

## Oncology Nursing Society Workforce Survey Part II: Perceptions of the Nursing Workforce Environment and Adequacy of Nurse Staffing in Outpatient and Inpatient Oncology Settings

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Concerns about widespread nursing shortages, reports of falling quality of care, the decline of dedicated oncology nursing units, and the shift of patients with cancer into mixed nursing units where they are treated together with nononcology patients prompted the Oncology Nursing Society (ONS) to develop a study to examine the state of the oncology nursing workforce in the United States. Funded by the ONS Foundation Center for Leadership Information and Research, a national survey was administered to oncology RNs, oncologists, and nurse executives during the summer of 2000.

Part one (Lamkin, Rosiak, Buerhaus, Mallory, & Williams, 2001) of this two-part series indicated that, over the past year, the majority of oncology RNs perceived that patient acuity has risen, the amount of paperwork has increased, and hospital lengths of stay have decreased for all patients, specifically for patients with cancer. Moreover, virtually all survey respondents believed that too few RNs are practicing in the United States today and too few RNs will practice 10 years from now. Outpatient and inpatient oncology RNs reported a mix of favorable and unfavorable characteristics about their workplaces. Outpatient-based RNs were more likely than inpatient RNs to report caring for an increased number of patients and that physicians had delegated an increased number of tasks for them to perform. Inpatient RNs were more likely to perceive a decrease in nurse staffing, less-than-adequate staffing, and difficulty retaining experienced staff. When comparing the perceptions of RNs who work in dedicated oncology units to those who work in mixed patient units, RNs in dedicated oncology units perceived their workplace environments more positively. More oncology RNs who reported working on mixed patient units believed that staffing has decreased, the amount of paperwork has increased, and the number of tasks delegated by RNs to non-RNs has increased compared to RNs who worked on dedicated oncology

units. Also, RNs working on dedicated oncology units were more likely than RNs working in mixed patient units to report that staffing levels of RNs were adequate.

In the second of this two-part series, data are reported that address additional questions about the oncology nursing workforce: (a) What are the perceived and actual levels of filled and budgeted RN staff positions in settings where oncology RNs work, including nurse-to-patient staffing ratios, (b) what short-term responses are being used to cope with staffing shortfalls, and (c) how do oncology RNs and nurse executives perceive the impact of these shortfalls on the quality of patient care? In addition, the implications of the study's results on the development of staffing standards will be discussed.

Because the data and methods used to administer the national survey were presented in detail in part one of the series and in Buerhaus, Donelan, DesRoches, Lamkin, and Mallory (2001), they will not be discussed here beyond noting that some of the information provided by inpatient nurse executives contained data that were well beyond the range of expected results. These outlying data points were probably the result of complex

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question wording; therefore, nurse executives likely misinterpreted certain questions. For example, instead of reporting hours of care provided per patient over a 24-hour time period, some nurse executives reported hours per nursing unit or hours for the entire facility. Another source of outliers was found when some respondents, presumably nurse managers and supervisors overseeing the care of a group of patients and nurses, provided information on staffing ratios that did not reflect the one-nurse-to-one-patient ratio. After carefully examining the data provided by nurse executives and oncology nurses, it was discovered that most of the extreme data points were attributed to a small number of nurse executives and RNs, who reported information on inpatient units, and involved a very limited number of questions. To assess the impact of outliers, results of analysis when outliers were included were compared to results obtained when they were dropped from the analysis. Because the differences in the results were not statistically significant, the results reported here are those obtained when outliers were not included in the analysis. Also, to the extent the data make possible, results are reported that compare perceptions between nurse executives and oncology RNs, RNs working in inpatient and outpatient settings, and RNs employed in dedicated oncology units and mixed patient units.

## Limitations

Several limitations were encountered in using a survey to gather data on the oncology nursing workforce. (a) The data are based on *perceptions* of RNs and nurse executives. (b) The information provided by nurse executives on actual and budgeted staffing reflects the wide variety of reporting systems in use making it very difficult, if not impossible, for some nurse executives to translate the data provided by their reporting system into the information requested in this survey. (c) No consistent or reliable measures of patient acuity are used by all oncology settings, and key information needed to make staffing decisions was not gathered in the survey. (d) When nurses were asked about their patient assignments, they were not asked to report their roles or the shift and setting of each assignment, making it impossible to interpret some of the answers. (e) It was impossible to determine the actual staff mix and resources available to the staff caring for patients with cancer.

