

National Oncology Practice Benchmark, 2011 Report on 2010 Data

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Introduction

The National Practice Benchmark (NPB) was developed by Oncology Metrics (Los Altos, CA), a team of professionals with many years of experience in oncology practice management, surveys, and benchmarking. Benchmarking is widely recognized as the best, most efficient way to find opportunities to improve your practice and then monitor progress after corrective action is taken. The NPB provides important and meaningful data for oncology practices to use in today's challenging practice environment.

Approximately 1,600 practice administrators, medical oncologists, and other key staff members from 1,400 practices across the country were invited to participate in the 2011 NPB. Invitations were sent via e-mail, and the survey was completed entirely online. Practices were instructed to submit only one survey per practice. Respondents who completed the entire survey received an electronic version of the survey report as well as a personalized report comparing their practices to the entire data set on several key benchmarks. Additionally, the first 65 participants to complete all applicable questions were eligible for a \$25 gift card.

The 2011 NPB survey reflects data from calendar year 2010 or the most recently completed 12-month accounting period. Practices were not required to complete all questions, and data from incomplete surveys are included in the final survey results. Data were submitted by hematology/oncology (HemOnc) single-specialty practices as well as by multispecialty practices. A total of 117 survey responses were submitted. Five were determined to be duplicates and were discarded. The number of responses to individual questions varied. Responses were received from practices in 37 states. Six states—California, Florida, Illinois, New York, Ohio and Pennsylvania—had 5 or more practices respond.

All responses are included for the qualitative information presented in this report (demographics, operations, information systems). Level 1 quantitative benchmarks are reported only for practices that met specific exclusion criteria. To be included in the level 1 quantitative benchmarks, practices must have submitted five key data elements: number of full-time equivalent (FTE) HemOnc physicians, total revenue, cost of goods paid for (COGPF), number of new HemOnc patients in the office setting, and number of new HemOnc patients in the inpatient hospital setting.

Criteria were then applied to exclude practices reporting:

- higher drug revenue than total revenue, and
- higher COGPF than total revenue, and

- drug revenue less than 0.5% or greater than 1.5% of COGPF.

A total of 37 practices with 340 FTE HemOnc physicians and 430 FTE physicians met these criteria and are included in the level 1 analysis. Additional exclusions were applied to specific benchmarks for data outside the range of credible results.

Level 2 benchmarks include measures of staffing, staff productivity, laboratory, imaging, closed-door pharmacy, inventory, accounts receivable, and radiation oncology. These benchmarks are not limited to the level 1 inclusion/exclusion criteria; all practices that provided appropriate data are included.

Confidentiality

Oncology Metrics is committed to protecting the confidentiality of individual practice data and makes a commitment to NPB participants: "All of the individual data that you provide in the survey are absolutely confidential and will never be disclosed. Access to the data file that Oncology Metrics creates from this survey will never be made available to any party. Oncology Metrics will create analytic reports including aggregated data from this survey but will always publish in a manner that completely obscures the source of the data so that no reader can make any supported inference of data to any individual practice."

Understanding the NPB Report

NPB data are presented in an easy-to-understand format primarily using pie charts and bar graphs.

- Pie charts show the quantitative relationship of items in one data series proportional to the sum of the items. The data points in a pie chart are displayed as a percentage of the whole pie.
- Bar graphs illustrate comparisons among individual items. In horizontal bar graphs, categories are organized along the vertical axes and values along the horizontal axes. Vertical bar graphs are useful for showing data changes over a period of time or for illustrating comparisons among items. In these vertical bar graphs, categories are typically organized along the horizontal axes and values along the vertical axes.

NPB data are generally presented in vertical bar graphs using 25th percentile, 50th percentile (or median), average, and 75th percentile. When interpreting these data, remember that a percentile is a point on a scale below which a certain percentage of responses fall. For example, the 75th percentile is the point in a

distribution of data below which 75% of responses fall. Likewise, the 25th percentile is the point below which 25% of responses fall. Note that a percentile may or may not correspond to a value judgment about whether it is good or bad. The interpretation of whether a certain percentile is good or bad depends on the context to which the data apply. In some situations, a low percentile would be considered good—for example, number of days sales are outstanding. In other contexts, a high percentile might be considered good, such as the number of new patients per FTE HemOnc physician.

Definitions are provided for the data elements presented in this report. Data are presented on the basis of FTE HemOnc physician or FTE physician given that respondents represent both HemOnc single-specialty practices and multispecialty practices.

Our goal in producing and presenting this is to provide readers with a valuable tool to manage today's increasingly complex oncology practice. We have not attempted to draw conclusions from these data but would refer you to our article in the September issue of *Journal of Oncology Practice*.¹

Results of the National Oncology Practice Benchmark, 2011 Report on 2010 Data, are presented here.

Respondent Demographics

As previously noted, 117 responses were submitted to the 2011 NPB. This is a marked decrease in survey participation, down from 193 responses in 2010² and 208 responses in 2009.³ The authors speculate that there may be complex contributing factors for this decrease. The survey has grown in complexity and takes considerable time to complete (particularly for first-time contributors), and the decrease in participation may be caused by the complexity of the survey tool itself. We will consider that issue when developing the 2012 survey on 2011 data. Additionally, with the competing priorities in today's complex practice environment, it is hard to find the time to complete the survey. Finally, we are seeing structural changes in the business organization of practices, including transitions to the hospital or academic setting. In both of these environments, quantitative data can be much more difficult to collect.

The Oncology Circle is a national benchmarking collaborative for oncology practices that was developed in 2002 and operated by Oncology Metrics. Practices participating in the Oncology Circle generally have four or more medical oncologists; professional practice management including a physician leader and executive director or practice administrator; and agree to share detailed practice data, usually extracted directly from the practice management system and/or electronic medical record (EMR) in a deidentified manner to protect confidential patient information. Oncology Circle practices also complete the NPB survey. In exchange, Oncology Metrics provides detailed benchmark reporting to the practices at both the practice and physician level and conducts two meetings a year during which data are presented and the Oncology Circle members share best practices. This year for the first time, Oncology Circle practices represent the majority of the practices in the level 1 quantitative benchmarks (75%). We believe this is be-

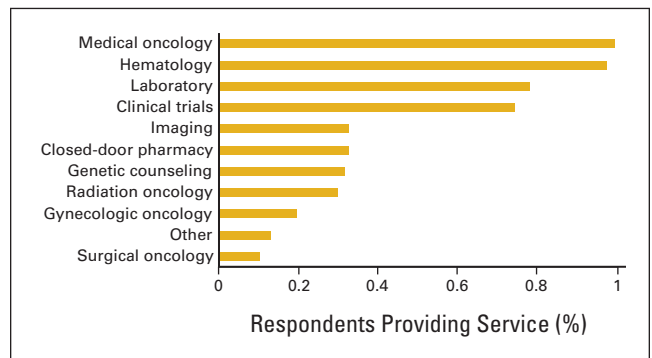


Figure 1. Services provided by practice (n = 108 practices).

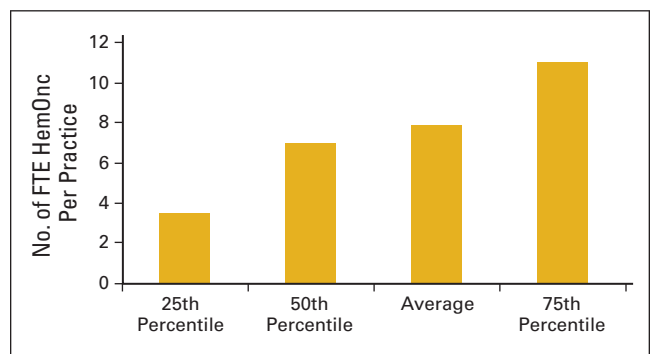


Figure 2. Number of full-time equivalent (FTE) hematology/oncology (HemOnc) physicians per practice (n = 54 practices, 427 HemOnc physicians).

cause of the increasing complexity of the survey instrument and recognize that we may need to transition more practices into the Oncology Circle format to facilitate the collection and reporting of this complex and important practice information.

The first seven figures present demographic information for the survey respondents. Figure 1 shows the services provided by the practices. Nearly all of the reporting practices provide medical oncology and hematology services; three quarters of the respondents offer laboratory services and clinical research; and a third of the practices provide imaging, a closed-door pharmacy, genetic counseling, and radiation oncology services. This is similar to the services provided by practices responding to previous years' surveys.

Respondents were asked to provide the number of FTE HemOnc physicians in the practice (Fig 2) as well as the number of FTE physicians in all specialties (Fig 3). For the purposes of the survey, an FTE physician is defined as a physician who spends four full days per week in clinic seeing patients and part of a fifth day on clinic business and who shares call equally with other physicians. The average number of FTE HemOnc physicians in the reporting practices is 7.9 and the average number of FTE physicians is 9.8.

The number of clinical sites (Figs 4 and 5) and chemotherapy chairs (Figs 6 and 7) are additional indications of practice size and were reported on an FTE basis. For example, a clinical site open five days per week is reported as 1.0; a site open three days per week is reported as 0.6. Similarly, a chemotherapy

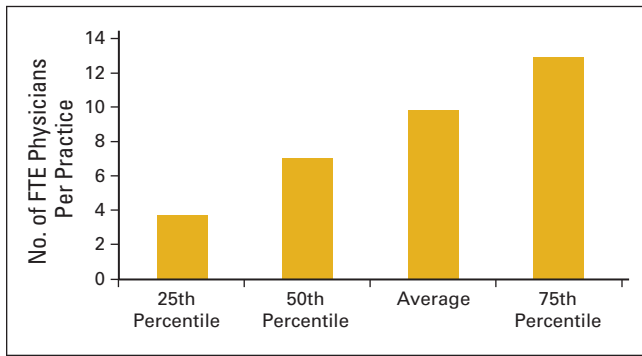


Figure 3. Number of full-time equivalent (FTE) physicians per practice (n = 54 practices, 527 FTE physicians).

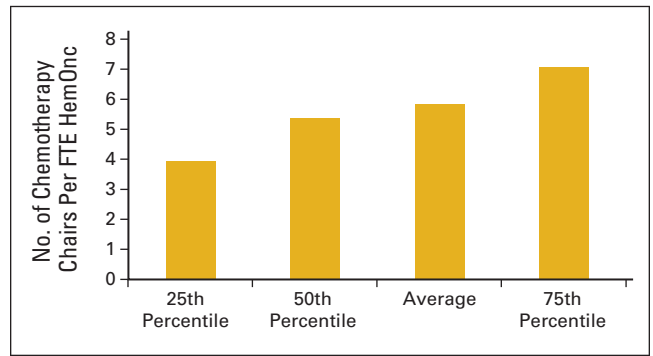


Figure 7. Number of chemotherapy chairs per full-time equivalent (FTE) hematology/oncology (HemOnc) physician (n = 54 practices).

