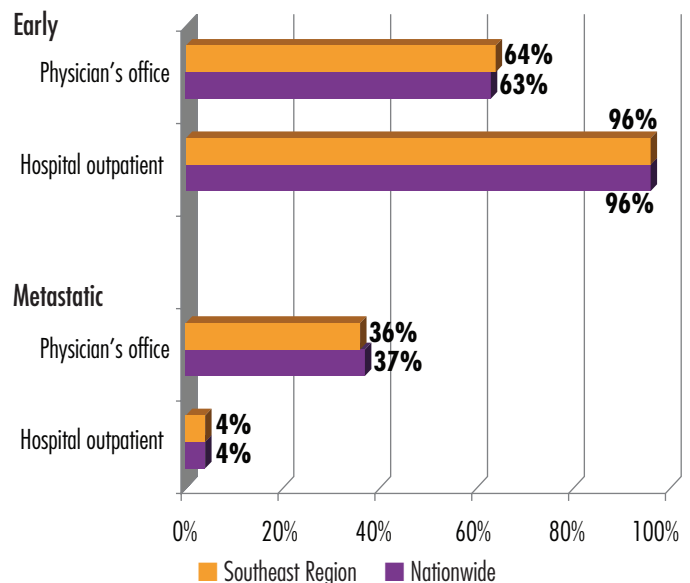


Figure 24 Patients Diagnosed with Prostate Cancer by Disease Stage and Treatment Setting



Southeast Region in 2009, 96% of 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, 64% of Southeast Region prostate cancer patients seen in physicians' offices were diagnosed at an early stage (65% in 2008). Both the Central Region and the West Region had lower rates of patients with early diagnosis seen in physicians' offices in 2009 (59% and 57%, respectively).

"Owing to increased screening for cancer in men overall, the number 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 2008 and 2009, the Southeast Region accounted for 24% of nationwide prostate cancer cases seen in physicians' offices. The region also accounted for 25% of prostate cancer patients treated in hospital outpatient settings nationwide during 2009, up from 20% in 2008.

Patients in Physicians' Offices by Disease Stage and Payer Type

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

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 were diagnosed early (down from 39% in 2008).

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

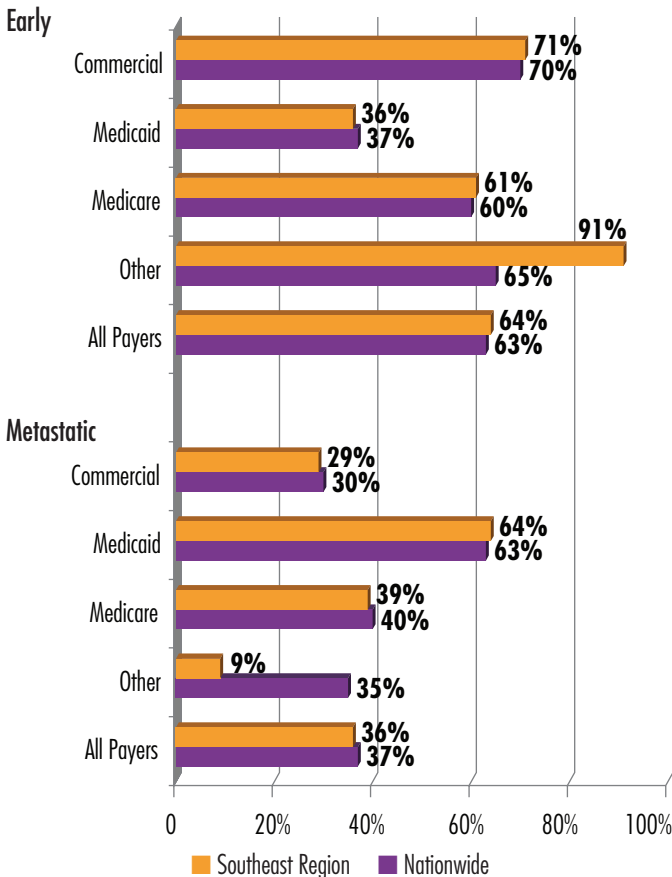
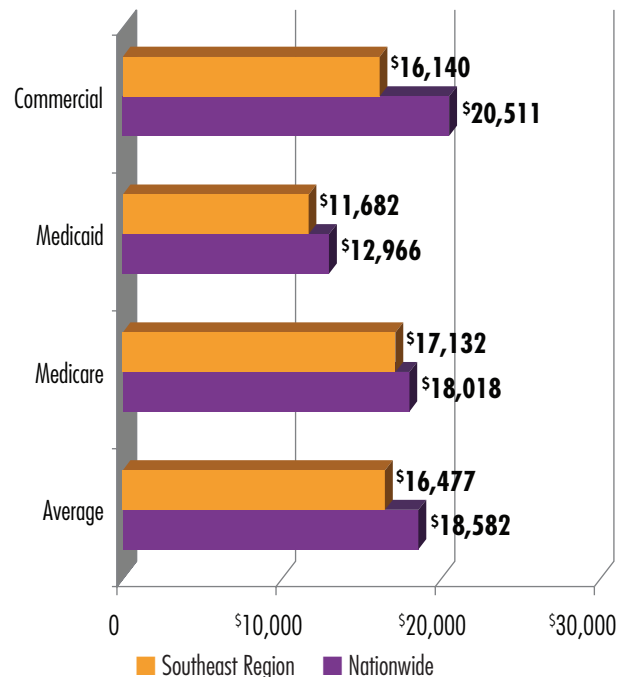


Figure 26 Physician's Office Average Charges for Patients with Prostate Cancer, by Payer



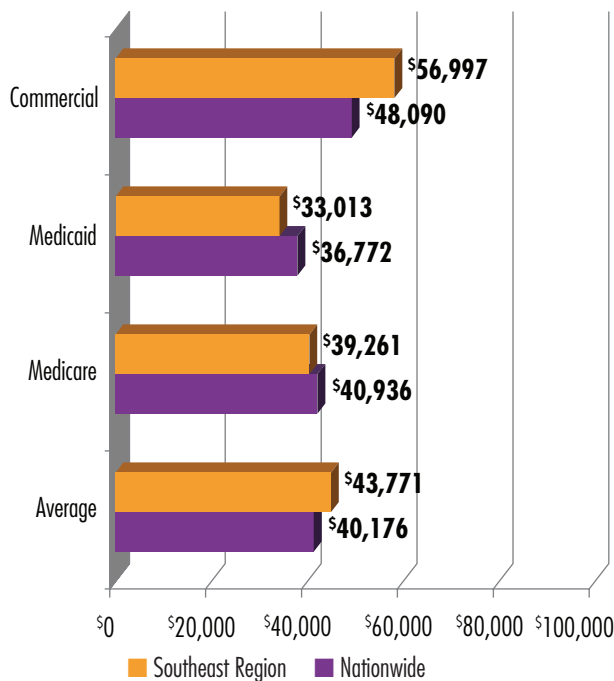
In the Southeast Region in 2009, 71% of commercially insured patients treated in physicians' offices received an early-stage diagnosis (75% in 2008), compared with 61% of Medicare patients (unchanged from 2008). Only 36% of Medicaid patients in this treatment setting received an early diagnosis (down from 37% in 2008). The percentage of change for Medicaid 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 in the Southeast Region and nationwide in 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 Southeast Region the average charge in 2009 was \$16,477, down 5% from \$17,405.

The decrease in the average charge in the Southeast Region was led by commercial payers, for which the average charge for treatment in a physician's office declined 24% to \$16,140. The average charge under Medicare increased in the Southeast Region by 15% to \$17,132 from 2008 to 2009. Based on a small sample size (less than 1% of patients seen in physicians' offices both in the Southeast Region and nationwide), the average charge in physicians' offices in the Southeast Region when Medicaid paid was \$11,682 in 2009, down 37% from 2008.

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



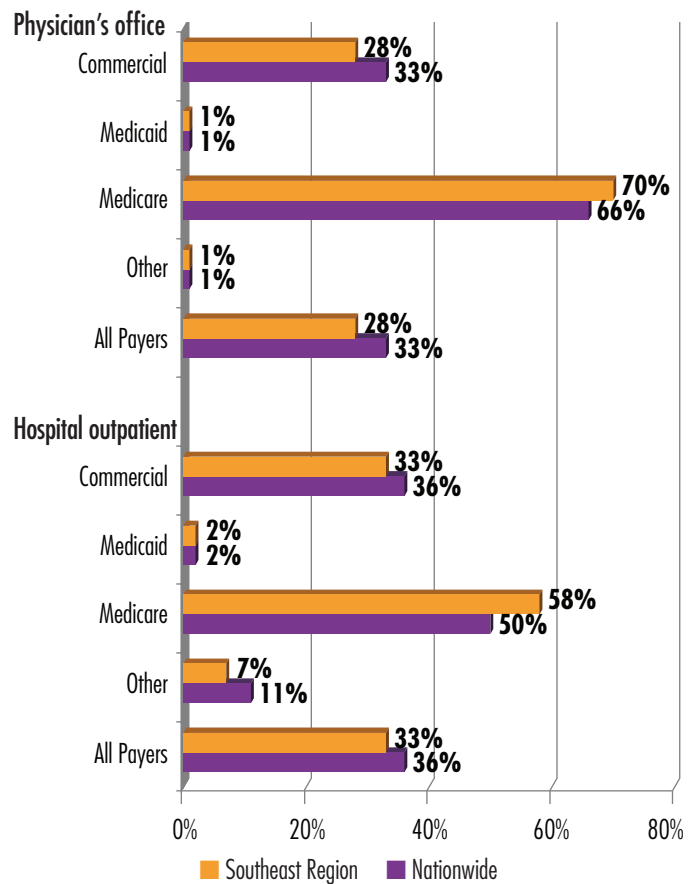
Hospital Outpatient Charges

According to hospital outpatient data from Charge Data Masters (CDM), 2009 total average hospital outpatient charges for patients diagnosed with prostate cancer were similar to 2008 charges both nationwide and in the Southeast Region (Figure 27). However, the average charge to patients insured by commercial payers was up 8% nationwide to \$48,090, and up 22% in the Southeast Region to \$56,997. Medicare average charges were up 20% in the Southeast Region to \$39,261 and up 4% nationwide to \$40,936. Medicaid 2009 CDM average hospital outpatient charges were up 4% nationwide to \$36,772, and up 3% in the Southeast Region to \$33,013.

