ONCOLOGY

Nationwide and Northeast Region Cancer Care Report

2011–2012 Edition

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Introduction

Sanofi-aventis is pleased to present the sanofi-aventis Nationwide and Northeast 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 Northeast, Central, Southeast, Southwest, and West Regions of the United States. Each report compares regional data with information gathered nationwide, offering readers the opportunity to compare their experiences with those of colleagues across the United States.

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

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

In Part 2, findings from 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 Northeast Region.

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Executive Summary

Highlights from the data analyses and survey findings:

Northeast Region and Nationwide Averages Compared

- The Northeast Region leads the nation as a whole in the rate of patients with a diagnosis of early stage breast cancer by payer and treatment setting. The proportion of Medicaid patients receiving an early stage diagnosis of breast cancer was the highest in the Northeast Region of the five regions examined.
- The Northeast Region had the highest percentage of colorectal cancer patients with early-stage diagnoses being treated in the hospital outpatient setting, but lagged behind the Southeast Region, the Central Region, and the Southwest Region in the physician's office setting.
- The Northeast Region leads the nation in the percentage of patients receiving a diagnosis of early stage prostate cancer, except when Medicaid is the payer. In 2009, of patients treated in physicians' offices nationwide with Medicaid as the payer, 37% received an early stage diagnosis, compared with 32% in the Northeast Region.
- One-quarter of Northeast Region oncology practices are hospital-based compared with one-fifth nationwide. The Northeast Region has the highest proportion of hospital-based practices of the five regions.
- Northeast Region practices are smaller than average. Almost three-quarters (74%) of Northeast Region practices are staffed by 5 or fewer oncologists compared with 66% nationwide; 26% are operated by solo practitioners, the highest proportion of all regions.
- Over the next five years, proportionately more Northeast Region practices expect to join another practice (30%) or join an institution (31%) than practices nationwide (21%, 25%, respectively) or in any other region.

Electronic Medical Records (EMRs)

- Northeast Region practices lag practices nationwide (39% vs 44%) in the implementation of EMRs.
- EMRs are primarily used for routine business functions both in the Northeast 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, or prostate cancer were seen in hospital outpatient settings. Among breast cancer patients in the Northeast Region, 93% in the outpatient setting (90% nationwide) and 78% in physicians' offices (74% nationwide) were diagnosed with early stage disease. Among colorectal cancer patients, 89% in the outpatient setting (87% nationwide) and 58% in physicians' offices (59% nationwide) were diagnosed with early stage disease. Among prostate cancer patients, 97% in the outpatient setting (96% nationwide) and 69% in physicians' offices (63% nationwide) were diagnosed with early stage disease.
- Of patients seen in physicians' offices, both in the Northeast Region and nationwide, the proportion diagnosed with early stage cancer was higher for breast cancer (78% Northeast Region, 74% nationwide) than for either colorectal cancer (58%, 59%, respectively) or prostate cancer (69%, 63%).
- The hospital outpatient proportion of patients with an early diagnosis in the Northeast Region or nationwide was higher for prostate cancer (97%, Northeast Region, 96% nationwide), than for breast cancer (93%, 90%, respectively), or colorectal cancer (89%, 87%).
- Of patients seen in physicians' offices, 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 67% of Medicaid breast cancer patients in the Northeast Region (62% nationwide) had a diagnosis of early stage cancer, versus 80% of commercially insured patients (75% nationwide) and 75% covered under Medicare (73% nationwide). Only 46% of Medicaid patients with colorectal cancer in the Northeast Region (45% nationwide) had a diagnosis of early stage disease, compared with 58% of commercially insured patients (58% nationwide) and 59% covered under Medicare (62% nationwide). Only 32% of Medicaid patients in the Northeast Region (37% nationwide) had a diagnosis of early stage prostate cancer versus 66% of patients covered under Medicare (60% nationwide) and 74% of commercially insured patients (70% nationwide).

Care Delivery

- The preferred cancer care treatment settings of Northeast Region plans are community physicians' offices and freestanding infusion clinics (3.7 for both, 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.

- The most frequently cited reason by oncologists (Northeast Region, 51%; nationwide, 45%) for using specialty pharmacies is that the commercial payer requires their use.
- More than 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 from 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 Northeast Region (60%, 62%, respectively). The largest portion of colorectal cancer patients nationwide was covered by Medicare (50%, 35%), while commercial insurance led in the Northeast Region (51%, 50%). The largest portion of prostate cancer patients was covered by Medicare, both nationwide (66%, 50%, respectively) and in the Northeast Region (57%, 45%).
- Plans with national coverage (56%) report greater interest of employers seeking to participate in determining oncology reimbursement policy than other plan types.
- Of the 17% of practices nationwide that calculate the reimbursement rate for professional services sufficient to cover costs of care delivery by using Medicare rates as a basis, the largest single proportion, 22%, suggest that professional fees from private plans equivalent to 50% over Medicare rates would be considered fair; another 56% suggested varying higher amounts. In contrast, 44% of all plans nationwide see Medicare rates as sufficient.
- Practices nationwide and in the Northeast Region say that, under the medical benefit, drug reimbursement formulas of average sales price (ASP) plus 6% or less are most common. The most frequently used drug reimbursement rate for all three plan types is ASP plus 6%.

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 40% of Northeast Region practices (33% nationwide).
- More than a third of practices (Northeast Region, 39%; nationwide, 42%) don't know if the majority of their managed care contracts are profitable. Less than one-third of contracts are considered to be profitable (Northeast Region, 31%; nationwide, 32%).

Collaboration Among Oncologists and Health Plans

- Northeast Region plans are significantly more likely (62%) to contract with hospital-based oncology practices than are plans in all other regions (62% vs 34% nationwide) and plans with national coverage (18%).
- 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 Perspective on Breast Cancer

- Oncologists favor treatment with multiple agents.
- Northeast 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 Perspective on Prostate Cancer

- Treatment choices of oncologists for patients with localized prostate cancer vary by region. Northeast Region oncologists more commonly treat with IMRT, conformal RT, and brachytherapy than oncologists nationwide.
- LHRH is prescribed by more than half of all oncologists for stage I and II prostate cancer, treated either surgically or with radiation.
- Plans, especially plans with national coverage, are more likely to require prior authorization for treating patients with stage III and IV disease than for treating early-stage prostate cancer.

Oncologist vs Plan Perspective on Colorectal Cancer

- Northeast Region plans generally approve chemotherapy without prior authorization or medical review. However, more than half of plans with national coverage require prior authorization regardless of treatment.
- While most plans agree that stage III is an appropriate time to discuss the need for palliative care, most oncologists would not have that discussion until stage IV.

Methodology

This report on oncology practice and trends compares national averages with data gathered from the Northeast Region. Part 1 reports and interprets claims data for chemotherapy and biologic regimens used in the treatment of breast, colorectal, and prostate cancers. 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 Southeast, 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 is based on information obtained through the use of the standard Healthcare Common Procedure Coding System (HCPCS) utilizing J-codes for the billing of chemotherapy and biologics. These cancer data are from two proprietary databases that are maintained by SDI Health, LLC. One database uses claims data from physicians' offices and clinics (CMS1500); the other is based on billed hospital charges (Charge Data Master). SDI uses algorithms to project its data to national and regional levels. These two datasets are viewed in parallel but not commingled. Data presented in this section of the report are drawn from both datasets.

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

The data-reporting period includes the full calendar years 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 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, 53 (32%) indicated that their practice was located in the Northeast Region. Where appropriate, comparisons were made between averages nationwide and those of the Northeast Region. The survey was conducted in July-August 2010.

While the largest proportion, and similar percentages, of both practices nationwide and Northeast Region practices were private, single specialty practices (46% and 45%, respectively), 25% of Northeast Region practices were hospital-based, compared with 20% nationwide. Approximately three-quarters (74%) of Northeast Region practices were staffed by 5 or fewer oncologists compared with 66% nationwide. Northeast Region practices were also more likely to be operated by solo practitioners (26%, compared with 18% nationwide).

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

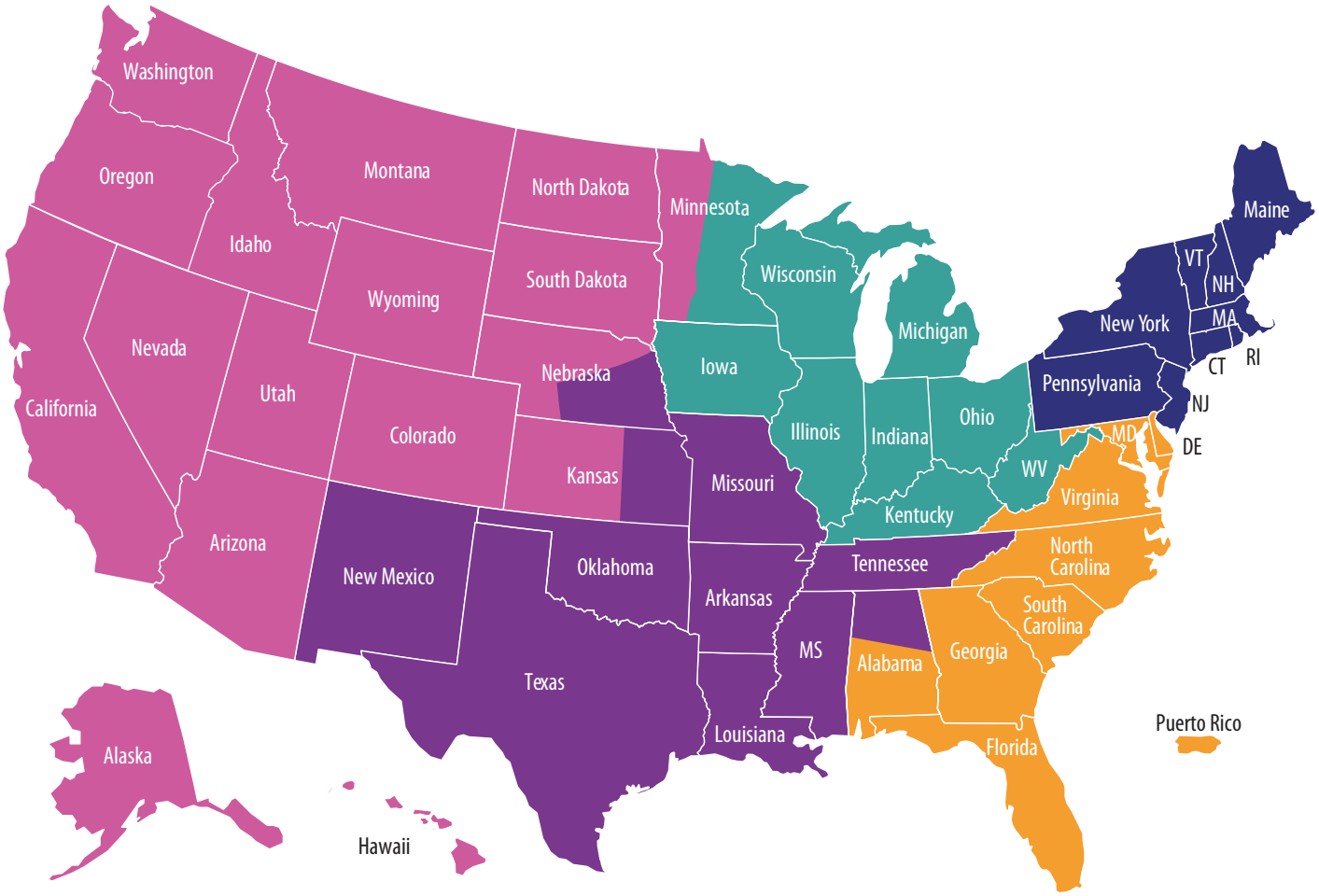
Managed Care Survey

The managed care survey was completed by 123 health plan executives: HMO/PPO pharmacy directors (39%), HMO/PPO medical directors (15%), managed care executives (9%), and others (37%), most of whom were clinical and staff pharmacists. Of the 123 survey respondents, 18 (15%) had members primarily in the Northeast 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 Northeast Region. The managed care survey was conducted in July-September 2010.

The greatest proportion of Northeast Region plan members were enrolled in HMOs (38%), followed by Medicaid (19%), PPOs (18%), and Medicare (18%). Proportions for all plans nationwide were slightly lower for HMOs (34%), PPOs (16%), and Medicaid 16%) but slightly higher for Medicare (21%). 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 Northeast Region to responses nationwide.

- Northeast
- Southeast
- Central
- Southwest
- West

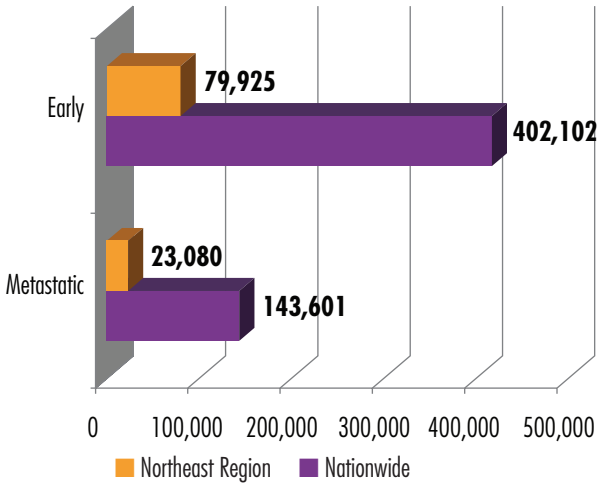
SDI Data on Patients with Breast Cancer

More than two million women living in the United States have been diagnosed with breast cancer at some point in their lives, and one in eight women in the US will be diagnosed with breast cancer during her lifetime.[1] Breast cancer is initially suspected when a lump is discovered as the result of an examination or mammography. A biopsy is used to confirm a cancer diagnosis. Breast cancer 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 independent 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. The five-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 Northeast Region. Changes from 2008 to 2009 are described in the text.

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



Treatment in Physicians' Offices

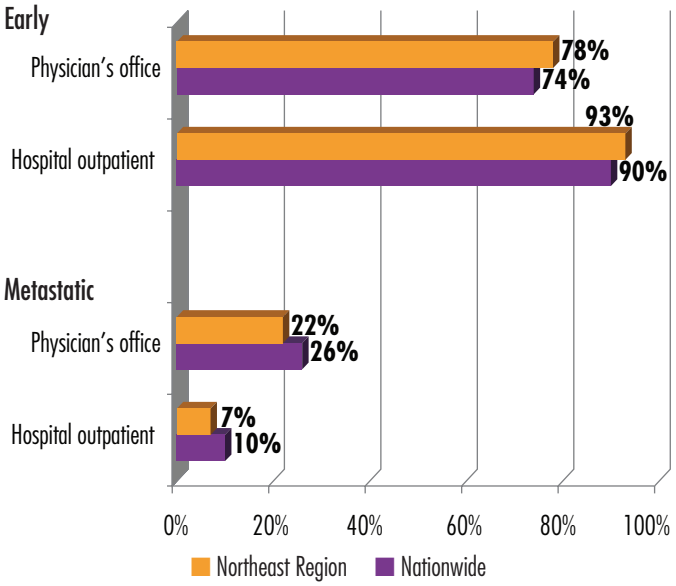
Almost 550,000 patients diagnosed with breast cancer were seen in oncologists' or hematologists' offices nationwide during 2009 (Figure 1). These patients may or may not have received chemotherapy during these visits. More than 100,000 patients (19%) of these patients were seen in the Northeast Region.

Treatment by Setting and Cancer Stage

Nationwide in 2009, of the 1.3 million patients with a breast cancer diagnosis receiving hospital outpatient 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 Northeast Region in 2009, 93% of patients receiving hospital outpatient treatment were diagnosed at an early stage, while 7% were diagnosed with metastatic disease compared with an 89%/11% split in 2008. During both 2008 and 2009, the Northeast Region had the highest percentage of early diagnoses among patients treated in the outpatient setting of any of the regions studied.

Of the almost 550,000 patients nationwide with a breast cancer diagnosis receiving treatment in physicians' offices

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

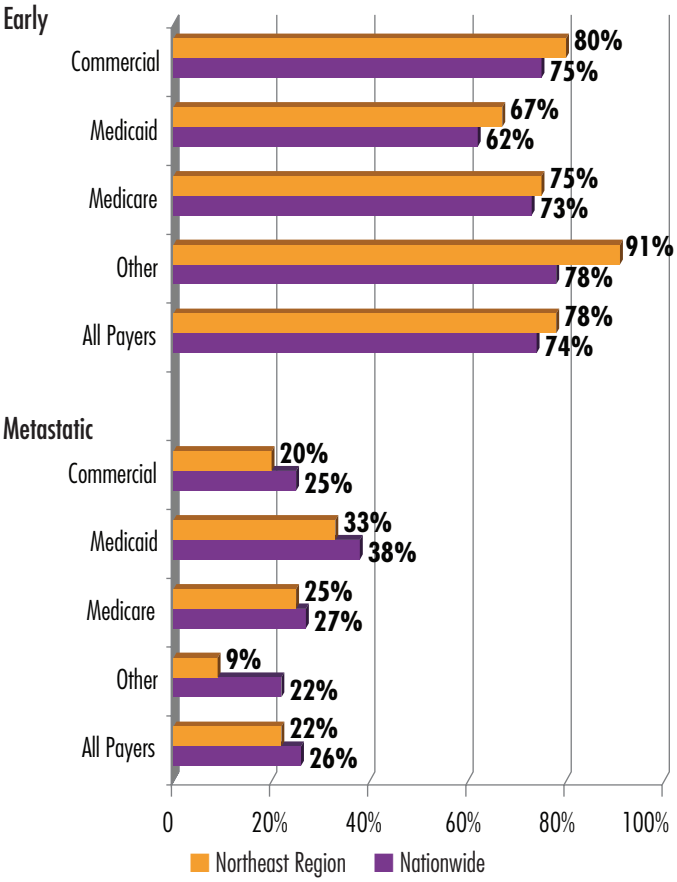


in 2009, 74% were diagnosed at an early stage while 26% were diagnosed with metastatic disease, the same percentages as in 2008 (Figure 2). In the Northeast Region in 2009, 78% of patients were diagnosed at an early stage, while 22% were diagnosed with metastatic disease; the 2008 ratio was similar at 77%/23%. In both years, the Northeast Region proportion of patients with early diagnosis among all breast cancer patients seen in physicians' offices was the highest of all five regions. 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 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 Northeast Region and nationwide (Figure 3).