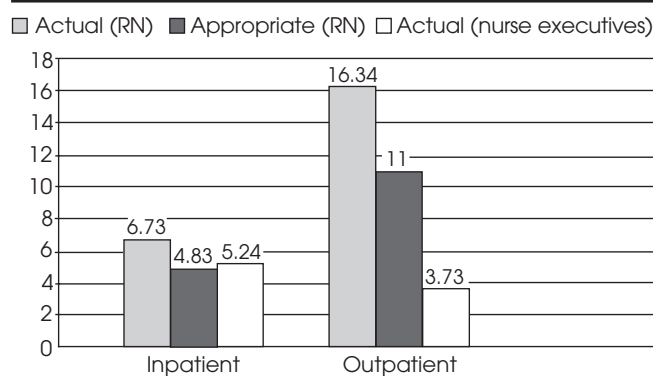
## Results

### Oncology RNs' Perceptions of Staffing

To address the first study question concerned with perceived and actual levels of filled and budgeted staff positions, the survey included questions, such as "On the shift you usually work, approximately how many patients do you usually take care of at one time?" and "What do you think is the appropriate number of patients you should be caring for?"

Oncology RNs reported caring for a range of patients numbering from 1–30 in inpatient settings and 3–60 in outpatient settings. The mean number of patients cared for per shift in inpatient settings was 6.73, and the majority of inpatient RNs (72%) reported caring for between five and eight patients per shift. The mean number of patients cared for per shift in outpatient settings was 16.34, with 72% of RNs reporting that they care for between 5–25 patients (see Figure 1).

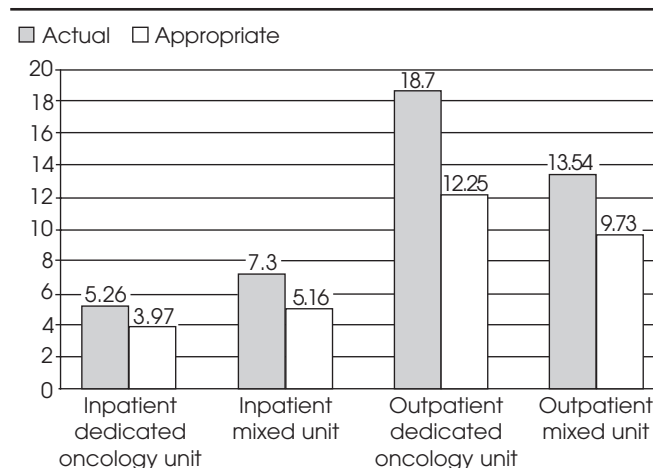
Data in Figure 1 also show that the number of patients actually cared for per shift is greater than RNs feel is appropriate.



**Figure 1. Perceptions of Oncology RNs and Nurse Executives on Actual and Appropriate Numbers of Patients Per Shift Per RN by Setting**

ate. Inpatient RNs report a mean of 4.83, and outpatient RNs report a mean of 11 as the appropriate number of patients to care for per shift. Sixty-five percent of outpatient RNs and 82% of inpatient RNs reported taking care of more patients per shift than they believed was appropriate.

Differences also were observed between RNs on dedicated oncology units and those on mixed patient units with respect to the number of patients actually cared for and perceptions of the appropriate number of patients RNs should care for per shift. Inpatient RNs employed on dedicated oncology units reported caring for a mean of 5.26 patients per shift, compared to a mean of 7.3 patients on inpatient mixed units (see Figure 2). Inpatient RNs on dedicated oncology units felt four patients was the appropriate number, whereas those working on mixed patient units thought five was appropriate. Outpatient RNs employed on dedicated oncology units reported caring for a mean of 18.7 patients per shift, compared to a mean of 13.54 cared for by RNs on mixed patient units. Outpatient RNs on dedicated oncology units believed the appropriate mean number of patients per shift that an RN should care for was 12.25, whereas RNs on mixed patient units felt the mean number of patients appropriate for an RN per shift was 9.73 patients.



**Figure 2. Mean Number of Patients Cared for Per Shift Per RN by Employment Setting and Type of Unit**

# Nurse Executive Reports of Nurse Staffing

The survey asked nurse executives the following questions pertaining to nurse staffing.

- Including nurses who are specialized in the care of patients with cancer and those who are not, what is your average patient-to-registered-professional-nurse ratio per day?
- What is the number of total productive hours of direct patient care provided by nursing staff in your oncology unit/department per patient per day?
- Of all your productive nursing care hours devoted to direct patient care, what percent are RN hours?