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) nationwide in both 2008 and 2009 (Figure 28). In physicians' offices, commercially insured patients accounted for most of the rest, except for the 1% each who were covered

Figure 28 Patients with Prostate Cancer by Treatment Setting and Payer



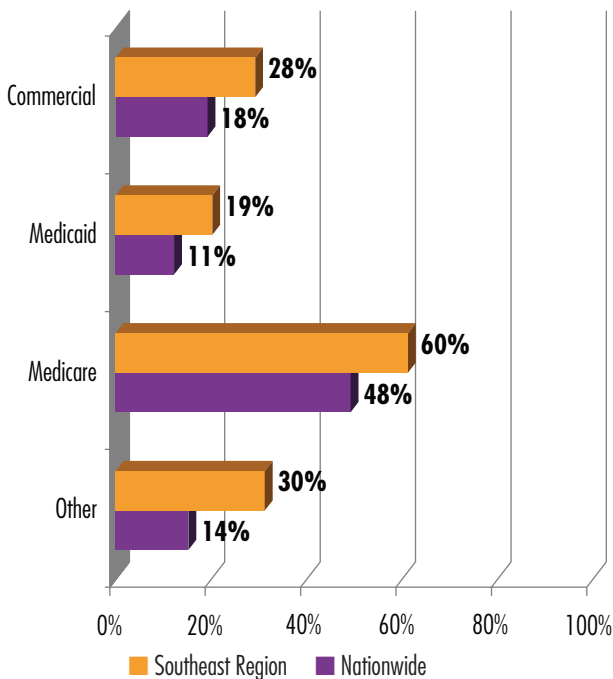
by Medicaid, or “other” payers (5% nationwide in 2008). Nationwide In 2009, 11% of patients diagnosed with prostate cancer and treated in hospital outpatient settings were covered in the “other” payer group, which includes government employee, military and railroad retirement plans as well as cash payers. The “other” payer group accounted for 7% of patients treated in the hospital outpatient setting in the Southeast Region in 2009.

Compliance with NCCN Guidelines by Payer

Chemotherapy and biologic treatments administered to prostate cancer patients in physicians’ offices 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 46% in the Southeast Region (48% in 2008) (Figure 29).

Nationwide and in the Southeast Region, treatments for prostate cancer patients covered by Medicare had the highest compliance levels in 2009: 60% in the Southeast 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,

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



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, DGH Consulting.

Compliance with NCCN Guidelines by Treatment Setting

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

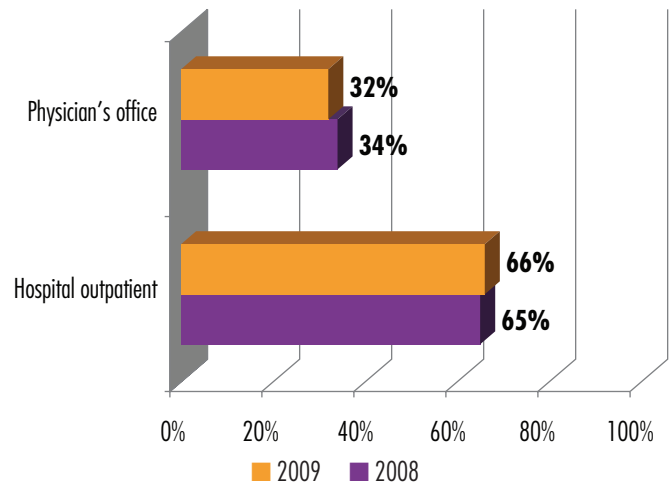
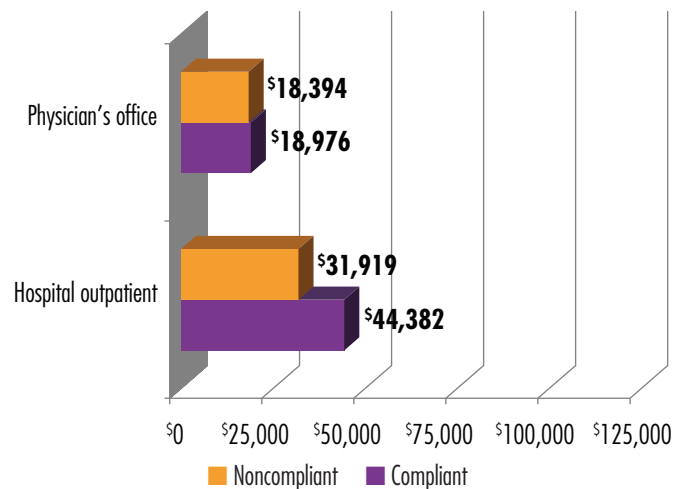


Figure 31 Average Charges for Prostate Cancer Treatments, by NCCN Guideline Compliance, Nationwide



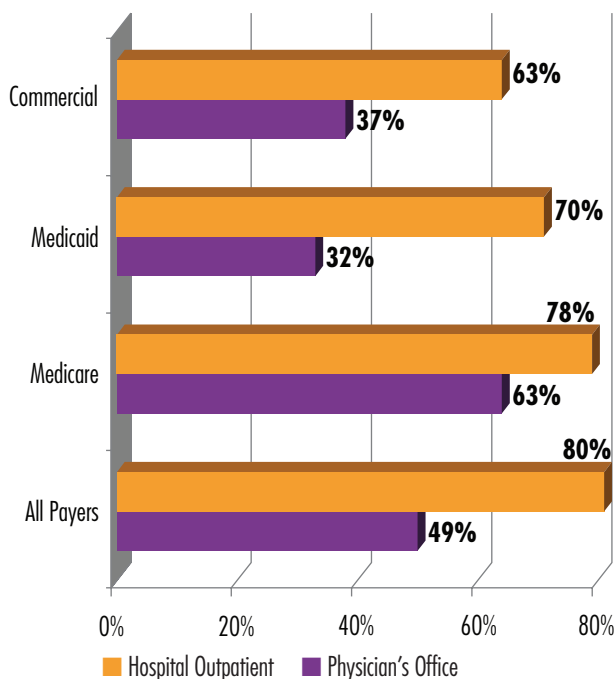
Treatment Charges and Compliance with NCCN Guidelines

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). These charges were still significantly higher than charges for either compliant or non-compliant care in the physician's office setting. The lower average charges for non-compliant treatment in the outpatient setting 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 in 2009, for prostate cancer patients receiving chemotherapy and biologic treatments, the top five most prescribed treatment regimens accounted for 49% of treatments provided by physicians' offices (50% in 2008), and 80% of treatments provided in outpatient hospital settings (93% in 2008) (Figure 32). While the percentage of use of the top five 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

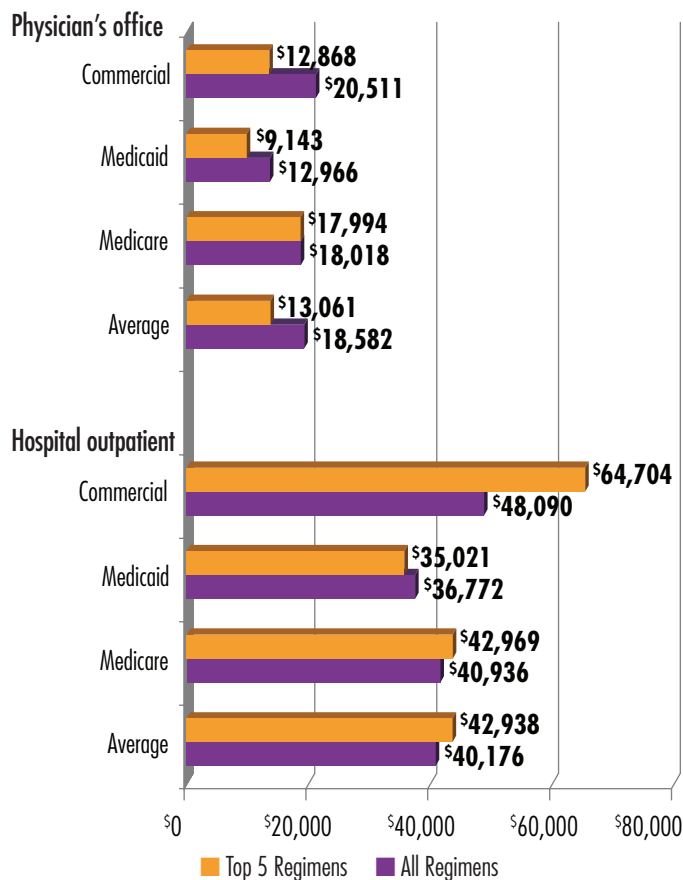


Treatment Charges for Top 5 and All Regimens

Nationwide, the average charge for treatment of prostate cancer in physicians' offices for all 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 costly cases to this treatment setting from physicians' offices.

