



**RADIATION THERAPY
STAFFING SURVEY
2005**

**A Nationwide Survey of Radiation Therapy Facility Managers and Directors
Conducted by
The American Society of Radiologic Technologists**

Reported June 2005

©Copyright 2005 by ASRT.
All rights reserved.
Reproduction in any form is forbidden without written permission from publisher.

TABLE OF CONTENTS

Executive Summary	3
Respondents and Their Facilities	3
Staffing of the Facilities.....	3
Recruitment and Retention of Professionals	4
Introduction.....	6
Background.....	6
Sample Design.....	6
Response Rates	6
Margin of Error.....	6
Definitions of Statistics.....	6
Calculation of Percent Vacancy Rates	7
Facility Demographics	9
Number of radiation therapists per treatment machine during a given treatment session	13
Number of new patients per year and patients treated per day.....	14
Reliability of treatment machines	14
Profile Differences Among Facility Types	15
Services Provided	15
Number of Services Provided	15
Staffing of the Facility.....	16
Staffing Differences Among Facility Types	23
Current (2005) FTEs for 8 Listed Specialists.....	23
Recruitment and Retention.....	25
Recruitment Effort	25
Reasons for Decreases in Budgeted FTEs	27
Reasons for Increases in Budgeted FTEs	30
Changes in Tenure and Turnover Rate	34
Sign-on Bonuses.....	34
Use of Temporary/Traveling Specialists	36
Work Force Shortage Consequences.....	37
Verbatim Comments.....	39
Appendix	46

EXECUTIVE SUMMARY

A Radiation Therapy Staffing Survey questionnaire was mailed in March 2005 to each of the 1,586 ARRT registrants who listed a managerial job title and who identified radiation therapy as their primary sphere of employment. Each invitee had the option of completing the questionnaire online. In late April 2005 an invitation to complete the questionnaire online was e-mailed to each of the 543 radiation therapy facility managers for whom the Society for Radiation Oncology Administrators (SROA) provided an e-mail address.

Respondents and Their Facilities

- About 54% of the respondents chose “Department/Facility Manager or Director” as most descriptive of their job titles, with another 39% choosing “Chief Therapist” and 2% choosing “Chief Dosimetrist.”
- About 59% of the respondents indicated that their facilities are located in a community hospital; 28% in a freestanding clinic; 7.5% in a university medical center; 2% in a teaching facility and less than 1% in a government hospital.
- Almost all (93%) of the facilities provide conformal radiation therapy services and 73% to 78% provide CT simulation, brachytherapy and IMRT. Of respondents, 29% provide stereotactic/gamma knife/MammoSite; 23.5% report providing fractionated stereotactic therapy; 17% offer whole-body irradiation and 17% offer pediatric therapy. The number of services checked as being provided by a given facility ranged from zero to all 9 of the items on the nonexhaustive checklist, with a mean of 4.1, median of 3.9, and mode (24% of the facilities) of 4.
- University medical centers provide significantly more services (mean of 7.2 of the 9 listed services) than do community hospitals and freestanding clinics (mean of 3.8 services). This was especially true of whole-body irradiation (provided by 81.5% of the university medical centers vs. 9% of community hospitals and freestanding clinics), pediatric radiation therapy (70% vs. 10%), fractionated radiation therapy (78% vs. 18%), stereotactic/gamma knife/MammoSite (89% vs. 24%) and brachytherapy (100% vs. 70%).
- About 21% of the respondents consider their facilities to be in rural locations, 38% suburban and 40% urban. However, rural locations accounted for only 13% of the radiation therapist full-time equivalents (FTEs) reported, 13% of dosimetrist FTEs, 14% of medical physicist FTEs and 13% of radiation oncologist FTEs reported by the sample of managers and directors.

Staffing of the Facilities

- The typical (median) facility reported a 2005 budget that provided for 4.9 FTE radiation therapists, 1.1 medical dosimetrists, 1.1 medical physicists, 1.6 radiation oncologists, 1.5 nurses, 2.1 administrative staff positions, and almost no physician assistants (.02 FTE; 91.5% of facilities report zero FTEs) or ancillary staff positions (.06 FTE; 64% zero FTEs).
- Respondents’ reports of the number of budgeted FTEs in each specialty that were currently vacant and recruiting revealed that FTE for budgeted positions in U.S. radiation oncology facilities currently go unfilled at rates of: 6.2% for radiation therapists, 5.8% for medical dosimetrists, 7.6% for physicists, 6.4% for radiation oncologists, 6.2% for physician assistants, 4.8% for ancillary staff positions and 4.1% for administrative staff.
- Considering facilities with nonzero budgeted FTEs for given specialties in both 2004 and 2005, the only statistically significant change in individual-facility vacancy rate was the nurses’ decrease from a mean vacancy rate of 7.2% in January 2004 to 4.3% in March/April 2005.

- University medical centers (UMCs) have, on average, more FTEs of each of the eight specialties than do community hospitals and freestanding clinics, with this difference being statistically significant for all except physician assistants and ancillary staff. However, the only statistically significant differences between UMCs vs. hospitals and clinics in *proportional* representation of the various specialties were the UMCs' slightly higher representation of medical physicists (11.4% vs. 9.1% of total FTEs) and their slightly lower proportional representation of ancillary staff (1.0% vs. 3.2%).