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



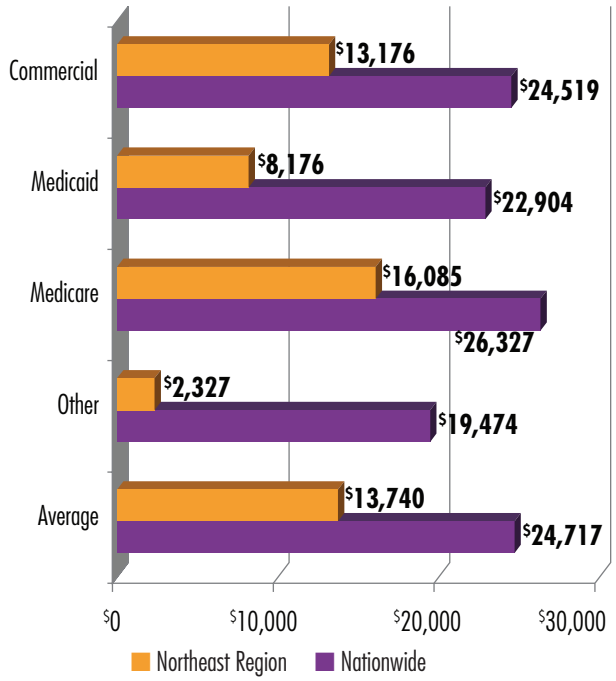
Nationwide in 2008 and 2009, 75% of commercially insured patients received an early-stage diagnosis. This compares with 73% of Medicare patients (72% in 2008) and 62% of Medicaid patients (61% in 2008). The lower rates of early diagnosis among patients covered under Medicaid reflect the difficulty these patients have in accessing care.

In the Northeast Region in 2009, 80% of commercially insured patients received an early-stage diagnosis (the same as in 2008), compared with 75% of Medicare patients (74% in 2008) and 67% of Medicaid patients (up from 61% in 2008).

"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," says Dawn Holcombe, MBA, president of DGH Consulting, although she notes that Medicaid patients in the Northeast Region fared better than patients in other regions.

Patients with "other" payers only accounted for a small percentage of visits to physicians' offices in 2009 (less than 1% in the Northeast Region and 4% nationwide), but had the highest rates of early diagnoses both nationwide and in the Northeast Region.

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



Average Charges in Physicians' Offices, by Payer

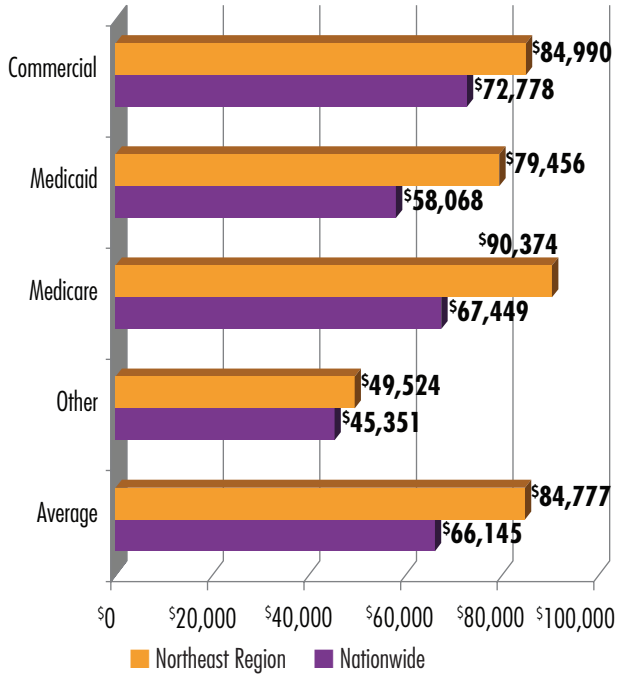
Nationwide, the average charge per patient for treatment in a physician's office was $24,717 in 2009, similar to the 2008 average of $25,000 (Figure 4). In the Northeast Region, however, the average charge in 2009 was $13,740, down more than 30% from the 2008 charge of $20,032.

The decline in charges in the Northeast Region was led by commercial insurers, whose average charge for treatment in a physician's office decreased almost 40%, to $13,176, in 2009. This decrease seems to have been driven primarily by a reported drop of more than 50% in the payment for a specific biologic in the Northeast Region. Medicare charges were virtually unchanged in the Northeast Region at $16,085 in 2009, but were up over 7% nationwide to $26,327. Among the three major payers, Medicaid had the lowest average charge both in the Northeast 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 Northeast Region (Figure 5). However, the average charge to commercial payers was up 2% in the Northeast Region to $84,990, and up 4% nationwide to $72,778. Medicare average charges were down 4% in the Northeast Region to $90,374, and down 3% nationwide to $67,449.

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



Patients by Payer and Treatment Setting

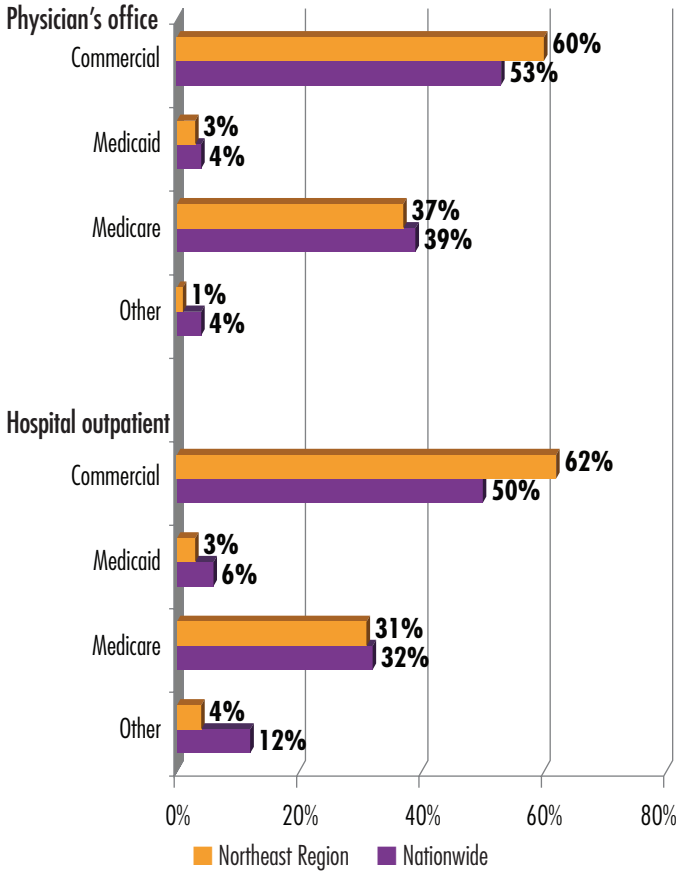
Of the three major payers, commercial payers covered the largest portion of patients treated in physicians' offices or hospital outpatient settings in both 2008 and 2009 both regionally and nationwide (Figure 6). Medicare covered the next largest portion. The "other" group, which includes government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

The percentage of patients diagnosed with breast cancer covered under Medicaid in the Northeast Region was similar to the nation as a whole, accounting for 3% to 6% of patients in 2008 and 2009 in both treatment settings.

Compliance with NCCN Guidelines by Payer

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

Figure 6 Patients with Breast Cancer by Treatment Setting and Payer



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

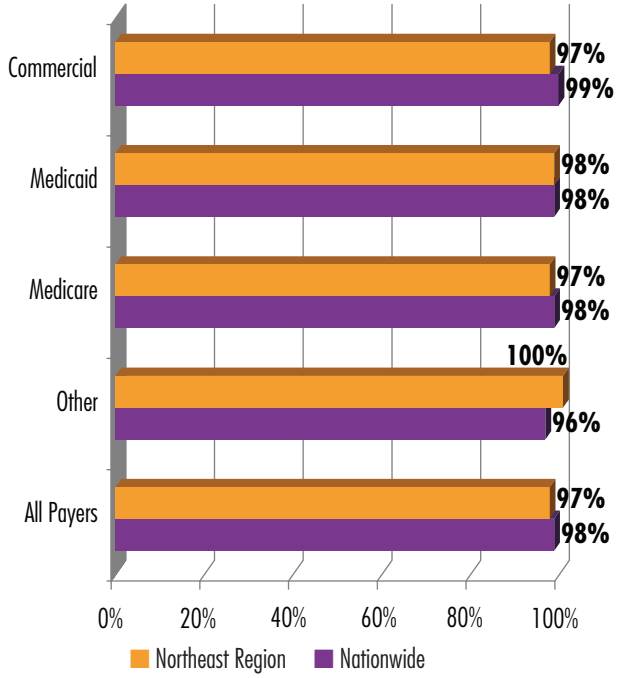
Chemotherapy treatments administered to breast cancer patients in physicians' offices are compared by payer type with those recommended in NCCN guidelines in Figure 7. Compliance with NCCN guidelines for all payer types in 2009 averaged 98% nationwide, unchanged from 2008, and 97% in the Northeast Region, up 2 percentage points from 2008.

Guideline compliance improved or was unchanged from 2008 to 2009 for all payers, both in the Northeast Region and nationwide, with the exception of compliance under Medicaid, which declined slightly in both the Northeast Region and nationwide.

Compliance with NCCN Guidelines by Treatment Setting

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

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



Treatment Charges and Compliance with NCCN Guidelines

Noncompliance with NCCN guidelines in delivering hospital outpatient care in 2009 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 2009 in physicians' offices, 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 reflect 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 costly therapies,"

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

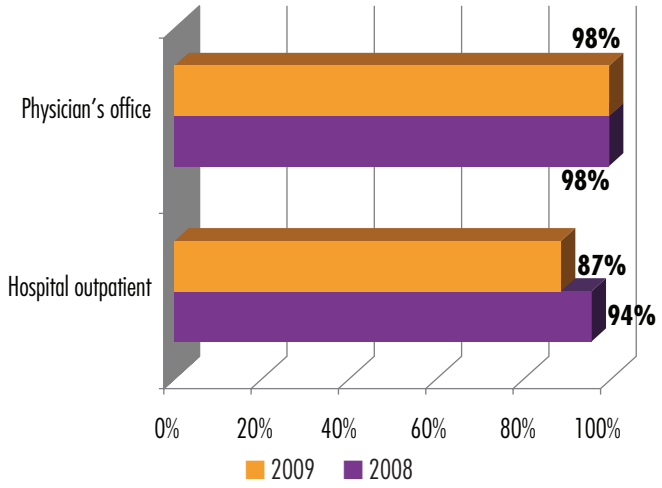
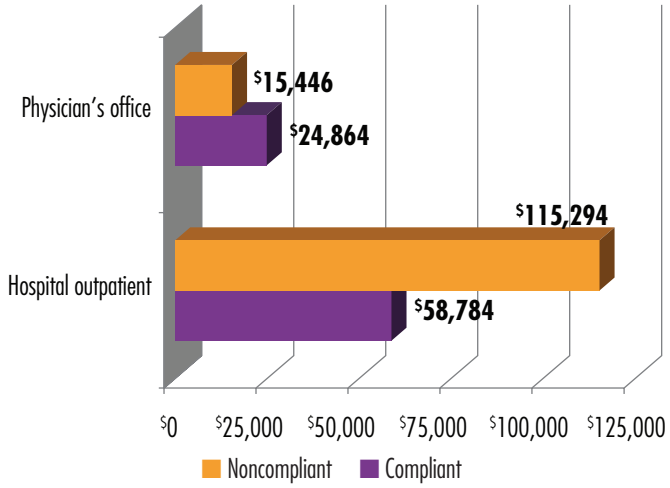


Figure 9 Average Charges for Breast Cancer Treatments, by NCCN Guideline Compliance, Nationwide



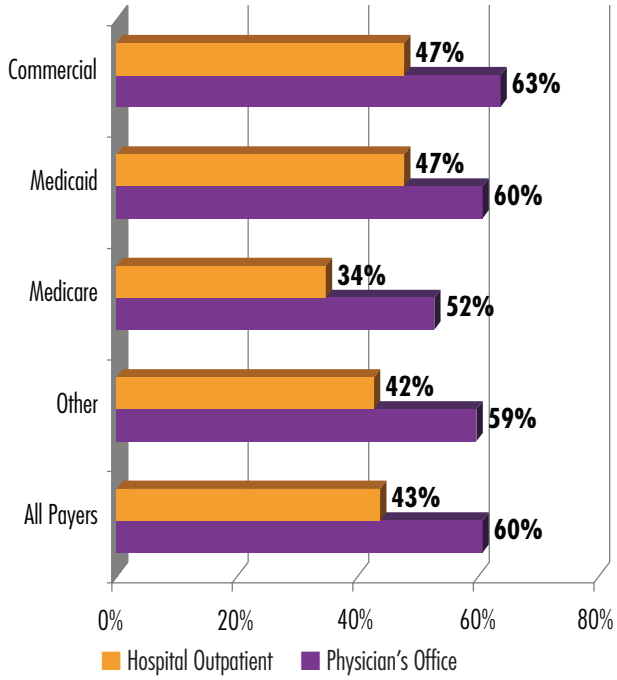
suggests Randy Vogenberg, PhD, RPh, principal, Institute for Integrated Healthcare. The impact on charges shown here, however, may be magnified by the small number of treatments that fall outside NCCN guidelines in both treatment settings.

Use of the Top 5 Regimens

Nationwide, for patients treated with chemotherapy in 2009, the five most prescribed treatment regimens accounted for 60% of chemotherapy treatments provided by physicians' offices (59% in 2008) and 43% (down from 63%) of chemotherapy treatments provided in outpatient hospital settings (Figure 10). The increased use of treatments outside the top regimens, which are typically more costly, may reflect the move of 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 for all 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 and challenging cases being treated.

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

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



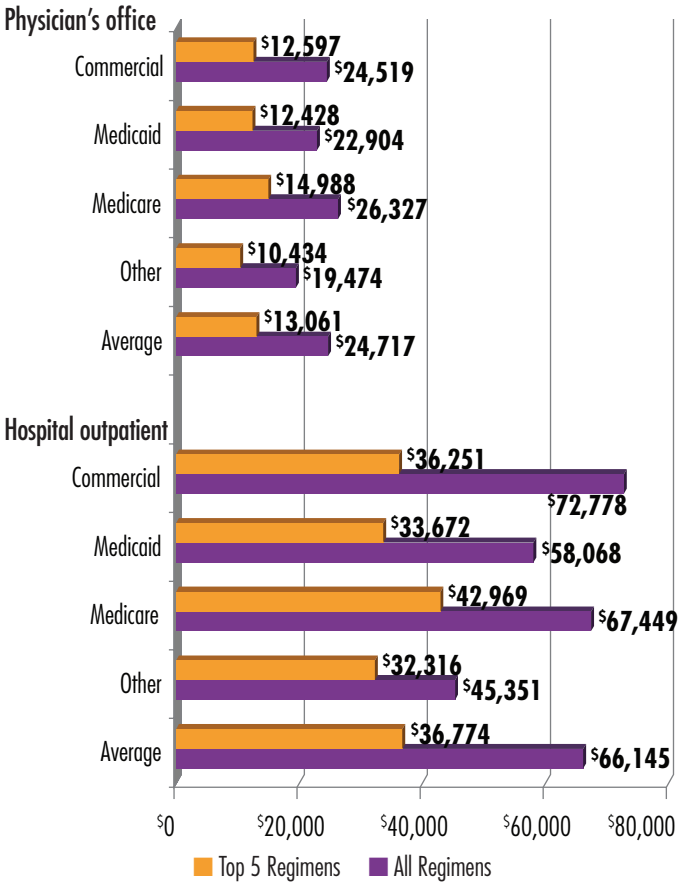
Treatment Charges for Top 5 and All Regimens

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

The 2009 average charge of $24,717 for all regimens in physicians' offices was down only 1% from 2008, but in hospital outpatient settings the average charge for all regimens increased by $12,000, to $66,145 (up 22%). Year-to-year dollar charges were lower for the top regimens, which decreased by about $1,000 to $13,061 (down 8%) in physicians' offices, and increased $12,000 to $36,774 (up 47%) in hospital outpatient settings.