Treatment in hospital outpatient settings is typically associated with higher average charges than treatment delivered in physicians' offices, as held true in 2009. The average charge per patient receiving 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 \$42,938 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



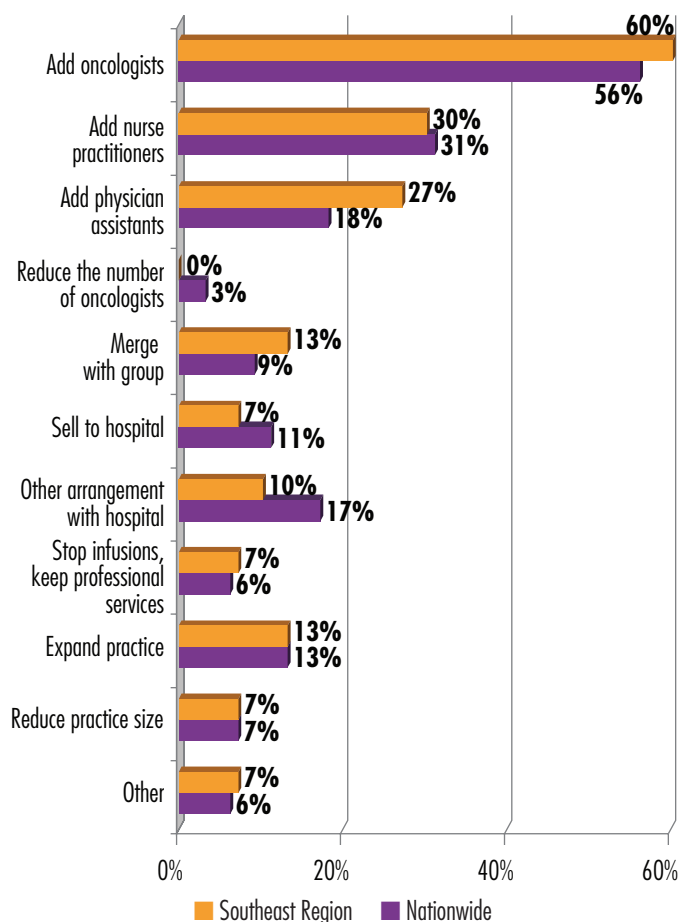
Oncology Practice Survey Findings

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%) responded to the survey nationwide. Of these, 32, or 20%, are in the Southeast Region. Almost two thirds (64%) of all practices represented in the Southeast Region are groups of five or fewer physicians, while 13% each are practices of 6 and practices of 10 or more oncologists.

Significantly more Southeast Region practices are considering changes than practices nationwide; 13% are considering merging with another medical group as compared to 9% nationwide. Ten percent are considering a collaborative arrangement with a hospital and another 7% are considering selling to a hospital (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 preserving access to services and care in their offices, exceeds their focus on the business of care delivery. Nearly half of practices (41% in the Southeast Region and 49% nationwide) report that they now see more patients than a year ago. For the same time period, a slightly higher percentage of practices in the Southeast Region (47%) and nationwide (52%) report decreasing net profit. Despite these strains, more than half of practices (55% in the Southeast Region and 58% nationwide), when asked how they would respond to proposed Medicare reimbursement cuts of as much as 20% to 30%, indicate that they would continue to treat Medicare patients as usual. Nearly one third (31%) of oncologists nationwide and 35% in the Southeast Region say that 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 most practices report that they send Medicare patients to a hospital-based infusion center if the patients have no secondary insurance or are privately insured but unable to afford the copayment or co-insurance (80% in the Southeast Region and 69% nationwide).

Practices are also now reporting that patients are choosing to delay or cancel care due to costs of treatment. In the Southeast Region 22% report that more than 11% of patients have requested changes in their care plans (32% nationwide) and 47% report that more than 11% of patients have stopped taking oral medications early because of treatment costs (45% nationwide).

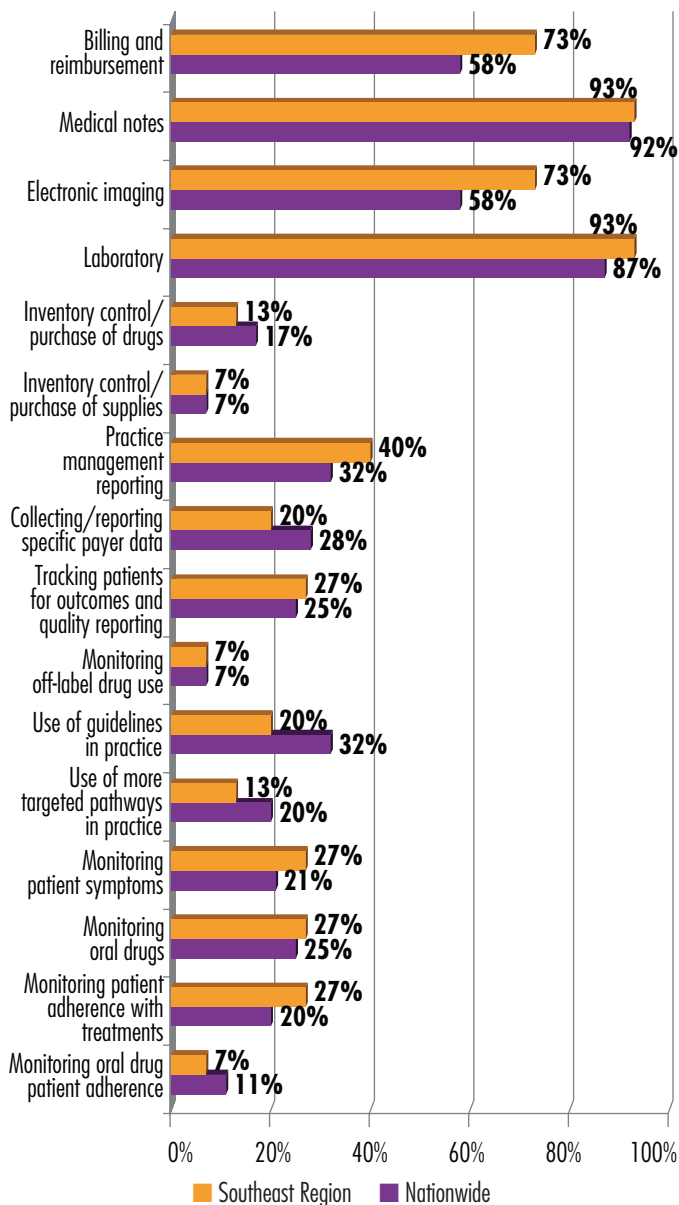
Use of Electronic Medical Records (EMRs)

Almost half (47%) of practices in the Southeast Region and 44% of practices nationwide report using an EMR system. There is considerable variation in the type of system used, with a greater number of practices (33% in the Southeast Region and 28% nationwide) using a hospital-provided/based system rather than an oncology-specific EMR.

It is a lengthy process to select, install and implement an EMR. Southeast Region practices are far less likely (7%) than practices nationwide (22%) to have not yet fully implemented their EMR. Many Southeast Region practices (33%) report having had fully implemented systems for from 3 to 5 years, almost double the rate of practices nationwide (18%). Another 26% of Southeast 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 provide data to improve patient outcomes and practice management. When the 44% of survey respondents with EMRs indicate how they use their systems, more than three quarters of practices in the Southeast Region and more than half of practices nationwide indicate that they utilize EMRs for billing, medical notes, electronic imaging, and laboratory results (Figure 35). Southeast Region practices are less likely (20%) than practices nationwide (28%) to use EMRs to collect and report specific payer data.

Figure 35 EMR Utilization



About half (50% in the Southeast Region and 49% nationwide) of practices do not collect data through their health technology. Of those that do, many are not able to sell their data or leverage it with payers (6% of EMR users in the Southeast Region and 12% nationwide). Just 9% in the Southeast Region and nationwide have been able to sell their data or gain preferential reimbursement consideration. Nearly twice the proportion of practices in the Southeast Region (13%) report that they are not now able to collect the data they want from their EMR systems than is reported by practices nationwide (7%), a situation that may be related to the higher levels of early installation of EMR systems in the Southeast Region.

Use of Practice Guidelines

Guidelines for the delivery of medically recognized standards of practice are widely accepted and followed. More than half of all respondents nationwide (56%-59%) and Southeast Region respondents (53%-60%) encourage their use in colorectal, NSC lung, breast, prostate, and head and neck cancers.

Respondents were most likely to use as a reference the Nationwide Comprehensive Cancer Network (NCCN) Guidelines (88% for the Southeast Region and 89% nationwide). More than one quarter (28%) of Southeast Region practices reported developing their own internal guidelines based on guidelines developed by NCCN or the American Society of Clinical Oncology (ASCO), far more than practices nationwide (19%). Only 28% of Southeast Region practices monitor compliance to guidelines or pathways compared to 35% of practices nationwide. Of those practices that do monitor compliance, in the Southeast Region most audit for compliance annually versus quarterly (45% vs 27%); this is the opposite of the scheduling of audits by practices nationwide (26% annually and 37% quarterly).

Only 18% of practices in the Southeast Region and 25% nationwide report guideline integration into an EMR. While 36% in the Southeast Region and 33% nationwide track compliance, few (9% in the Southeast Region and only 4% nationwide report receiving rewards for guideline compliance.

Use of Specialty Pharmacies

While oncology practices do accept specialty pharmacy drugs in their practice, such utilization primarily occurs only under specific situations, eg, for selected drugs, or for specific payers under limited circumstances. Most practices do not accept drugs from specialty pharmacies when shipped directly to the patient (72% in the Southeast Region, 63% nationwide), but about half will allow some specialty pharmacy drugs to be shipped directly to the practice (55% in the Southeast Region,

50% nationwide). More than three quarters (79%) of practices in the Southeast Region and 75% of practices nationwide state that they would not accept drugs from a specialty pharmacy without a signed liability waiver.

About half of practices use specialty pharmacy drugs because the commercial payer requires it (58% in the Southeast Region and 45% nationwide); 38% in the Southeast Region and 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 31% in the Southeast Region report using specialty pharmacies for 5% or less of their total drug orders for oral drugs. About two thirds (69% in the Southeast Region, 66% nationwide) order through specialty pharmacies for 5% or less of injectable drugs.