Recruitment and Retention of Professionals

- When asked whether recruiting for each specialty in 2005 has been more difficult, less difficult, or equally as difficult as it was in 2004, from 46% to 86% of the respondents (across the eight named specialties) who answered chose "same." The percentage reporting that more effort has been expended in 2005 than in 2004 was substantially higher than those reporting the reverse for dosimetrist, physicist, and radiation oncologist positions, while predominant opinion (among those who perceived a difference) was that recruiting for radiation therapists has become substantially less difficult (15.1% saying it had become more difficult vs. 38.5%, less difficult).
- About one-fourth (23.5%) of the respondents reported a decrease in budgeted FTEs for one or more of the specialties in which their facilities provide service. Of these 81 respondents, about one-half (53%) checked one or more of the seven suggested reasons (including "Other") for the decline. Of those 43 respondents, 56% checked "Overall department or facility budget declined, forcing downsizing" and 46.5% checked "Patient demand declined."
- About 41% of the respondents reported an increase in budgeted FTEs for one or more of the specialties in which their facilities provide service. Of these 141 respondents, about three-fourths (73.8%) checked one or more of the nine suggested reasons (including "Other") for the increase. Of those 104 respondents 68% checked "Patient demand increased," 30% checked "Overall department or facility budget increased, making it possible to add FTEs," 22% checked "Number of staff assigned to each treatment machine increased" and 17% checked "Number of patients that can be processed hourly on each treatment machine decreased."
- A majority (51% to 67%) of the respondents reported that average length of employment and employee turnover rate have remained about the same since January 2004 for radiation therapists, dosimetrists, physicists and radiation oncologists. However, at least four times as many feel these two indicators have improved as feel the indicators have gotten worse for radiation therapists and dosimetrists, and there are about twice as many who perceive improvement vs. worsening in tenure and turnover for radiation oncologists.
- A significantly lower percentage of facilities paid radiation therapists sign-on bonuses in 2005 than did so in 2004. (38% vs.31%). The other three specialties included in questions about bonuses showed nonsignificant changes from 2004 to 2005. About 19% of facilities employing medical dosimetrists, 11% of those with physicists and 3% of radiation oncologists' facilities paid sign-on bonuses each of the two years. The mean size of the bonus was not significantly different in 2005 than that reported in 2004 for any of these four specialties. (However, only one of the six facilities reporting that they paid sign-on bonuses to radiation oncologists both years also reported the bonus amounts.)
- The median reported percentage of FTEs in each of these four specialties that are filled with temps/travelers was quite low: from 0.1% of certified medical dosimetrist FTEs to 0.6% of radiation therapist FTEs, with 85% to 95% of facilities reporting no use of temps/travelers. The median reported percentage above average wages paid to temps/travelers was less than 1% for medical dosimetrist, physicist and radiation oncologist positions, and only 2.3% for radiation therapist positions. Moreover, 59% of

Radiation Therapy Staffing Survey

the facilities reported that they pay no more to temps/travelers than to their average radiation therapist and 82% to 87% reported that temps/travelers in the other three specialties receive 0 percent above average wages.

- From 14% to 19% of respondents indicated that their facility has experienced increased patient wait times for procedures, a reduction in the number of staff assigned to each treatment unit or curtailed plans for acquiring new technology. In addition, 5% to 10% reported they've had to curtail plans for facility expansion, reduce the number of staffed treatment units, discontinue radiation therapy educational programs, cancel procedures or endure decreased patient satisfaction and increased patient complaints as a consequence of a work force shortage.
- About one-third of the respondents accepted the invitation to add any comments to clarify responses. These comments are reported verbatim (except for portions that might identify individuals or their facilities) toward the end of this report.

INTRODUCTION

Background

Few matters could be more important for the profession – radiation therapists, other specialties involved in radiation oncology and their managers alike – than an accurate assessment of the current supply and demand for radiation therapy professionals. ASRT's *Radiology Department/Facility Staffing Survey* provided a snapshot of this supply/demand balance for the radiology suite, as well as providing information about directors' and managers' perceived reasons behind unfilled vacancies. The *Radiation Therapy Staffing Survey* addresses these same issues with respect to radiation oncology.

Sample Design

A total of 1,585 *Radiation Therapy Staffing Survey* questionnaires were mailed in March 2005 to every ARRT registrant who listed (on the ARRT registration-renewal form) a managerial job title and radiation therapy as the primary sphere of employment. To reduce return postage costs and minimize the labor involved in verifying handwritten responses, recipients of the hard copy questionnaire were encouraged to respond to an online version of the questionnaire if they had Web access. With the consent and cooperation of the Society for Radiation Oncology Administrators, an e-mail invitation to complete the questionnaire online was sent in April to every SROA member identified as manager of a radiation oncology facility for whom an e-mail address was available – a total of 542 invitations, 66 of which were undeliverable.

Response Rates

As of early May 2005 a total of 372 completed questionnaires (after eliminating some duplicate online submissions) had been received. Of these, 131 were completed online. The overall return rate was about 18%.

Margin of Error

The sample size of 372 returns yields a margin of error for overall percentages (width of the 95% confidence interval for the population percentage) of a maximum plus or minus 5%.

For percentages computed on subsets of respondents, the margin of error increases as the square root of the size of the subset. Thus, the margin of error for percentages based on a subset of 100 respondents is plus or minus 10% or less and for a subset of 30 respondents is plus or minus 18.3% or less. (The "or less" is because the margin of error for percentages is greatest for percentages in the 40% to 60% range and is less than one-half as wide for percentages below 5% or above 95%.)

Definitions of Statistics

The statistics reported in the question summaries include:

- **Frequency.** The number of responses given for each variable.
- **Percent.** The number of responses for each variable divided by the total number of usable surveys, including missing values.
- **Valid Percent.** The number of responses for each variable divided by the total number of usable surveys, excluding missing values.
- **Missing.** The number of respondents who either did not answer the question or who gave an unusable response.
- **Mean.** The arithmetic average; sum of the values of all observations divided by the number of observations.
- **Median.** The value above and below which one-half of the observations fall, 50th percentile. Usually, because of rounding, no number precisely satisfying the definition of the median exists. In such cases linear interpolation is used to estimate what the median in the population of unrounded scores would be.
- **Mode.** The figure that more respondents report than any other figure.
- **Standard deviation.** The square root of the average squared difference between each score in the set and the mean score. Subsets of respondents who have nearly identical responses on a given variable will have a near-zero standard deviation, while subsets of respondents with very different responses will have a high standard deviation. The major reason for using this relatively complex measure of variation is its close relationship to percentiles: For most sets of scores about 95% of the individual scores will fall within 2 standard deviations of the mean, and the mean of the set of scores will have a 95% chance of falling within 2 “standard errors” of the corresponding population mean, where the standard error is simply the standard deviation divided by the square root of the number of scores in the set.
- ***t*.** Sample statistic whose value is used to test the null hypothesis that the difference between two means in the sample is due entirely to chance fluctuation around corresponding means that do *not* differ from one another in the population to which results are generalized (in this case, all radiation therapy facilities managed by ARRT registrants or SROA members). The larger the absolute value of *t*, the more implausible the null hypothesis is and thus the more confident one can be that the direction of the difference in the sample matches the direction of the corresponding population difference. Because differences based on large samples more closely approximate the differences in the population from which they were sampled, *t* has a degree of freedom parameter (usually listed as a subscript number immediately after the *t*, as in “*t*₅₇₁”) associated with it.
- **P-value.** This is the probability that a *t* as large as or even larger in absolute value than the one observed in the sample would occur in random sampling from a population in which the null hypothesis of a zero population difference is true. If this value is smaller than some preselected value (often .05, but in the present report usually .01) called the alpha level (or just “level”) of the test, the observed sample difference is discussed as though it is representative of (perfectly matches) the sign of the corresponding population difference.

Calculation of Percent Vacancy Rates

With some exceptions the individual-facility vacancy rate for a particular specialty at a given facility was computed as the number of FTEs reported as budgeted for that specialty, divided into the number of FTEs for that specialty reported to be “vacant and recruiting.” The major exception to this calculation arose when the number of budgeted FTEs was zero. In that case the individual-facility vacancy rate was assigned a missing-value code and did not enter into the calculation of descriptive statistics for the specialty’s vacancy rates. The zero value for budgeted FTE was, however, retained for calculating descriptive statistics, with the result that the total number of observations (N) on which descriptive statistics for budgeted FTE and vacant-and-recruiting FTE were based was always larger than the N on which the “percent vacant and recruiting” statistics were based.

Radiation Therapy Staffing Survey

Another major exception occurred when a nonzero budgeted FTE was entered but the space for vacant-and-recruiting FTE was left blank. The “missing” vacant-and-recruiting FTE was treated as zero in all subsequent calculations.

The estimated percent unfilled positions for a given specialty for the population of radiation therapy facilities is defined as:

$$\frac{\text{total no. of FTEs vacant and recruiting}}{\text{total \# of FTEs budgeted for that specialty}}$$

which equals:

$$\frac{(\text{mean no. of vacant-and-recruiting FTEs per facility}) \times (\text{total no. of facilities})}{(\text{mean no. of budgeted FTEs per facility}) \times (\text{total no. of facilities})}$$

The total number of facilities that offer a given specialty is unknown, but drops out of the above equation, which thereby reduces to:

$$\frac{\text{mean no. of vacant-and-recruiting FTEs per facility}}{\text{mean no. of budgeted FTEs per facility}}$$

FACILITY DEMOGRAPHICS

Title of individual completing the questionnaire:

Your Title

		Frequency	Percent	Valid Percent
Valid	Department/ Facility Manager or Director	193	51.9	53.6
	Chief Therapist	139	37.4	38.6
	Chief Medical Dosimetrist	8	2.2	2.2
	Other	20	5.4	5.6
	Total	360	96.8	100.0
Missing	System	12	3.2	
Total		372	100.0	

“Other” titles reported:

Your Title – Other (Please specify)

		Frequency	Percent
	Blank	332	89.2
	1 PERFORMS ALL DUTIES	1	.3
	Administrative Director	2	.5
	ADMINISTRATOR	1	.3
	Administrator, Free Standing	1	.3
	ASSISTANT DIRECTOR	1	.3
	Chief Operating Officer	1	.3
	CLINICAL COORDINATOR	1	.3
	CLINICAL LEADER	1	.3
	CLINICAL MANAGER	1	.3
	CT SIM TECH	1	.3
	DEPARTMENTAL SUPERVISOR	1	.3
	Director-Radiation Oncology	1	.3
	Director	3	.8
	director of clinical operations	1	.3
	DOSIMETRIST/DEPT. SUPERVISOR	1	.3
	Dosimetrist	1	.3
	Dosimetrist/Chief Therapist	1	.3
	Dual role manager/dosimetrist	1	.3
	Executive Director	2	.5
	Former facility manager and current senior therapist also radiation	1	.3
	LEAD THERAPIST	2	.5

Radiation Therapy Staffing Survey

Lead Therapist/Dosimetrist	1	.3
Manager and dosimetrist	2	.5
OJT FOR DOSIMETRY	1	.3
oncology administrator	1	.3
OPERATIONS MANAGER – CANCER CENTER	1	.3
Operations manager	1	.3
Radiation Oncology Technical Director	1	.3
Regional Administrator [State name]	1	.3
SMALL FACILITY – COVER ALL POSITIONS	1	.3
STAFF THERAPIST	1	.3
TEAM LEADER	1	.3
Technical Coordinator	1	.3
VP, Clinical services	1	.3
Total	372	100.0

Type of Facility:

		Frequency	Percent	Valid Percent
Valid	Community Hospital	211	56.7	58.6
	Government Hospital	3	.8	.8
	University Medical Center	27	7.3	7.5
	Freestanding Clinic	102	27.4	28.3
	Teaching Facility	7	1.9	1.9
	Other	10	2.7	2.8
	Total	360	96.8	100.0
Missing	System	12	3.2	
Total		372	100.0	

Other Facility:

	Frequency	Percent
Blank	350	94.1
4 FREESTANDING CLINICS	1	.1
Clinic based with our own school	1	.1
Community AND University (only let me select one)	1	.1
Community Cancer Center	1	.1
COUNTY HOSPITAL	2	.2
Director of Clinical operations	1	.1
For Profit	1	.1
[City] Hospital, ____ Cancer Center	1	.1
____ Center for Oncology Care @ [State] Regional Medical Center	1	.1

Radiation Therapy Staffing Survey

HOSP. OWNED OUT PT. CLINIC	1	.1
I am employed by a University medical center, but work at a satellite facility - a community hospital.	1	.1
military medical center	1	.1
new department opening 5/05	1	.1
NOT FOR PROFIT CLINIC	1	.1
Not for profit hospital	1	.1
OFF CAMPUS CLINIC	1	.1
Regional center for Memorial [name of hospital system]	1	.1
SATELLITE FACILITY	1	.1
ST ___ RESEARCH HOSPITAL	1	.1
State supported University medical center and teaching facility	1	.1
US AIR FORCE	1	.1
Total	372	100.0

Radiation Therapy Services Provided:

		<u>Frequency*</u>	<u>Percent of Responses</u>	<u>Percent of Cases*</u>
Valid	CT simulation	277	18.3	77.4
	Brachytherapy	261	17.3	72.9
	IMRT	281	18.6	78.5
	Whole-body irradiation	61	4.0	17.0
	Pediatric therapy	61	4.0	17.0
	Stereotactic/gamma knife/MammoSite	105	6.9	29.3
	Fractionated stereotactic therapy	84	5.6	23.5
	Conformal radiation therapy delivery	334	22.1	93.3
	Other	48	3.2	13.4
Missing	None of above checked	14	3.8	
Total*		372	100.0	422.3

No single combination of services characterized more than 17% of the facilities. CT simulation, brachytherapy, IMRT and conformal radiation therapy delivery (17%); the same combination without brachytherapy (8%); and all eight of the services on the list (5%) were the most common combinations.

* Frequencies sum to more than 372 and percents, to more than 100% because most facilities provide multiple radiation therapy services.

Radiation Therapy Staffing Survey

Other Radiation Therapy Services Provided:

Service	Frequency	Percent
Blank	313	84.1
ACCU LOC/IBRT	1	.3
Bat localization, Zmed localization	1	.3
body radiosurgery	1	.3
BRAIN LAB ULTRASOUND SETUP VERIFICATION	1	.3
CONVENTIONAL SIMULATION	1	.3
CT SCANNER IN RADIOLOGY	1	.3
CT/PET imaging/simulation	1	.3
CYBERKNIFE STARTING FALL 2005	1	.3
CYBERKNIFES AS OF JULY 1	1	.3
CYBERKNIFE	2	.5
ECR	1	.3
EXTERNAL BEAM LINEAR ACCEL.	1	.3
GAMMA KNIFE	1	.3
HDR	3	.8
HDR and LDR Seed implant program	1	.3
HDR, Prostate Implants	1	.3
HTT	1	.3
hyperthermia, total skin irradiation, grenz/superficial	1	.3
I-131 pills/ orthovoltage	1	.3
I 131 CAPSULE SM 153 SR 89	1	.3
IDRT, COMS	1	.3
IGRT/ IMRT	1	.3
IMRT DOSE PAINTING	1	.3
IMRT will be available in October, 2005	1	.3
IORT	1	.3
IORT, ABC	1	.3
IORT, HDR	1	.3
IVBT	1	.3
MAMMOSITE	2	.5
MRT	1	.3
Ortho/Superficial	1	.3
Prostate Seed Implantation	1	.3
prostate seeds	1	.3
PROTON THERAPY	1	.3
protons	1	.3
PSI	1	.3
RADIOLABELED ANTIBODY THERAPY	1	.3
RADIOSURGERY	1	.3

Radiation Therapy Staffing Survey

Remote Planning	1	.3
RESPIRATORY GATING, TOTAL SKIN IRRADIATION	1	.3
SMARIUM INJECTIONS	1	.3
STRONTIUM 90 THERAPY	1	.3
SUPERFICIAL	1	.3
SUPERFICIAL RADIATION THERAPY	1	.3
SUPERFICIAL, SRONTIUM	1	.3
TOMOTHERAPY	2	.5
TOTAL SKIN	2	.5
U/S VERIFICATION	1	.3
Ultrasound Based IGRT	1	.3
ultrasound guided prostate localization	1	.3
ULTRASOUND IMRT (PROSTATES)	1	.3
ULTRASOUND LOCALIZATION	1	.3
Will be getting CT/Sim, IMRT and IGRT.	1	.3
Total	372	100.0

State in which facility is located:

All states and the District of Columbia were represented in the returns except for Alaska, Hawaii, Maine, South Dakota and Vermont.

Facility's locale:

		<u>Frequency</u>	<u>Percent</u>	<u>Valid Percent</u>
Valid	Urban	147	39.5	40.4
	Suburban	139	37.4	38.2
	Rural	78	21.0	21.4
	Total	364	97.8	100.0
Missing	System	8	2.2	
Total		372	100.0	

Number of radiation therapists per treatment machine during a given treatment session

		<u>Frequency</u>	<u>Percent</u>	<u>Valid Percent</u>
Valid	1.00	12	3.2	3.4
	2.00	295	79.3	82.4
	3.00	48	12.9	13.4
	4.00	3	.8	.8
	Total	358	96.2	100.0
Missing	System	14	3.8	
Total		372	100.0	

Radiation Therapy Staffing Survey

Number of new patients per year and patients treated per day

		New pts. per year, outliers dropped ^a	Pts. treated per day, outliers dropped ^a
N	Valid	289	363
	Missing	83	9
Mean		440.0761	48.9972
Median ^a		350.7692	38.1212
Std. Deviation		353.07599	39.74285
Minimum		.00	6.00
Maximum		3200.00	420.00
Percentiles ^b	5	85.8500	14.9000
	95	1182.0000	115.8750

Reliability of treatment machines

		Frequency	Percent	Valid Percent
Valid	Excellent	217	58.3	59.9
	Good	132	35.5	36.5
	Fair	12	3.2	3.3
	Poor	1	.3	.3
	Total	362	97.3	100.0
Missing	System	10	2.7	
Total		372	100.0	

^a Omits one facility that reported seven pts. per year and 15 pts. treated daily and one facility that reported 300 pts. per year, 300 treated daily and three radiation therapists on staff.