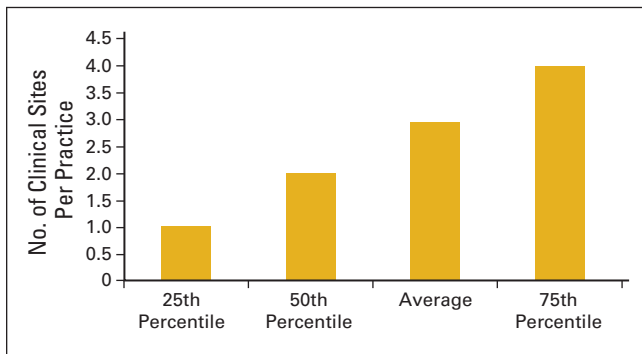


Figure 4. Number of clinical sites per practice (n = 104 practices).

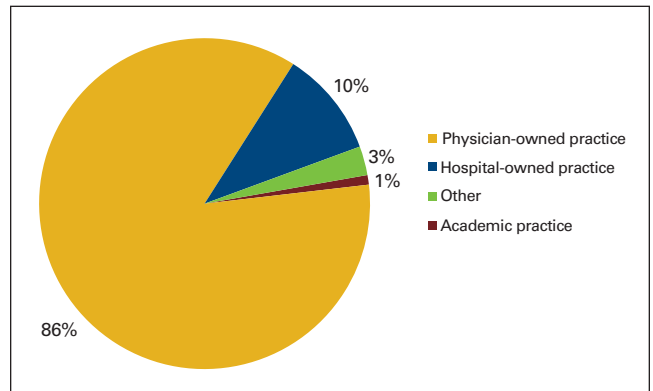


Figure 8. Current business structure (n = 106 practices).

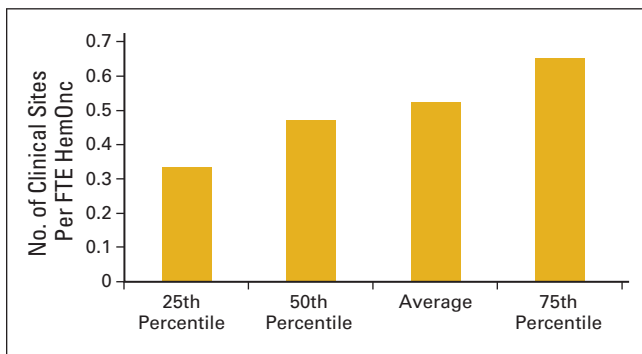


Figure 5. Number of clinical sites per full-time equivalent (FTE) hematology/oncology (HemOnc) physician (n = 54 practices).

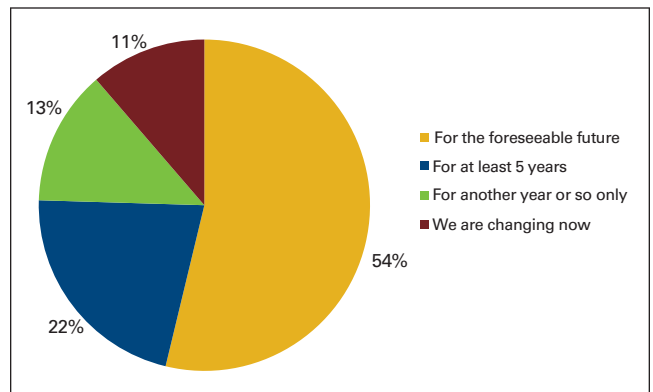


Figure 9. Responses to survey question "How long do you expect this business structure will remain unchanged and viable?" (n = 106 practices).

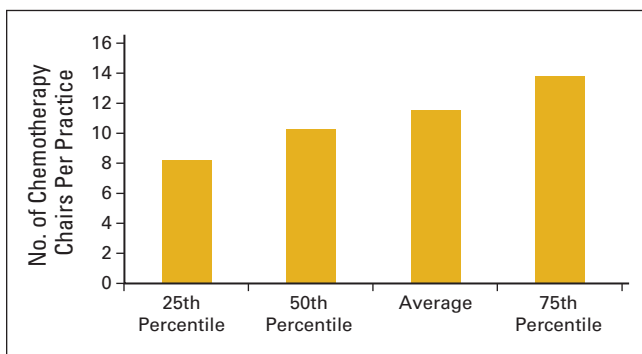


Figure 6. Number of chemotherapy chairs per practice (n = 100 practices).

chair used only one day per week is reported as 0.2; a chair that is available five days per week but was not put in service until July 1 is reported as 0.5.

Practice Operations and Planning

Practices were asked to describe current business structure from a list of four options: academic practice, physician-owned practice, hospital-owned practice, and other (Fig 8). Physician-owned practices represent the majority of the survey respondents. Respondents were also asked how long they expect their current business structure to remain unchanged and via-

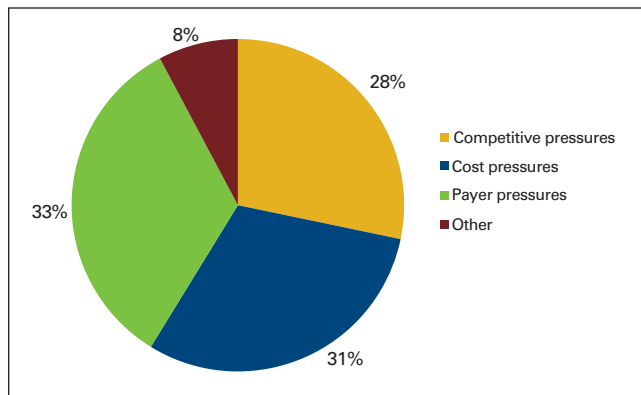


Figure 10. Responses to survey question “What pressures are impacting your business decisions?” (n = 102 practices).

Table 1. Respondent Comments Regarding Pressures Impacting Business Decisions

Comment
“Collaboration with hospitals”
“Concern for increased amounts for which patients are responsible”
“Economy”
“EMR and equipment needed to accommodate installation—scanners, computer upgrades, servers, new phone lines, etc.”
“Health care reform” and “regulatory requirements”
“Higher patient deductibles, copays, co-insurance”
“Inability to recruit new physicians”
“Internal decision making—compensation methodology, new provider recruitment, NPP use, etc.”
“Internal structure dynamics”
“Organizing an oncology-specific infrastructure with a hospital-owned practice”
“Outside guidelines for treating patients”
“Payer and cost pressures are tied for importance”
“Overhead”
“Physician/hospital alignment”
“Prior authorizations and step therapy taking away the physicians’ ability to treat”
“Staffing: both physicians and nurses in short supply”
“Drug distributor system is broken and is the No. 1 reason our drug cost is increasing; pressure to use specialty pharmacies”
“Uninsured and underinsured patients”
“The unknown”

Abbreviations: EMR, emergency medical record; NPP, nonphysician practitioner.

ble. These results are presented in Figure 9. A comment field was provided for this question, and comments included “currently negotiating new contracts with payers,” “hospital buy-out in process,” “looking at joint ventures with hospitals,” “negotiating with hospitals,” and “planned merger for this year.”

A new question was added this year to ask survey respondents to rank the pressures that impact their business decisions (Fig 10). Four options were provided and described:

- Competitive Pressures (consider market competition)
- Cost Pressures (consider drug costs, rent, staff costs, physician compensation, general operating costs, and so on)

- Payer Pressures (consider declining reimbursement rates, contracting, preauthorization/precertification requirements, retrospective denials, audits, underinsured patients, and so on)
- Other.

Almost one-third of those responding to this question included comments that are summarized in Table 1 and reflect a wide range of challenges facing oncology practices today.

Another new survey question was added to identify how drugs are purchased or procured. Results are presented in Figures 11 to 15 (n = 101 practices). Practices were instructed to estimate the dollar amount in each of five categories for the 12-month period. The categories included:

- traditional buy and bill (the business entity purchases drugs and bills payers),
- 340B pricing,
- specialty pharmacy/brownbagging (drugs are ordered through a specialty pharmacy or preferred provider who delivers to the patient who then transports to the office),
- specialty pharmacy/whitebagging (drugs are ordered through a specialty pharmacy or preferred provider and then delivered directly to the practice), and
- drugs are not purchased by the practice.

Payer mix information was requested from practices for major payer categories on both a charge and a payment basis (Figs 16 and 17). Payer categories and their survey definition include:

- Medicare (include fee-for-service and health maintenance organization)
- commercial (include Blue Cross Blue Shield and all other commercial payers)
- Medicaid (include fee-for-service and health maintenance organization),
- VA/Champus/Tricare (include any military payers, both active duty and retired), and
- self-pay.

Respondents were also asked to indicate the percentage of patients on Medicare in their practice who did not have secondary insurance coverage (Fig 18) and were instructed to provide estimates if actual numbers were not available.

Practice Guidelines and Clinical Pathways

The survey asked whether physicians regularly use practice guidelines or clinical pathways in patient care (Fig 19). Practice guidelines were defined as evidence-based recommendations for treatment. Clinical guidelines were defined as standard protocols for treating specific groups of patients with cancer; standardization of care processes is a key element.

Additional questions were asked about the use of clinical pathways, including the source of the pathways (Fig 20), whether the practice measures physician compliance with pathways (Fig 21), and if not, why not (Fig 22). Several respondents

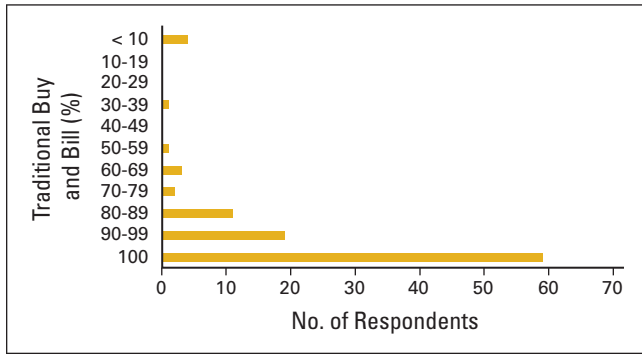


Figure 11. Percentage of drugs purchased using the traditional buy-and-bill method.

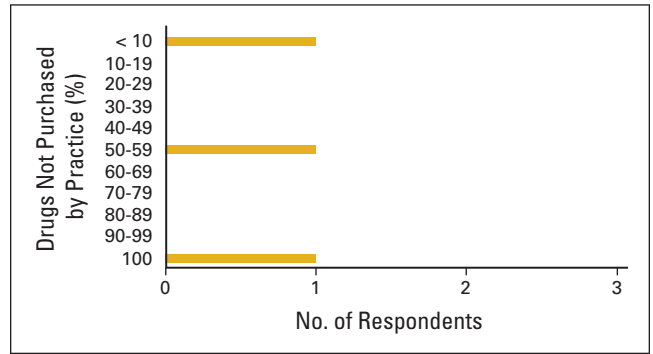


Figure 15. Percentage of drugs not purchased by the practice.