Oncology Management Programs

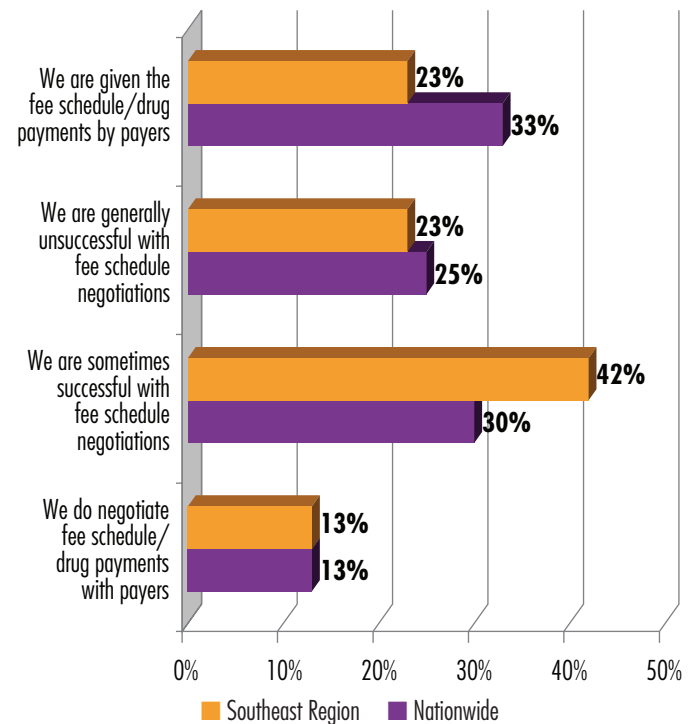
Respondents were asked to cite oncology management programs already in place or that could be developed and presented to payers. Southeast Region practices were most likely to already be doing case management (48%), end of life programs (48%), symptom management (46%), guidelines (42%) and survivorship programs for cancer patients (39%), and to have the greatest interest in developing formal education and support for patients (50%), pathways (45%), survivorship programs (43%) review of oncology treatments over certain dollar thresholds (42%) and preferred treatment regimens (40%).

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 Southeast Region, 43% estimated less than 50% over Medicare rates (19% nationwide) while 14% for each rate estimated that rates of 50% over, 100% over, 150% over and 200% over Medicare rates would be adequate (nationwide 22%, 14%, 19% and 17% respectively).

Oncology practices report a distinct lack of success in negotiating contract terms with payers (Figure 36). Many oncology practices lack basic information concerning the profitability of working with specific plans. Just 38% in the Southeast Region and 32% nationwide consider their contracts

Figure 36 Practice-Payer Fee Negotiations



with most managed care plans to be profitable. Another quarter of contracts are considered unprofitable (25% in the Southeast Region, 26% nationwide), with more than one third (38% in the Southeast Region and 42% nationwide) classified as “don’t know.”

The costs of oncology drugs and their handling constitute the largest component of the costs of running an oncology practice. More practices in the Southeast Region (63%) than nationwide (53%) report having taken steps to identify potential losses for specific oncology infusion therapies. Yet, more than one third (38%) in the Southeast Region have not taken such basic business steps.

Despite potential losses in profitability incurred by treating these patients in their offices, most practices are unlikely to take significant steps to avoid such losses. 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). The least preferred choice for both practices in the Southeast Region and nationwide is to refer the patient to a specialty pharmacy (19% for both).

In the face of increasing fiscal and operational challenges, practices are turning to a variety of options to increase practice

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

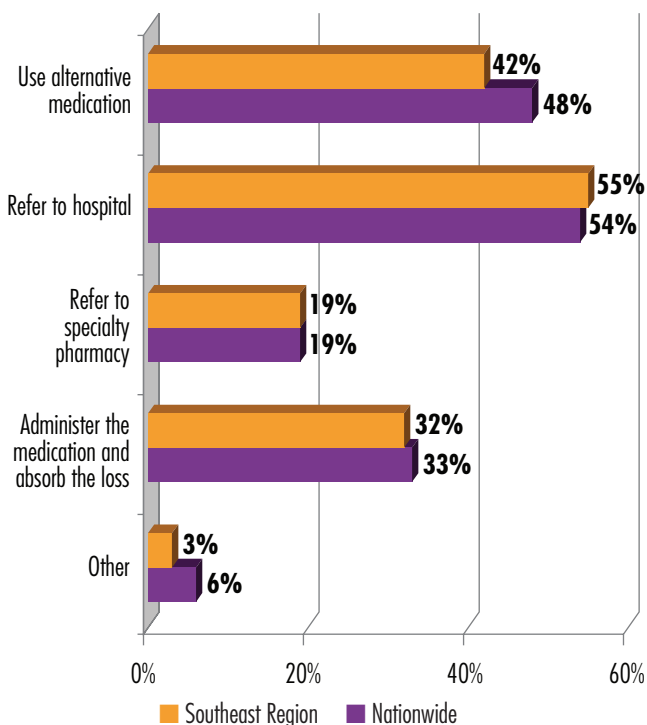
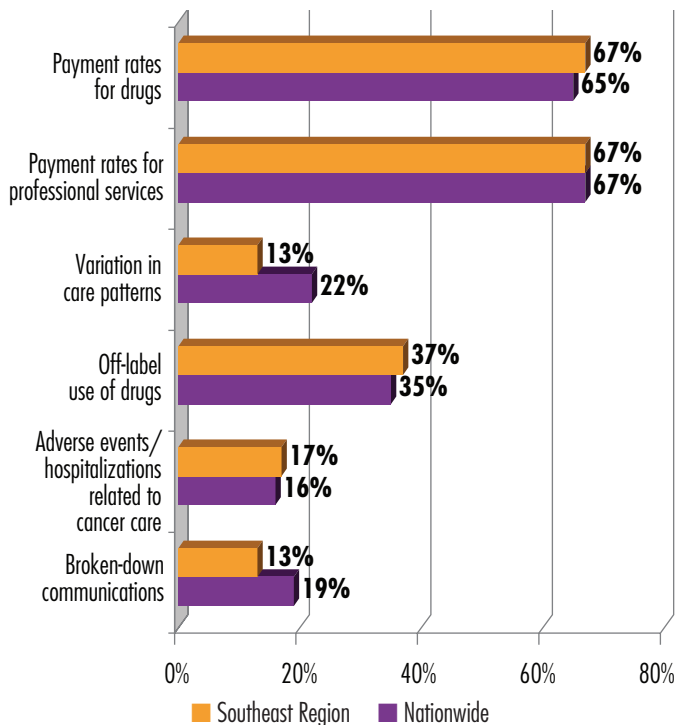
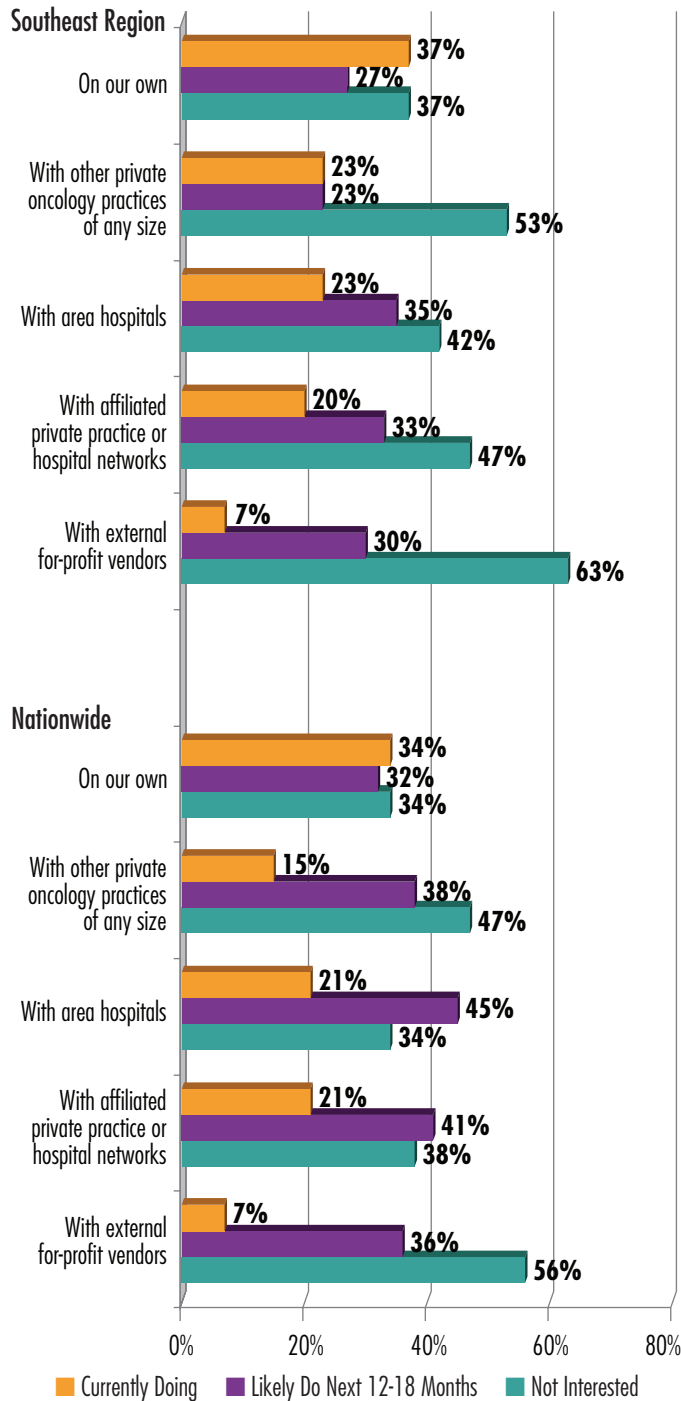


Figure 38 Issues Affecting Provider-Payer Relations



revenues. The most popular choices are tightening controls on coding and documentation (68% and 61% respectively in the Southeast Region, and 60% and 56% respectively nationwide), participation in clinical trials (23% in the Southeast Region, 19% nationwide) and participating in federal performance programs such as e-prescribing and PQRI (19% and 10% respectively in the Southeast Region and 20% and