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

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



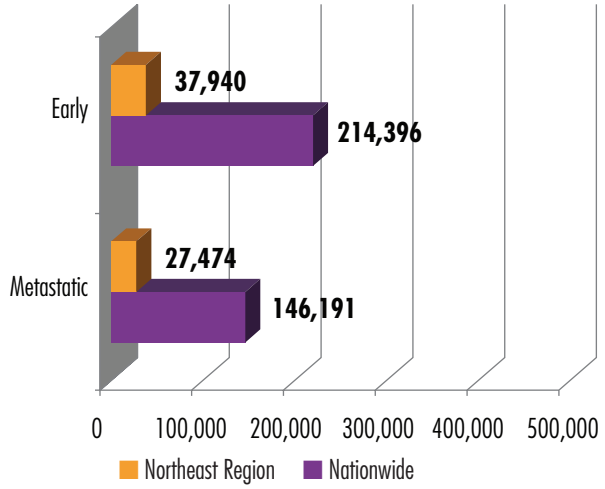
SDI Data on Patients with Colorectal Cancer

Colorectal cancer (cancer of the colon or rectum) is the third leading cause of cancer death for both men and women in the United States, with over 140,000 new cases diagnosed each year.[2] The lifetime risk for men and women of developing colorectal cancer is one in twenty.[2] Approximately 39% of patients receive early diagnoses (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 (where 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 independent judgment, to establish a treatment plan. Under the NCCN guidelines, treatment for early stage localized colon or rectal cancer is surgical removal, followed by 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 Northeast Region. Changes from 2008 to 2009 are described in the text.

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



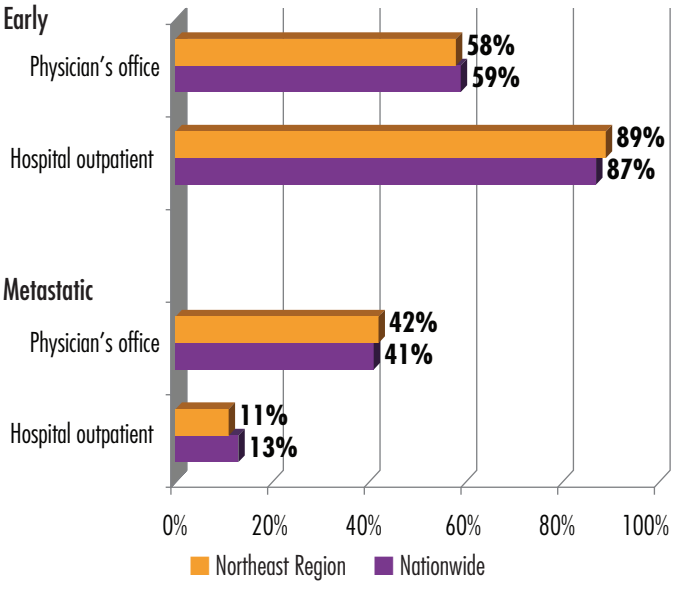
Treatment in Physicians' Offices

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 Northeast Region accounted for more than 65,000 patients seen in physicians' offices in 2009, up 1% from 2008, and representing 18% of the nationwide total in 2008 and 2009. During both years the percentage of patients with early diagnosis in the Northeast Region, compared with that of all patients with early diagnosis in physicians' offices nationwide, was the second lowest among all five regions; only the Southwest Region had a lower percentage.

Treatment by Setting and Cancer Stage

In 2009, almost 340,000 patients diagnosed with colorectal cancer were treated in hospital outpatient treatment settings nationwide (Figure 13). Among this group, 87% were diagnosed at an early stage, while 13% were diagnosed with metastatic disease. This was a change from the previous year's early/metastatic nationwide percentages of 84%/16% in outpatient treatment settings. In the Northeast Region, 89% of patients in outpatient settings were diagnosed at an early stage, the highest percentage for this treatment setting in any of the regions. The Northeast Region accounted for 34% of colorectal cancer patients treated in hospital outpatient settings nationwide in 2009, down from 39% in 2008.

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



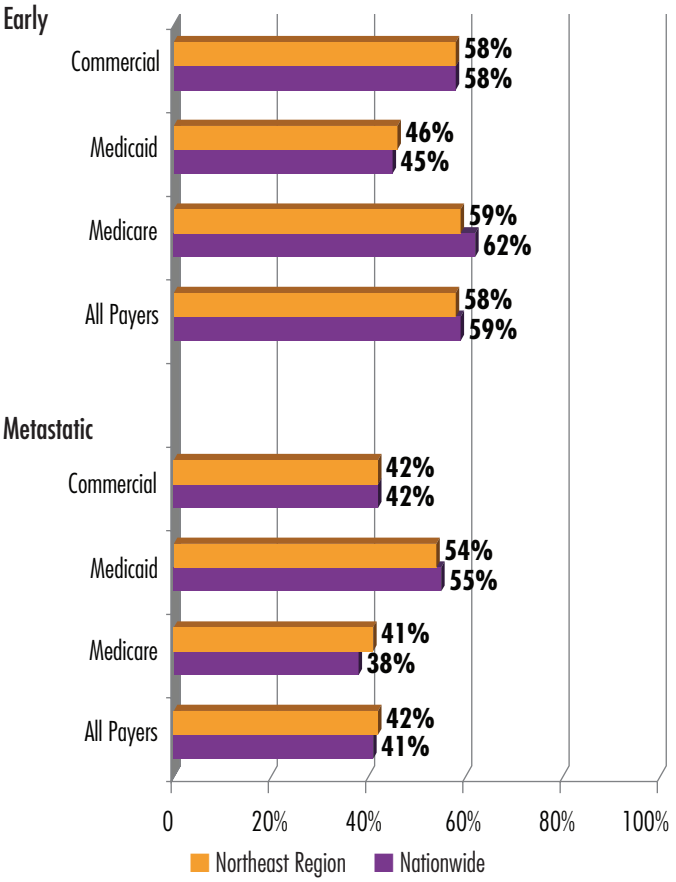
Nationwide in 2009, 59% of colorectal cancer patients treated in physicians' offices were diagnosed at an early stage while 41% were diagnosed with metastatic disease, similar to the 60% to 40% ratio seen in 2008. In the Northeast Region in 2009, 58% of colorectal cancer patients seen in physicians' offices were diagnosed at an early stage, unchanged from the previous year.

Patients in Physicians' Offices by Disease Stage and Payer Type

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

Colorectal cancer treatment in the Northeast Region was most often covered by commercial payers, who covered 51% of patients treated in physicians' offices in 2009, and by Medicare, which paid for 45%. Nationwide, colorectal cancer treatment was most often covered by Medicare, which paid for 50% of patients treated in physicians' offices in 2009, followed by commercial payers, who covered 43%.

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



Nationwide in 2009, 62% of Medicare patients treated in physicians' offices received an early-stage colorectal cancer diagnosis, unchanged from 2008 (Figure 14). This compares with 58% of commercially insured patients (59% in 2008). In the Northeast Region in 2009, 59% of Medicare patients treated in physicians' offices received an early-stage diagnosis (58% in 2008), compared with 58% of commercially insured patients (60% in 2008). When Medicaid was the payer, only 46% of patients treated in physicians' offices received an early diagnosis in the Northeast Region in 2009 but this was up from 29% in 2008.

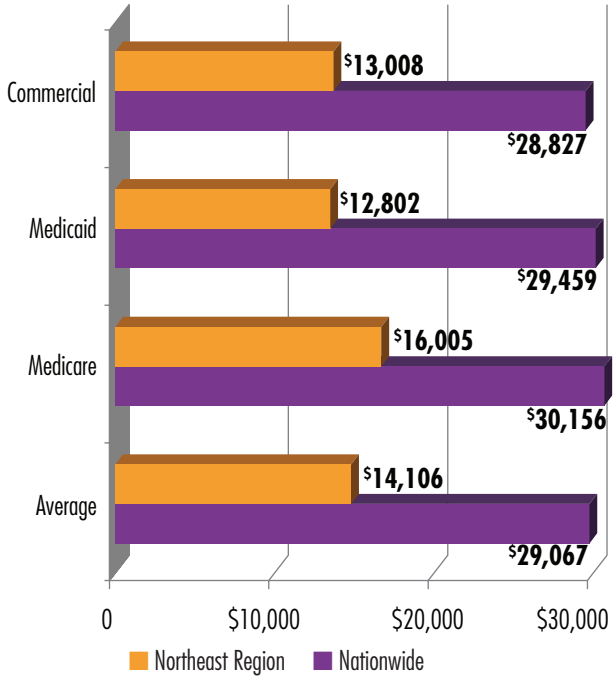
Average Charges in Physicians' Offices, by Payer

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 Northeast Region, however, the average charge in 2009 was $14,106, down 47% from the 2008 charge of $26,725.

The decline in the average charge in the Northeast Region was led by commercial payers, whose average charge for treatment in a physician's office decreased 57%, to $13,008. This drop was related in large part to the substantial drop in charges for the top treatments used by commercial payers during the period studied.

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

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



charges on a national basis, although some regional variations persist," says 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 setting."

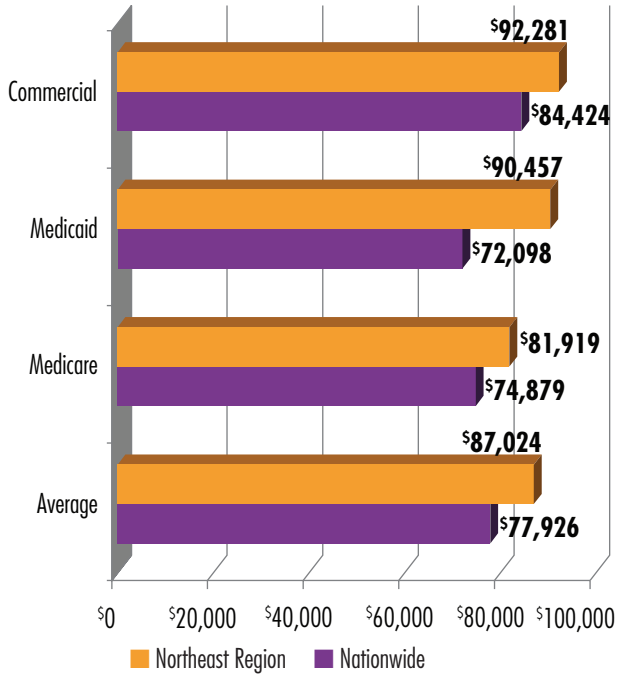
Hospital Outpatient Charges

Based on hospital Charge Data Masters (CDM), 2009 average hospital outpatient charges for patients diagnosed with colorectal cancer were virtually unchanged from the previous year both nationwide and in the Northeast Region (Figure 16). The average charge to patients insured by commercial payers increased 2% nationwide to $84,424, and increased 3% in the Northeast Region to $92,281. Medicare average charges decreased 6% in the Northeast Region to $81,919, and decreased 1% nationwide to $74,879. Medicaid 2009 CDM average hospital outpatient charges decreased 3% nationwide to $72,098, and decreased 7% in the Northeast Region to $90,457.

Patients by Payer and Treatment Setting

Of the three major payers, Medicare covered the largest portion of colorectal cancer patients treated in physicians' offices or hospital outpatient settings nationwide in 2008, and in physicians' offices in 2009 (Figure 17).

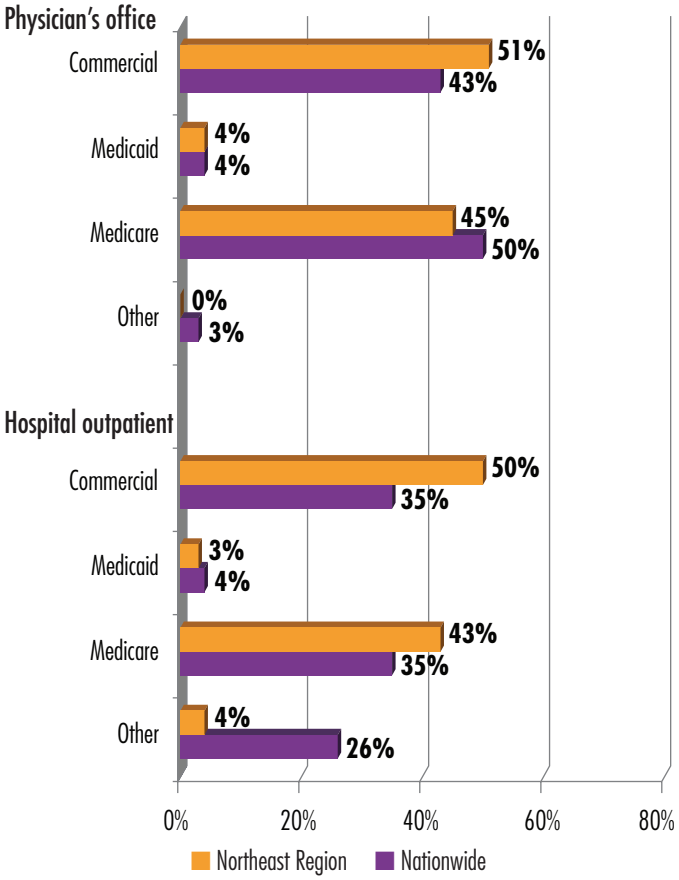
Figure 16 Hospital Outpatient Average Charges for Patients with Colorectal Cancer, by Payer (CDM)



In the Northeast Region, commercial insurers covered the largest portion: half of the colorectal cancer patients treated in outpatient settings and 51% of those treated in physicians' offices were commercially insured. Nationwide, only 35% of those treated in hospital outpatient settings and 43% of those treated in physicians' offices were covered by commercial insurance. From 2008 to 2009 the percentage of commercially insured patients increased slightly in the Northeast Region, while nationwide the percentage increased in physicians' offices, but slipped in the hospital outpatient setting. In 2009 in the Northeast Region, Medicare patients made up 45% of the patients treated in physicians' offices and 43% of those treated in hospital outpatient settings. Nationwide, Medicare paid for half of the patients in physicians' offices and for 35% in hospital outpatient settings.

Both nationwide and in the Northeast Region, the percentage of colorectal cancer patients covered in the "other" payer group, which includes government employee, military and railroad retirement plans as well as cash payers, increased in hospital outpatient settings but continued to cover a very small percentage of patients treated in physicians' offices nationwide and in the Northeast Region.

Figure 17 Patients with Colorectal Cancer by Treatment Setting and Payer



Compliance with NCCN Guidelines by Payer

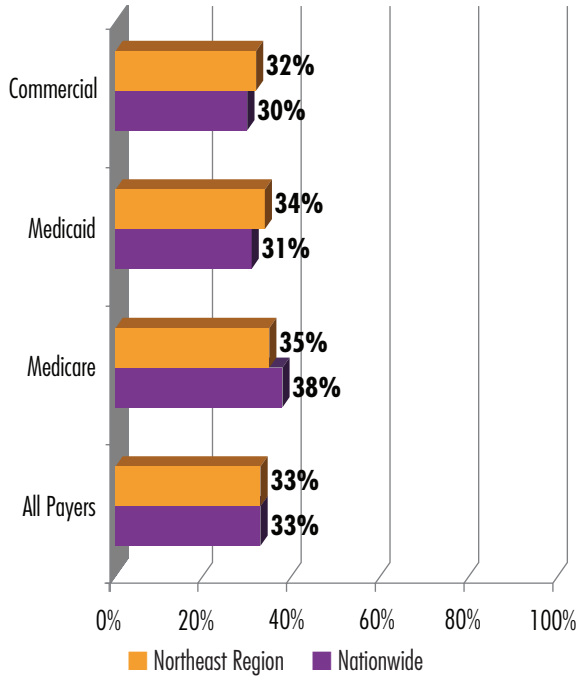
Chemotherapy treatments administered to colorectal cancer patients seen in physicians' offices were compared with the most commonly accepted guidelines for cancer care (Figure 18). Compliance with NCCN practice guidelines for patients covered under Medicare and commercial insurance in 2009 increased substantially over 2008 both in the Northeast Region and nationwide. 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 Northeast Region, NCCN compliance was 32% (up from 21%) when a commercial insurer paid, and 35% (up from 28%) when Medicare paid.

Compliance with NCCN Guidelines by Treatment Setting

Nationwide, only 33% of treatments for colorectal cancer in physicians' offices during 2009 were compliant with NCCN guidelines, although this was up 7% from the previous year (Figure 18). In hospital outpatient venues 36% of treatments were compliant, which was up 6% from the previous year (Figure 19).

"With colorectal cancer, it can be difficult to have high compliance owing to 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."

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



Treatment Charges and Compliance with NCCN Guidelines

Year-to-year changes in average treatment charges indicate that more complex/costly colorectal cancer cases have been moved from physicians' offices to the hospital outpatient setting. The result of this shift is 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.

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

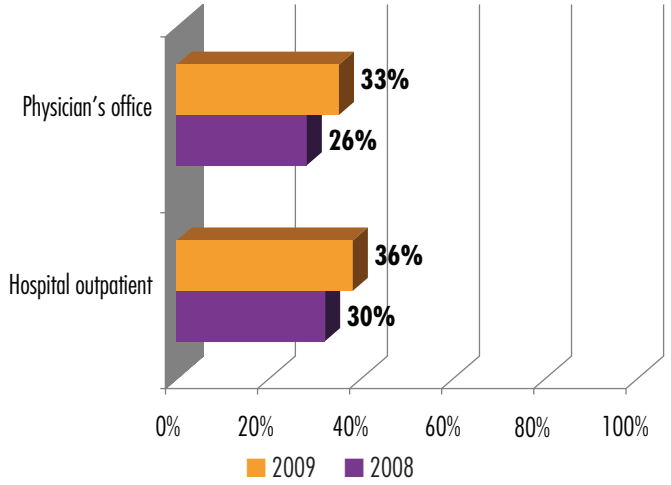
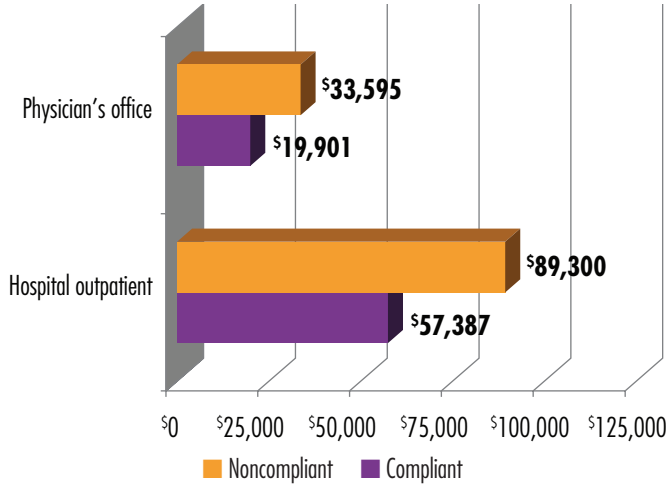


Figure 20 Average Charges for Colorectal Cancer Treatments, by NCCN Guideline Compliance, Nationwide



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.