**RN-to-patient ratios:** In responding to the first question above, nurse executives reported that RNs care for significantly fewer patients than the number reported by oncology RNs. The mean number of patients per RN in inpatient settings was reported by nurse executives to be 5.24 and was 3.73 in outpatient settings. Only 1% of nurse executives reported that inpatient oncology RNs cared for more than 10 patients per day, and none reported outpatient RNs caring for more than 10 patients per day.

**Budgeted versus actual staffing:** Many nurse executives and managers budget the number of nurses needed by calculating the total direct productive “hours of care per patient day” (HPPD) for the number of patients expected to require nursing care over a given time period. Calculating the HPPD takes into account the number of minutes and hours nursing staff directly interact with patients (i.e., the time it takes to administer treatments and medications, monitor patients, and provide teaching). It also reflects the time staff takes to document care, order supplies, prepare medication, and direct other caregivers. HPPD equals the sum of all direct care time provided by all staff members (RNs and ancillary staff) who care for one patient in a 24-hour period.

Actual HPPD may differ from the budgeted HPPD for several reasons. For example, if staffing vacancies exist because they cannot be filled as a result of staff illness or a shortage of staff to hire, then the actual HPPD would be lower than budgeted. On the other hand, actual HPPD would be higher than budgeted if patient acuity was so high that extra nurses were

called in to provide care or if an RN was not available and had to be replaced by two nursing assistants.

Nurse executives were asked to report both budgeted and actual HPPD for the settings they supervised. Executives reported a mean of 7.63 HPPD of direct productive care as budgeted on inpatient units, whereas the actual HPPD was slightly higher at 7.77. Because outpatient areas typically operate on a less than 24-hour per day basis and patients usually are present in these settings far less than 24 hours, nurse executives reported lower budgeted and actual HPPD staffing in outpatient settings, with a mean budgeted amount of 3.61 HPPD and 3.52 actual staffing. The similarity between budgeted and actual HPPD in both settings is an unexpected finding. The differences are considered negligible because of measurement errors.

**Staff mix:** Nurse executives were asked to provide information on the proportion of RNs in the staffing mix in settings where oncology care is provided. Nurse executives reported a mean budgeted proportion of 71% RNs for inpatient units but provided an actual staffing mean of 66%. In the outpatient setting, the average budgeted proportion of RNs was 85% compared to 82% actual staffing. The remaining percentage of HPPD time was provided by other non-RN staff.

## Responses to Staffing Shortfalls

**Inpatient versus outpatient RNs and nurse executives:** Inpatient-based oncology RNs were far more likely than outpatient RNs to report employing nurses supplied by temporary employment agencies, hospital internal float nurses, full-time RNs reassigned from other departments, and double shifts or overtime hours to cope with short staffing (see Table 1). In addition, inpatient oncology RNs were more likely to report that RNs specializing in the care of patients with cancer were reassigned to nononcology departments experiencing staffing shortages. The majority of nurse executives also reported using float nurses and full-time RNs reassigned from other departments (65%), and 82% said that double shifts and overtime hours had increased. When asked about overtime hours, inpatient RNs were significantly less likely than outpatient

Table 1. Perceptions of the Use of Alternative Sources of Nurse Staffing

Alternative Sources	Inpatient Nurses (N = 278) %	Outpatient Nurses (N = 185) %	Nurse Executives (N = 347) %
<b>Sources of staffing during the past 12 months</b>			
Agency nurses	57	33	39
Float nurses	79	55	65
Full-time RNs reassigned from other departments	79	53	66
<b>Oncology nurses reassigned to nononcology areas</b>			
Always	11	7	2
Sometimes	57	15	35
Rarely	21	17	39
Never	11	61	24
<b>Increased double shifts/overtime worked by RNs</b>			
Yes	90	64	82
No	10	36	18
<b>Working overtime</b>			
Voluntary but feels like it is required	37	42	N/A
Required	15	26	N/A
Strictly voluntary	48	32	N/A

RNs to report that working overtime was required and significantly more likely to report that working overtime was strictly voluntary.

