



A Comparative Report on Key Cancer DRGs

Lee E. Mortenson & Mary Lou Bowers

To cite this article: Lee E. Mortenson & Mary Lou Bowers (1999) A Comparative Report on Key Cancer DRGs, *Oncology Issues*, 14:2, 23-26, DOI: [10.1080/10463356.1999.11904818](https://doi.org/10.1080/10463356.1999.11904818)

To link to this article: <https://doi.org/10.1080/10463356.1999.11904818>



Published online: 17 Oct 2017.



Submit your article to this journal [↗](#)



Article views: 2



View related articles [↗](#)

A Comparative Report on Key Cancer DRGs

by Lee E. Mortenson, D.P.A., and Mary Lou Bowers, M.B.A.

Fifteen years after the introduction of DRGs (Diagnosis-Related Groupings), hospitals appear to be developing effective cost containment strategies to deliver oncology services within a stricter reimbursement paradigm. Results from ACCC's 1998 DRG survey indicate that, overall, hospitals are achieving substantial profits despite severe reimbursement constraints from Medicare and other payers. Cost pressures from both the public and private sectors have transformed oncology into a business driven by the bottom line. As a result, hospital administrators are becoming increasingly savvy about how to decrease their costs, streamline operations, and code for reimbursement.

The past five years have witnessed substantial activity in the area of hospital mergers and development of multihospital networks and systems. Such arrangements allow for consolidation of resources, advanced purchasing power, and greater economies of scale across the entire oncology program. On the other hand, the decline in numbers of inpatient oncology units, oncology-certified nurses, and mid-level administrative and clinical personnel overall are examples of economic measures that may harm quality of care. As in any business, oncology leaders are challenged with balancing cost demands against the quality of services provided.

Lee E. Mortenson, D.P.A., is ACCC executive director. Mary Lou Bowers, M.B.A., is director of practice and disease management with ELM Services, Inc., in Rockville, Md.

The study of DRG data continues to serve as a barometer for measuring the overall health of hospital-based oncology programs. Our analysis shows a healthier bottom line this year over last year. Apparently, managed care's maximum rate setting has forced programs to focus on cost savings. A number of other factors can be credited with reducing hospitals' cost burden. With disease being detected at earlier stages, and a host of supportive drugs available to lower the risk of complications and side effects, most patients are able to better tolerate on an outpatient basis the previously debilitating aspects of cancer treatment. Today, inpatient units tend to be concentrated with some of the more difficult cases to treat. In addition, inpatients tend to be either persons of advanced age who are more susceptible to complications, or younger persons with aggressive

disease. As a result, those hospitals experiencing decreased variation in DRG mix are better able to review necessary services for those DRGs and eliminate wasteful practices.

The 1998 DRG analysis presents cancer-specific DRG information on the costs, charges, and reimbursements associated with more than 169,000 discharges; the average age by DRG varies from age 9 to 75. For the second year our data collection effort targets *all* cancer patients—not only Medicare patients—discharged from ACCC member institutions. An examination of the entire patient population offers a more complete assessment of a hospital's cancer program finances.

The database used for this cancer DRG analysis was collected in the fall of 1998 from ACCC members, based on their financial experience with cancer-related DRGs. All ACCC member institutions were surveyed and requested to submit data on costs, charges, and reimbursements for seventy-two cancer-related DRGs for *all* patients discharged from their institutions over a twelve-month period. The 127 reporting hospitals recorded a total of 169,120 cancer-related discharges. They accessioned a total of 101,882 new analytic cancer cases during the twelve-month reporting period. This year three additional cancer-related DRGs were included in the survey, DRG 354, DRG 355, and DRG 405.

This year for the first time we examined the payer mix of hospital patients overall and by region. We offer this payer analysis as an additional frame of reference with which to compare your institution, given the considerable impact that payer mix has on your ability to effectively manage DRG perfor-

A VALUABLE BENCHMARKING TOOL

Cancer DRGs 1998 is the twelfth in a series of cancer DRG reports sponsored by the Association of Community Cancer Centers (ACCC). This publication presents detailed information on seventy-two DRGs as reported by ACCC member institutions.