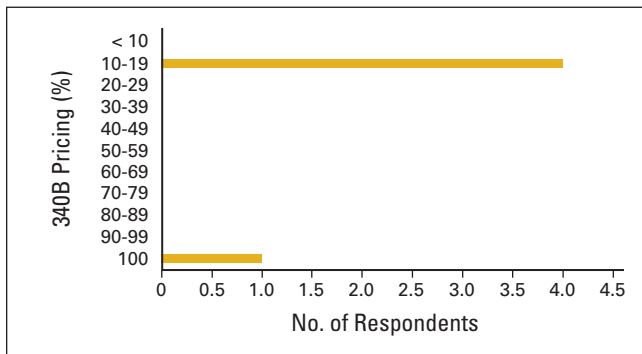


Figure 12. Percentage of drugs purchased using 340B pricing.

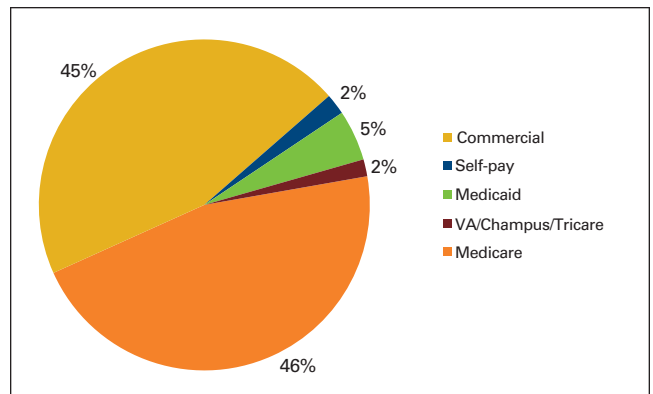


Figure 16. Payer mix on the basis of charges generated (n = 48 practices).

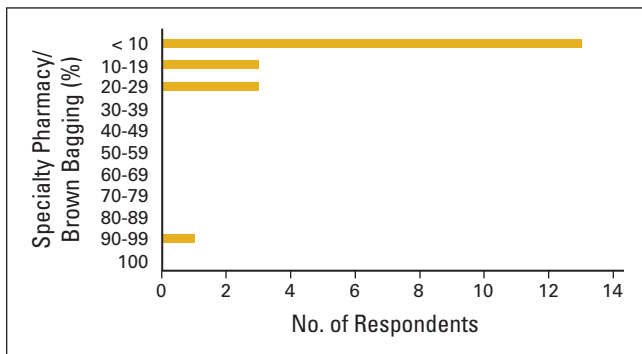


Figure 13. Percentage of drugs purchased using the specialty pharmacy/brown bagging method.

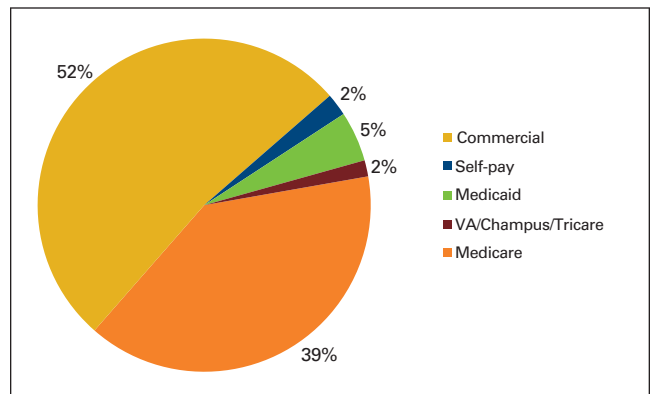


Figure 17. Payer mix on the basis of collected revenue (n = 48 practices).

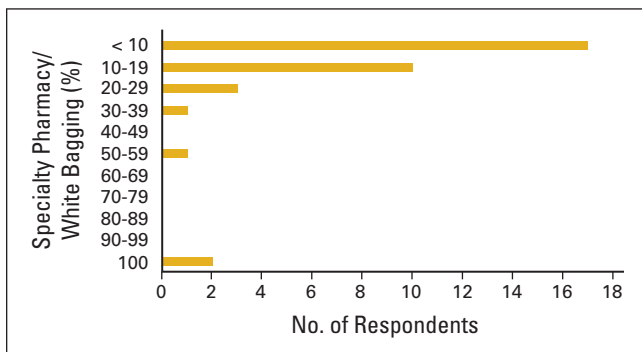


Figure 14. Percentage of drugs purchased using the specialty pharmacy/white bagging method.

noted that they are just beginning to measure compliance or that they plan to when EMR is implemented. One respondent noted that it is “difficult to get all physicians to agree as a group.”

Information Systems and Incentive Programs

The survey requested information from participating practices about the use of technology and participation in the Centers for Medicare and Medicaid Services incentive programs. Sixty-eight percent of respondents indicated that they generate prescriptions using an ePrescribing system (Fig 23), and 60%

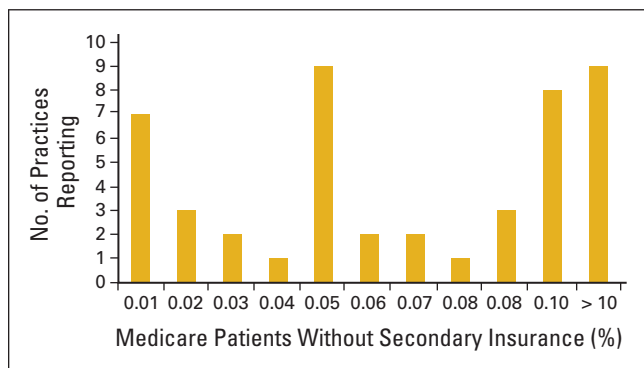


Figure 18. Percentage of Medicare patients without secondary insurance coverage (n = 47 practices).

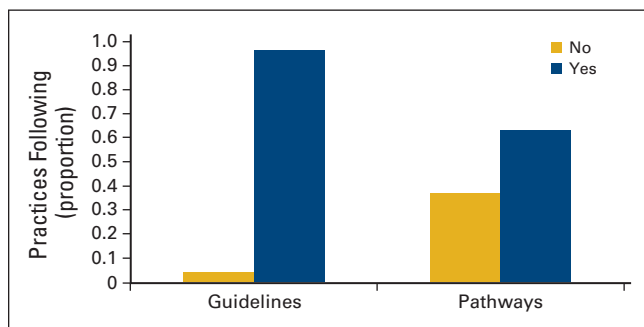


Figure 19. Responses to survey question “Do practice physicians regularly use practice guidelines or clinical pathways in patient care?” (n = 106 practices).

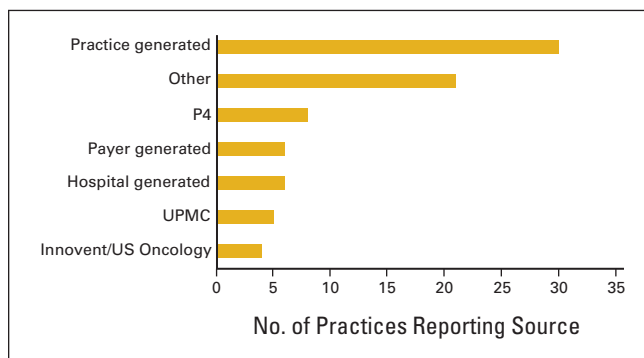


Figure 20. Source of clinical pathways (n = 80 practices). P4, P4 Healthcare (Dallas, TX); UPMC, University of Pittsburgh Medical Center (Pittsburgh, PA).

expect to receive an ePrescribing incentive payment for 2010 (Fig 24).

In addition, practices were asked whether they currently use an EMR system (Fig 25) and which EMR they use (Fig 26). The survey also asked practices to indicate their readiness for the Medicare EMR incentive program in 2011 by choosing one response to the statement: “To be eligible for a first-year payment for the Medicare EMR incentive program in 2011, you must be a meaningful user of an Office of the National Coordinator–Authorized Testing and Certification Body–certified EMR by October 1, 2011.” Results are depicted in Figure 27 and show that almost 40% of respon-

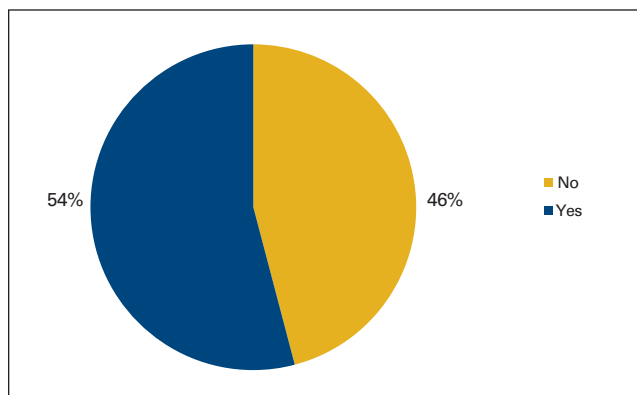


Figure 21. Response to survey question “Do you routinely measure physician compliance with clinical pathways?” (n = 61 practices).

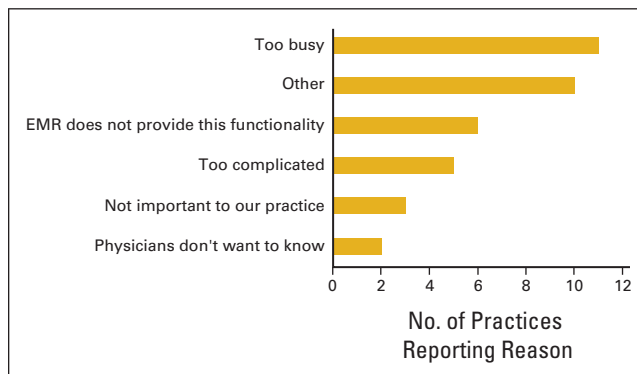


Figure 22. Reasons given for not measuring compliance with clinical pathways (n = 37 practices). EMR, electronic medical record.

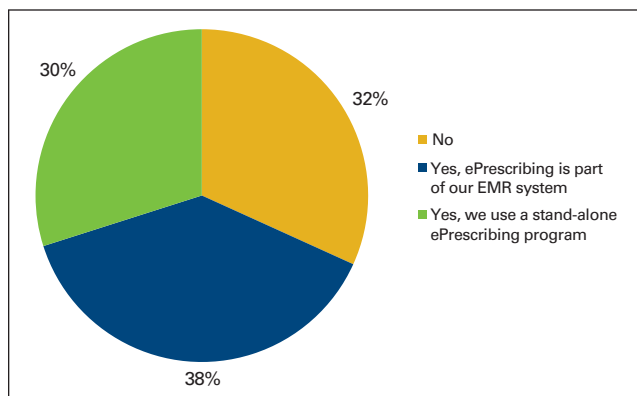


Figure 23. Responses to survey question “Do you generate prescriptions using an ePrescribing system?” (n = 107 practices). EMR, electronic medical record.

dents say they have a certified EMR and expect to receive an incentive payment for 2011.