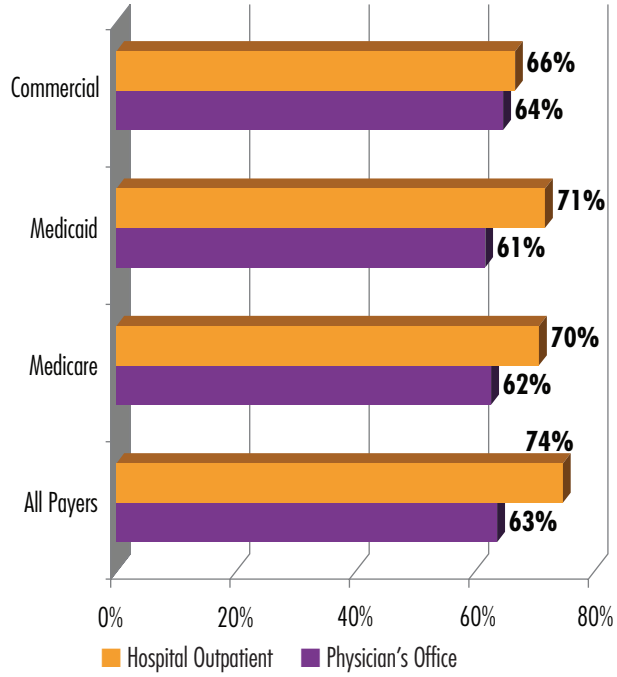
Use of the Top 5 Regimens

Nationwide, for colorectal cancer patients treated with chemotherapy in 2009, the five most prescribed treatment regimens accounted for 63% of treatments provided by physicians' offices (unchanged from 2008), and 74% of chemotherapy treatments (down from 82%) provided in hospital outpatient settings (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 setting suggests an increase in the percentage of more complex cases in the hospital outpatient setting.

Treatment Charges for Top 5 and All Regimens

Nationwide for all payers, the average charge for treatment of colorectal cancer in physicians' offices with all chemotherapy regimens was $29,067 in 2009, down from $31,674 in 2008 (Figure 22). In the hospital outpatient setting the average charge for treatment with all regimens was $77,926, up substantially from $41,256 in 2008. This is another indication that more complex/expensive cases are being shifted from physicians' offices to hospital outpatient settings.

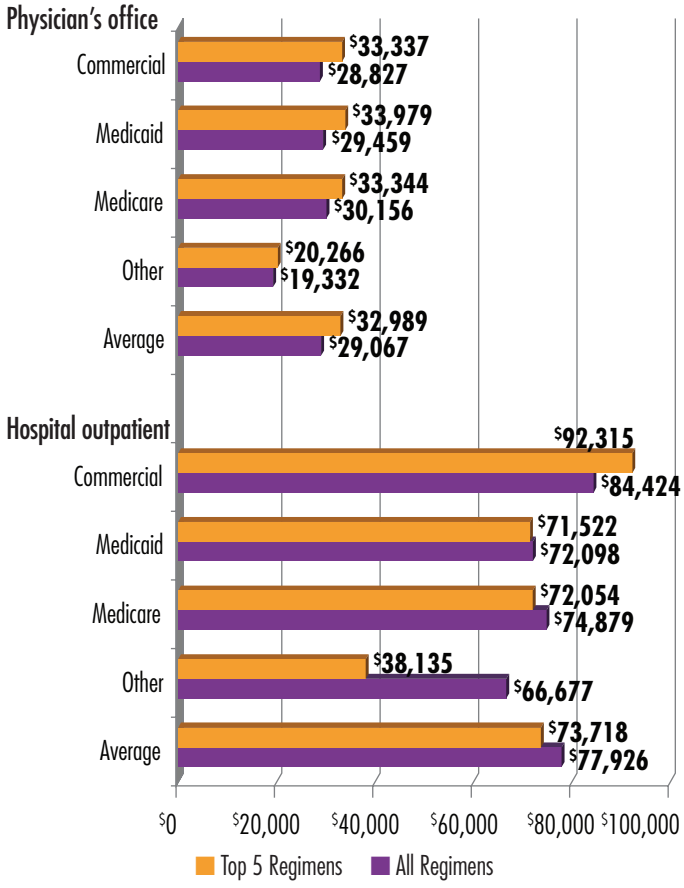
Figure 21 Colorectal Cancer Treatments Using Top 5 Regimens, by Setting and Payer, Nationwide



From 2008 to 2009, increases in treatment charges to commercial payers were generally lower than those to Medicare. Average charges to commercial payers for treatment for all regimens in physicians' offices decreased from $33,591 in 2008 to $28,827 in 2009, and from $30,573 in 2008 to $30,156 in 2009 when Medicare was the payer. Average charges to commercial payers for treatments in the hospital outpatient setting increased 46% (to $92,315) for the top 5 regimens and 57% (to $84,424) for all regimens. When Medicare paid, charges in the hospital outpatient setting averaged increases of 35% for the top 5 regimens (to $72,054), and 182% for all regimens (to $74,879).

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

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 level of prostate-specific antigen (PSA) level; and 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 independent judgment, to establish a treatment plan. Under the 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 often as every twelve 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 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 Northeast Region. Changes from 2008 to 2009 are described in the text.

Treatment in Physicians' Offices

SDI reports that almost 860,000 men diagnosed with prostate cancer were seen in physicians' offices nationwide during 2009 (Figure 23). This was a 2% increase over 2008. The Northeast Region accounted for almost 175,000 patients seen in physicians' offices in 2009, up 1% from 2008, and 20% of the nationwide total.

Treatment by Setting and Cancer Stage

In 2009, almost 840,000 men diagnosed with prostate cancer were treated in hospital outpatient settings nationwide (Figure 24). Among this group, 96% were diagnosed at an early stage, while 4% were diagnosed with metastatic disease, unchanged from 2008. In the Northeast Region in 2008 and 2009, 97% of patients in outpatient settings were diagnosed at an early stage, the highest percentage for this treatment setting of any of the regions.

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

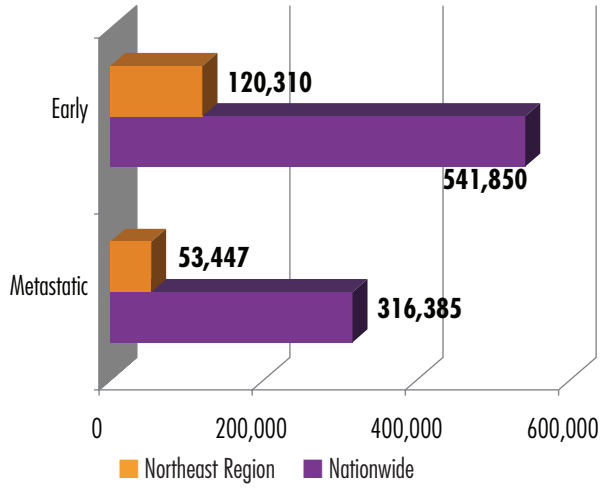
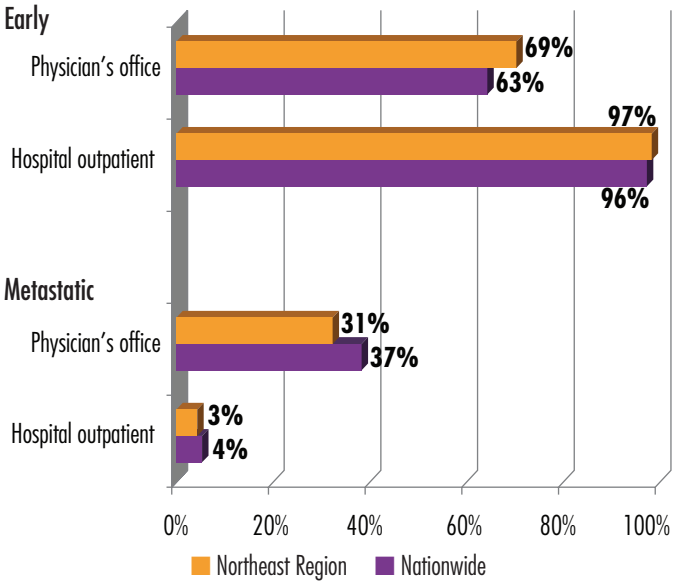


Figure 24 Patients Diagnosed with Prostate Cancer by Disease Stage and Treatment Setting

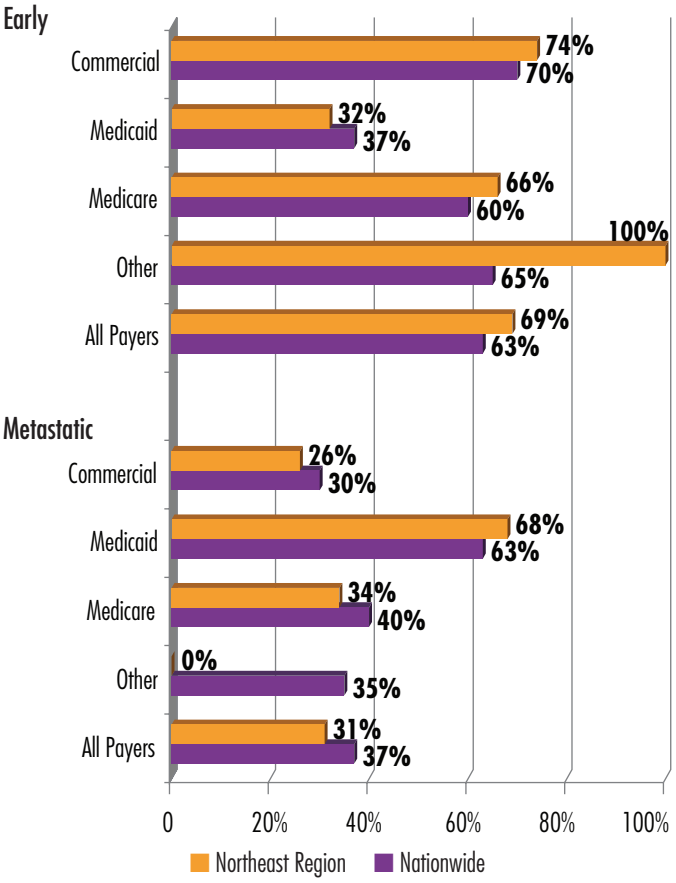


In physicians' offices nationwide in 2009 and in 2008, 63% of prostate cancer patients were diagnosed at an early stage while 37% were diagnosed with metastatic disease. For both 2008 and 2009, 69% of Northeast Region prostate cancer patients seen in physician offices were diagnosed at an early stage, the highest percentage for this treatment setting of any of the regions.

"Owing to increased screening for cancer in men overall, the rate of prostate cancer diagnoses has been inching upwards," says Randy Vogenberg, PhD, RPh, principal at the Institute for Integrated Healthcare. "This has been especially true in hospital owned settings where affiliated physicians have steadily increased screening rates."

In 2009, the Northeast Region accounted for 20% of nationwide prostate cancer cases seen in physicians' offices, down from 21% in 2008. The region also accounted for 36% of prostate cancer patients treated in hospital outpatient settings nationwide during 2009, down from 42% in 2008.

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



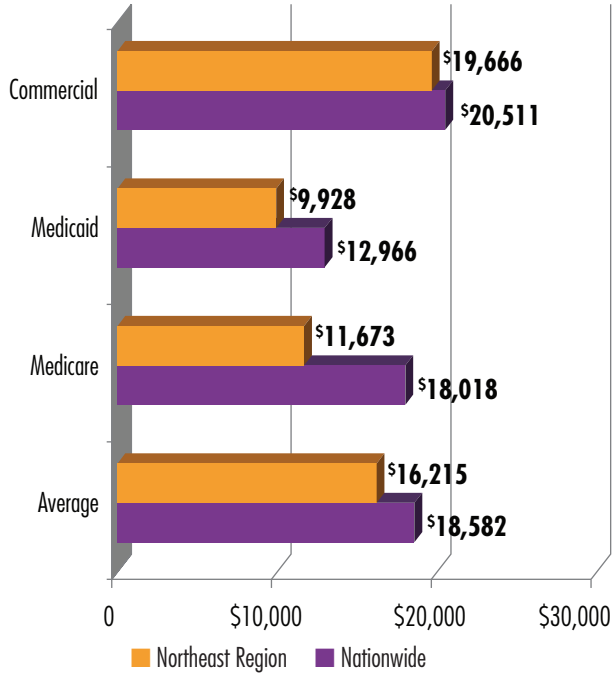
Patients in Physicians' Offices by Disease Stage and Payer Type

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

Prostate cancer treatment in the Northeast Region in 2009 was most often paid for by Medicare, which covered 57% of patients treated in physicians' offices. Commercial payers covered 42% of these patients in 2009. Nationwide, prostate cancer treatment was also most often covered by Medicare, which covered 66% of patients treated in physicians' offices in 2009; commercial payers covered 33%.

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 (down from 61% in 2008). Also nationwide in 2009, only 37% of Medicaid patients (down from 39% in 2008) were diagnosed early who were seen in this treatment setting.

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



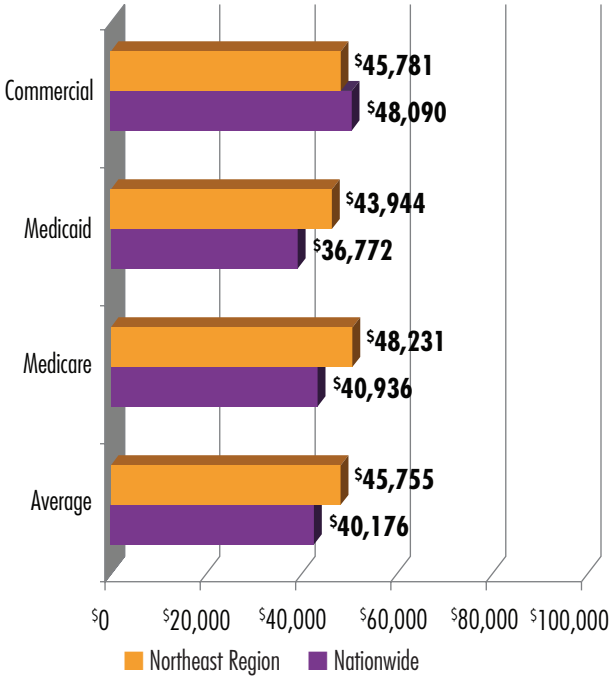
In the Northeast Region in 2009, 74% of commercially insured patients treated in physicians' offices received an early-stage diagnosis (75% in 2008), compared with 66% of Medicare patients (65% in 2008). Only 32% of Medicaid patients (down substantially from 68% in 2008) in this treatment setting received an early diagnosis (the percentage change may be magnified by the small base of prostate cancer patients involved; Medicaid patients accounted for only 1% of patients seen in physicians' offices both regionally and nationwide during 2008 and 2009).

Average Charges in Physicians' Offices, by Payer

Nationwide, the average charge per patient for treatment of prostate cancer in physicians' offices was $18,582 in 2009, up 2% from the 2008 average of $18,236 (Figure 26). In the Northeast Region, the average charge in 2009 was $16,215, down 13% from the 2008 charge of $18,630.

The decline in the average charge in the Northeast Region was led by Medicare, for which the average charge for treatment in a physician's office decreased 28% to $11,673. This drop was related in large part to a 35% drop in charges for the top treatments under Medicare in the time period studied. Commercial payer charges also decreased in the Northeast Region by 6% to $19,666 during that time. Medicaid had the lowest average charge both in the Northeast Region and nationwide in 2008 and 2009, but showed the largest percentage increase of all the payers in the Northeast Region, up 30% to $9,928. However, this had little impact on the average, as Medicaid accounted for only 1% of patients receiving prostate cancer treatment in physicians' offices in the Northeast Region and nationwide in 2008 and 2009.