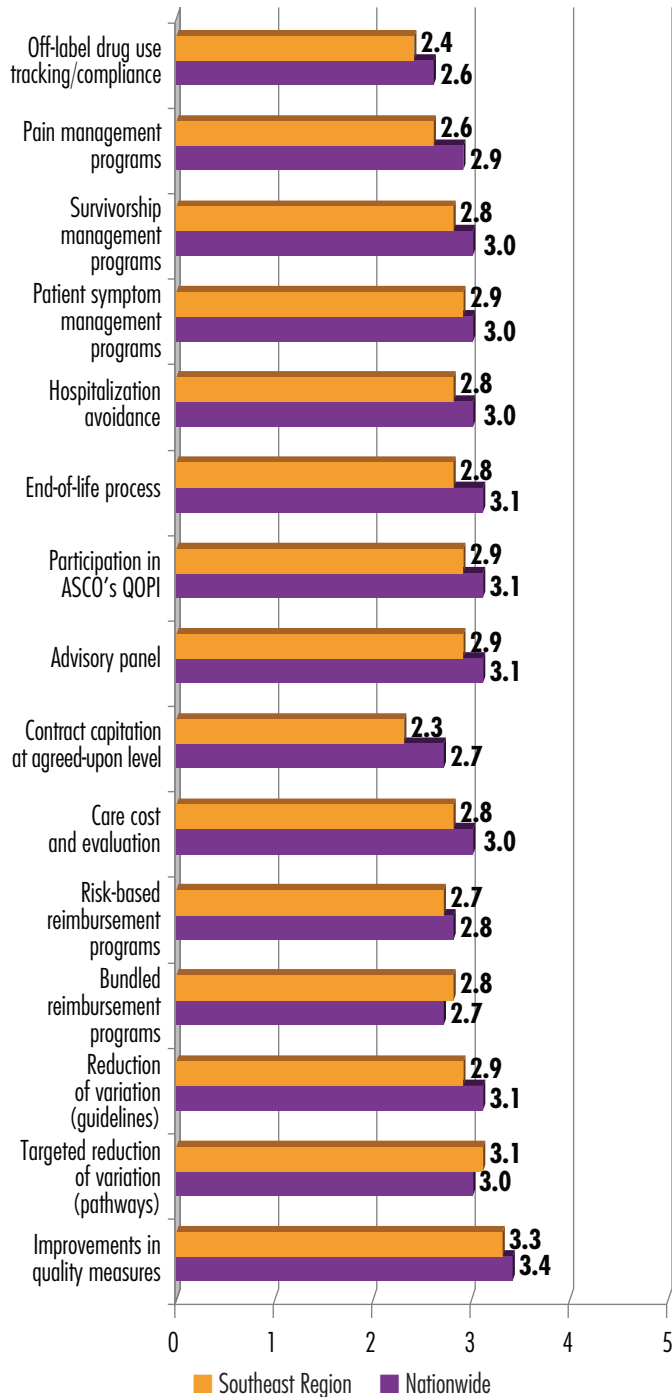
Figure 39 Oncology Practice Interest in Payer Programs



18% respectively nationwide). Southeast Region practices have been very pro-active; fewer practices (13%) in the Southeast Region than nationwide (20%) have made no changes.

In the Southeast Region, the most commonly reported reimbursement rate for office-administered drugs is average

Figure 40 Practice-Payer Collaboration Options
 1 = Not at all interested; 2 = Slightly interested; 3 = Neutral, 4 = Moderately interested; 5 = Extremely interested



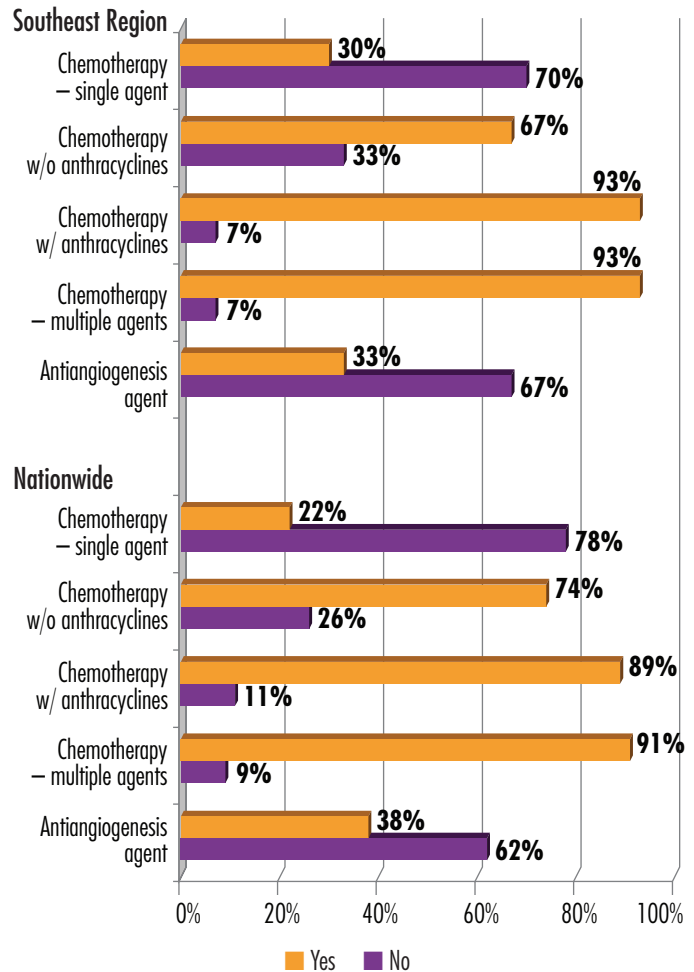
sales price (ASP) plus 6% (33%), with ASP plus 0%-5% a close second (21%). Practices nationwide report 43% at ASP plus 6%, and 27% at ASP plus 0%-5%. Practices in the Southeast Region further report rates higher than ASP plus 6% (13% report ASP plus 7%-12%, 8% report ASP plus 13%-18%, 13% report ASP plus 19%-25% and 13% report ASP plus 26%-30%); the number of practices reporting the higher rates nationwide is somewhat lower (14%, 7%, 5%, and 6%, respectively).

Practice-Payer Relations

Oncology practices and payers have an opportunity to create new programs and collaborations, given the under-developed relationship that exists. Almost two thirds (63%) of Southeast Region practices and 68% of practices nationwide state that their relationship goes no further than annual contracting.

For physicians in the Southeast Region and all physicians nationwide, the most sensitive issues affecting current and future relations with key payers are payment rates for professional services and payment rates for drugs (Figure 38).

Figure 41 Adjuvant Treatment for Breast Cancer



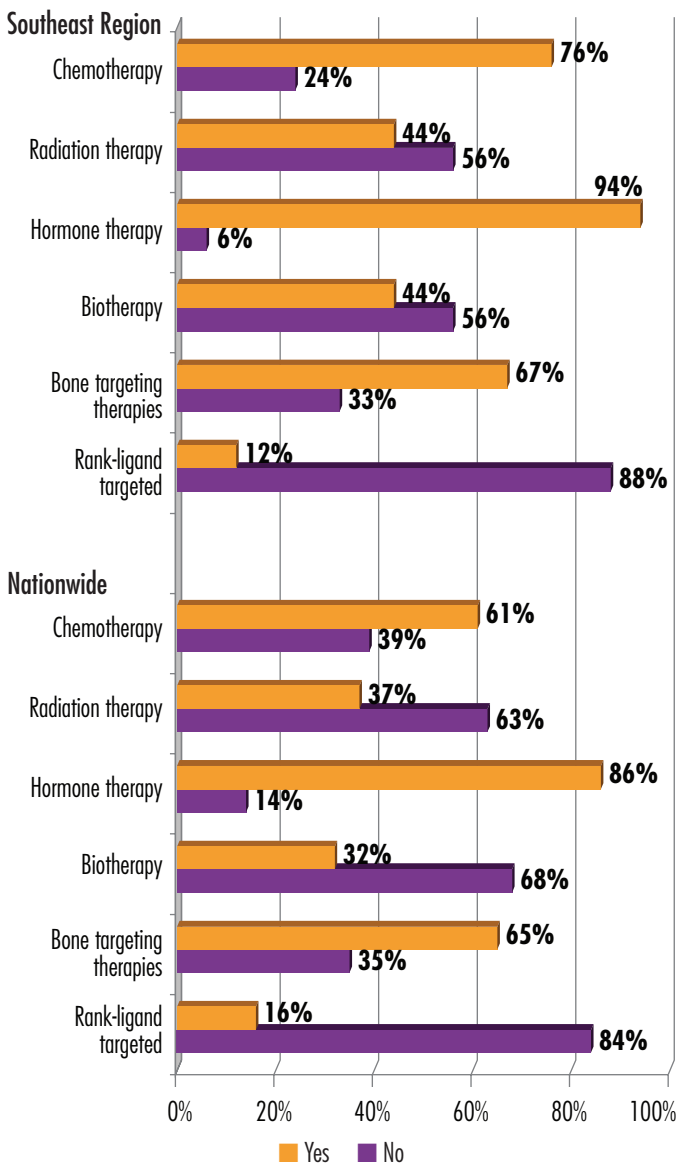
Collaborative Prospects

When asked about collaborating with other care providers in exploring key payer programs related to oncology, practices in the Southeast Region show a little less interest (58%, 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.

Potential collaboration options of greatest interest across all practices are improvements in quality measures programs, pathways, guidelines, advisory panels and participation in ASCO’s Quality Oncology Practice Initiative (Figure 40).

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



Clinical Treatment Trends

Treatment of cancer is complex, usually involving more than one drug. When asked about adjuvant treatment generally followed for breast cancer patients, practices clearly report a trend toward chemotherapy with multiple agents (93% in the Southeast Region and 91% nationwide) and for chemotherapy with anthracyclines (93% in the Southeast Region and 89% nationwide) (Figure 41). If the patient is HER2 positive, treatment also is most likely to include HER2 inhibitors (97% for both).

The majority of 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 (77%, Southeast Region; 74% nationwide).