^b Calculated from grouped data.

Profile Differences Among Facility Types

Services Provided

Service		Percent of Facilities Providing the Service				Chi-square with 3 <i>df</i> for differences
		Community hospital	Freestanding clinic	University medical center	Other or unstated	
CT Simulation	Count	163	71	24	19	8.91
	%	77.3%	72.4%	88.9%	86.4%	
Brachytherapy	Count	167	49	27	18	46.42*
	%	79.1%	50.0%	100.0%	81.8%	
IMRT	Count	162	75	25	19	9.17 ^{***}
	%	76.8%	76.5%	92.6%	86.4%	
Whole-body irradiation	Count	19	10	22	10	100.22*
	%	9.0%	10.2%	81.5%	45.5%	
Pediatric therapy	Count	23	7	19	12	79.18*
	%	10.9%	7.1%	70.4%	54.5%	
Stereotactic/gamma knife/mammosite	Count	55	14	24	12	61.48*
	%	26.1%	14.3%	88.9%	54.5%	
Fractionated stereotactic therapy	Count	40	15	21	8	52.36*
	%	19.0%	15.3%	77.8%	36.4%	
Conformal radiation therapy delivery	Count	196	90	26	22	19.17*
	%	92.9%	91.8%	96.3%	100.0%	
Other	Count	24	11	7	6	5.89
	%	11.4%	11.2%	25.9%	27.3%	
Total	Count	211	98	27	22	358

Percentages and totals are based on respondents.

Number of Services Provided

Service	N	Mean	Std. Deviation	Std. Error	95% Confidence Interval for Mean	
					Lower Bound	Upper Bound
Community hospital	211	4.0237	1.54439	.10632	3.8141	4.2333
Freestanding clinic	102	3.3529	1.73860	.17215	3.0114	3.6944
University medical center	27	7.2222	1.45002	.27906	6.6486	7.7958
Other or unstated	32	3.9375	3.31115	.58533	2.7437	5.1313
Total	372	4.0645	2.02575	.10503	3.8580	4.2710

University medical centers provide significantly more services than do community hospitals and freestanding clinics, $t_{368} = 9.70$, $P < .001$.

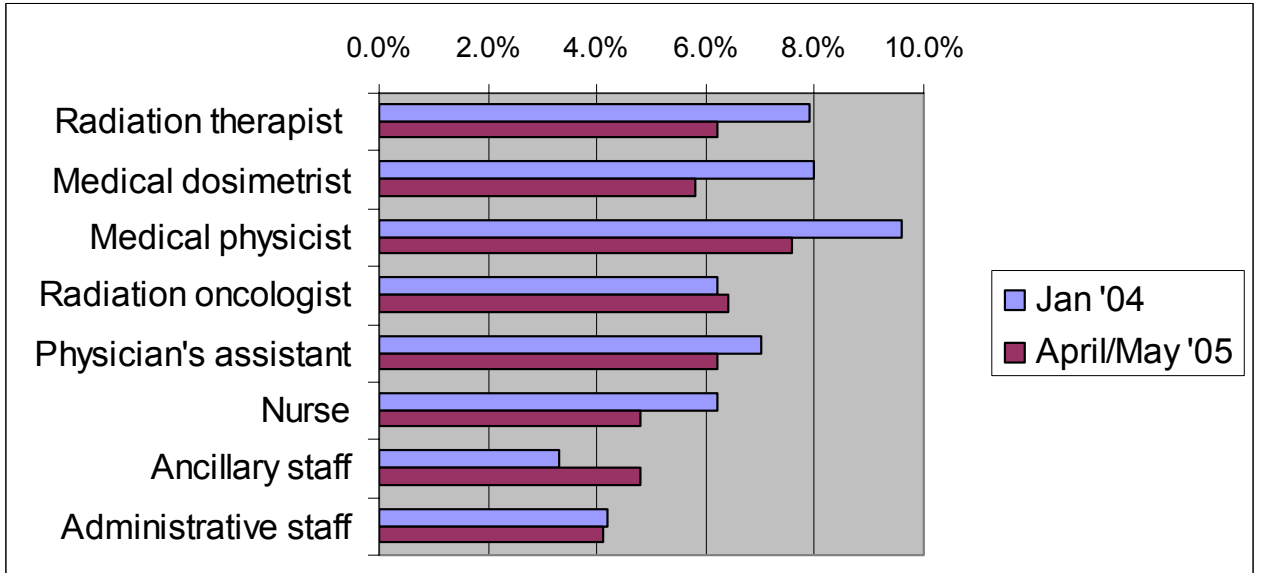
* $P < .001$.

*** $P < .05$.

Staffing of the Facility

Percent Vacant and Recruiting, 2004 and 2005

1. For each of the following specialists needed to provide radiation therapy, please provide the budgeted and vacant FTEs for your organization in January of 2004 and today. (Leave blank the rows for any specialists who do not work in your facility's radiation therapy suite.)