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



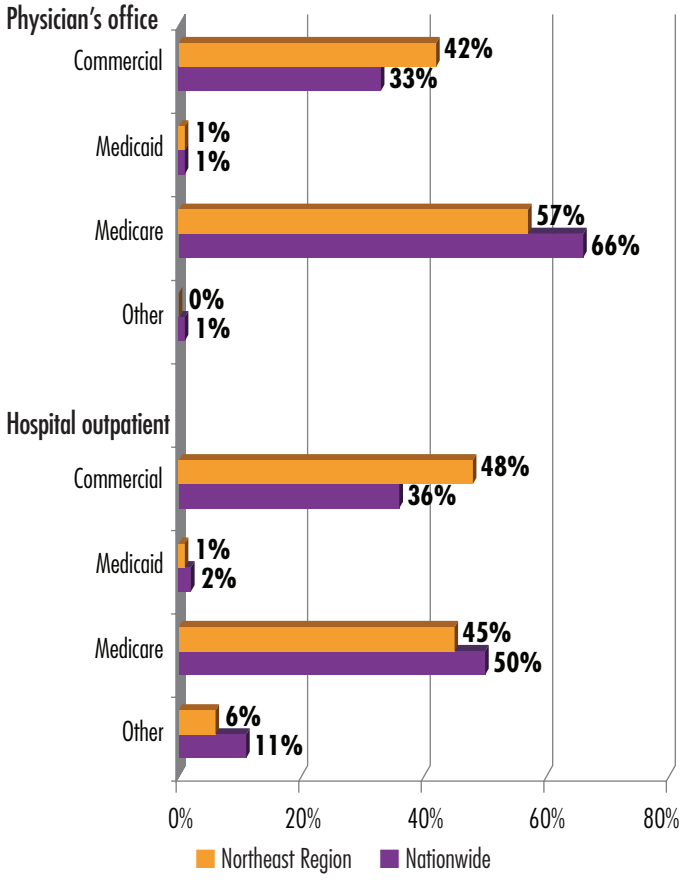
Hospital Outpatient Charges

Based on hospital data from Charge Data Masters (CDM), 2009 average hospital outpatient charges for patients diagnosed with prostate cancer were similar to 2008 charges both nationwide and in the Northeast Region (Figure 27). However, the average charge to patients insured by commercial payers was up 8% nationwide (to $48,090) and down 1% in the Northeast Region (to $45,781). Medicare average charges were up by 1% in the Northeast Region (to $48,231), and 4% nationwide (to $40,936). Medicaid 2009 CDM average hospital outpatient charges were up 4% nationwide (to $36,772) but down 3% in the Northeast Region (to $43,944).

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

Figure 28 Patients with Prostate Cancer by Treatment Setting and Payer



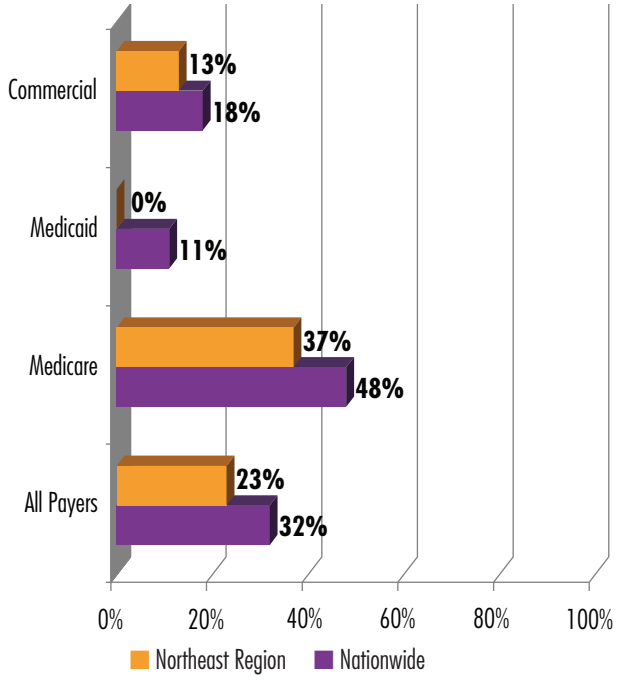
half) nationwide in both 2008 and 2009 (Figure 28). In physicians' offices nationwide in 2009, commercially insured patients accounted for almost all of the rest, except for the 1% covered by Medicaid. In 2009, 11% of patients nationwide and 6% of patients in the Northeast Region diagnosed with prostate cancer and treated in hospital outpatient settings were covered in the "other" payer group, which includes government employee, military and railroad retirement plans as well as cash payers.

Compliance with NCCN Guidelines by Payer

Chemotherapy treatments administered to prostate cancer patients 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 23% in the Northeast Region (27% in 2008) (Figure 29).

Nationwide and in the Northeast Region, treatments for prostate cancer patients paid by Medicare had the highest compliance levels in 2009: 48% nationwide (49% in 2008) and 37% in the Northeast Region (down from 44%). The relatively high rate of guideline compliance for care covered by Medicare is because Medicare will pay for treatments detailed in five compendia, one of which is NCCN, but will not pre-approve other care plans. Thus, physicians may be more likely to limit treatment to approved compendia when Medicare is the payer, explains Dawn Holcombe, MBA, president, DGH Consulting.

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



Compliance with NCCN Guidelines by Treatment Setting

Nationwide, only 32% of treatments 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).

Treatment Charges and Compliance with NCCN Guidelines

Noncompliance with NCCN guidelines in delivering hospital outpatient care in 2009 was associated with reduced treatment charges nationwide, averaging $31,919 per patient, $12,463 lower than the $44,382 charged for compliant care delivered in an outpatient care setting during this period (Figure 31). These average charges are surprising, given that non-compliant care is usually associated with more complex cases and higher charges.

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

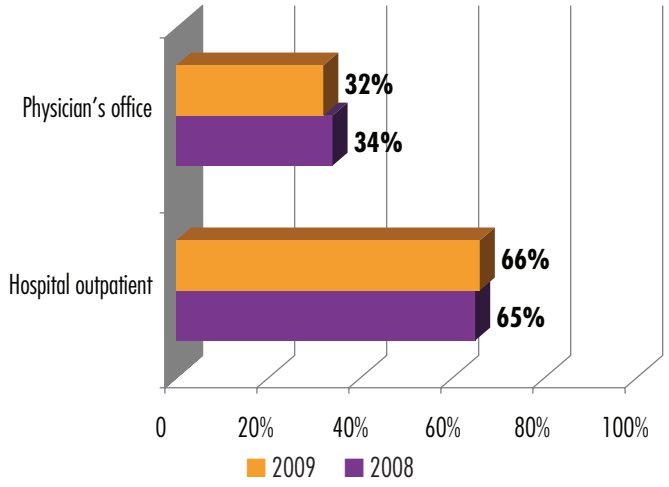
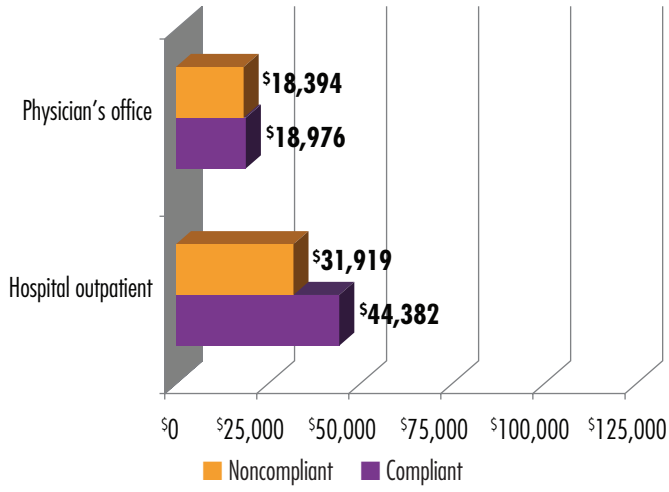


Figure 31 Average Charges for Prostate Cancer Treatments, by NCCN Guideline Compliance, Nationwide

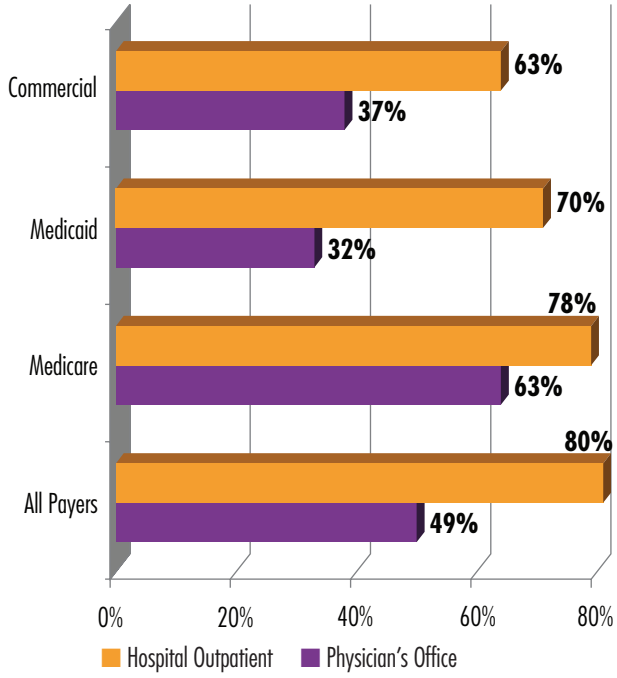


For care delivered in physicians' offices, noncompliant per-patient charges were similar to those for compliant care ($18,394 and $18,976, respectively).

Use of the Top 5 Regimens

Nationwide, for prostate cancer patients treated with chemotherapy and biologics in 2009, the five most prescribed treatment regimens accounted for 49% of treatments provided by physicians' offices (50% in 2008) and 80% (93% in 2008) of treatments provided in outpatient hospital settings (Figure 32). While the percentage of use of the top 5 regimens remained consistent year-to-year in physicians' offices, the decline in their use in the hospital outpatient setting suggests an increase in the percentage of more complex cases being treated in this setting.

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

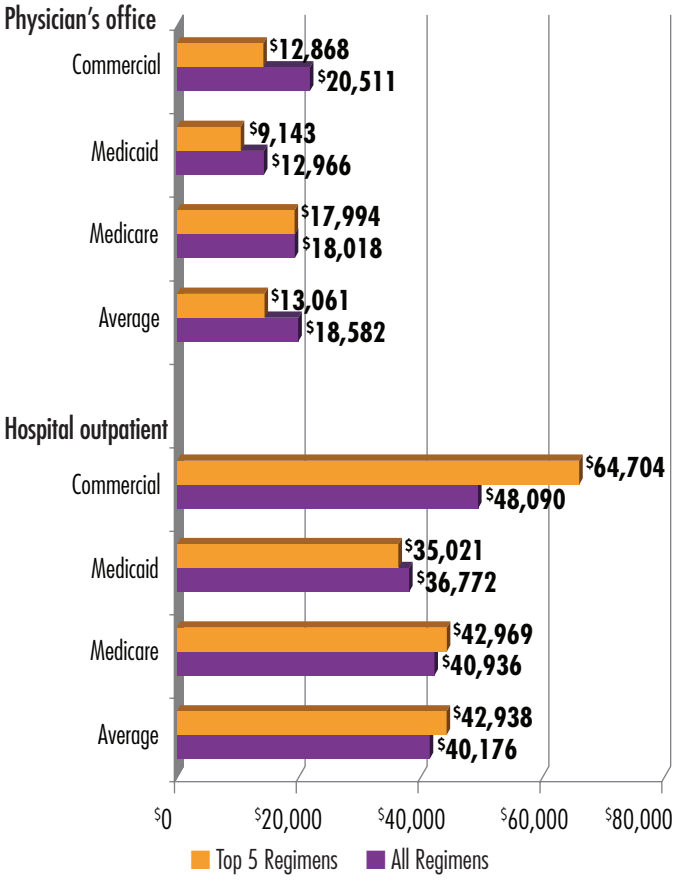


Treatment Charges for Top 5 and All Regimens

On a nationwide basis, the average charge for all chemotherapy and biologic regimens in physicians' offices was $18,542 in 2009, 42% higher than the average charge for the top 5 regimens in this setting (Figure 33). All regimens average treatment charges were higher than for the top regimens in physicians' offices in 2008 as well, although only by 8%. The year-to-year 10% increase in the average charge for all regimens for hospital outpatients indicates a shifting of more costly cases to this treatment setting from physicians' offices.

As previously noted, chemotherapy in hospital outpatient settings is typically associated with higher average charges than chemotherapy delivered in physicians' offices, and this held true during 2009. During this period the average charge per patient receiving chemotherapy treatments in the outpatient setting was $40,176 for all regimens, more than double the $18,582 charged for treatment in physicians' offices. The average top regimen charge per patient was $42,938 in outpatient settings, more than three times the charge for treatment in physicians' offices.

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



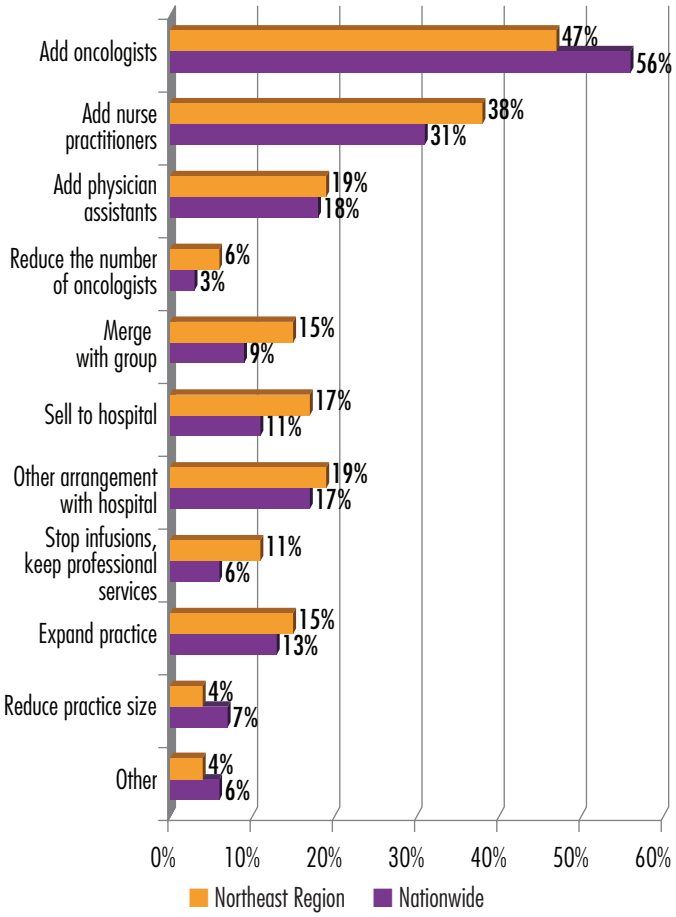
Oncology Practice Survey Findings

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

A total of 165 oncology physicians (93%) and administrators (7%) nationwide responded to the survey. Of these, 53, or 32%, are in the Northeast Region. Three quarters (74%) of Northeast respondents are in practices of 5 or fewer physicians, compared with 66% nationwide.

Proportionately more practices in the Northeast Region are considering changes than practices nationwide: 15% are considering merging with another medical group and 36% are considering selling to a hospital or developing some other collaborative hospital arrangement (Figure 34).

Figure 34 Potential Changes to Practice



Commitment to Patient Care

Responses concerning payer and patient care policies demonstrate that oncologists' commitment to patient care and to preserving access to services and care in their offices exceeds their focus on the business of care delivery. About half of practices (52% in the Northeast Region and 49% nationwide) report that they now see more patients than a year ago. At the same time, more than half of practices in the Northeast Region (55%) and nationwide (52%) report decreasing net profit. Despite these strains, more than half of practices (56% in the Northeast Region and 58% nationwide) indicated, when asked how they would respond to proposed Medicare reimbursement cuts of as much as 20% to 30%, that they would continue to treat Medicare patients as usual. Nearly one third (31%) of oncologists nationwide and 28% in the Northeast Region say they may need to identify alternative sites of service for Medicare patients, such as hospitals, which would prove more costly to Medicare and private insurers. Already many practices report that they refer some patients to a hospital-based infusion center (74% in the Northeast Region and 69% nationwide).

Practices also report that patients are choosing to delay or cancel care due to costs of treatment. Forty-three percent of Northeast Region practices report that 11% or more of patients have requested changes in their care plan (32% of practices nationwide). Almost half (49%) percent of Northeast Region practices report that 11% or more of patients have stopped taking oral medications early because of cost (45% nationwide).

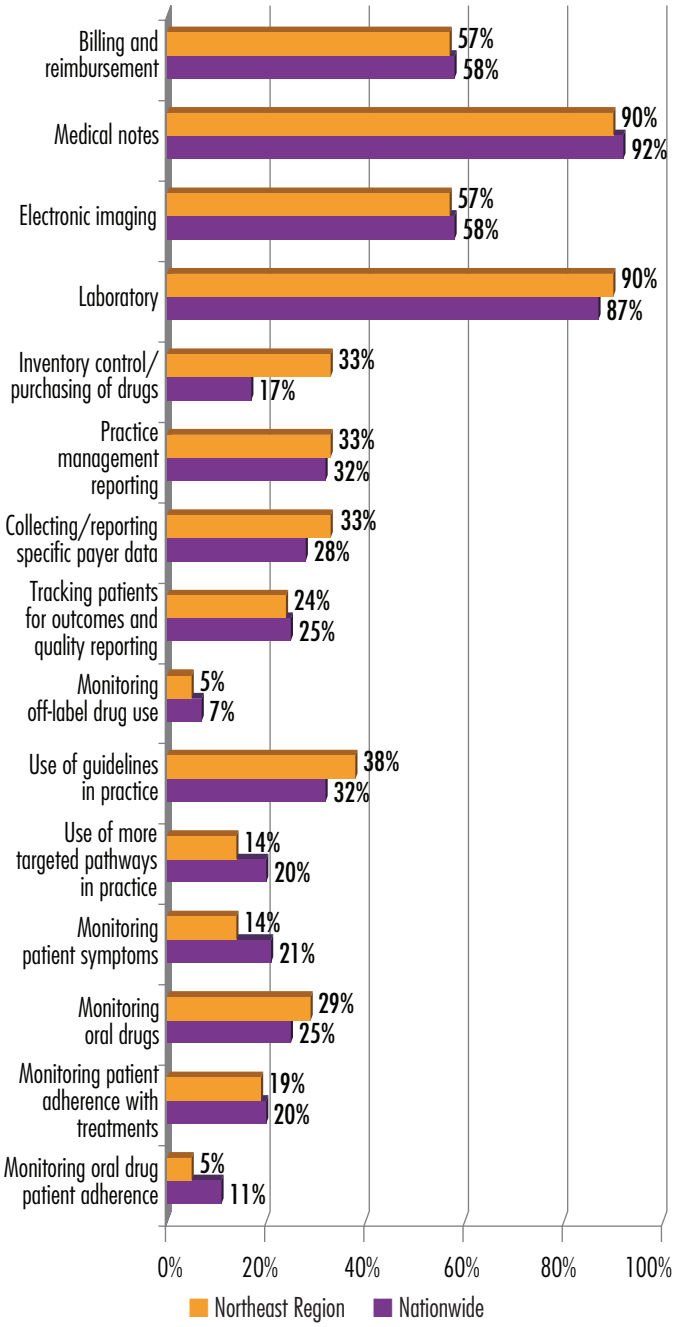
Use of Electronic Medical Records (EMRs)

Only 39% of practices in the Northeast Region and 44% of practices nationwide reported using an EMR system. There is considerable variation in the type of system used, with a similar proportion of practices (24% in the Northeast Region and 28% nationwide) using a hospital-provided/based system as use an oncology-specific EMR.