Level 1 Quantitative Benchmarks

Reporting on level 1 quantitative benchmarks was limited to practices that submitted minimum data elements, including:

- number of FTE HemOnc physicians,
- total revenue,
- COGPF,

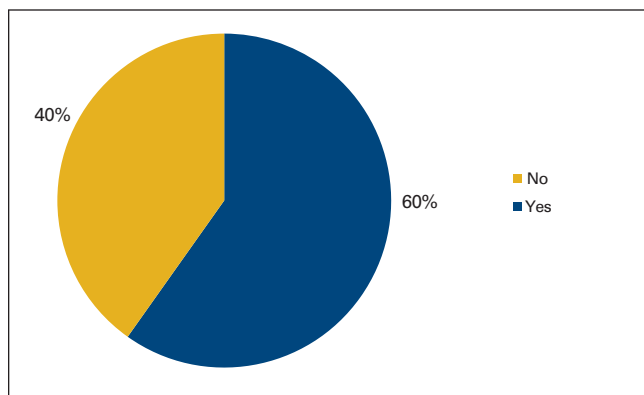


Figure 24. Responses to survey question “Do you expect to receive an ePrescribing incentive payment for 2010?” (n = 107 practices).

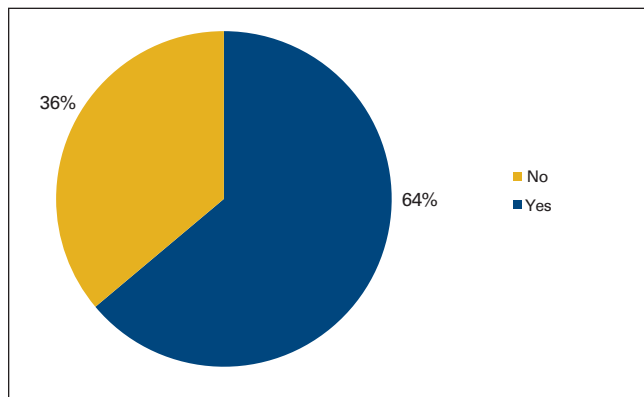


Figure 25. Responses to survey question “Does your practice currently use an electronic medical record?” (n = 108 practices).

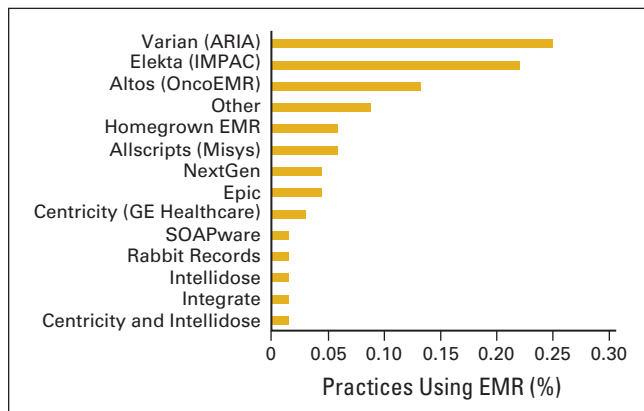


Figure 26. Electronic medical record (EMR) system used by survey respondents (n = 68 practices).

- number of new HemOnc patients in the office, and
- number of new HemOnc patients inpatient in the hospital.

Criteria were then applied to exclude practices reporting:

- higher drug revenue than total revenue,
- higher COGPF than total revenue, and
- drug revenue less than 0.5% or greater than 1.5% of COGPF.

A total of 37 practices with 340 FTE HemOnc physicians and 430 FTE physicians met these criteria and are included in the level 1 analysis. Additional exclusions were applied to specific benchmarks for data outside the range of credible results.

HemOnc Productivity

New patient flow into a practice continues to be an important measure of productivity and an essential tool for strategic planning. In the past, we have asked practices to report the number of new patients on the basis of codes for consultation and new patient services. Medicare no longer recognizes the consultation codes that have historically been used to report these services, and because of this, coding patterns are no longer a reliable source for this information. This year, we asked practices to report the number of new patients by specialty (radiation oncology or HemOnc) and by place of service (office or inpatient hospital) and did not specify that they report on the basis of specific codes. A new patient is defined as one who has not received services in the practice in the last three years. The number of new patients per FTE HemOnc physician is reported in aggregate in Figure 28 and by site of service (office *v* hospital) in Figure 29. Similar to last year’s results, approximately two thirds of the new patients are seen in the office setting.

In addition to reporting new patients, practices were also asked to report on the number of established patient visits in the office and in the hospital setting according to codes; office visits included codes 99212 to 99215, and hospital visits included codes 99217 to 99220, 99221 to 99223, 99231 to 99233, 99234 to 99236, 99238 to 99239. Data are reported in aggregate (Fig 30) and by site of service (Fig 31). Data are not collected or reported on an individual code basis.

In the 2010 benchmarking work that was completed for the Oncology Circle practices, data were collected for individual codes and converted to work relative value units (wRVU) for productivity reporting. In that work we include the physician wRVUs for all services billed in 2010 in the Oncology Circle practices and determined that 6,000 wRVU is the standard work output for one FTE HemOnc physician.

Revenue and Expense

In the survey instrument, revenue was defined as cash collections for the 12-month period as reported on the practice’s profit and loss statement and further described as all money received by the business entity during the year for any services, regardless of when that service was provided. Total revenue is the same as gross income as reported on a cash basis financial statement and includes all collected revenue for the period, medical revenue plus nonmedical revenue. Nonmedical revenue is defined as total collected revenue for the period for services other than the provision of medical care. Examples include (but are not limited to) research revenue, medical directorships, publication revenue, interest income, and so on. Total revenue per FTE HemOnc physician and total medical revenue (total revenue less nonmedical revenue) per FTE HemOnc physician are presented in Figure 32. Revenue mix by service line is pre-

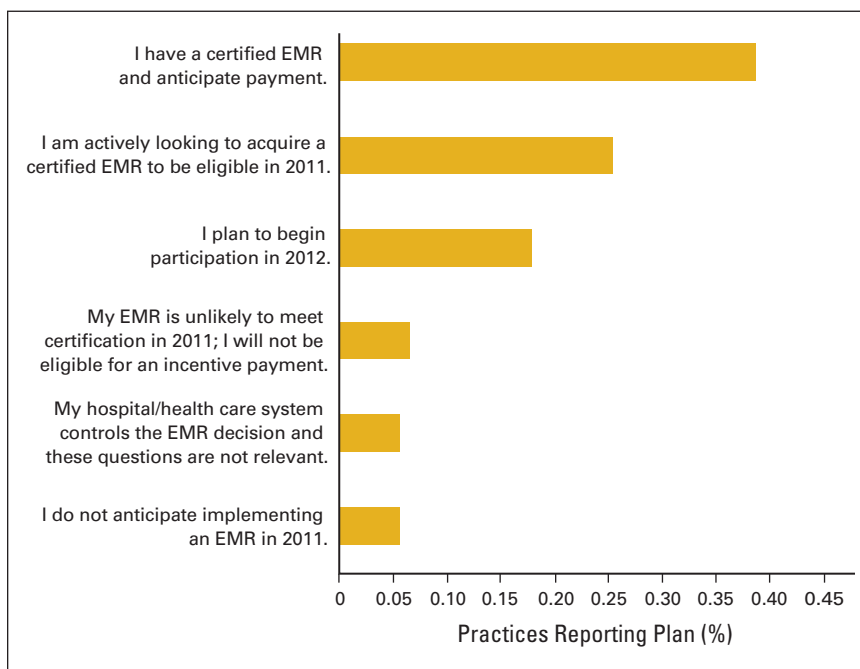


Figure 27. Plans for participation in the Medicare electronic medical record (EMR) incentive program in 2011 (n = 106 practices).

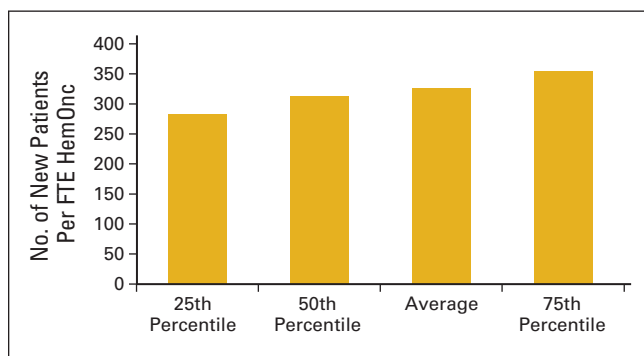


Figure 28. Number of new patients per full-time equivalent (FTE) hematology/oncology (HemOnc) physician (n = 37 practices).

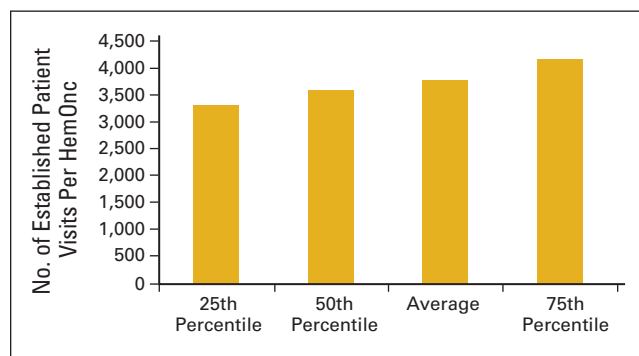


Figure 30. Number of established patient visits per full-time equivalent hematology/oncology (HemOnc) physician (n = 37 practices).

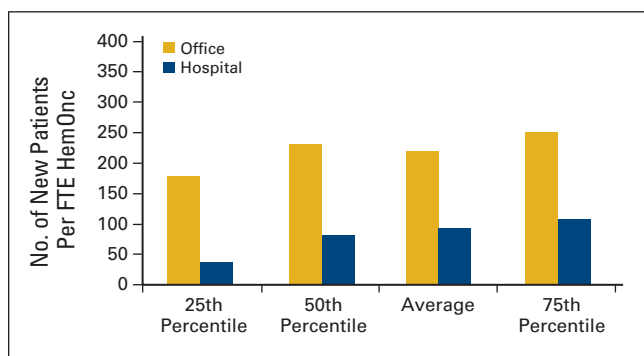


Figure 29. Number of new patients per full-time equivalent (FTE) hematology/oncology (HemOnc) physician by site of service (n = 37 practices).

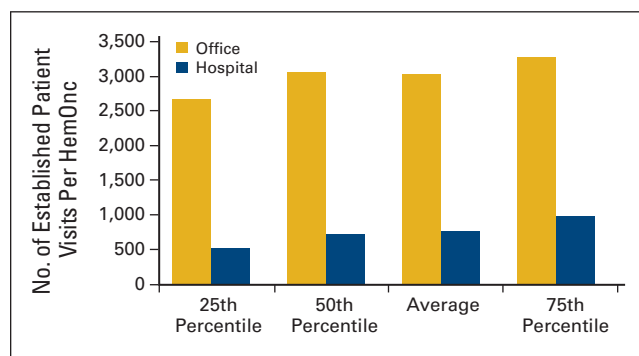


Figure 31. Number of established patient visits per full-time equivalent hematology/oncology (HemOnc) physician by site of service (n = 37 practices).