### Impact of Shortfall on Quality of Care

Virtually none of the respondents believed that the quality of care was higher as a result of using any of the responses to short staffing (see Table 2). Of the various responses to short staffing, RNs believed that the reassignment of staff from other departments provided the least desirable option. Nurse executives were of the opinion that the lowest quality of care results from the use of staff from outside agencies to take care of patients with cancer. Data in Table 3 show that, regardless of work setting or whether general patients or patients with cancer are cared for, the majority of RNs believed that increased double shifts and overtime hours harmed the quality of care. Nurse executives were less likely than either inpatient or outpatient oncology RNs to perceive that overtime hours harmed the quality of patient care.

**Dedicated oncology units versus mixed patient units:** Data shown in Figures 3 through 7 indicate that inpatient RNs employed on dedicated oncology units and inpatient mixed units were significantly more likely than their outpatient counterparts to perceive that their units relied on alternative sources of nurse staffing during the past 12 months. Specifically, inpatient RNs on dedicated oncology and mixed patient units reported using more temporary and traveling RNs (see Figure 3), internal float pools (see Figure 4), RNs reassigned from other departments (see Figure 5), and double shifts or overtime hours (see Figure 6) than outpatient RNs. In addition, inpatient oncology RNs employed on mixed units were significantly more likely than all other groups to say that nurses specialized in the treatment of patients with cancer were reassigned to different areas because of staffing needs elsewhere in the facility (see Figure 7).

With respect to perceptions of how alternative sources of nurse staffing have affected the quality of care, very few RNs felt that quality of care was higher. Moreover, inpatient RNs who worked on dedicated and mixed units were more likely to perceive that the use of temporary and traveling RNs (see Figure 8), internal float pools (see Figure 9), and RNs reassigned from other departments (see Figure 10) lowers the quality of patient care.

**Table 3. Impact of Double Shifts and Overtime on Quality of Care**

Respondents	Improved Care %	No Impact on Care %	Harmed Care %
<b>Inpatient RNs (N = 270)</b>			
General patients	3	26	71
Patients with cancer	3	25	72
<b>Outpatient RNs (N = 181)</b>			
General patients	2	24	74
Patients with cancer	4	24	72
<b>Nurse executives (N = 275)</b>			
General patients	2	44	54
Patients with cancer	2	51	47

### Discussion

Data from the survey reveal important differences in oncology nurse staffing between inpatient and outpatient settings and between RNs according to whether they worked on dedicated oncology or mixed patient units. Other differences were found between oncology RNs and nurse executives regarding actual and perceived staffing and perceptions of the quality of care resulting from alternative sources of staffing used to respond to short staffing.

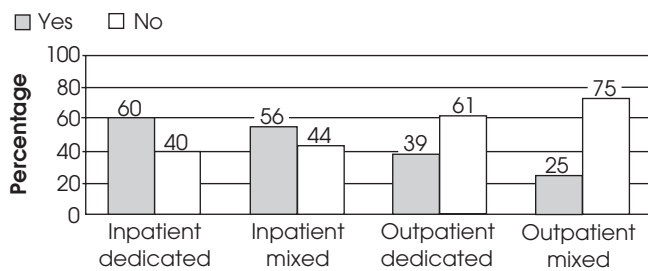
The first question this study sought to answer concerned perceived and actual levels of filled and budgeted RN staff positions. Actual staffing levels varied by type of patient unit, with RNs on inpatient dedicated oncology units caring for fewer patients than those on mixed patient units. In outpatient settings, however, just the opposite was found; RNs on dedicated oncology units cared for more patients than RNs working in outpatient mixed units. This finding may reflect differences in the nature of the treatments being delivered across settings that require a greater or lesser amount of total time per patient. For example, administration of blood transfusions or assistance with non-oncology medical procedures may involve more time per patient than the delivery of brief chemotherapy treatments, affecting the total number of patients that can be scheduled in a day.

Regardless of employment setting or type of unit oncology RNs work in, the majority reported caring for a greater num-

**Table 2. Perceptions of the Quality of Care Provided by Alternative Sources of Nurse Staffing**

Respondent	Agency Nurses %	Float Nurses %	Full-time RNs Reassigned From Other Departments %
<b>Inpatient RNs (N = 278)</b>			
Higher quality	1	1	1
About the same	29	28	16
Lower quality	70	71	83
<b>Outpatient RNs (N = 185)</b>			
Higher quality	3	0	2
About the same	38	48	31
Lower quality	59	52	67
<b>Nurse executives (N = 275)</b>			
Higher quality	1	3	1
About the same	24	55	51
Lower quality	75	42	48