It is a lengthy process to select, install and implement an EMR. Almost one third (30%) of Northeast Region practices and 22% of practices nationwide have not yet fully implemented an EMR. Another 43% of Northeast Region practices have had an EMR for two years or less (39% for practices nationwide).

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

Figure 35 EMR Utilization



Almost half of practices (49% in the Northeast Region and nationwide) do not collect data through their EMR or electronic order entry system (EOES). Of those that do, just 12% in the Northeast Region and 9% nationwide have been able to sell their data or gain preferential reimbursement consideration.

Use of Practice Guidelines

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

Respondents were most likely to use as a reference the National Comprehensive Cancer Network (NCCN) Guidelines (82% in Northeast Region and 89% nationwide). Less than half of all respondents monitor compliance to guidelines or pathways (41% in the Northeast Region and 35% nationwide). Of those practices that do monitor compliance, the greatest number audit or monitor compliance every three months (34% in the Northeast Region and 37% nationwide).

Only 19% of practices in the Northeast Region and 25% nationwide report guideline integration into an EMR. While 37% in the Northeast Region and 33% nationwide track compliance, only 4% of practices in the Northeast Region and nationwide report receiving rewards for guideline compliance.

Use of Specialty Pharmacies

While oncology practices do accept specialty pharmacy drugs in their practice, such utilization occurs only under specific situations, eg, for selected drugs, or for specific payers under limited circumstances. The majority of practices do not accept drugs from specialty pharmacies when shipped directly to the patient (57% in the Northeast Region, 63% nationwide), but about half will allow some specialty pharmacy drugs to be shipped directly to the practice (54% in the Northeast Region, and 50% nationwide). Two thirds (67%) of practices in the Northeast 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 (51%) in the Northeast Region and 45% nationwide use specialty pharmacy drugs because the commercial payer requires it and 53% in the Northeast Region (49% nationwide) do so because of inadequate drug

reimbursement margins or reimbursement rates too low to support buy and bill. Nationwide, 34% of practices and 36% in the Northeast Region report using specialty pharmacies for 5% or less of their total drug orders for oral drugs; for injectable drugs, about two thirds (64% in the Northeast Region and 66% nationwide) report ordering 5% or less from specialty pharmacies.

Oncology Management Programs

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

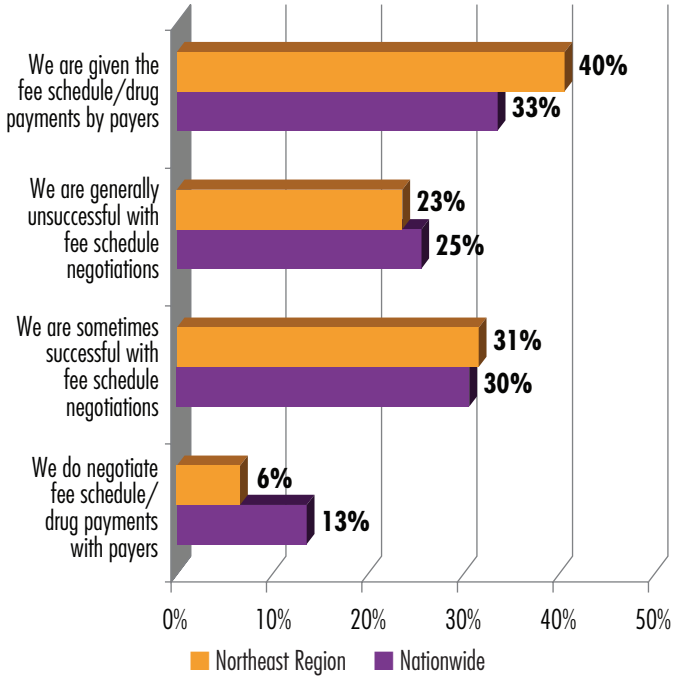
Reimbursement Issues

Oncologists see a growing chasm between Medicare payment policy and what they deem to be acceptable reimbursement rates. Respondents were asked to estimate what rate of payment for professional services by private payers (in relation to proposed 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 Northeast Region, 27% estimated less than 50% over Medicare rates and 27% estimated 150% over Medicare rates (19% for both nationwide), while 18% in the Northeast Region estimated that both 50% and 100% over Medicare rates would be adequate (22% and 14% respectively nationwide).

Oncology practices report a distinct lack of success in creating effective contracts with payers (Figure 36). Many oncology practices lack basic information concerning the profitability of working with specific plans. Just 31% in the Northeast Region and 32% nationwide feel their contracts with the majority of managed care plans are profitable. The contracts are considered unprofitable by 30% in the Northeast Region and 26% nationwide. The largest response, 39% in the Northeast Region and 42% nationwide, was "don't know."

The costs of oncology drugs and their handling constitute the largest component of the costs of running an oncology practice, yet only 44% of practices in the Northeast Region and 53% nationwide report having taken steps to identify

Figure 36 Practice-Payer Fee Negotiations

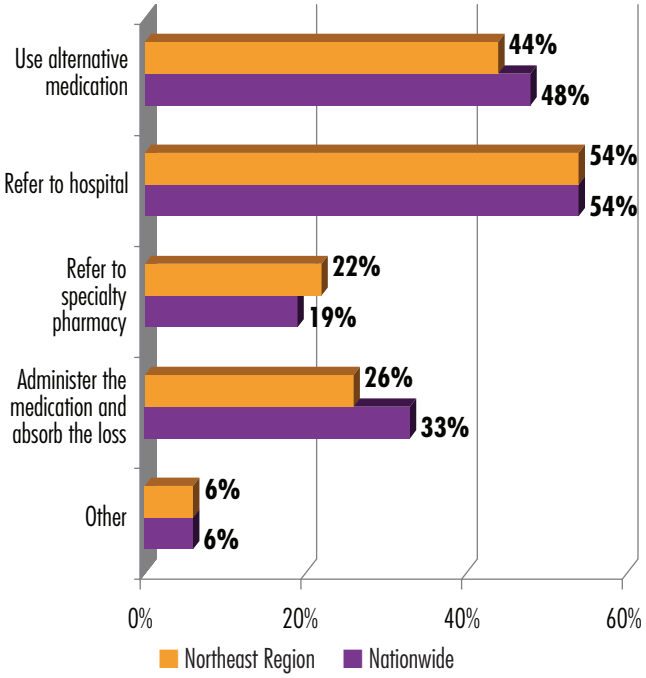


potential losses for specific oncology infusion therapies. When asked what they would do in cases where delivery of a medication would result in a revenue loss, most would refer the patient to the more costly hospital setting or use an alternative medication if one exists (Figure 37).

In the face of increasing fiscal and operational challenges, practices are turning to a variety of options to increase practice revenues. The most popular choices are tightening controls on coding and documentation (56% and 50% respectively in the Northeast Region and 60% and 56% respectively nationwide), and participating in federal performance programs such as Physician Quality Reporting Initiative and e-prescribing (20% and 24% respectively in the Northeast Region and 18% and 20% respectively nationwide). Almost a quarter (24%) in the Northeast Region and 20% nationwide have made no changes.

The most commonly reported reimbursement rate (39%) in the Northeast Region for drugs in the physician practice is average sales price (ASP) plus 0%–5%, with ASP plus 6% a close second (36%). For practices nationwide, 43% report ASP plus 6% and 27% report ASP plus 0%–5%.

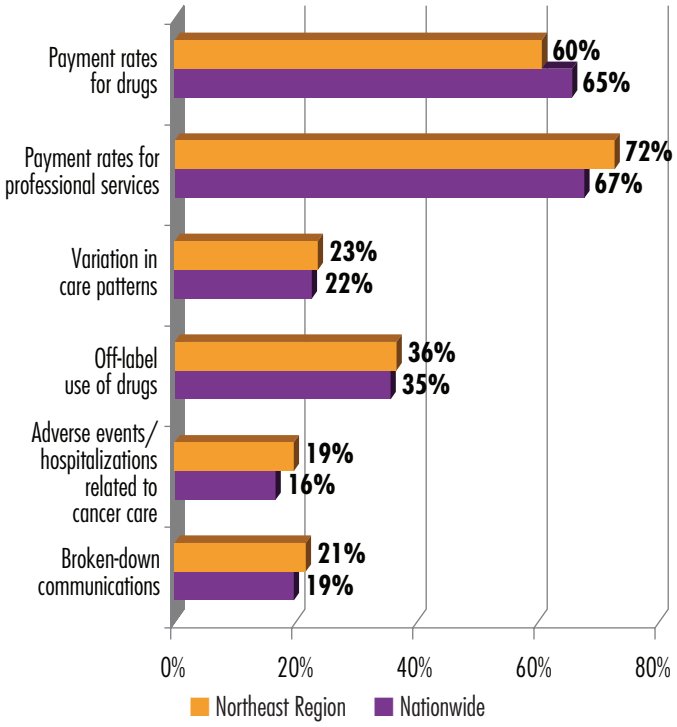
Figure 37 When Use of a Drug Will Result in Revenue Loss



Practice-Payer Relations

Almost three-quarters (74%) of Northeast Region practices and 68% of practices nationwide state that their relationship with payers goes no further than annual contracting.

Figure 38 Issues Affecting Provider-Payer Relations

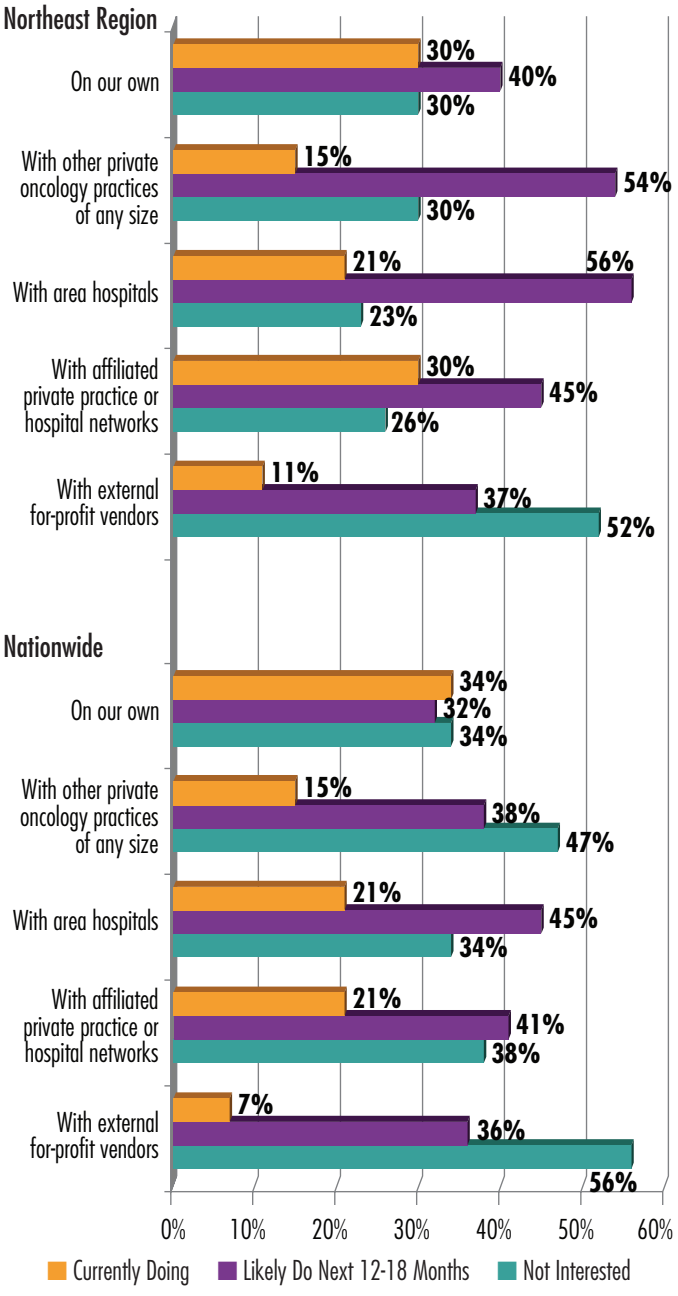


For Northeast Region practices and all practices nationwide, the most sensitive issue with payers is payment rates for professional services (Figure 38).

Collaborative Prospects

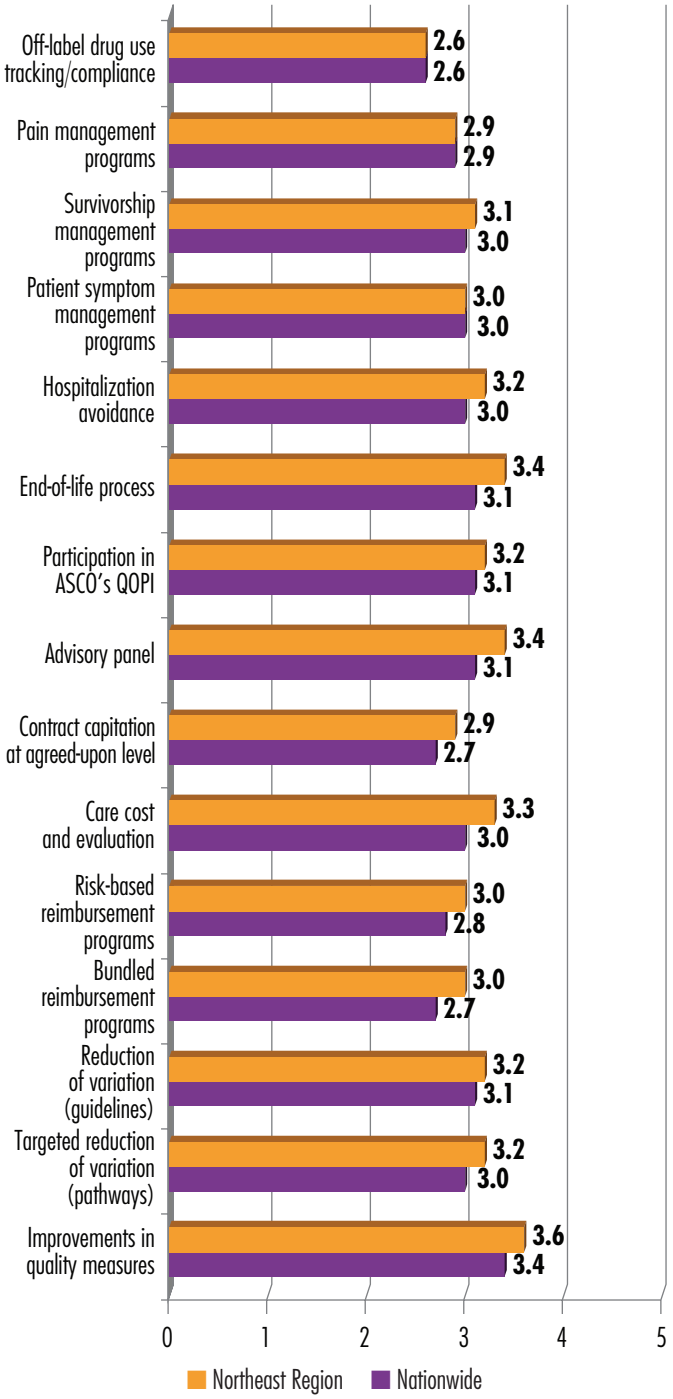
When asked about collaborating with other care providers in exploring key payer programs related to oncology, Northeast Region practices show a much higher interest (77%, combining currently doing and likely to do) in working with area hospitals than do practices nationwide (66%) (Figure 39).

Figure 39 Oncology Practice Interest in Payer Programs



Practices are also looking at programmatic collaborations and innovative programs with payers. All practices show the most interest in improvements in quality measures programs, end-of-life process and advisory panels (Figure 40).