Radiation Therapist:

	Budgeted FTE 2004	FTE Vacant and recruiting 2004	Percent vacant and recruiting 2004	Budgeted FTE 2005	FTE vacant and recruiting 2005	Percent Vacant and recruiting 2005
N Valid	360	360	355	352	352	351
Missing	12	12	17	20	20	21
Mean	5.9868	.4747	8.1572	6.4376	.3994	7.4601
Median ^a	4.7625	.1606	.8209	4.9189	.1716	1.0407
Mode	3.00	.00	.00	3.00	.00	.00
Std. Deviation	6.06814	1.10054	18.87272	6.92599	.96476	17.41464
Minimum	.00	.00	.00	.00	.00	.00
Maximum	68.00	8.00	141.67	72.00	8.00	100.00
Percent zeroes	1.4%	75.6%	75.2%	.3%	73.9%	73.8%

^a Calculated from grouped data. Estimated percentage of all U.S. radiation therapy positions unfilled = 100(.4747/5.9868) = 7.9% in 2004, 6.2% in 2005.

Radiation Therapy Staffing Survey

Medical Dosimetrist:

	Budgeted FTE 2004	FTE Vacant and recruiting 2004	Percent vacant and recruiting 2004	Budgeted FTE 2005	FTE vacant and recruiting 2005	Percent Vacant and recruiting 2005
N Valid	360	360	319	352	352	319
Missing	12	12	53	20	20	53
Mean	1.5754	.1253	6.9580	1.8266	.1068	5.6638
Median ^a	1.0537	.0537	1.6983	1.0727	.0511	.6173
Mode	1.00	.00	.00	1.00	.00	.00
Std. Deviation	1.42323	.41878	23.70149	2.49233	.37112	20.04615
Minimum	.00	.00	.00	.00	.00	.00
Maximum	11.00	3.00	200.00	36.00	3.00	100.00
Percent zeroes	11.4%	90.3%	89.3%	9.4%	90.6%	90.0%

Medical Physicist:

	Budgeted FTE 2004	FTE Vacant and recruiting 2004	Percent vacant and recruiting 2004	Budgeted FTE 2005	FTE vacant and recruiting 2005	Percent Vacant and recruiting 2005
N Valid	360	360	323	352	352	319
Missing	12	12	49	20	20	53
Mean	1.5229	.1458	8.8151	1.6171	.1222	9.6873
Median ^b	1.0549	.0710	2.3041	1.0813	.0566	1.8045
Mode	1.00	.00	.00	1.00	.00	.00
Std. Deviation	1.60416	.42214	25.00726	1.69588	.38949	32.33046
Minimum	.00	.00	.00	.00	.00	.00
Maximum	12.00	3.00	100.00	14.00	2.00	200.00
Percent zeroes	10.3%	87.5%	86.1%	9.4%	89.8%	88.7%

Radiation Oncologist:

	Budgeted FTE 2004	FTE Vacant and recruiting 2004	Percent vacant and recruiting 2004	Budgeted FTE 2005	FTE vacant and recruiting 2005	Percent Vacant and recruiting 2005
N Valid	360	360	311	352	352	298
Missing	12	12	61	20	20	74
Mean	2.1383	.1322	6.5876	2.1467	.1364	6.6165
Median ^c	1.6000	.0624	1.2230	1.5500	.1095	1.2838
Mode	1.00	.00	.00	1.00	.00	.00
Std. Deviation	2.88575	.50915	21.51432	3.14337	.48761	20.76802
Minimum	.00	.00	.00	.00	.00	.00
Maximum	37.00	5.00	100.00	42.00	6.00	100.00
Percent zeroes	13.6%	90.6%	89.1%	15.3%	89.2%	87.6%

^a Calculated from grouped data. Estimated percent unfilled medical dosimetrist positions = 8.0% in 2004, 5.8% in 2005.

^b Calculated from grouped data. Estimated percent unfilled physicist positions = 9.6% in 2004, 7.6% in 2005.

^c Calculated from grouped data. Estimated percent unfilled radiation oncologist positions = 6.2% in 2004, 6.4% in 2005.

Radiation Therapy Staffing Survey

Physician Assistant:

		Budgeted FTE 2004	FTE Vacant and recruiting 2004	Percent vacant and recruiting 2004	Budgeted FTE 2005	FTE vacant and recruiting 2005	Percent Vacant and recruiting 2005
N	Valid	360	360	27	352	352	30
	Missing	12	12	345	20	20	342
Mean		.1019	.0083	4.9383	.1213	.0085	10.0000
Median ^a		.0162	.0083	2.5641	.0186	.0085	10.0000
Mode		.00	.00	.00	.00	.00	.00
Std. Deviation		.59839	.09103	20.05058	.71832	.09206	30.51286
Minimum		.00	.00	.00	.00	.00	.00
Maximum		10.00	1.00	100.00	12.00	1.00	100.00
Percent zeroes		92.5%	99.2%	92.6%	91.5%	99.1%	90.0%

Nurse (including RN, LPN, nurse practitioner):

		Budgeted FTE 2004	FTE Vacant and recruiting 2004	Percent vacant and recruiting 2004	Budgeted FTE 2005	FTE vacant and recruiting 2005	Percent Vacant and recruiting 2005
N	Valid	360	360	319	352	352	309
	Missing	12	12	53	20	20	63
Mean		1.8083	.1122	7.0729	1.9130	.0915	4.7764
Median ^b		1.0920	.0518	1.3209	1.4611	.0445	1.2900
Mode		1.00	.00	.00	1.00	.00	.00
Std. Deviation		1.72111	.39835	23.54217	2.21065	.35684	17.86182
Minimum		.00	.00	.00	.00	.00	.00
Maximum		16.00	4.00	100.00	28.00	4.00	100.00
Percent zeroes		11.4%	90.6%	89.3%	12.2%	91.8%	90.6%

Ancillary Staff (e.g., dietitian, social worker):

		Budgeted FTE 2004	FTE Vacant and recruiting 2004	Percent vacant and recruiting 2004	Budgeted FTE 2005	FTE vacant and recruiting 2005	Percent Vacant and recruiting 2005
N	Valid	360	360	128	352	352	127
	Missing	12	12	244	20	20	245
Mean		.5379	.0175	5.4688	.5616	.0270	5.2493
Median ^c		.0549	.0085	4.7244	.0557	.0116	3.8567
Mode		.00	.00	.00	.00	.00	.00
Std. Deviation		1.12342	.14721	26.04839	1.16325	.20668	21.99294
Minimum		.00	.00	.00	.00	.00	.00
Maximum		14.00	2.00	200.00	14.00	3.00	100.00
Percent zeroes		64.4%	98.3%	95.3%	63.9%	97.7%	94.5%

^a Calculated from grouped data. Estimated percent unfilled physician assistant positions = 7.0% in 2004, 6.2% in 2005.