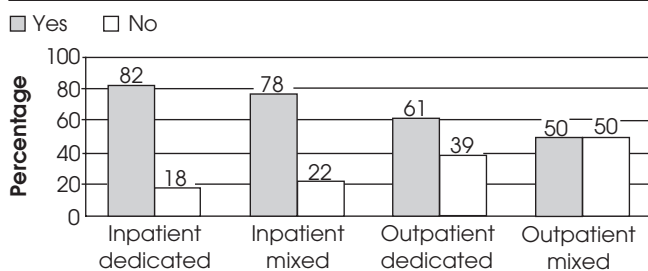




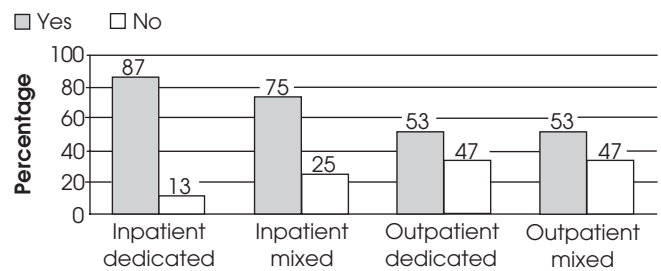
**Figure 3. Reliance on Temporary Staffing Agency or Traveling RNs in the Past 12 Months**

ber of patients than they felt was appropriate. RNs in inpatient settings, however, were significantly more likely than RNs working in outpatient settings to say that they cared for more patients than they felt was appropriate. Also, in both inpatient and outpatient settings, RNs employed on dedicated oncology units perceived that the ratio of patients to RNs should be lower than did RNs working on mixed patient units. This finding may be attributed to increased acuity of patients with cancer who require more clinical nursing care than nononcology patients. Alternatively, this may reflect the perception of oncology RNs that patients with cancer have unique needs that require more nursing care than other patients treated on mixed units. Without data to compare patient acuity, attempting to discern which explanation is more likely is impossible.

To meet staffing shortfalls, hospitals and outpatient settings have responded with a variety of alternative sources of nurses, including temporary employment agencies, internal float pools, full-time RNs reassigned from other departments, and double shifts or overtime hours. Inpatient RNs working on dedicated oncology units and mixed patient units were more likely than outpatient-based RNs to indicate using all of these alternative sources of staffing. Regardless of work setting or unit type, very few nurse executives and oncology RNs perceived that the quality of care was higher as a result of using RNs supplied by alternative staffing. Nurse executives, however, were not as likely as oncology RNs to believe that quality was lowered by RNs from internal float pools, those reassigned from other departments, or the use of double shifts or overtime hours. This divergence in perceptions implies that RNs closer to direct patient care are more likely to perceive declines in quality. Nurse executives match the RNs' perception of lower quality only when agency nurses are used to supplement oncology staffing. This suggests nurse executives believe quality can be maintained by staff through manage-



**Figure 4. Reliance on RNs From Internal Float Pools in the Past 12 Months**



**Figure 5. Reliance on RNs Reassigned From Other Departments in the Past 12 Months**

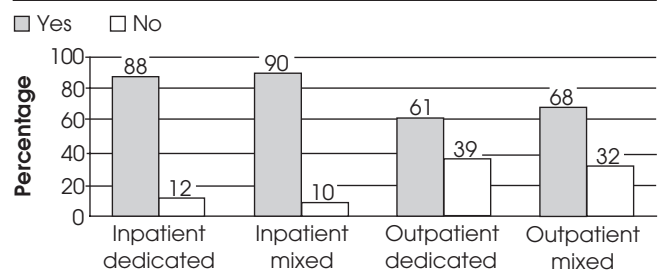
ment control (float RNs or reassigned staff from other units), whether specially skilled in oncology or not.

This study provided evidence that the percentage of RNs in outpatient settings is remarkably close to the percentage of RNs in inpatient settings. This finding can be explained by the shorter time required for most outpatient visits, rise in outpatient acuity, and increased delegation by physicians to RNs (Lamkin et al., 2001). The growth in the proportion of RNs in outpatient settings is likely to change because the specialized role and functions that they perform cannot be delegated to ancillary staff.