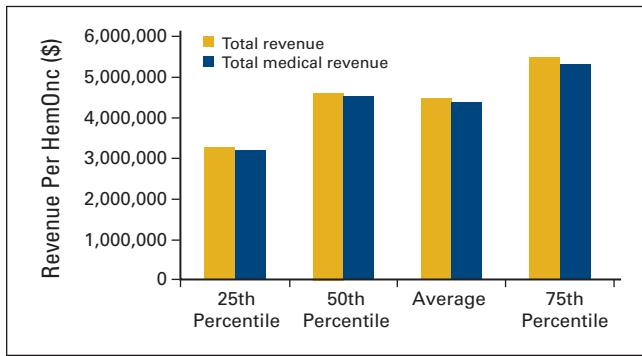


Figure 32. Total revenue and total medical revenue per full-time equivalent hematology/oncology (HemOnc) physician (n = 37 practices).

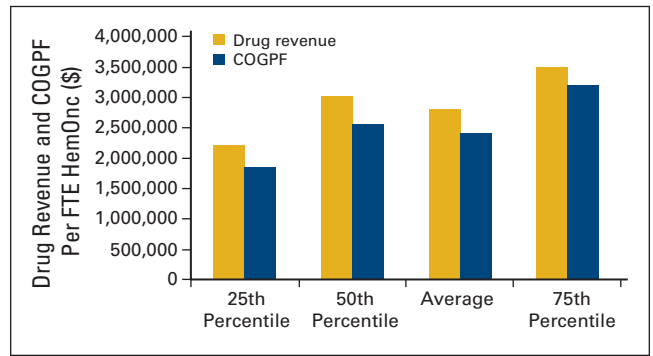


Figure 35. Drug revenue and cost of goods paid for (COGPF) per full-time equivalent (FTE) hematology/oncology (HemOnc) physician (n = 37 practices).

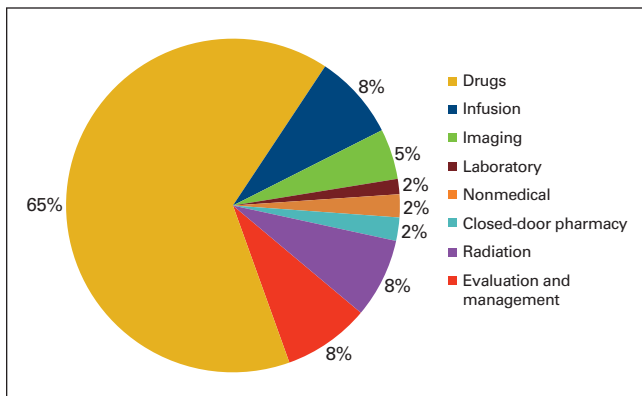


Figure 33. Revenue mix by service line (n = 37 practices).

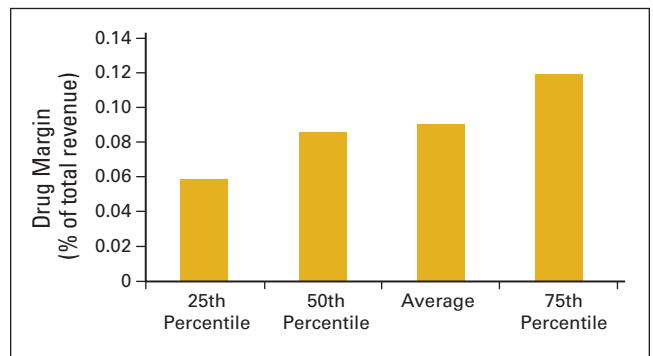


Figure 36. Drug margin as a percentage of total revenue (n = 37 practices).

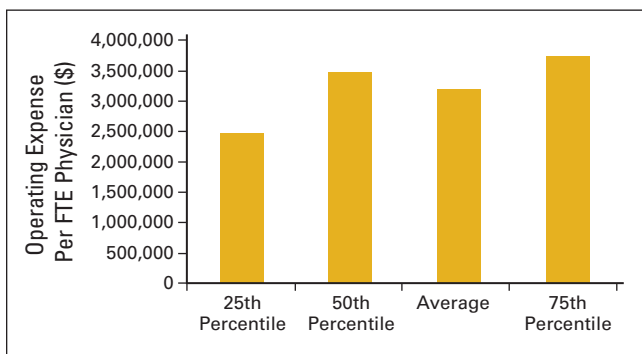


Figure 34. Total operating expense per full-time equivalent (FTE) physician (n = 37 practices).

sented in Figure 33. Total operating expense is defined as total practice expense less physician compensation (W-2 salary). This is reported per FTE physician in Figure 34.

Drug Cost, Revenue, and Margin

Drug revenue (Fig 35) is defined as total collected revenue for drugs purchased and provided by the practice. COGPF (Fig 35) is defined as the total of all money paid for drugs in the reporting period less rebates or other cost reductions received in the same period. Drug margin (Fig 36) is drug revenue less COGPF and is calculated and reported for all drugs and all payers. Trends in drug revenue as a percentage of total revenue and

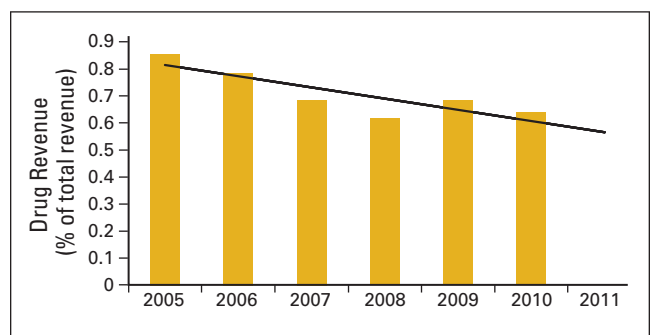


Figure 37. Drug revenue as a percentage of total revenue from 2005 through 2010.

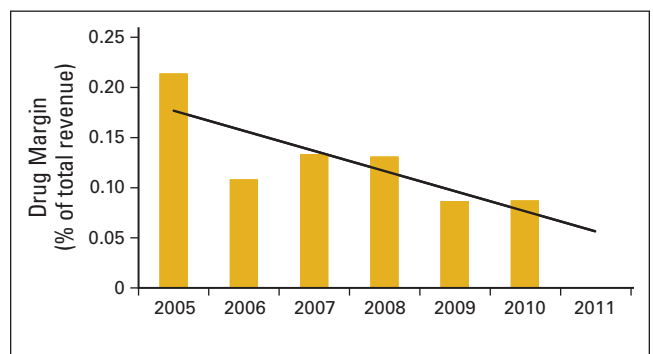


Figure 38. Drug margin as a percentage of total revenue from 2005 through 2010.

Table 2. Staffing Categories and Definitions

Category	Definition	Figures
Staff all	All staff working in all departments/specialties in the practice; includes nonphysician practitioners; does not include physicians	39, 40
Staff all HemOnc	All staff in the HemOnc line of business in the practice; includes nonphysician practitioners; does not include physicians	39, 40
Nonphysician practitioners	Includes nurse practitioners and physician assistants working the HemOnc line of business	41, 42
Executive staff	Includes all executive and senior management staff in all departments/specialties in the practice, all staff members who report to the physician executive or the board, and nonphysician practitioners; does not include physicians	43, 44, 45
Chemotherapy administration staff	Includes all staff responsible for drug purchasing, mixing, delivery to patients, and management of these processes; reported on an FTE basis including percentage of time all staff members spend on these activities	46, 47, 48, 49
Billing staff	Includes all staff in the billing and collecting process in the practice for all departments/specialties; does not include patient financial advocates	50, 51, 52
Patient financial advocate	Includes all staff in the patient financial advocate or financial counseling process in the practice for all departments/specialties	53, 54
Research staff	Includes all staff performing clinical research and research clerical support; does not include physician research time	55, 56
Laboratory staff	Includes all laboratory staff employed by the practice	57, 58
Imaging staff	Includes all imaging staff employed by the practice	62, 63

Abbreviations: FTE, full-time equivalent; HemOnc, hematology/oncology.

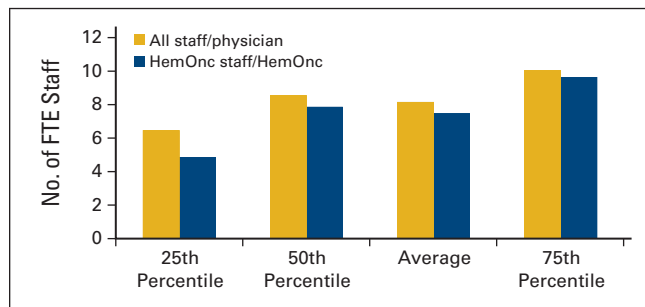


Figure 39. All staff and all hematology/oncology (HemOnc) staff per full-time equivalent (FTE) physician and FTE HemOnc physician, respectively (n = 39 practices).

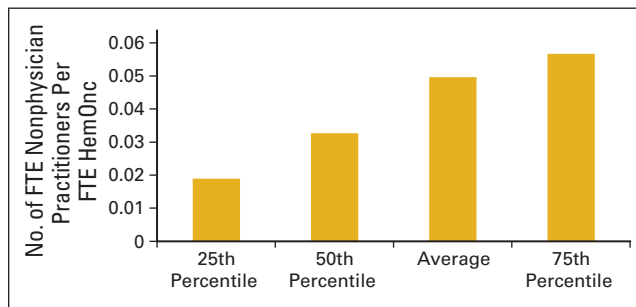


Figure 41. Number of full-time equivalent (FTE) nonphysician practitioners per FTE hematology/oncology (HemOnc) physician (n = 36 practices).

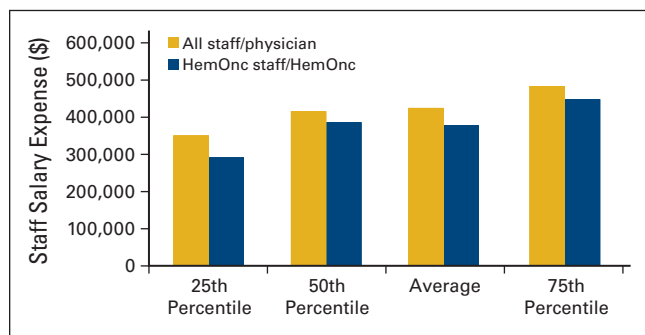


Figure 40. Pay for all staff per full-time equivalent (FTE) physician and pay for hematology/oncology (HemOnc) staff per FTE HemOnc physician (n = 33 practices staff all, 36 practices staff all HemOnc).

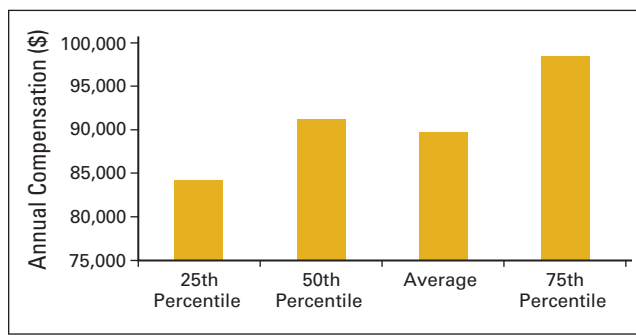


Figure 42. Annual compensation per full-time equivalent nonphysician practitioner (n = 32 practices).

drug margin as a percentage of total revenue are presented in Figures 37 and 38.