^b Calculated from grouped data. Estimated percent unfilled nurse positions = 6.2% in 2004, 4.8% in 2005.

^c Calculated from grouped data. Estimated percent unfilled ancillary staff positions = 3.3% in 2004, 4.8% in 2005.

Radiation Therapy Staffing Survey

Administrative Staff (e.g., clerical and billing staff):

	Budgeted FTE 2004	FTE Vacant and recruiting 2004	Percent vacant and recruiting 2004	Budgeted FTE 2005	FTE vacant and recruiting 2005	Percent Vacant and recruiting 2005
N Valid	360	360	322	352	352	309
Missing	12	12	50	20	20	63
Mean	3.1082	.1319	4.8559	3.0894	.1264	4.5612
Median ^a	2.0789	.0417	.4746	2.0735	.0377	.3133
Mode	2.00	.00	.00	2.00	.00	.00
Std. Deviation	3.67349	.69013	19.56824	3.74571	.71137	18.37278
Minimum	.00	.00	.00	.00	.00	.00
Maximum	30.00	10.00	125.00	32.00	10.00	100.00
Percent zeroes	10.6%	92.2%	91.3%	12.2%	92.6%	91.9%

Considering facilities with nonzero budgeted FTEs for a given specialty in both 2004 and 2005, the only statistically significant change in individual-facility vacancy rate was the nurses' decrease from a mean vacancy rate of 7.2% in January 2004 to 4.3% in March/April 2005, $t_{298} = 2.360$, $P = .019$.

^a Calculated from grouped data. Estimated percent unfilled administrative staff positions = 4.2% in 2003, 4.1% in 2005.

Radiation Therapy Staffing Survey

Other Specialties for Which FTEs Were Reported:

	Frequency	Percent
Blank	279	75.0
1-Accelerator engineer 1-Accelerator engineer assistant	1	.3
1-Fabrication engineer 1-Patient Care Assistant		
1-Research Nurse, 1-IRB Coordinator, 2-Cancer Registrars	1	.3
1 Senior Radiation Therapist and 1 Patient Care Coordinator (Head RN)	1	.3
1.0 FTE block/mold room tech1.0 FTE System administrator (computers)2.0 radiation therapist assistants	1	.3
2 PART TIME COURTESY VAN DRIVERS.	1	.3
3 Cancer Registrars and 1 Cancer Registry Assistant	1	.3
ADMIN DIRECTORS	1	.3
AIDE	2	.5
AIDE/TRANSPORTER	1	.3
bioengineer	1	.3
BLOCK CUTTER TRANSPORTER	1	.3
Block room person	1	.3
block room tech	1	.3
brachytherapist	1	.3
CANCER REGISTRY	2	.5
CANCER/TUMOR REGISTRAR	1	.3
CHIEF THERAPIST/RAD ONC. OPERATIONS COORDINATOR	1	.3
clinical trails	1	.3
CT TECH	1	.3
CT TECH/BLK CUTTER	1	.3
CT/Simulator Tech RT	1	.3
CyberKnife Coordinators, which are CMSs	1	.3
DENTAL HYGENIST	1	.3
Department Managers with RTT background	1	.3
Dept manager	1	.3
DIRECTOR RADIATION THERAPY	1	.3
Dosimetry is done offsite; MPs, ROs contracted. Ancillary is social worker; admin staff is receptionist.	1	.3
electronics technician	1	.3
Engineers (2), program director (1) for therapist and dosimetrist programs.	1	.3
FULLY STAFFED	1	.3
HOPE TO HAVE ENOUGH PATIENT LOAD TO EMPLOY A FULL TIME PHYSICIST AND ANOTHER FULL TIME THERAPIST SOON. WE ARE INVESTIGATING THAT AT THIS TIME.	1	.3
HYPERTHERMIC STAFF	1	.3
IS Project Leader	1	.3
JR PHYSICIST	1	.3
LVN	1	.3
MAINTENANCE	1	.3
Management / Administration	1	.3

Radiation Therapy Staffing Survey

MANAGER	5	1.3
MARKETING	1	.3
massage therapist	1	.3
Me, manager/director	1	.3
MED ROOM TECH/TRANSPORTER	1	.3
MEDICAL ASSISTANT	1	.3
MEDICAL OFFICE ASSISTANT	1	.3
Medical Transcriptionist 1.0 Administrative Director 1.0	1	.3
Mold Room Technician/Transport	1	.3
MOU/D ROOM ASSISTANT	1	.3
NUCLEAR MED TECHS AND CT TECHS	1	.3
NURSE ASST., IS SPECIALIST, operations coordinator (or chief technologist)	1	.3
OFFICE MANAGER	1	.3
Per diem therapists - needed! daytime per diem not readily available - our per-diem staff used to work evening hours	1	.3
Programmer analyst	1	.3
PYSICIST ASSISTANT	1	.3
RAD ONC RESIDENT MD	1	.3
RADIATION ONCOLOGY ASSISTANTS	1	.3
RADIATION THERAPIST ASSISTANT	1	.3
RADIATION THERAPY ASSISTANT	1	.3
Radiation Therapy Assistants	1	.3
RADIATION THERAPY ASSISTANT/SCHEDULING	1	.3
Radiation Therapy Technologist R.T. (R)(CT)	1	.3
Simulation Therapist	1	.3
SUPERVISOR	1	.3
tech aide/block cutter	1	.3
Technical Aide	1	.3
TECHNICAL ASSISTANCE	1	.3
technical assistant	1	.3
THERAPIST ASSISTANT	1	.3
These numbers reflect the FTE's per center. Currently there are 3 centers.	1	.3
TRANSCRIPTION	1	.3
Transcriptionist	1	.3
TRANSCRIPTIONIST/BLOCK SHOP	1	.3
Transcriptionists	1	.3
TRANSPORTATION (PICKS UP PATIENTS)	1	.3
TRANSPORTER AND BLOCK CUTTER	1	.3
transporter/driver	1	.3
Tumor Registrar	5	1.3
Tumor Registrars Physics/Sim Tech	1	.3
VA Program Manager (RN) coordinates XRT at 3 hospitals for our Veterans. ___ Office Coordinator serves as liaison between our Rad Onc dept at	1	.3
VAN DRIVER - PT. TRANSPORTATION	1	.3