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

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

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

Treatment Modality	Region	0%–25%	26%–50%	51%–75%	76%–100%
Radical nerve sparing prostatectomy	Southeast Region	62%	19%	19%	0%
	Nationwide	58%	23%	16%	3%
Laparoscopic prostatectomy	Southeast Region	38%	46%	12%	4%
	Nationwide	60%	30%	9%	2%
Robotic prostatectomy	Southeast Region	46%	36%	14%	4%
	Nationwide	56%	25%	13%	5%
Brachytherapy	Southeast Region	46%	43%	7%	4%
	Nationwide	47%	39%	13%	2%
Conformal RT	Southeast Region	62%	35%	4%	0%
	Nationwide	52%	34%	12%	2%
IMRT	Southeast Region	56%	28%	12%	4%
	Nationwide	44%	31%	19%	5%

Prostate Cancer Treatments

Oncology physicians report variations in treatment choices for patients with localized prostate cancer (Figure 43). Patients are less likely to receive radical nerve sparing prostatectomy in the Southeast Region (62% reporting 0% – 25% occurrence) than nationwide (58% reporting 0% – 25% occurrence).

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

When asked if they currently had patients receiving immunotherapy for metastatic, hormone-refractory prostate cancer, physicians' responses were overwhelmingly negative (71% in the Southeast Region and 76% nationwide). When asked if physicians expected to have such patients in the next twelve months, more than one-third responded in the affirmative (45% in the Southeast Region and 37% nationwide).

Figure 44 Treatment of Prostate Cancer by Stage

Stage 1,2 surgically treated adjuvant					
Southeast Region	59%	18%	23%	0%	0%
Nationwide	60%	14%	25%	0%	1%
Stage 1,2 RT treated adjuvant					
Southeast Region	56%	15%	26%	4%	0%
Nationwide	52%	20%	25%	2%	1%
Recurrent/metastatic first line therapy					
Southeast Region	33%	31%	22%	11%	2%
Nationwide	37%	21%	31%	7%	4%
Hormone refractory therapy					
Southeast Region	21%	24%	21%	17%	17%
Nationwide	24%	17%	17%	23%	18%

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

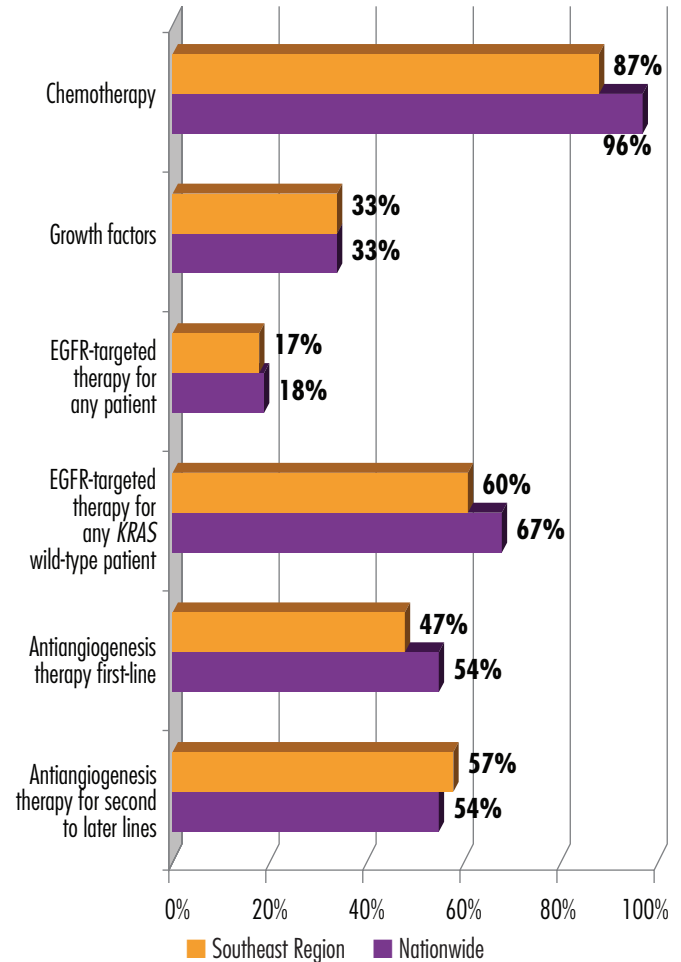
The responses of physicians, when asked about expectations for trends in therapeutic medication volume for stage IV prostate cancer patients, revealed variation in expectations for individual treatment options between the Southeast Region and nationwide.

Colorectal Cancer Treatment

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

More than three-quarters of oncologists (86% in the Southeast 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 Southeast 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 Southeast 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 Southeast Region plans and all plans with national coverage are freestanding infusion clinics (Figure 46). Least preferred for all plan types are retail pharmacy infusion facilities.

Medical and Pharmacy Benefits

Only about two-thirds of all plan types report that they are actively managing cancer care in their medical and pharmacy benefits plans.

For all plans nationwide and plans with national coverage, injectable/infused drugs make up the greatest proportion of cancer spend under the medical benefit (32% and 31%, respectively). Professional services edge out injectable/infused drugs for Southeast Region plans (28% vs 27%). Hospital services are a significant component of cancer spend under the medical benefit for all plan types (26% to 29%). More than half of respondents 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 benefits cancer spend for all plans nationwide, 59% for plans with national coverage, and 44% for Southeast Region plans. More than two-thirds of respondents of all plan types expect the portion allocated to oral drugs to increase over the next year. Two-thirds (67%) of plans with national coverage expect the

pharmacy benefit cancer spend for injectable/infused drugs to increase, compared with half of Southeast Region plans and 49% of all plans nationwide.

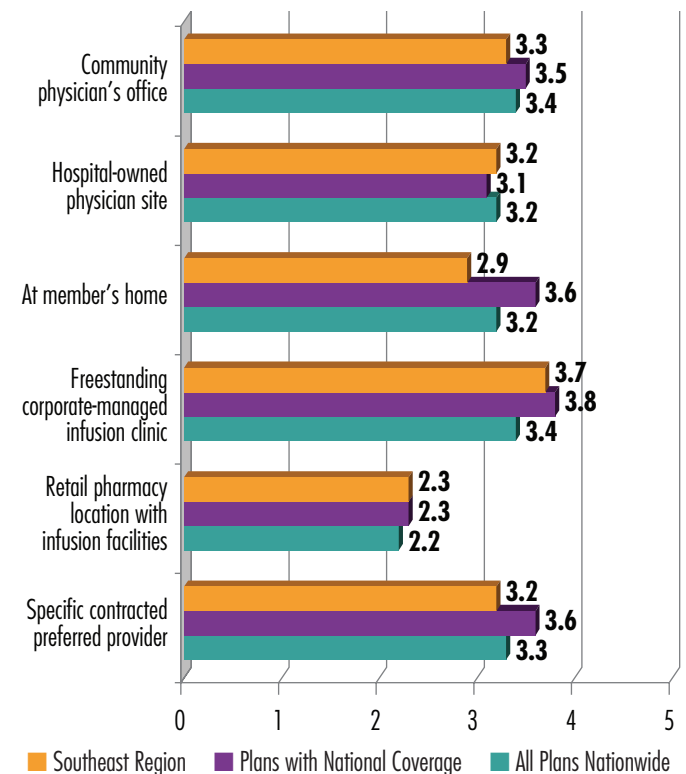
Sixty percent of Southeast Region plans, the highest proportion among all regions, and 56% of plans with national coverage (compared to 46% of all plans nationwide) report that employers are expressing concern or desire a role in determining oncology reimbursement policy. Select clients have concerns but are allowing plans to determine specifics (45%, Southeast Region plans; 33%, plans with national coverage; 35%, all plans nationwide).

Specialty Pharmacy

Southeast Region plans lead other plan types in having preferred relationships with one or more specialty pharmacies or other external vendors for injectable/infused cancer drugs (Figure 47). The use of a preferred specialty pharmacy in oncology remains optional with many plans that indicate that they will not force this requirement in the next 12 to 18 months.

Most plans have preferred relationships with one or more specialty pharmacies to acquire oral cancer 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 results within certain parameters.

Plans with national coverage (84%) are more likely to have a medical policy regarding approved coverage of cancer treatments than are plans in the Southeast Region and all plans nationwide (both 75%). The policy is most often applied by drug (45 % of Southeast Region plans, 44% of plans with national coverage, 33% of all plans nationwide), followed by ICD-9 code (15%, 17%, and 20%, respectively).

Plans rely on many different information sources on oncology treatments. Sources favored by Southeast Region plans are: peer-reviewed journals (88%), NCCN Guidelines (71%), and American Hospital Formulary Service (71%). Southeast Region plans were significantly less likely to utilize FDA labeling (53%) than either plans with national coverage (83%) or all plans nationwide (78%). 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