Copies of the *Cancer DRGs* publication are now available. Call the ACCC Executive Office at 301-984-9496 or visit www.accc-cancer.org for more information.

mance. In the future, we expect to evaluate Medicare versus Medicare-risk versus managed care, which will provide another tool for successful program management.

WINNERS AND LOSERS

Figure 1 identifies the ten most frequently reported DRGs, as well as the percentage of all discharges reported for the 1998 survey. Of the top ten DRGs with the largest percentage of reported discharges, six are the same as those reported for the 1997 survey. DRGs 172, 203, 10, and 398 have joined the top ten in 1998. Keep in mind that the variation from 1997 to 1998 is perhaps more reflective of this year's sample than any overall trend.

The most profitable DRG per discharge is DRG 481 (BMT without O.R. procedures), which shows a mean profit of \$12,586 per discharge (Figure 2). A word of caution: Some hospitals may have

attributed reimbursements to this DRG that actually belong to DRG 275 (Malignant Breast Disorders).

Bone marrow transplant continues to evolve from an "experimental" procedure to an accepted treatment, in some cases on an outpatient basis. BMT is one area in which screening/early detection measures are producing positive results. Early detection is allowing more patients to enter a bone marrow treatment plan in an overall healthier state than patients undergoing BMT a few years ago. At the same time, BMT is increasingly gaining the acceptance of third-party payers. With BMT reimbursement more readily available, many patients need not endure a disabling delay while fighting a legal battle for coverage. As a result, treatment is commencing earlier in their disease, leaving patients healthier at time of treatment. Such patients tend to have

fewer complications and shorter lengths of stay.

Other profitable DRGs include DRG 473 (\$3,488 per discharge), DRG 405 (\$3,451 per discharge), DRG 492 (\$3,011 per discharge), DRG 406 (\$2,477 per discharge), and DRG 400 (\$2,345) (Figure 2). Refer to Table 1 on page 26 for a partial listing of cancer DRGs.

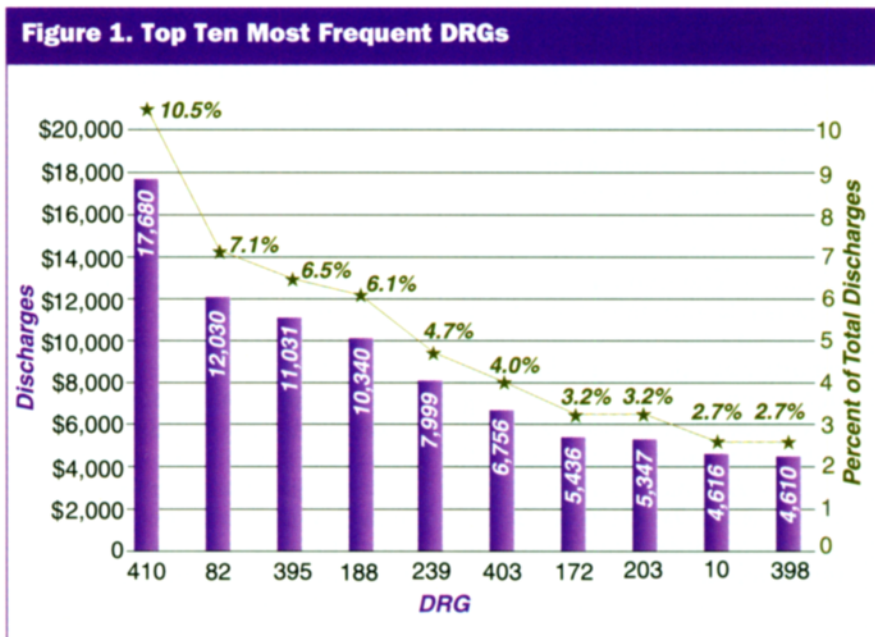
Figure 3 shows the top ten DRGs with the largest mean loss per discharge. Mean losses per discharge by DRG range from -\$18 (DRG 239) to -\$573 (DRG 64). This year's respondents report just thirteen DRGs with mean losses per discharge. Again, these numbers point to hospitals' success in managing their cancer programs via clinical pathways, streamlined services, and system-wide information sharing. Many cancer program administrators now have a much more accurate and complete handle on program costs and are more readily able to distinguish profitable services from unprofitable ones.