Level 2 Quantitative Benchmarks

Level 2 benchmarks include measures of staffing, staff productivity, laboratory, imaging, closed-door pharmacy, inventory, accounts receivable and radiation oncology. These benchmarks

are not limited to the level 1 inclusion/exclusion criteria; all practices that provided appropriate data are included.

Staffing and Productivity

Staffing information was collected and reported in categories as presented in Table 2. Staffing information is reported per FTE physician for some categories such as executive staff and billing staff, which support all specialties in a multispecialty practice.

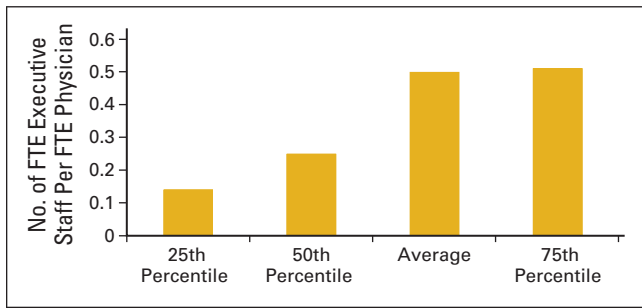


Figure 43. Number of full-time equivalent (FTE) executive staff per FTE physician (n = 40 practices).

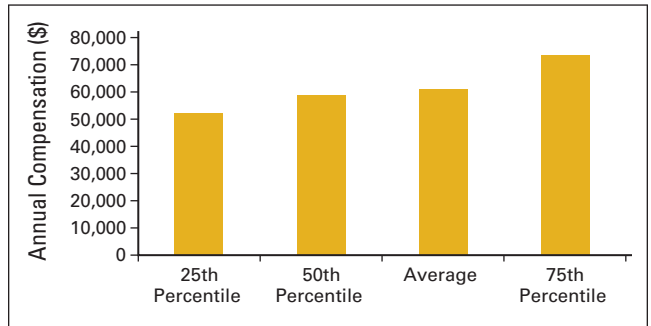


Figure 47. Annual compensation per full-time equivalent chemotherapy administration staff (n = 42 practices).

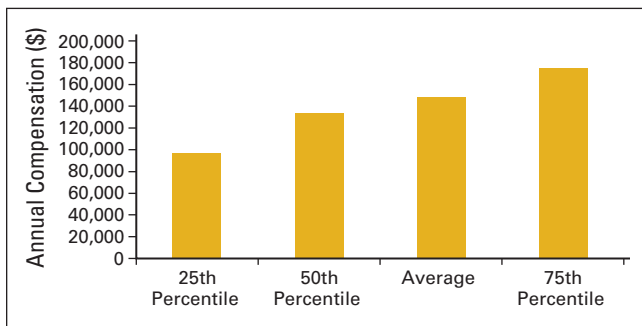


Figure 44. Annual compensation per full-time equivalent executive staff (n = 39 practices).

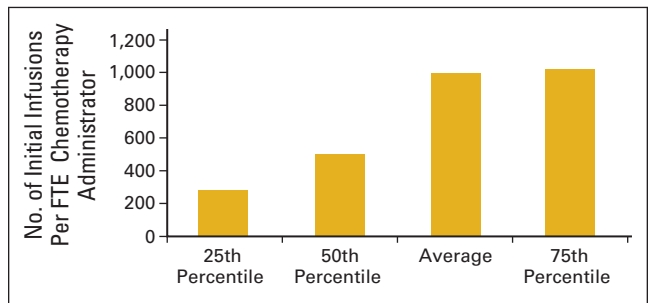


Figure 48. Number of initial infusion services per full-time equivalent (FTE) chemotherapy administration staff (n = 37 practices).

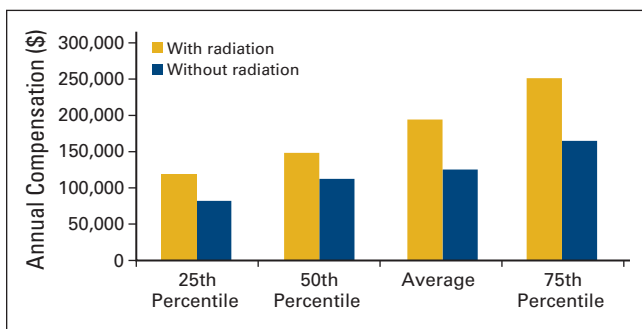


Figure 45. Annual compensation per full-time equivalent executive staff in practices with (n = 13 practices) and without (n = 26 practices) radiation oncology.

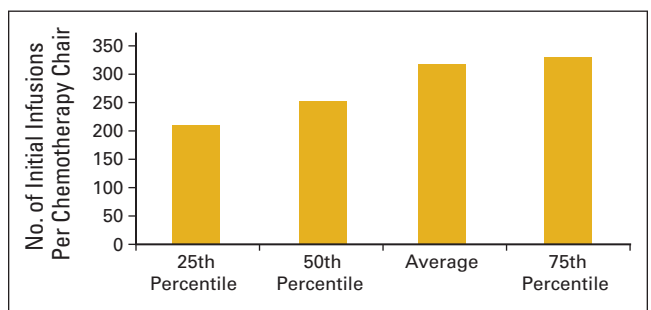


Figure 49. Number of initial infusions per chemotherapy chair (n = 38 practices).

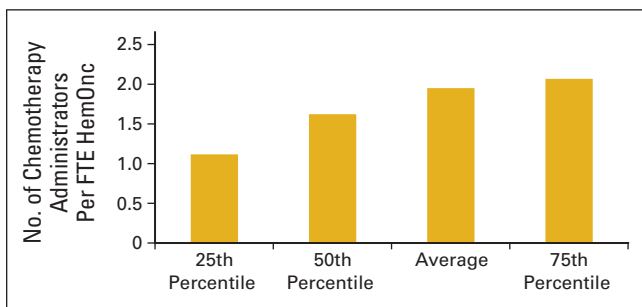


Figure 46. Number of chemotherapy administration staff per full-time equivalent (FTE) hematology/oncology (HemOnc) physician (n = 44 practices).

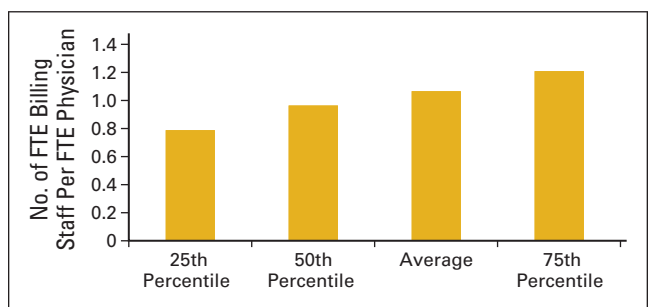


Figure 50. Number of full-time equivalent (FTE) billing staff per FTE physician (n = 40 practices).

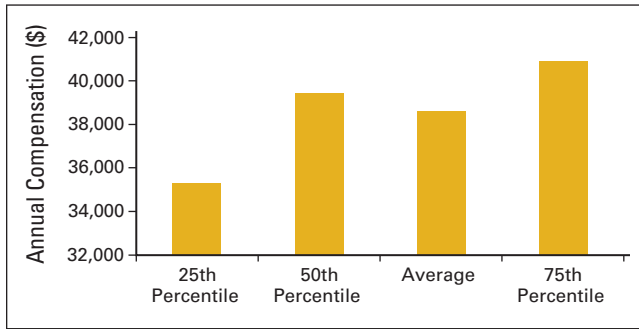


Figure 51. Annual compensation per full-time equivalent billing staff (n = 39 practices).

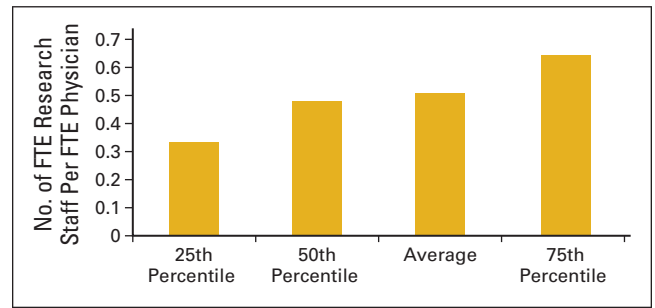


Figure 55. Number of full-time equivalent (FTE) research staff per FTE physician (n = 23 practices).

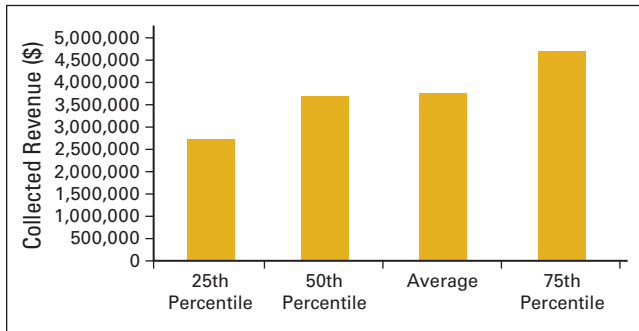


Figure 52. Collected revenue per full-time equivalent billing staff (n = 40 practices).

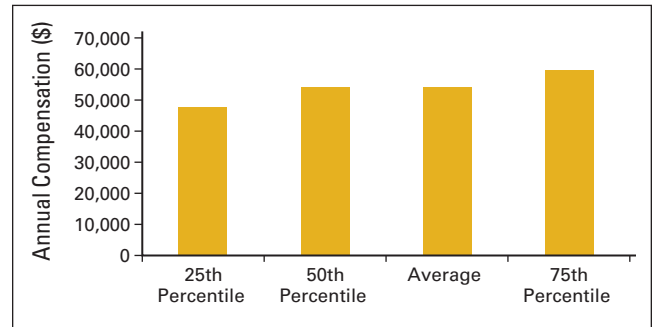


Figure 56. Annual compensation per full-time equivalent research staff (n = 22 practices).

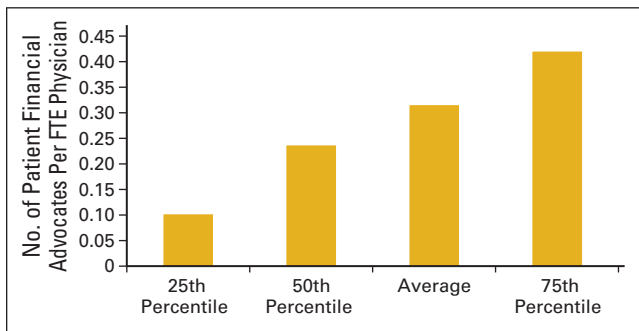


Figure 53. Number of full-time equivalent (FTE) patient financial advocate staff per FTE physician (n = 40 practices).