Study results revealed important discrepancies between nurse executives and oncology RNs in a number of areas. Nurse executives, particularly in outpatient settings, reported that RNs care for significantly fewer patients than the number reported by oncology RNs. Oncology RNs in outpatient settings reported caring for three times the number of patients perceived by nurse executives, and RNs' perception of the appropriate nurse-to-patient ratio was twice what nurse executives perceived to be the actual number. The perceptions of oncology inpatient staffing ratios are much closer between RNs and executives, but a discrepancy of one to two patients per nurse per shift still exists. Determining why these perceptions vary so dramatically in outpatient settings is difficult and, therefore, represents the most surprising finding of the study. One possibility is that a large percentage of RNs responding to the survey worked in outpatient settings where no chemotherapy was delivered; hence, patient acuity was lower compared to inpatient settings. Further research is needed to adequately understand this discrepancy.

## Implications for Mandatory Nurse Staffing Standards

The results of the national survey have implications for the development of nurse staffing standards. The nursing profes-



**Figure 6. Reliance on Increased Double Shifts or Overtime Hours Worked by RNs in the Past 12 Months**

sion and healthcare organizations are struggling with the idea of establishing and implementing mandatory nurse staffing standards (e.g., minimum levels of RNs, mandatory ratios of RNs to nonprofessional nurses, minimum ratios of RNs to patients). The U.S. General Accounting Office (2001) reported that “staffing may play a crucial role in determining the extent of the future nursing shortage.” Lawrenz Consulting, Inc. (2001) found that staffing ratios vary greatly from hospital to hospital, with the day shift of a typical medical-surgical unit ranging between 4–11 patients assigned per nurse. As the data from the present survey show, similar disparities occur in both inpatient and outpatient oncology care.

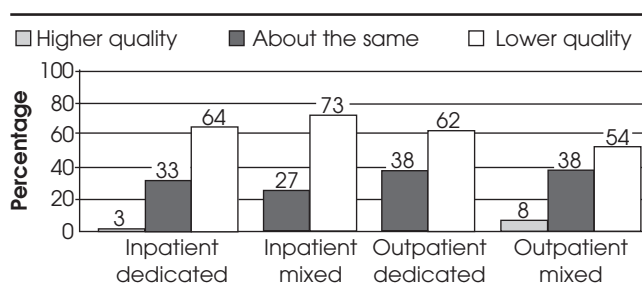
Oncology nurses have asked ONS for data regarding staffing standards. Understandably, nurses believe staffing standards could leverage employers to provide richer staffing. Nevertheless, the imposition of regulations mandating minimum nurse staffing levels or ratios are not supported for a number of reasons.

## Lack of Comparable Data on Quality of Care

Although the data from this national survey provide averages of the perceived number of patients cared for by an oncology RN, the study did not gather data on measures of the actual quality of patient care associated with these ratios. Without data linking staffing and measures of quality comparable across hospitals and units of hospitals, nurse staffing standards cannot be developed that appropriately take into account their impact on quality of patient care. Recent studies conducted by Needleman, Buerhaus, Matke, Stewart, and Zelevinsky (2001) and Aiken et al. (2001) showed that more RN care hours resulted in improvements in certain patient outcomes. Neither study, however, was able to quantify the exact number of RNs and other nursing personnel required to produce these patient outcomes. Bolton et al. (2001) attempted to relate nurse staffing to patient safety but concluded that before determining the appropriate number and skill level of nurses and other direct care staff, further research was needed to understand the relationship between the resources needed for patient care, characteristics and processes of care, and the impact of nursing care on patient outcomes.

## Variation Across Nursing Units

Recently, three organizations lobbied the California legislature to establish staffing standards. The California Nurses Association (CNA) recommended an RN-to-patient ratio of 1:3 in medical-surgical units, the Service Employees International Union recommended a ratio of 1:4, and the California



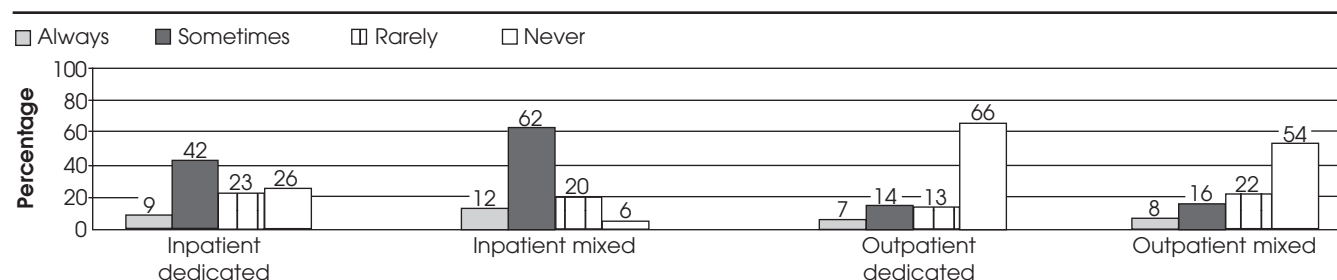
**Figure 8. Perceived Quality of Care Using RNs From a Temporary Staffing Agency or Traveling Nurses Compared to RNs Who Specialize in the Care of Patients With Cancer**