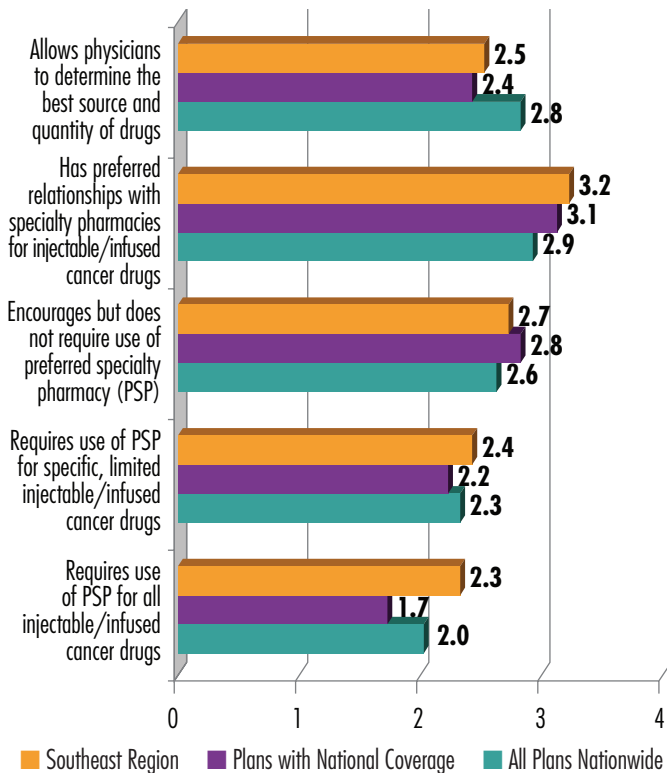
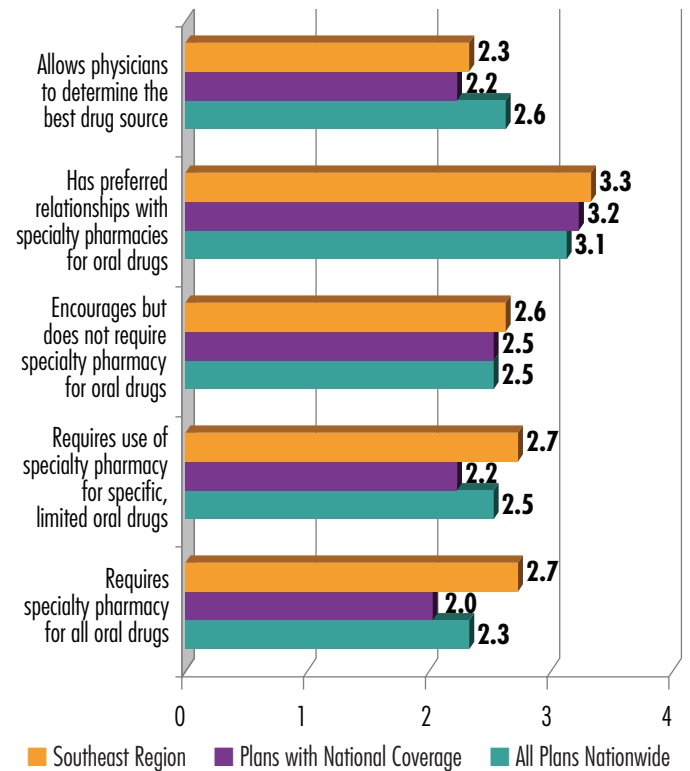


Figure 48 Policies for Acquiring Oral Drugs
 1 = Will not do; 2 = Considering doing in next 12–18 months;
 3 = Will do within the next 12–18 months; 4 = Currently doing



Disease Stage Data

Two-thirds of plans with national coverage review stage data on members with cancer compared with only 40% of Southeast Region plans and 54% of all plans nationwide. Plans with national coverage most frequently review disease stage data by requiring staging information on prior authorization forms (39%). 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%. The largest proportion (23%) of Southeast Region plans, however, favor AWP minus $\leq 15\%$. About half of all plans did not adjust professional fees in conjunction with a move to ASP-based reimbursement (47% of Southeast Region plans, 56% of plans with national coverage, 60% of all plans nationwide); 11% of Southeast Region plans report decreasing professional fees.

An equal proportion (42%) of Southeast Region plans see Medicare rates as sufficient reimbursement for professional services as see reimbursement at 50% over Medicare rates to be fair. Responses for other plan types are similar, although for all plans nationwide the responses respectively are 44% and 38%.

Reimbursement pricing of cancer products utilizes a publicly available basis, according to 60% of Southeast Region plans, 78% of plans with national coverage, and 72% of all plans nationwide. Modification of specific drug rates to incentivize physicians or to promote use within medical policy is reported by 80%, 51%, and 56% of plans, respectively.

Oncology Care Management

Of oncology management strategies, plans with national coverage are most likely over time to favor enforcement of strict laboratory value thresholds as a prerequisite for product access (2.9 out of a possible 4.0). This strategy is rated 2.6 by Southeast Region plans, tied with the use of differential prior authorization rules to direct physicians to a preferred agent within a therapeutic class and with the requirement that a product or regimen have specific positioning on compendia. Only a few plan 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 91%), most often with internal staff (58% of Southeast Region plans, 50% of plans with national coverage, and 56% of all plans nationwide) or specific oncology providers (37%, 31%, and 35% respectively), rather than with an external oncology management vendor (5%, 19%, and 9%, respectively).

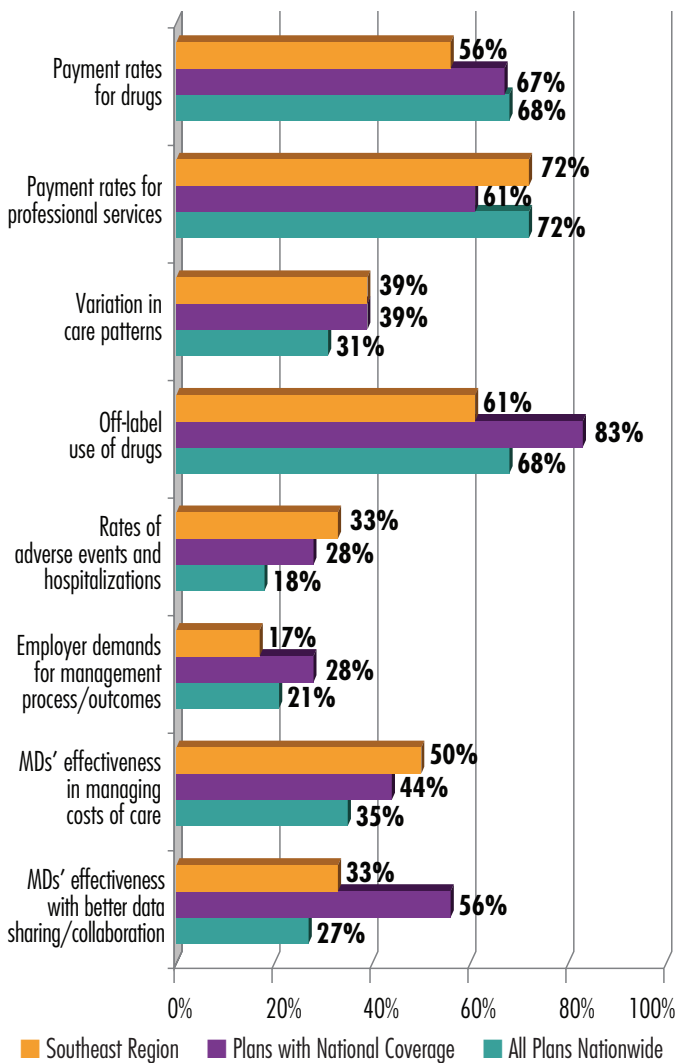
All plans nationwide favor mandatory prior authorization (60%) and use of guidelines (50%). Most other types of oncology management, including pathways and symptom management, are used predominantly on a voluntary basis.

Plan-Provider Relationships

For Southeast Region plans and all plans nationwide, the most sensitive issue that may affect current or future relations with oncology providers is payment rates for professional services, selected by 72%. The top concern for plans with national coverage is offlabel use of drugs (83%) (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.

Figure 49 Issues Affecting Provider Relations



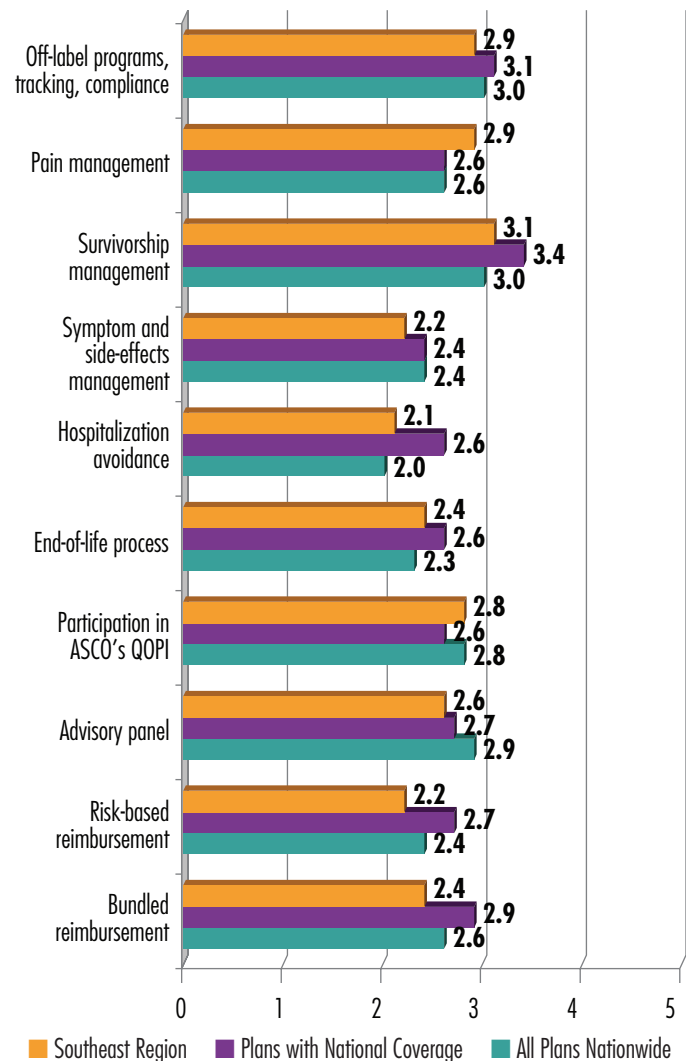
Interest in Collaboration

Southeast Region plans are more likely to be currently contracting with hospital-based oncology practices (50%) than plans with national coverage (18%) or all plans nationwide (45%). Plans with national coverage are generally less interested in contracting with private practices of fewer than 20 oncologists and 47% of them are not interested in contracting with private oncology practices of any size.

Southeast Region plans, plans with national coverage, and all plans nationwide all show the greatest interest in collaborating with providers on survivorship management programs and on offlabel tracking and compliance programs (Figure 50). Southeast Region plans also favor pain management programs.

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



Breast Cancer Treatment

Asked about various adjuvant treatments of breast cancer, all plans nationwide and Southeast Region plans tend to respond that they have no specific policy. Plans with national coverage are about twice as likely as other plan types to have prior authorization requirements for approval of treatment (Figure 51).