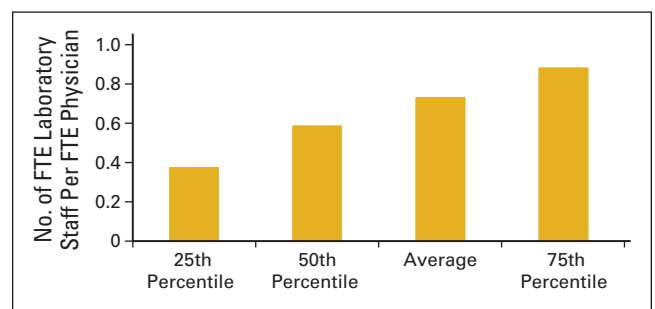


Figure 57. Number of full-time equivalent (FTE) laboratory staff per FTE physician (n = 32 practices).

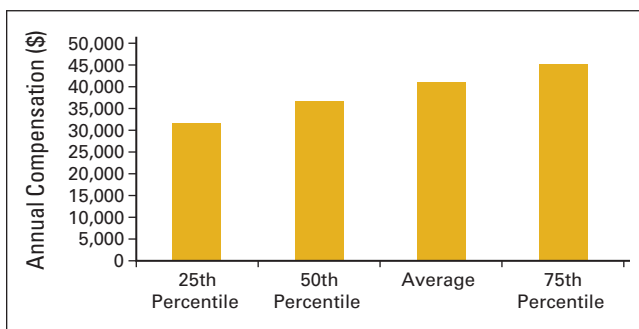


Figure 54. Annual compensation per full-time equivalent patient financial advocate (n = 36 practices).

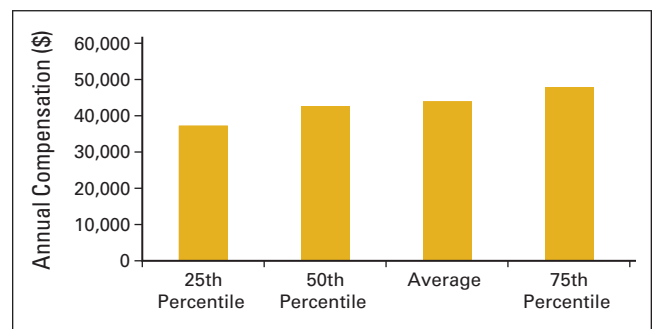


Figure 58. Annual compensation per full-time equivalent laboratory staff (n = 30 practices).

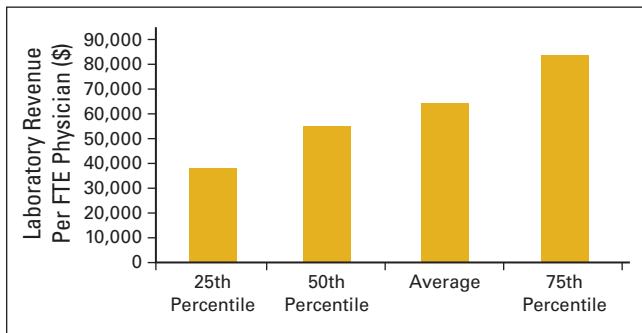


Figure 59. Laboratory revenue per full-time equivalent (FTE) physician (n = 36 practices).

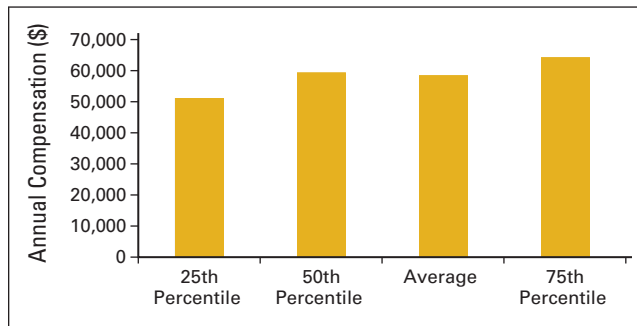


Figure 63. Annual compensation per full-time equivalent imaging staff (n = 15 practices).

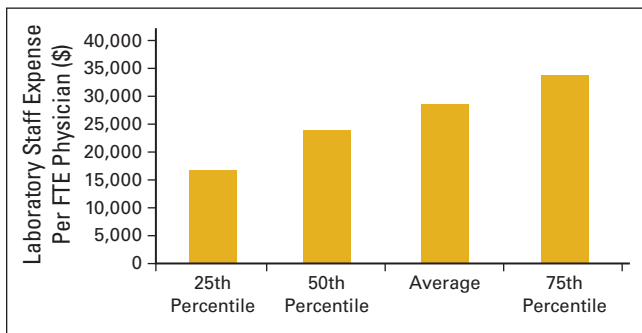


Figure 60. Laboratory staff cost per full-time equivalent (FTE) physician (n = 29 practices).

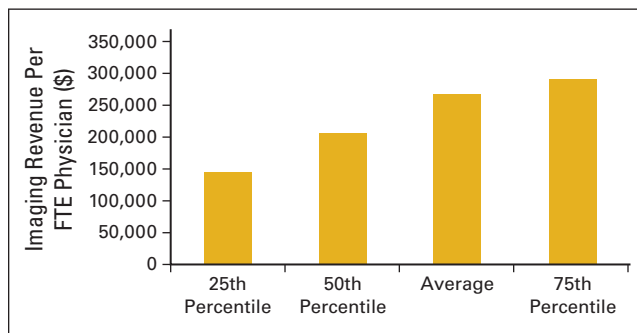


Figure 64. Imaging revenue per full-time equivalent (FTE) physician (n = 16 practices).

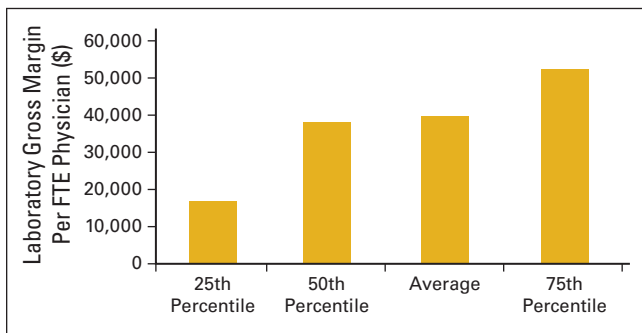


Figure 61. Laboratory gross margin per full-time equivalent (FTE) physician (n = 31 practices).

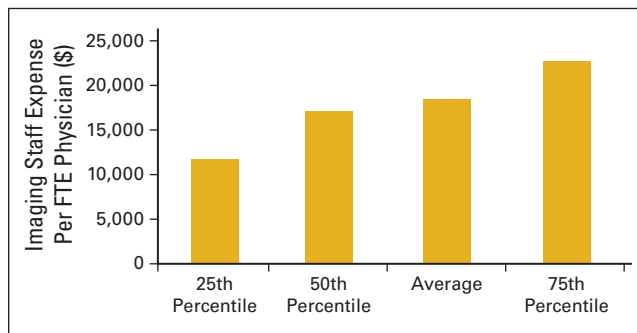


Figure 65. Imaging staff cost per full-time equivalent (FTE) physician (n = 15 practices).

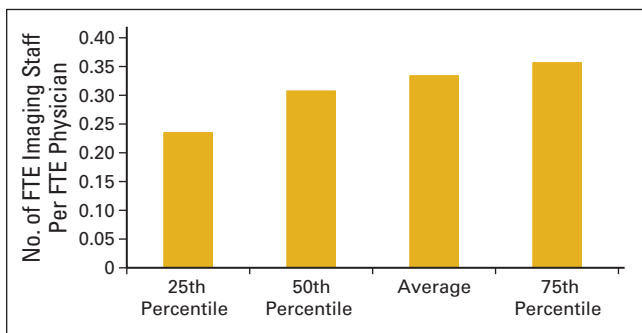


Figure 62. Number of full-time equivalent (FTE) imaging staff per FTE physician (n = 16 practices).

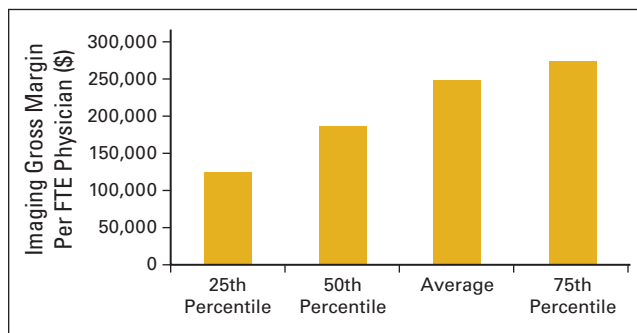


Figure 66. Imaging gross margin per full-time equivalent (FTE) physician (n = 15 practices).

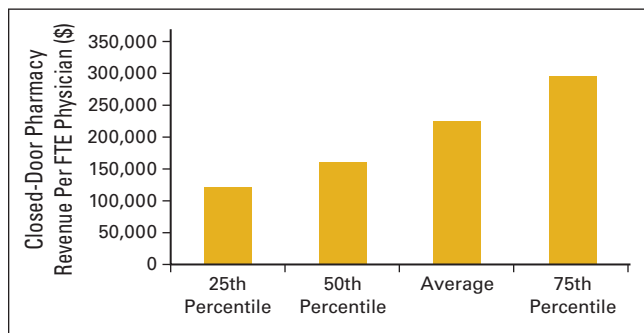


Figure 67. Closed-door pharmacy revenue per full-time equivalent (FTE) physician (n = 12 practices).

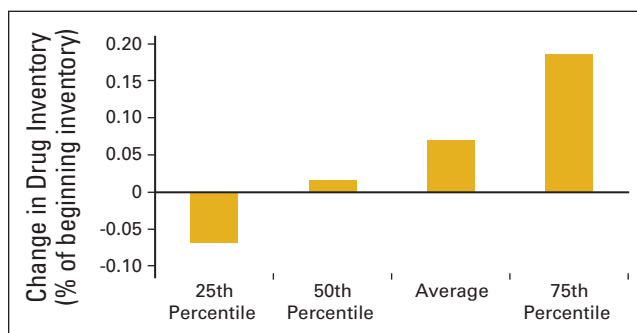


Figure 71. Change in drug inventory as a percentage of beginning inventory (n = 31 practices).

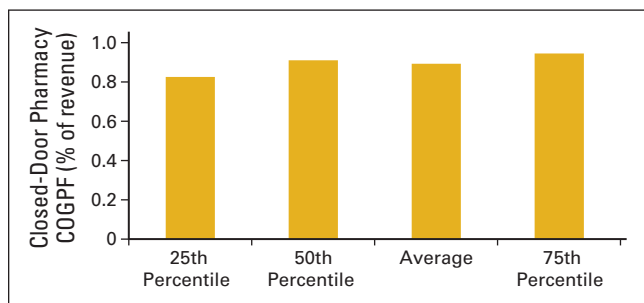


Figure 68. Closed-door pharmacy cost of goods paid for (COGPF) as a percentage of closed-door pharmacy revenue (n = 12 practices).