Hospital Association recommended a 1:10 ratio. The CNA’s original version of the staffing ratio bill also specified that oncology specialty units required a 1:4 staffing ratio (Spetz, 2001). In addition, each organization recommended specific ratios for step-down units, pediatric units, emergency departments, and recovery rooms. These organizations represent specific constituents, but even that cannot account for one group thinking that RNs can care for three patients and another believing that RNs can care for more than three times as many.

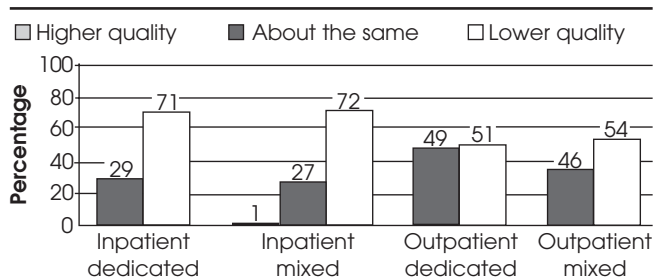
Patients with cancer are spread throughout a hospital, even when dedicated oncology nursing units exist. Patients with cancer are cared for in bone marrow transplant, intensive care, medical, surgical, pediatric, ambulatory infusion, and radiation therapy units, symptom management clinics, and hospices. The care varies widely by unit but, more importantly, varies by patient. Therefore, even highly experienced practitioners find it extremely difficult to accurately foresee the staffing necessary for a patient with acute leukemia from one day to the next.

## Variation in Nursing Care

Not only is variation found in patient acuity and nursing units, but RNs and other professionals vary in the skills and knowledge they possess. For example, an experienced oncology-certified RN has greater knowledge and more highly developed skills in observation, organization, and intervention than those of an experienced orthopedic nurse when it comes to caring for patients with cancer. Similarly, an RN who has recently graduated cannot be expected to act with the same skill and efficiency of an experienced RN. Furthermore, it is unlikely that staffing standards could adequately take into account the variation in knowledge, experience, and skill of oncology RNs available on a particular unit during a particular



**Figure 7. Reliance on RNs Who Specialize in the Treatment of Patients With Cancer Reassigned From Oncology Units to Nononcology Units Because of Staffing Needs in the Past 12 Months**



**Figure 9. Perceived Quality of Care Using RNs From Internal Float Pools Compared to RNs Who Specialize in the Care of Patients With Cancer**

shift. Spetz (2001) observed that RNs are not a homogenous group, as they possess different basic and graduate nursing education, experiences, personalities, levels of maturity, and communication skills.

Some RNs have the support of a cadre of team members ranging from patient care assistants and technicians to discharge planners, clinical nurse specialists, and IV teams. Other RNs do not enjoy such support. Even the availability of food service workers to deliver and set up meals for patients influences the amount of time RNs have available for patients. The presence and quality of resident physicians, social workers, utilization reviewers, and clerks varies widely and also affects the number of hours nurses have available for patient care. The presence or absence of family members and volunteers similarly affects the need for nursing care.

### Variation in Technology

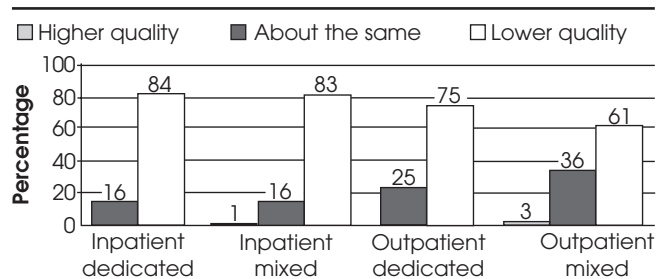
Similarly, the availability of sophisticated monitoring, charting, and communication technology varies widely from hospital and ambulatory settings. Such technology does not substitute for RNs' skilled observation and intervention, but can help them be more efficient in using the time to provide patient care and can influence the number of RNs needed for patient care.