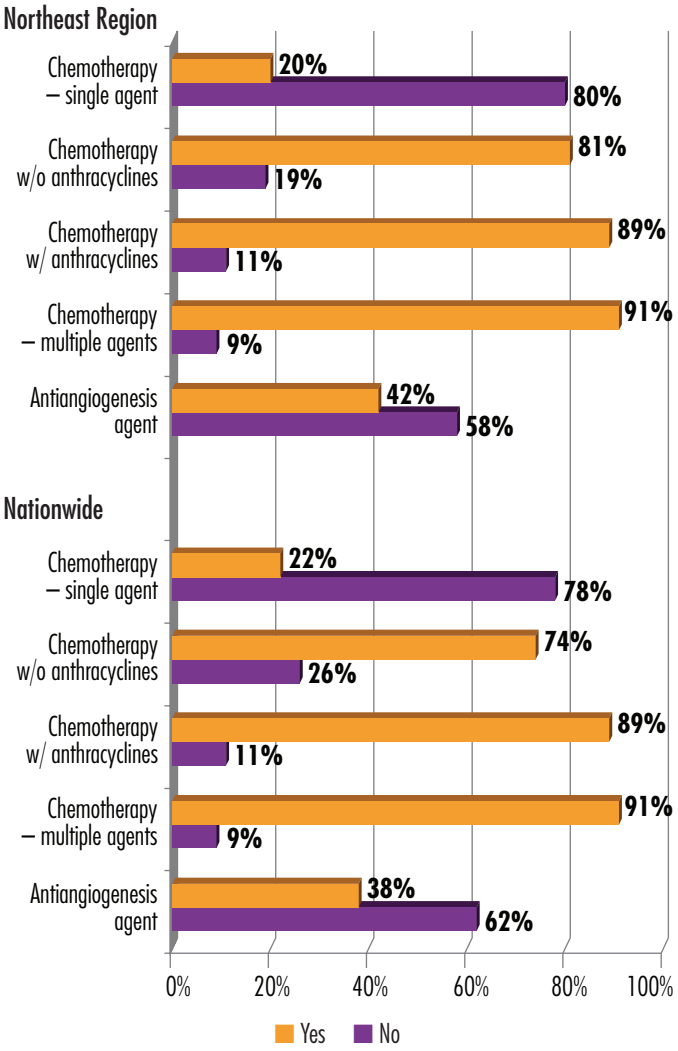
Figure 40 Practice-Payer Collaboration Options
1 = Not at all interested; 2 = Slightly interested; 3 = Neutral, 4 = Moderately interested; 5 = Extremely interested



Breast Cancer Treatment

Treatment of cancer is complex, usually involving more than one drug. When asked about adjuvant treatment generally followed for breast cancer patients, practices clearly show a trend toward chemotherapy with multiple agents (91% in both the Northeast Region and nationwide) and for chemotherapy with anthracyclines (89% for both groups) (Figure 41). If the patient is HER2 positive, treatment also is most likely to include HER2 inhibitors (98% and 97%, respectively).

Figure 41 Adjuvant Treatment for Breast Cancer

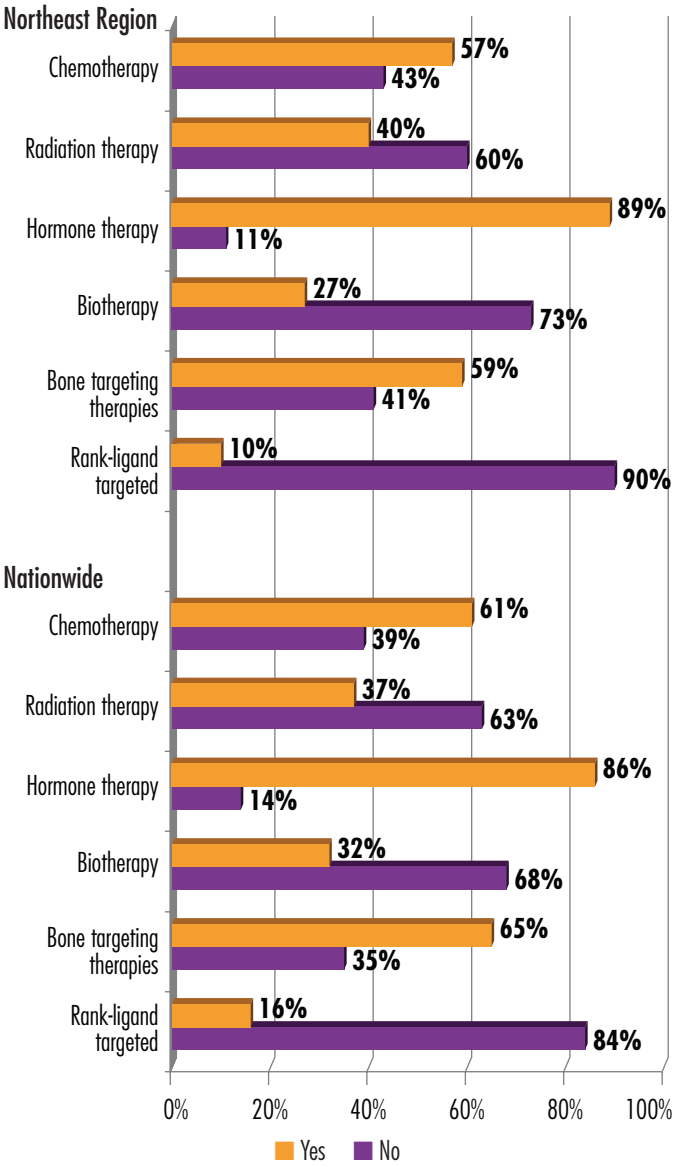


Most physicians indicate that if they have patients with positive hormone receptor findings and metastatic disease, they generally continue to treat for the life of the patient (77%, Northeast Region; 74% nationwide).

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

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

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



Prostate Cancer Treatment

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 Northeast Region (71% reporting 0%–25% occurrence) than nationwide (58% reporting 0%–25% occurrence).

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

Radical nerve sparing prostatectomy				
Northeast Region	71%	19%	8%	2%
Nationwide	58%	23%	16%	3%
Laparoscopic prostatectomy				
Northeast Region	67%	20%	11%	2%
Nationwide	60%	30%	9%	2%
Robotic prostatectomy				
Northeast Region	57%	20%	16%	6%
Nationwide	56%	25%	13%	5%
Brachytherapy				
Northeast Region	42%	35%	23%	0%
Nationwide	47%	39%	13%	2%
Conformal RT				
Northeast Region	40%	38%	20%	2%
Nationwide	52%	34%	12%	2%
IMRT				
Northeast Region	33%	31%	31%	4%
Nationwide	44%	31%	19%	5%

0%–25% 26%–50% 51%–75% 76%–100%

Physician choices for treatment of prostate cancer in the Northeast Region are generally consistent with those nationwide (Figure 44). When asked if they currently had patients receiving immunotherapy for metastatic, hormone-refractory prostate cancer, 80% in the Northeast Region said no, as did 76% nationwide. When asked if physicians expected to have such patients in the next twelve months, more than one-third responded in the affirmative (38% in the Northeast Region and 37% nationwide).

Figure 44 Treatment of Prostate Cancer by Stage

Stage 1,2 surgically treated adjuvant					
Northeast Region	67%	11%	22%	0%	0%
Nationwide	60%	14%	25%	0%	1%
Stage 1,2 RT treated adjuvant					
Northeast Region	54%	22%	24%	0%	0%
Nationwide	52%	20%	25%	2%	1%
Recurrent/metastatic first line therapy					
Northeast Region	39%	17%	36%	5%	3%
Nationwide	37%	21%	31%	7%	4%
Hormone refractory therapy					
Northeast Region	24%	19%	15%	25%	17%
Nationwide	24%	17%	17%	23%	18%

LHRH ADT Anti-androgen Immunotherapy Antiangiogenesis

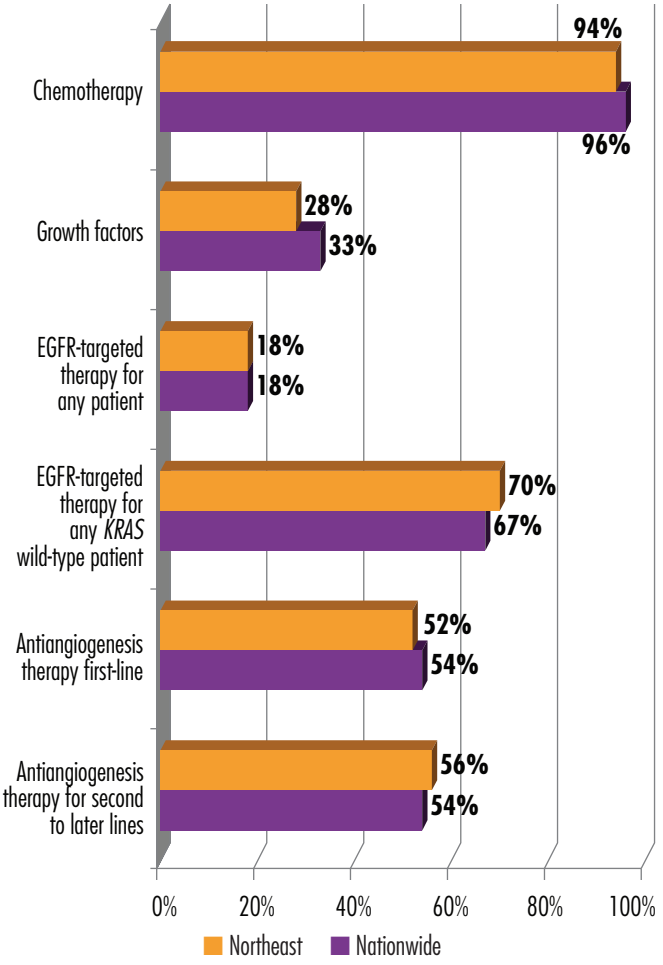
Physicians, when asked about expectations for trends in therapeutic medication volume for stage IV prostate cancer patients, showed variation in expectations for individual treatment options between the Northeast Region and nationwide.

Colorectal Cancer Treatment

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

Approximately three-quarters of oncologists (71% in the Northeast 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 coverage and patient management decisions, 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, 18 are Northeast Region plans and 18 are plans with national coverage. In this section of the report only, three sets of responses are presented: responses from plans in the Northeast Region, responses from plans with national coverage, and responses from all plans nationwide, representing all five geographic regions.

Preferred Care Settings

The preferred cancer care treatment locations for plans in the Northeast Region and all plans nationwide are community physicians' offices and freestanding infusion clinics (Figure 46). Plans with national coverage favor freestanding infusion clinics, members' homes with nursing support, and specific preferred providers. Least favored by 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 plan types, injectable/infused drugs make up the greatest proportion of cancer spend under the medical benefit; the percentage is highest in the Northeast Region (35%). More than half of all plans expect to see increases in both injectable/infused drugs and oral drugs covered under the medical benefit.

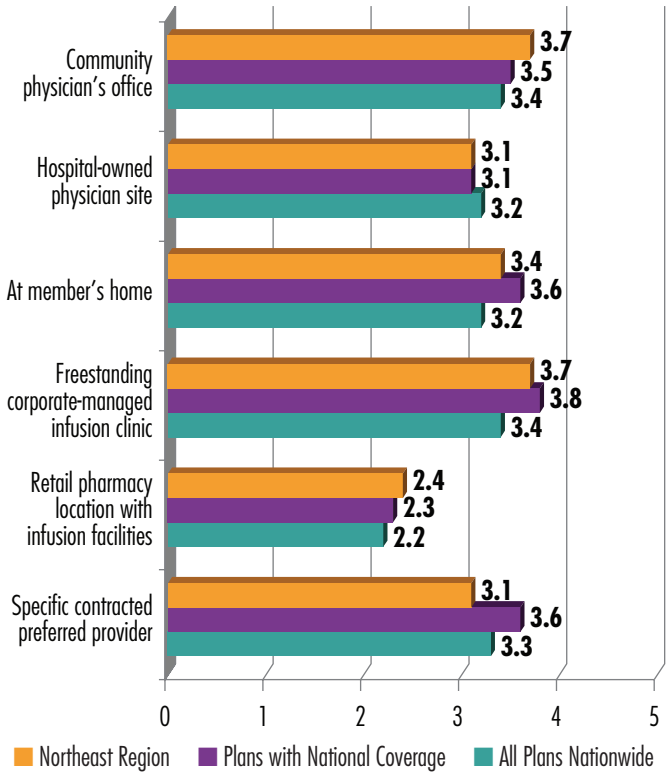
Oral drugs account for half or more of the pharmacy benefits cancer spend for plans with national coverage (50%) and all plans nationwide (59%), and 46% for plans in the Northeast Region. Injectable/infused drugs account for 35% of the spend for plans in the Northeast Region. Approximately three-quarters of all plan types expect the portion allocated to oral drugs to increase over the next year (78% in the Northeast Region and in plans with national coverage; 71% in plans nationwide). Two-thirds (67%) of plans with national coverage expect the pharmacy benefits cancer spend for injectable/infused drugs to increase, compared with 35% of Northeast Region plans and 49% of all plans nationwide.

Plans with national coverage (56%) report greater concern expressed by select employers specific to oncology, or a desire for a role in determining oncology reimbursement policy, as do 51% of Northeast Region plans and 46% of all plans nationwide. Select clients are expressing concerns but are allowing plans to determine specifics.

Specialty Pharmacy

Half of plans in the Northeast Region and plans with national coverage have preferred relationships with one or more specialty pharmacies for acquiring injectable/infused

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



cancer drugs (Figure 47). Use of a preferred specialty pharmacy by oncology practices is still optional, with many plans indicating 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. In the Northeast Region 67% of plans have preferred relationships, as do 59% of plans with national coverage and plans nationwide. (Figure 48).

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, more than half use physician notes or lab test 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 Northeast Region (71%) and all plans nationwide (75%). The coverage authorization policy is most often applied by drug (29% of Northeast Region plans, 44% of plans with national coverage, and 33% of all plans nationwide), followed by ICD-9 code (24%, 17%, and 20%, respectively).

Plans rely on many different information sources on oncology treatments. Sources favored by Northeast Region plans are: FDA labeling (71%), NCCN Compendia (71%), NCCN Guidelines (65%), American Hospital Formulary Service (65%), and ASCO Guidelines (65%). Northeast Region plans are significantly more likely to utilize ASCO Guidelines (65%) than are either plans with national coverage (33%) or all plans nationwide (44%). 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

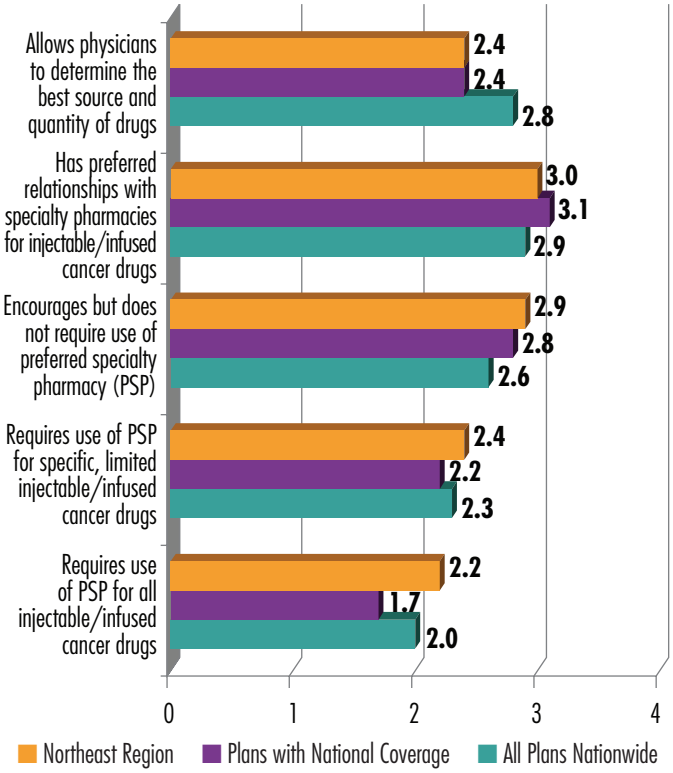
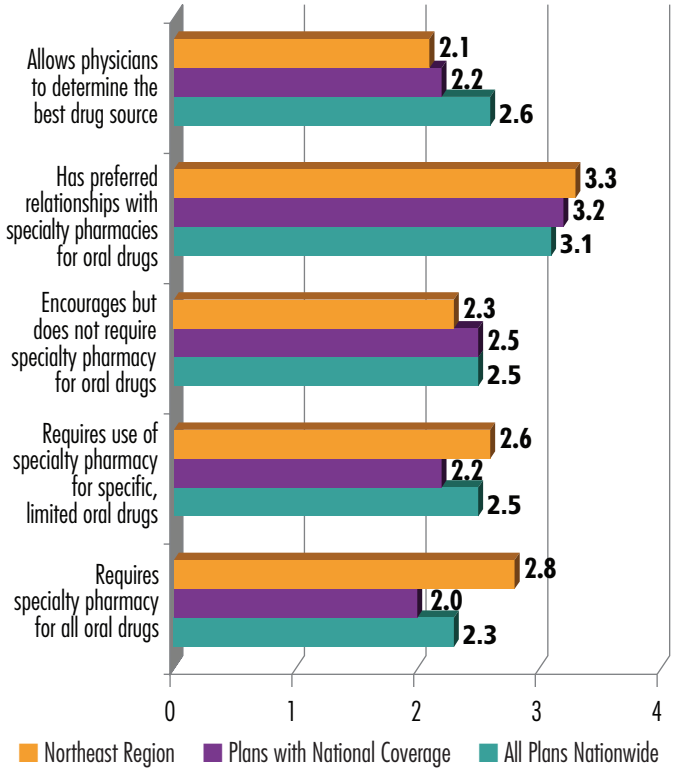


Figure 48 Policies for Acquiring Oral Drugs
1 = Will not do; 2 = Considering doing in next 12–18 months; 3 = Will do within the next 12–18 months; 4 = Currently doing



Disease Stage Data

Two-thirds (67%) of plans with national coverage review stage data on members with cancer, compared to 28% of Northeast Region plans and 54% of all plans nationwide. Northeast Region plans are the least likely of the three plan groups to review disease stage data on members with cancer. Plans with national coverage most often 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 all three plan types is average sales price (ASP) plus 6%. ASP plus 6% garnered the highest proportion of responses from Northeast Region plans and plans with national coverage (37% for both). Almost one quarter (21%) of plans with national coverage employ rates of ASP plus 13%-18%, compared with 11% in Northeast Region Plans. Rates of ASP plus 7%-12% are reported by 21% of Northeast Region plans and 11% of plans with national coverage. More than half of all respondents did not adjust professional fees in conjunction with a move to ASP-based reimbursement.