REGIONAL PROFIT/LOSS

A separate analysis was performed for each of five geographic regions to compare costs or profit/loss margins from region to region. The mean institutional profit across all regions is \$12,044. All regions report average institutional profits. Hospitals in the Southwest, Northeast, and West show the highest profits. As in last year's survey, wide regional variations exist in profit/loss figures for some DRGs.

BREAKOUTS

Five DRGs were again selected for a "financial breakout analysis," which included charge and cost data for diagnostic radiology and nuclear medicine, clinical and



pathology labs, pharmacy, operating rooms, room expenses, and all other ancillaries (including physical, speech, and occupation therapies; supplies; nutritionist; and social work). The selected DRGs are 82 (Respiratory Neoplasms),

172 (Digestive Malignancy), 257 (Total Mastectomy), 410 (Chemotherapy), and 481 (Bone Marrow Transplant). Seventy-three percent of respondents provided this valuable benchmarking data. These DRGs were selected for more

detailed analysis because they represent high-volume and/or high-cost cancers typically found in hospitals with active oncology programs.

For these five breakout DRGs, costs and charges for room expenses, including nursing services, were extrapolated. Not unexpectedly, for four of five breakout DRGs room expenses accounted for the most significant portion of overall costs, ranging from 34 to 45 percent. This finding reflects the fact that expenses due to lodging and nursing services continue to be the most significant determinants of profit or loss. The exception is DRG 257 (Total Mastectomy), where O.R. eclipses room costs by 25 percent, reflecting the growing trend for outpatient and shortened length of stay for mastectomy in appropriate patients.

Figure 2. Top Ten DRGs with Greatest Mean Profit per Discharge

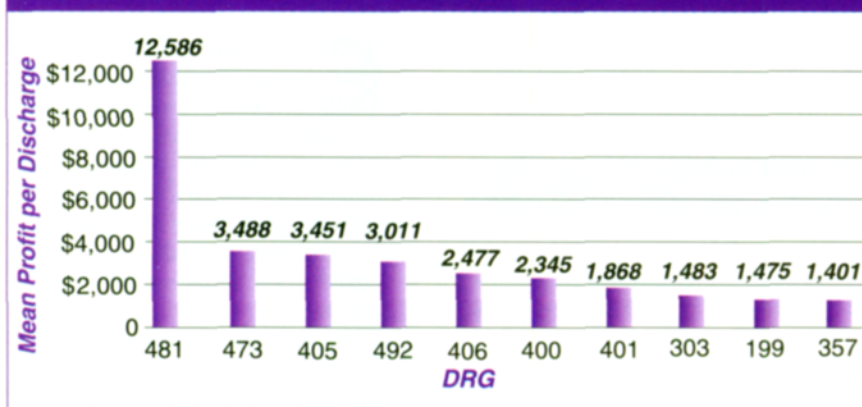
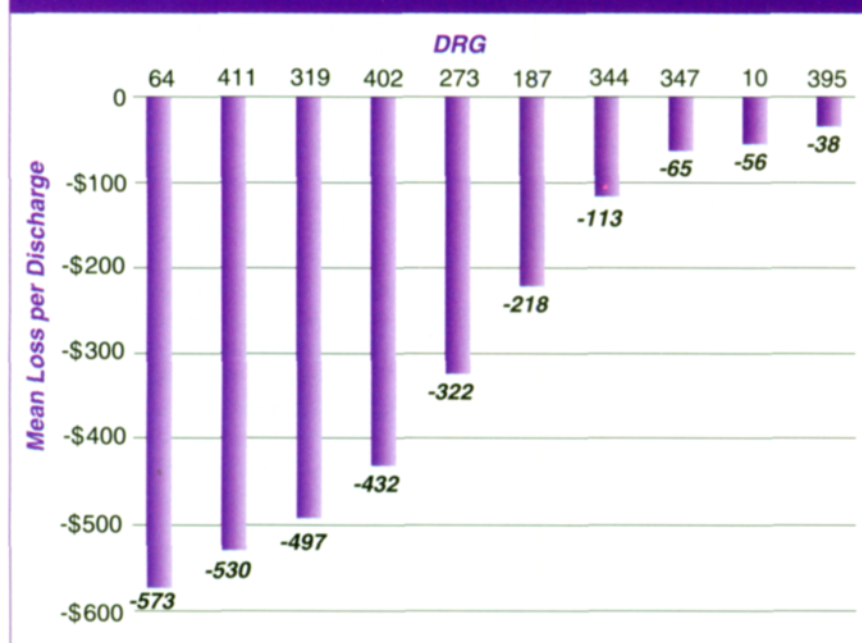