Most plans will approve treatment for patients with positive hormone findings for the life of the patient: Southeast Region plans have a response of 78%; plans with national coverage, only 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 51 Policy for Adjuvant Treatment of Breast Cancer

Chemotherapy with anthracyclines					
Southeast Region	0%	20%	5%	20%	55%
Plans with National Coverage	0%	53%	6%	12%	29%
All Plans Nationwide	0%	29%	8%	23%	40%
Chemotherapy without anthracyclines					
Southeast Region	0%	10%	10%	25%	55%
Plans with National Coverage	6%	47%	6%	12%	29%
All Plans Nationwide	1%	27%	9%	23%	40%
If HER2+, HER2 pathway inhibitors					
Southeast Region	0%	30%	5%	20%	45%
Plans with National Coverage	0%	71%	6%	6%	18%
All Plans Nationwide	1%	35%	9%	20%	34%
HER2 pathway inhibitors					
Southeast Region	0%	25%	15%	15%	45%
Plans with National Coverage	0%	71%	6%	6%	18%
All Plans Nationwide	1%	34%	10%	20%	35%
Antiangiogenesis agent					
Southeast Region	0%	35%	5%	20%	40%
Plans with National Coverage	0%	65%	6%	6%	24%
All Plans Nationwide	0%	39%	15%	13%	34%

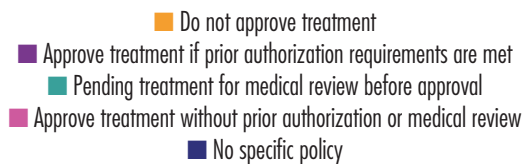
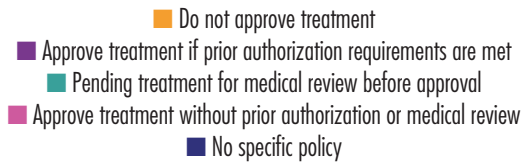


Figure 52 Policy for Treatment of Recurrent Metastatic Breast Cancer

Chemotherapy					
Southeast Region	0%	17%	17%	11%	56%
Plans with National Coverage	0%	47%	18%	12%	24%
All Plans Nationwide	0%	31%	12%	22%	35%
Radiation therapy					
Southeast Region	0%	17%	17%	17%	50%
Plans with National Coverage	0%	35%	18%	12%	35%
All Plans Nationwide	0%	27%	11%	24%	37%
Biotherapy					
Southeast Region	6%	6%	17%	11%	61%
Plans with National Coverage	6%	29%	24%	6%	35%
All Plans Nationwide	6%	19%	18%	12%	46%
Bone targeting therapies					
Southeast Region	6%	11%	17%	6%	61%
Plans with National Coverage	0%	35%	24%	12%	29%
All Plans Nationwide	1%	29%	16%	15%	39%
Rank-ligand targeted therapies					
Southeast Region	6%	11%	11%	11%	61%
Plans with National Coverage	0%	41%	18%	6%	35%
All Plans Nationwide	1%	30%	14%	11%	44%



Prostate Cancer Treatment

The largest single response of the majority of plans regarding authorization of various treatment options for early-stage prostate cancer is that they have no specific policy. Where policies are in place, most plans require prior authorization (Figure 53).

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, the majority of Southeast Region plans have no specific policy for all treatment options.

Most plans (58% of Southeast 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					
Southeast Region	11%	11%	6%	17%	56%
Plans with National Coverage	0%	35%	24%	6%	35%
All Plans Nationwide	2%	25%	12%	21%	39%
Laparoscopic prostatectomy					
Southeast Region	0%	22%	6%	17%	56%
Plans with National Coverage	0%	35%	24%	6%	35%
All Plans Nationwide	0%	24%	15%	21%	39%
Robotic prostatectomy					
Southeast Region	17%	6%	6%	11%	61%
Plans with National Coverage	0%	35%	24%	6%	35%
All Plans Nationwide	7%	21%	13%	19%	41%
Brachytherapy					
Southeast Region	6%	11%	11%	17%	56%
Plans with National Coverage	0%	35%	24%	6%	35%
All Plans Nationwide	2%	22%	17%	17%	42%
Conformal RT					
Southeast Region	6%	11%	11%	11%	61%
Plans with National Coverage	0%	29%	24%	6%	41%
All Plans Nationwide	1%	20%	17%	16%	46%
IMRT					
Southeast Region	6%	22%	6%	17%	50%
Plans with National Coverage	0%	29%	29%	6%	35%
All Plans Nationwide	1%	21%	21%	13%	44%
Antiangiogenesis drugs					
Southeast Region	0%	22%	17%	11%	50%
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					
Southeast Region	17%	11%	17%	11%	44%
Plans with National Coverage	0%	47%	18%	6%	29%
All Plans Nationwide	4%	29%	14%	17%	36%
Chemotherapy					
Southeast Region	0%	22%	17%	22%	39%
Plans with National Coverage	0%	47%	18%	12%	24%
All Plans Nationwide	0%	27%	13%	27%	33%
Anthracycline chemotherapy					
Southeast Region	0%	17%	17%	17%	50%
Plans with National Coverage	0%	47%	12%	12%	29%
All Plans Nationwide	0%	25%	14%	22%	40%
ADT agents, including LHRH					
Southeast Region	0%	17%	22%	11%	50%
Plans with National Coverage	0%	47%	18%	6%	29%
All Plans Nationwide	0%	31%	17%	15%	37%
Antiandrogen					
Southeast Region	0%	11%	11%	28%	50%
Plans with National Coverage	0%	53%	12%	12%	24%
All Plans Nationwide	0%	29%	12%	21%	38%
Generic antiandrogens or ADT agents					
Southeast Region	0%	11%	6%	28%	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					
Southeast Region	0%	11%	16%	11%	63%
Plans with National Coverage	0%	47%	24%	6%	24%
All Plans Nationwide	3%	30%	15%	18%	35%
Biologics/immunotherapy					
Southeast Region	5%	16%	5%	16%	58%
Plans with National Coverage	0%	47%	18%	12%	24%
All Plans Nationwide	3%	36%	11%	18%	32%
Chemotherapy					
Southeast Region	0%	26%	5%	16%	53%
Plans with National Coverage	0%	41%	18%	18%	24%
All Plans Nationwide	0%	30%	9%	26%	35%
Anthracycline chemotherapy					
Southeast Region	0%	16%	5%	16%	63%
Plans with National Coverage	0%	35%	18%	18%	29%
All Plans Nationwide	0%	24%	11%	23%	41%
ADT agents, including LHRH					
Southeast Region	5%	11%	11%	11%	63%
Plans with National Coverage	0%	41%	18%	12%	29%
All Plans Nationwide	1%	29%	14%	19%	38%
Antiandrogen					
Southeast Region	0%	21%	5%	16%	58%
Plans with National Coverage	0%	41%	18%	18%	24%
All Plans Nationwide	0%	29%	12%	20%	39%
Generic antiandrogens or ADT agents					
Southeast Region	0%	16%	0%	26%	58%
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 all plan types, Southeast Region plans are most likely to have no specific policy for treatment of colorectal cancer patients (Figure 55). Plans with national coverage often 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 (74% of Southeast Region plans, 75% of all plans nationwide and 81% of plans with national coverage).

Figure 55 Policy for Treatment of Colorectal Cancer Patients

Chemotherapy					
Southeast Region	0%	26%	5%	21%	47%
Plans with National Coverage	0%	56%	11%	11%	22%
All Plans Nationwide	0%	32%	9%	27%	32%
Growth factors					
Southeast Region	0%	32%	11%	11%	47%
Plans with National Coverage	0%	61%	11%	11%	17%
All Plans Nationwide	0%	40%	12%	19%	30%
EGFR-targeted therapy for any patient					
Southeast Region	5%	16%	16%	16%	47%
Plans with National Coverage	0%	56%	17%	6%	22%
All Plans Nationwide	1%	36%	15%	15%	33%
EGFR-targeted therapy for KRAS patient					
Southeast Region	5%	21%	16%	11%	47%
Plans with National Coverage	0%	56%	17%	6%	22%
All Plans Nationwide	1%	35%	17%	13%	35%
Antiangiogenesis therapy first-line					
Southeast Region	6%	22%	6%	17%	50%
Plans with National Coverage	0%	50%	17%	6%	28%
All Plans Nationwide	3%	33%	11%	19%	35%
Antiangiogenesis therapy later lines					
Southeast Region	5%	21%	16%	11%	47%
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.
- Southeast Region practices and plans agree that a sensitive issue facing plans and practices is payment for professional services (Southeast Region practices cite payment rates for drugs as equally sensitive). However, they do not agree on what constitutes a fair reimbursement rate. 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. Most Southeast Region plans (42%) see current Medicare rates for professional services as sufficient on which to base private plan rates, but not a single Southeast Region practice did. Nationwide comparisons were only slightly closer: 44% vs 3%.
- 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. Southeast Region practices, however, report more success 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 Southeast Region practices and practices nationwide 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.

References

1. Surveillance Epidemiology End Results (SEER) Breast Cancer Stat Fact Sheet. National Cancer Institute. <http://seer.cancer.gov/statfacts/html/breast.html>. Accessed January 21, 2011.
2. Jemal A, Siegel R, Xu J, Ward E. Cancer statistics, 2010. *CA Cancer J Clin*. 2010;60:277-300. <http://caonline.amcancersoc.org/cgi/reprint/60/5/277>. Accessed January 23, 2011.
3. Surveillance Epidemiology End Results (SEER) Colorectal Cancer Stat Fact Sheet. National Cancer Institute. <http://seer.cancer.gov/statfacts/html/colorect.html>. Accessed January 23, 2011.
4. Surveillance Epidemiology End Results (SEER) Prostate Cancer Stat Fact Sheet. National Cancer Institute. <http://seer.cancer.gov/statfacts/html/prost.html>. Accessed January 23, 2011.

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