### Variation in Care Setting

Assuming that one staffing ratio is appropriate for all patients across all patient care settings is risky. For example, a different number of RNs most likely will be needed to care for patients with cancer in a comprehensive cancer center where half of the patients are on phase II or III clinical trials than in a rural community hospital where the nurse may be splitting time among a variety of patients.

### Availability of RNs

The American Hospital Association (2001) estimated that 126,000 RN positions were vacant in U.S. hospitals. This



**Figure 10. Perceived Quality of Care Using RNs Reassigned From Other Departments Compared to RNs Who Specialize in the Care of Patients With Cancer**

finding, together with the findings of this study pertaining to the current widespread use of alternative sources of nurse staffing, makes it difficult to envision how mandatory nurse staffing standards can be met, particularly for those prescribing a small number of patients for each RN.

Oncology nurses take great pride in providing individualized patient care. The plan of care created by oncology RNs takes into account patients' and their families' physical, psychological, spiritual, and social needs. Oncology RNs expend great effort keeping up with treatment innovations, technology, patient and family education, and individualized patient care. Nurse staffing must be based on patient acuity, setting, skill and experience of the RNs, available ancillary staff, technology, and each individual patient and family. After examining the costs and benefits of nurse staffing legislation, Buerhaus (1997) concluded "regulations carry a high potential for unwittingly leading to the economic and political devaluation of the nursing profession" (p. 72). Oncology RNs are not average nurses caring for average patients based on average standards.

## Conclusion

This two-part report has focused on assessing the state of affairs within the oncology nursing workforce. Through a national survey, oncology RNs, nurse executives, and physicians provided information that described perceptions of the clinical workplace, staffing adequacy, and many other dimensions of oncology nursing. The results indicate that not all that is occurring within the oncology nursing workforce is troubling; however, many problems do exist that require attention so that oncology RNs may provide and patients may experience the very best nursing care in both inpatient and outpatient settings.

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- U.S. General Accounting Office. (2001). Nursing workforce: Multiple factors create nurse recruitment and retention problems. Retrieved September 6, 2001 from the World Wide Web: [www.aacn.nche.edu/Government/GAO%20Report.pdf](http://www.aacn.nche.edu/Government/GAO%20Report.pdf)

## For more information . . .

- ONS Work Force Study: Nursing Shortage  
[www.ons.org/xp6/ONS/Information.xml/PressRoom.xml](http://www.ons.org/xp6/ONS/Information.xml/PressRoom.xml)
- Nursing Shortage: Stats and Proposals  
<http://nursing.about.com/cs/currentissues>

*These Web sites are provided for information only. The hosts are responsible for their own content and availability. Links can be found using ONS Online at [www.ons.org](http://www.ons.org).*

## Cancer Prevention and Early Detection Program Announced

The Oncology Nursing Society, through a grant from the National Cancer Institute (#R25 CA 09554-10), is offering a Cancer Prevention and Early Detection Program for Historically Black Colleges and Universities and Minority Institutions (HBCU/MI) Nurse Educators. The program is designed to reduce health disparities and cancer mortality among medically underserved African Americans by integrating information about prevention and early detection among this group into the educational curricula of HBCU/MIs.

The workshops will provide nurse educators with training on how to

- Assess cancer risk
- Develop educational activities related to cancer prevention and early detection among African Americans
- Plan community-based screening programs
- Access state-of-the-science cancer information using the Internet
- Integrate information specific to the prevention and detection of cancer among African Americans in their nursing curricula
- Understand current research efforts
- Communicate with African American cancer survivors.

Nurse educators with a minority enrollment of at least 30% are eligible to apply for the program. Workshops

will be held March 8–10 and June 28–30 in Miami, FL. The grant covers travel and course expenses as well as a per diem. Thirty applicants will be chosen for each workshop.

Sandra Millon-Underwood, RN, PhD, FAAN, University of Wisconsin–Milwaukee professor, American Cancer Society professor of oncology nursing, and Northwestern Mutual Life Research Scholar, is the principle investigator.

For more information or an application, contact the Education Cancer Care Issues Team at 412-921-7373, ext. 276 ([eccit@ons.org](mailto:eccit@ons.org)). Applications for the June course are due May 1. Information on future workshops will appear in issues of the *ONS News*.

### Application Criteria

- Expressed interest in cancer prevention and early detection among African Americans
- Expressed interest in integrating didactic and clinical content related to cancer prevention and early detection among African Americans into a nursing curricula
- Ability to facilitate teaching and learning experiences within the African American community
- Ability to facilitate teaching and learning experiences among African Americans within the clinical practice setting