Figure 3. Top Ten DRGs with Greatest Loss per Discharge



TOTAL CHARGES, REIMBURSEMENTS, AND COSTS

The 126 hospitals providing charge data in this survey reported an overall total of more than \$1.88 billion in charges for a total of 169,049 discharges, representing a mean charge of \$11,149. This year DRG 481 leads all DRGs in terms of total charges, a significant jump from last year's twelfth place showing. Given this year's sample, this fact may signify a greater proportion of hospitals performing bone marrow transplants reporting than had last year. Having said that, one may also consider the growing acceptance by third-party payers to cover this procedure, which may result in a greater number of hospitals submitting claims for BMT procedures.

The 106 hospitals providing reimbursement data in this survey reported a total of more than

\$849 million in reimbursements for a total of 147,510 discharges. This represents a mean reimbursement per DRG of \$5,762. As with charges, in this year's survey DRG 481 tops the list for total reimbursements. Among the top fifteen DRGs for total reimbursements in last year's survey, all appear again in this year's top fifteen DRGs, demonstrating the pervasiveness of these DRGs across widely varying samples of institutions from one year to the next.

The 101 hospitals providing costs in this survey reported a total of more than \$757 million in costs for a total of 132,776 discharges, representing a mean cost of \$5,705. DRG 481 leads in terms of hospital costs.

DRG 1998

In summary, hospitals have cut costs in an attempt to assure the viability of their oncology services. This effort has paid off in a variety of ways, strengthening the ability

of hospitals to continue their vital role in the practice of quality oncology care. It is clear that hospitals are adapting to better manage a changing inpatient population. This is evidenced by increased profitability across all regions of the country. ☐

Table 1. Number, Title of 18 Cancer-Related DRGs

10	Nervous System Neoplasms, Age ≥ 70 w/CC
64	Ear, Nose, and Throat Malignancy
82	Respiratory Neoplasms
172	Digestive Malignancy, Age ≥ 70 w/CC
203	Malignancy of Hepatobiliary System or Pancreas
239	Path Fractures & Musculo & Connective Tissue Malignancy
257	Total Mastectomy for Malignancy, Age ≥ 70 w/CC
275	Malignant Breast Disorders, Age < 70 w/out CC
354	Uterus & Adnexa Procedures for Non-Ovarian/ Adnexal Malig w/CC
355	Uterus & Adnexa Procedures for Non-Ovarian/ Adnexal Malig w/out CC
398	Reticuloendothelial & Immunity Dis, Age ≥ 70 w/CC
400	Lymphoma or Leukemia w/Major OR Procedure
405	Acute Leukemia, Age ≤ 17 w/out Major OR Procedure
406	Myeloproliferative Dis w/Major OR Procedure w/CC
410	Chemotherapy
473	Acute Leukemia
481	Bone Marrow Transplant
492	Chemotherapy with Acute Leukemia as Secondary Diagnosis

Each autumn ACCC's annual DRG survey is distributed to ACCC member institutions. Staff in hospital administration, information systems, cancer registry, and other financial departments are asked to volunteer their time to complete this detailed record of costs, charges, and reimbursements for cancer DRGs. The task can often be a burdensome one, depending on the sophistication of the institution's information management systems, and the number of hospitals in the system or network. The Association is grateful to the many members who have devoted their time to participate in the DRG survey.

The survey for cancer DRG data has traditionally achieved a high response rate among the membership. This year's survey attained a 24 percent response rate, a slight decrease from the three previous years (25 percent, 1997; 27 percent, 1996 and 1995). These figures are quite impressive, considering the often intensive work involved in submitting data.