More Northeast Region plans (59%) see Medicare rates as sufficient reimbursement for professional services compared with 44% of plans with national coverage and all plans nationwide. An equal 44% of plans with national coverage agree that 50% over Medicare rates would be fair, as did 38% of all plans nationwide and 29% of plans in the Northeast Region.

Reimbursement pricing of cancer products utilizes a publicly available basis, like ASP or AWP, and reimburses at that rate or some multiple, according to 83% of Northeast Region plans, 78% of plans with national coverage, and 72% of all plans nationwide. Modification of reimbursement pricing for preferred drugs to incentivize physicians or to promote use within medical policy is reported by 67%, 51%, and 56% of plans, respectively.

Oncology Care Management

Of oncology management strategies, Northeast Region plans are most aggressive in pursuing step therapy, which garnered an average rating of 2.8 out of a possible 4.0. (Step therapy is defined as requiring prior failure of a formulary preferred product or regimen before approving use of a non-preferred product.) Plans with national coverage favor enforcing laboratory value thresholds as a prerequisite for product access (2.9). Only a few respondents plan to introduce a separate benefit design for oncology therapies, with Northeast Region plans the least likely.

Plans respond strongly that they may utilize oncology management services in the next 12 months, most often with internal staff (47% of Northeast Region plans, 50% of plans with national coverage, and 56% of all plans nationwide) or with specific oncology providers (41%, 31%, and 35% respectively), rather than with an external oncology management vendor (12%, 19%, and 9%, respectively).

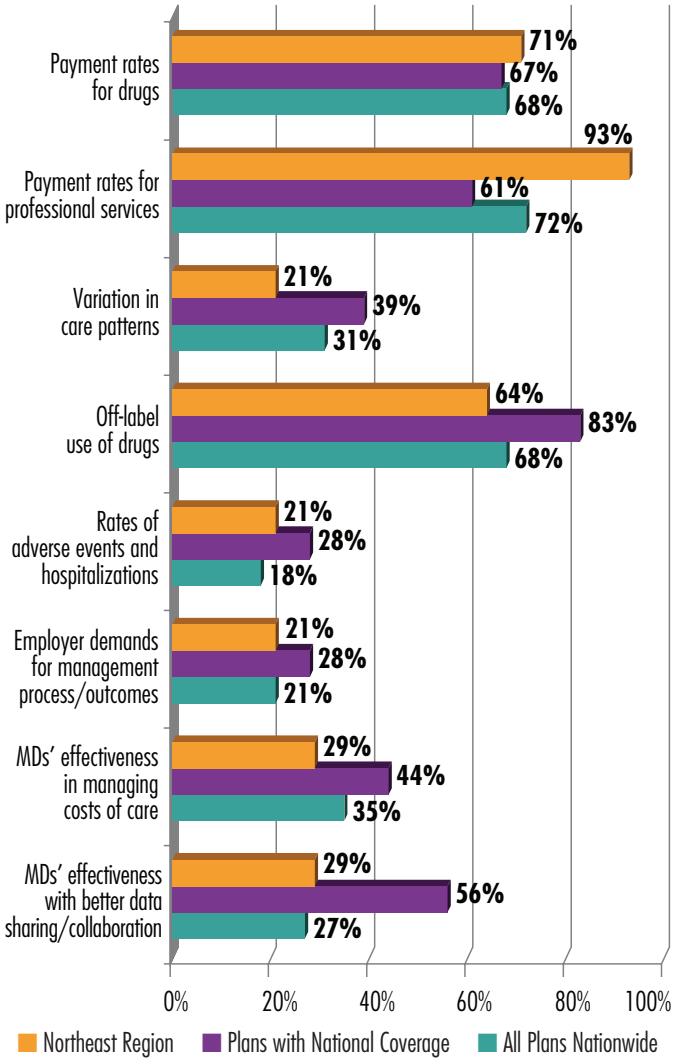
All plans nationwide generally favor mandatory prior authorization (60%) and use of guidelines (50%). Most other types of oncology management, including pathways and symptom management, are used predominantly on a voluntary basis by all plans nationwide as well as plans with national coverage and plans in the Northeast Region.

Plan-Provider Relationships

For Northeast 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 93% and 72% of the plans, respectively. The top concern for plans with national coverage is off-label 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



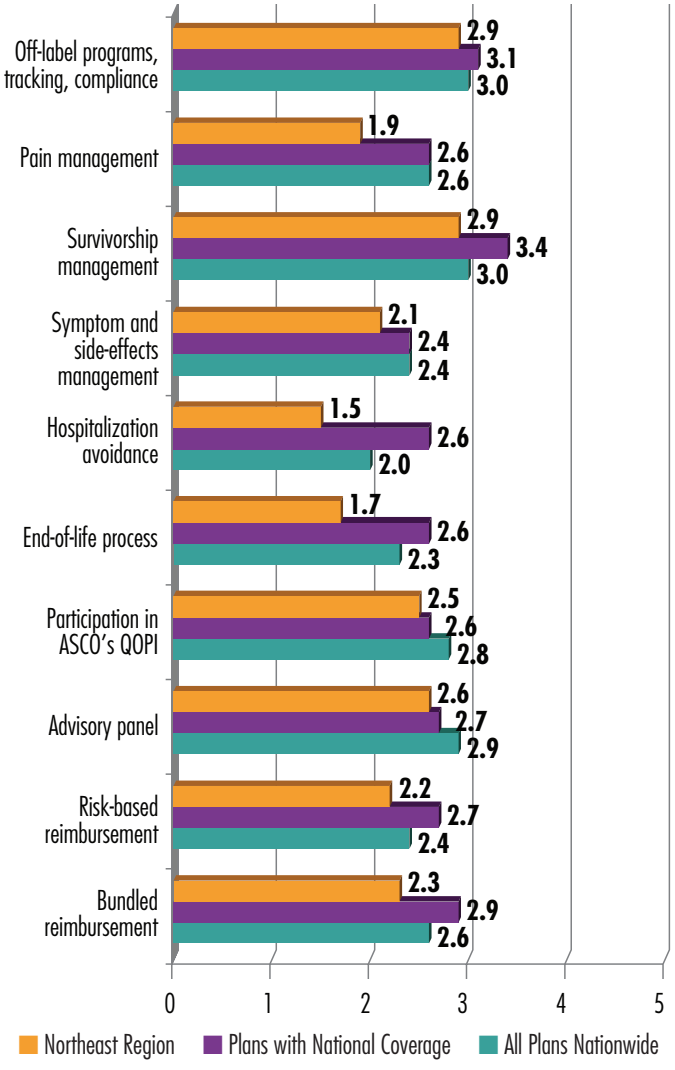
Interest in Collaboration

Plans in the Northeast Region are significantly more likely to contract with hospital-based oncology practices (62%) than plans with national coverage (18%) and all plans nationwide (45%). Plans with national coverage are generally less interested in contracting with private practices of fewer than 20 oncologists and 47% are not interested in contracting with private oncology practices of any size.

Northeast Region plans, plans with national coverage, and all plans nationwide all show the most interest in collaborating with providers on survivorship management programs, off-label tracking and compliance programs (Figure 50).

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, the greater percentage of all plans nationwide and plans in the Northeast Region tend to respond that they have no specific policy. Plans with national coverage are about twice as likely as other plan types to "approve treatment if prior authorization requirements are met" (Figure 51).

Most plans will approve treatment for patients with positive hormone findings for the life of the patient (Northeast Region plans have the highest response at 88%; 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).

Most plans of all types favor introducing discussion of palliative care with breast cancer patients by stage IV.

Figure 51 Policy for Adjuvant Treatment of Breast Cancer

Chemotherapy with anthracyclines					
Northeast Region	0%	13%	0%	44%	44%
Plans with National Coverage	0%	53%	6%	12%	29%
All Plans Nationwide	0%	29%	8%	23%	40%
Chemotherapy without anthracyclines					
Northeast Region	0%	13%	6%	38%	44%
Plans with National Coverage	6%	47%	6%	12%	29%
All Plans Nationwide	1%	27%	9%	23%	40%
If HER2+, HER2 pathway inhibitors					
Northeast Region	0%	25%	0%	38%	38%
Plans with National Coverage	0%	71%	6%	6%	18%
All Plans Nationwide	1%	35%	9%	20%	34%
HER2 pathway inhibitors					
Northeast Region	0%	19%	0%	38%	44%
Plans with National Coverage	0%	71%	6%	6%	18%
All Plans Nationwide	1%	34%	10%	20%	35%
Antiangiogenesis agent					
Northeast Region	0%	31%	13%	19%	38%
Plans with National Coverage	0%	65%	6%	6%	24%
All Plans Nationwide	0%	39%	15%	13%	34%

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

Figure 52 Policy for Treatment of Recurrent Metastatic Breast Cancer

Chemotherapy					
Northeast Region	0%	36%	0%	29%	36%
Plans with National Coverage	0%	47%	18%	12%	24%
All Plans Nationwide	0%	31%	12%	22%	35%
Radiation therapy					
Northeast Region	0%	29%	0%	36%	36%
Plans with National Coverage	0%	35%	18%	12%	35%
All Plans Nationwide	0%	27%	11%	24%	37%
Biotherapy					
Northeast Region	7%	21%	14%	7%	50%
Plans with National Coverage	6%	29%	24%	6%	35%
All Plans Nationwide	6%	19%	18%	12%	46%
Bone targeting therapies					
Northeast Region	0%	36%	14%	7%	43%
Plans with National Coverage	0%	35%	24%	12%	29%
All Plans Nationwide	1%	29%	16%	15%	39%
Rank-ligand targeted therapies					
Northeast Region	0%	23%	15%	8%	54%
Plans with National Coverage	0%	41%	18%	6%	35%
All Plans Nationwide	1%	30%	14%	11%	44%

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

Prostate Cancer Treatment

The largest single response of plans regarding authorization for the majority of treatment options for early stage prostate cancer is that they have no specific policy (Figure 53). Where policies are in place, most plans require prior authorization. Plans in the Northeast Region are consistently the most likely of the three plan groups to have a policy of approving a treatment without prior authorization or medical review.

Plans are more likely to have a specific policy for treatment of stage III or IV prostate cancer. Plans with national coverage tend to favor prior authorization. Northeast Region plans are more likely to approve treatments without prior authorization or medical review than the other plan groups.

Most plans cover vaccines and immunotherapy for cancer patients with stage IV metastatic, hormone-refractory prostate cancer (93% of Northeast Region plans, 71% of plans with national coverage, and 74% of all plans nationwide) (Figure 54).

Figure 53 Policy for Treatment of Early-Stage Prostate Cancer

Radical nerve sparing prostatectomy					
Northeast Region	0%	36%	14%	14%	36%
Plans with National Coverage	0%	35%	24%	6%	35%
All Plans Nationwide	2%	25%	12%	21%	39%
Laparoscopic prostatectomy					
Northeast Region	0%	21%	14%	29%	36%
Plans with National Coverage	0%	35%	24%	6%	35%
All Plans Nationwide	0%	24%	15%	21%	39%
Robotic prostatectomy					
Northeast Region	0%	15%	15%	31%	38%
Plans with National Coverage	0%	35%	24%	6%	35%
All Plans Nationwide	7%	21%	13%	19%	41%
Brachytherapy					
Northeast Region	0%	21%	14%	21%	43%
Plans with National Coverage	0%	35%	24%	6%	35%
All Plans Nationwide	2%	22%	17%	17%	42%
Conformal RT					
Northeast Region	0%	15%	15%	31%	38%
Plans with National Coverage	0%	29%	24%	6%	41%
All Plans Nationwide	1%	20%	17%	16%	46%
IMRT					
Northeast Region	0%	15%	31%	15%	38%
Plans with National Coverage	0%	29%	29%	6%	35%
All Plans Nationwide	1%	21%	21%	13%	44%
Antiangiogenesis drugs					
Northeast Region	0%	23%	31%	15%	31%
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					
Northeast Region	0%	23%	15%	31%	31%
Plans with National Coverage	0%	47%	18%	6%	29%
All Plans Nationwide	4%	29%	14%	17%	36%
Chemotherapy					
Northeast Region	0%	29%	0%	50%	21%
Plans with National Coverage	0%	47%	18%	12%	24%
All Plans Nationwide	0%	27%	13%	27%	33%
Anthracycline chemotherapy					
Northeast Region	0%	15%	15%	31%	38%
Plans with National Coverage	0%	47%	12%	12%	29%
All Plans Nationwide	0%	25%	14%	22%	40%
ADT agents, including LHRH					
Northeast Region	0%	31%	8%	38%	23%
Plans with National Coverage	0%	47%	18%	6%	29%
All Plans Nationwide	0%	31%	17%	15%	37%
Antiandrogen					
Northeast Region	0%	29%	14%	29%	29%
Plans with National Coverage	0%	53%	12%	12%	24%
All Plans Nationwide	0%	29%	12%	21%	38%
Generic antiandrogens or ADT agents					
Northeast Region	0%	25%	0%	33%	42%
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					
Northeast Region	0%	23%	15%	31%	31%
Plans with National Coverage	0%	47%	24%	6%	24%
All Plans Nationwide	3%	30%	15%	18%	35%
Biologics/immunotherapy					
Northeast Region	0%	38%	8%	31%	23%
Plans with National Coverage	0%	47%	18%	12%	24%
All Plans Nationwide	3%	36%	11%	18%	32%
Chemotherapy					
Northeast Region	0%	23%	0%	54%	23%
Plans with National Coverage	0%	41%	18%	18%	24%
All Plans Nationwide	0%	30%	9%	26%	35%
Anthracycline chemotherapy					
Northeast Region	0%	23%	0%	38%	38%
Plans with National Coverage	0%	35%	18%	18%	29%
All Plans Nationwide	0%	24%	11%	23%	41%
ADT agents, including LHRH					
Northeast Region	0%	31%	8%	38%	23%
Plans with National Coverage	0%	41%	18%	12%	29%
All Plans Nationwide	1%	29%	14%	19%	38%
Antiandrogen					
Northeast Region	0%	31%	8%	31%	31%
Plans with National Coverage	0%	41%	18%	18%	24%
All Plans Nationwide	0%	29%	12%	20%	39%
Generic antiandrogens or ADT agents					
Northeast Region	0%	31%	8%	23%	38%
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

Northeast Region plans are most likely to approve chemotherapy for treatment of colorectal cancer without prior authorization or medical review (Figure 55). Plans with national coverage tend to require prior authorization regardless of treatment.

A majority of health plans agree that stage III is an appropriate time for physicians to discuss palliative care with colorectal cancer patients (67% of Northeast Region plans, 75% of plans nationwide and 81% of plans with national coverage).

Figure 55 Policy for Treatment of Colorectal Cancer Patients

Chemotherapy					
Northeast Region	0%	36%	0%	43%	21%
Plans with National Coverage	0%	56%	11%	11%	22%
All Plans Nationwide	0%	32%	9%	27%	32%
Growth factors					
Northeast Region	0%	43%	7%	29%	21%
Plans with National Coverage	0%	61%	11%	11%	17%
All Plans Nationwide	0%	40%	12%	19%	30%
EGFR-targeted therapy for any patient					
Northeast Region	0%	43%	14%	14%	29%
Plans with National Coverage	0%	56%	17%	6%	22%
All Plans Nationwide	1%	36%	15%	15%	33%
EGFR-targeted therapy for *KRAS* patient					
Northeast Region	0%	31%	23%	15%	31%
Plans with National Coverage	0%	56%	17%	6%	22%
All Plans Nationwide	1%	35%	17%	13%	35%
Antiangiogenesis therapy first-line					
Northeast Region	7%	29%	7%	29%	29%
Plans with National Coverage	0%	50%	17%	6%	28%
All Plans Nationwide	3%	33%	11%	19%	35%
Antiangiogenesis therapy later lines					
Northeast Region	0%	25%	8%	33%	33%
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.
- Northeast Region practices and plans agree that the most sensitive issue facing practices and plans, respectively, is payment for professional services. 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 as acceptable reimbursement rates. Historically, private payers have used Medicare policies and payment rates as a basis for private reimbursement. Most Northeast Region plans (59%) see current Medicare rates for professional services as sufficient on which to base private plan rates but not a single Northeast 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. Perhaps because of their smaller average size, Northeast Region practices report less 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 practices say they will continue to treat Medicare patients as usual. Another third expect to refer such patients to hospital-based infusion centers, which would likely prove more costly to both public and private insurers. Policymakers need to guard against unintended consequences of cost containment measures.
- More strategic use of technology could facilitate the use of clinical data and care outcomes. EMRs remain underutilized for improving patient outcomes and practice management. Incorporation of guidelines into EMRs could encourage their use and improve monitoring of compliance.
- Coverage policies, for specific therapies for breast cancer patients, of plans with national coverage tend to be more formalized and restrictive than 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 showed more interest in collaborating with plans than plans did 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.
- A higher percentage of patients in the Northeast Region had an early stage cancer diagnosis compared with all other regions, suggesting a well-informed patient population and/or a more robust medical infrastructure.
- Nationwide, it appears that part of the impact of health care payers' efforts to drive down cost has been movement in the treatment of complex/costly breast cancer, colorectal cancer, and prostate cancer cases from physicians' offices to hospital outpatient settings. The impact of this apparent shift is significant for payers, given the consistently higher cost of treatment in a hospital outpatient setting.
- Changes in public and private-payer payment models combined with higher medication costs have reduced profitability for many oncology practices. Practices that cannot finance the carrying costs of new, more costly therapies may have to move cases that require these treatments to hospital outpatient settings, or find new ways to ensure the continued economic viability of their practices.

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