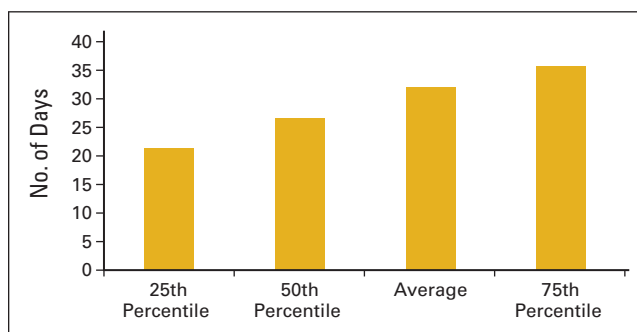


Figure 72. Days sales are outstanding (n = 30 practices).

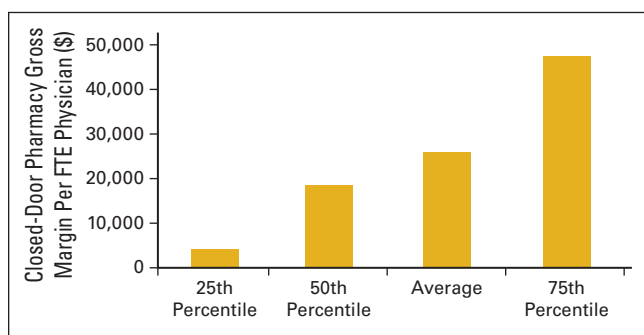


Figure 69. Closed-door pharmacy gross margin per full-time equivalent (FTE) physician (n = 12 practices).

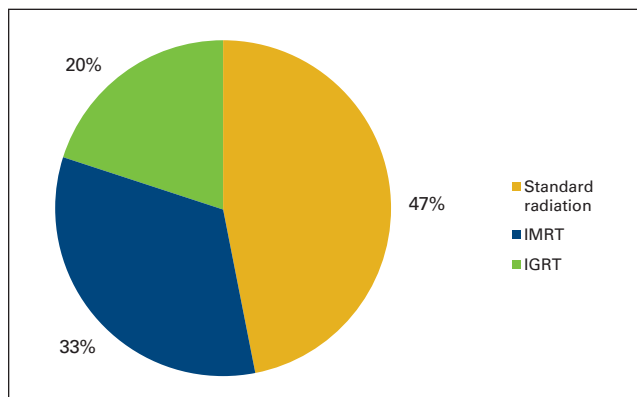


Figure 73. Radiation oncology treatment mix (n = 13 practices). IMRT, intensity-modulated radiation therapy; IGRT, image-guided radiation therapy.

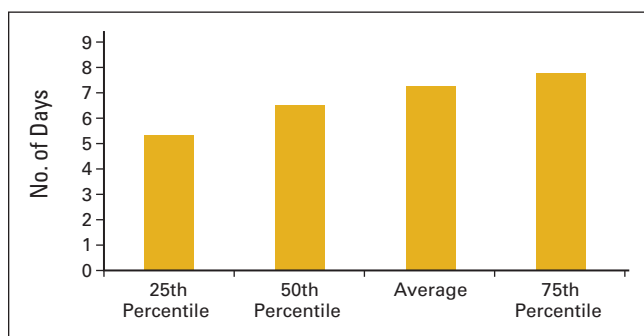


Figure 70. Days a supply of drugs is on hand (n = 30 practices).

Other staff categories, such as chemo admin staff, are reported per FTE HemOnc physician. Figure 39 presents FTE staff counts per FTE physician and FTE HemOnc physician. Figure 40 presents total staff salary expense per FTE physician and total HemOnc staff salary expense per FTE HemOnc physician. Staff salary information is also reported for specific staffing categories (Figs 41 through 56).

Productivity measures are reported for two staffing categories: chemotherapy administration staff and billing staff. The number of initial infusions per FTE chemo admin staff is a productivity measure for the chemotherapy suite. The number of initial infusions is a count of the initial drug administration codes (as defined in the coding manual) billed by the practice

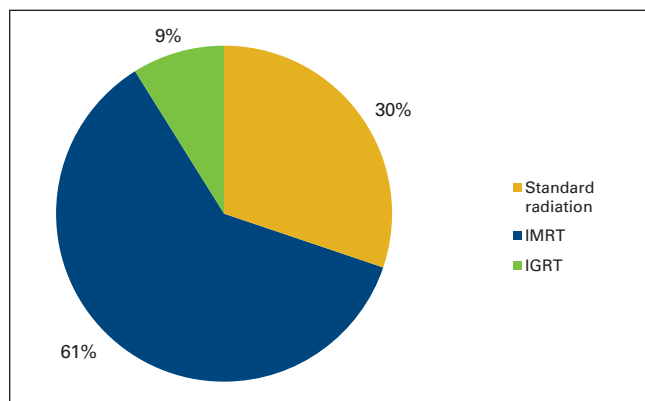


Figure 74. Radiation oncology revenue mix (n = 13 practices). IMRT, intensity-modulated radiation therapy; IGRT, image-guided radiation therapy.

during the period and includes initial infusions, initial hydration, and initial intravenous push services. Each patient receiving infusion services is billed for only one initial drug administration code; therefore, these codes become a surrogate for the number of patients receiving infusion services. It is interesting to note that the average number of initial infusions per FTE chemotherapy administration staff has been 800 for the last two years; this year, we see a sharp increase to an average of 1,000 (Fig 48). This year for the first time, we also report the number of initial infusion services per chemotherapy chair as an additional productivity measure (Fig 49); our data show an average of just more than 300 initial infusions per chair. In the billing department, we report collected revenue per FTE billing staff (Fig 52) as a productivity measure.

Laboratory

In addition to the number of laboratory staff per FTE physician (Fig 57) and annual compensation per FTE laboratory staff (Fig 58), we also report laboratory revenue per FTE physician (Fig 59), laboratory staff cost per FTE physician (Fig 60), and laboratory gross margin (laboratory revenue less laboratory staff cost) per FTE physician (Fig 61).

Imaging

We report the number of imaging staff per FTE physician (Fig 62) and annual compensation per FTE imaging staff (Fig 63), imaging revenue per FTE physician (Fig 64), imaging staff cost per FTE physician (Fig 65), and imaging gross margin (imaging revenue less imaging staff cost) per FTE physician (Fig 66).

Closed-Door Pharmacy

A closed-door pharmacy provides services to patients and employees of the practice but is not available to the public at large. This year, 18 practices report that they operate closed-door pharmacies and 12 practices provided financial data. Figure 67 presents total revenue for the closed-door pharmacy per FTE physician. Figure 68 shows the COGPF for the closed-door pharmacy as a percentage of closed-door pharmacy revenue and

Figure 69 reports closed-door pharmacy gross margin (total revenue less COGPF) per FTE physician.

Inventory

In the last several years, most oncology practices have made a concerted effort to decrease the inventory of drugs on hand. Figure 70 shows that the average days a supply of drugs is on hand for reporting practices in 2010 was just over 7 days. Figure 71 presents the change in drug inventory as a percentage of beginning inventory with an average of 7% increase during the year. Given that most chemotherapy drugs can be ordered, shipped, and received in 24 to 48 hours, there may be room to decrease the inventory on hand in many practices.

Accounts Receivable

Days sales outstanding is the time that it takes to collect from payers (and patients) for services that have already been provided. This is calculated by dividing net accounts receivable by average collections per business day. Figure 72 shows that the average days sales outstanding for 2010 is 32, which is unchanged from 2009.

Radiation Oncology

The NPB has collected data on radiation oncology services for several years, but reporting on meaningful benchmarks has been difficult because of the variety of radiation practice models in the marketplace and inconsistency in the data reported. This year, we collected data from 13 practices representing 40 radiation oncology physicians. Practices reported the number of services rendered and revenue collected in three categories: radiation treatment delivery (codes 77401 through 77416); intensity-modulated radiation therapy (77418); and image-guided radiation therapy (77421). Figure 73 presents the treatment mix on the basis of codes reported for these services; Figure 74 presents the revenue mix.

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Oncology Metrics, a division of Altos Solutions, develops information products and services for the oncology community to help accelerate advancements in the treatment of cancer. Oncology Metrics has built networks of community-based oncology practices from which it gathers financial, operational, and clinical information and aggregates the information to provide a platform of knowledge-based products and services. The cornerstone of Oncology Metrics' approach is to promote the discovery and adoption of best practices. Oncology Metrics' customers include oncology care providers and all organizations involved in the quest to improve cancer diagnosis and treatment.

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Although all authors completed the disclosure declaration, the following author(s) indicated a financial or other interest that is relevant to the subject matter under consideration in this article. Certain relationships marked with a "U" are those for which no compensation was received; those relationships marked with a "C" were compensated. For a de-

tailed description of the disclosure categories, or for more information about ASCO's conflict of interest policy, please refer to the Author Disclosure Declaration and the Disclosures of Potential Conflicts of Interest section in Information for Contributors.

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Commentary: Hard Times for Oncologists?

By J. Russell Hoverman, MD, PhD

In the face of a worldwide shortage at the end of World War I, the government increased the payment for wheat to an unprecedented \$2 per bushel. Ranchers and homesteaders, aided by newly mechanized farm equipment, began turning over the prairie sod of the high plains of Texas, Oklahoma, Colorado, Kansas, and Nebraska to plant winter wheat. By 1919, 70 million acres were planted. By 1926, the market price for wheat had dropped, but with 2,000 acres planted, a farmer could still make more than the president. At the end of the decade, the price for wheat plummeted. To pay notes and maintain income, more and more acres of marginal grassland were turned over. Even so, a dry land wheat farmer could still make a decent living in the first years of the depression. Then, after 11 years of above average rainfall, the weather changed.¹

The weather changed for community oncologists in 2007. As Barr and Towle² note in the September issue of this *Journal*, the Medicare Prescription Drug, Improvement, and Modernization Act was signed in late 2003 to become effective in 2004. The critical component for oncologists was a change in the reimbursement methodology for chemotherapy drugs from using average wholesale price to a newly defined average sales price (ASP), which would be effective in 2005. This represented a 1/4

to 1/3 or more decrease in net income on drugs. In 2004, there was a one-time, one-year increase in reimbursement for infusion codes. The effects of ASP were somewhat mitigated in 2005, and less so in 2006, by the Medicare Demonstration Project. For 2005 to 2007, drug revenues were enhanced by volume on erythroid stimulation agents (ESAs; epoetin alpha and darbepoetin). A progressive linking of commercial payer drug fee schedules to the Medicare ASP schedule continued through this period. Since 2007, when the US Food and Drug Administration issued the black box warning, revenue from ESAs dropped steadily and may only now be bottoming out. The squeeze noted by the authors began in 2007 when all of these alternative revenue sources went away (Fig 1 of that article).

The 2011 National Practice Benchmark³ documents the profound effect these changes have had on community oncology. This is a report of primarily physician-owned oncology practices (86%). In 2005, drug revenue accounted for 85% of total revenue. In 2010, this was 65% (Fig 37 of that article). Drug margin had fallen from 22% to 9% (Fig 38 of that article). The authors note that the surveyed practices are not necessarily the same year over year; in fact, the number of responding practices has dropped from 208 in 2009 to 117 in the current