Radiation Therapy Staffing Survey

We also have a medical assistant.	1	.3
ONE PT THERAPIST. WE ARE FULLY STAFFED FOR THE FIRST TIME IN 4 YEARS.	1	.3
WE ARE IN NO NEED AT THIS TIME	1	.3
We contract a physics service to provide 3 days per week service.		.3
Our dosimetrist works 24 hrs per week-.60 I have 2 therapists that also work	1	
We currently have no vacancies.	1	.3
Total	372	100.0

Staffing Differences among Facility Types

Current (2005) FTEs for Eight Listed Specialists

Specialist	Type of Facility	N	Mean	Std. Deviation	95% Confidence Interval for Mean		<i>P</i> value for	
					Lower Bound	Upper Bound	UMC vs. Hosp, Clinic	Hosp vs. Clinic
Radiation Therapist	Community hospital	204	5.2222	2.94464	4.8157	5.6287	< .001	.995
	Freestanding clinic	93	5.2258	5.57037	4.0786	6.3730		
	University medical center	26	16.5000	13.89748	10.8867	22.1133		
	Other or unstated	29	9.8517	11.93038	5.3136	14.3898		
Medical Dosimetrist	Community hospital	204	1.4743	.95954	1.3419	1.6068	.014	.980
	Freestanding clinic	93	1.4699	1.55070	1.1505	1.7893		
	University medical center	26	5.0962	7.01430	2.2630	7.9293		
	Other or unstated	29	2.5172	2.75967	1.4675	3.5670		
Medical Physicist	Community hospital	204	1.3626	.94726	1.2319	1.4934	< .001	.250
	Freestanding clinic	93	1.2035	1.16465	.9637	1.4434		
	University medical center	26	4.8269	3.62475	3.3629	6.2910		
	Other or unstated	29	1.8552	1.64134	1.2308	2.4795		
Radiation Oncologist	Community hospital	204	1.7256	1.40171	1.5321	1.9191	.019	.483
	Freestanding clinic	93	1.8591	1.56721	1.5364	2.1819		
	University medical center	26	6.1385	8.85090	2.5635	9.7134		
	Other or unstated	29	2.4517	3.89144	.9715	3.9319		
Physician Assistant	Community hospital	204	.0451	.20613	.0166	.0736	.224	.059
	Freestanding clinic	93	.1129	.31389	.0483	.1775		
	University medical center	26	.6538	2.34849	-.2947	1.6024		
	Other or unstated	29	.2069	.77364	-.0874	.5012		
Nurse	Community hospital	204	1.7926	2.10882	1.5015	2.0837	.005	.326
	Freestanding clinic	93	1.5409	2.01241	1.1264	1.9553		
	University medical center	26	3.4769	2.93289	2.2923	4.6615		
	Other or unstated	29	2.5517	2.18495	1.7206	3.3828		
Ancillary staff	Community hospital	204	.5706	.87141	.4503	.6909	.756	.655
	Freestanding clinic	93	.4882	1.67571	.1431	.8333		
	University medical center	26	.5962	.97999	.2003	.9920		
	Other or unstated	29	.7034	1.15464	.2642	1.1427		
Administrative staff	Community hospital	204	2.3596	1.86713	2.1018	2.6173	.003	.044
	Freestanding clinic	93	3.2215	3.87735	2.4230	4.0200		
	University medical center	26	8.1731	8.40274	4.7791	11.5670		
	Other or unstated	29	3.2414	3.19492	2.0261	4.4567		

University medical centers have, on average, more FTEs in each of the eight specialties than do community hospitals and freestanding clinics, with this difference being statistically significant for all except physician assistants and ancillary staff. To separate this tendency to simply have more

Radiation Therapy Staffing Survey

staff overall from the makeup of that staff, the *proportion of total FTEs* across all eight specialties that is accounted for by each separate specialty was examined separately from differences in total FTEs.

Type of Facility	Total FTEs, eight listed specialties						
	N	Mean	Std. Deviation	95% Confidence Interval for Mean		Minimum	Maximum
				Lower Bound	Upper Bound		
Community hospital	204	14.5526	8.09132	13.4356	15.6696	.00	46.60
Freestanding clinic	93	15.1218	12.75991	12.4940	17.7497	3.00	93.00
University medical center	26	45.4615	35.43532	31.1489	59.7742	8.00	166.00
Other or unstated	29	23.3793	19.85203	15.8280	30.9306	1.00	89.00
Total	352	17.7133	16.39160	15.9950	19.4316	.00	166.00

The difference between university medical centers' mean of 45.5 FTEs for these eight specialties and the 14.7 mean FTEs for community hospitals and freestanding clinics was indeed statistically significant ($F_{3,348} = 38.744$, $P < .01$) and accounted for 94% of the variation among the four means. However, the only statistically significant differences between UMCs vs. hospitals and clinics in *proportional* representation of the various specialists were the UMCs' slightly higher representation of medical physicists (11.4% vs. 9.1% of total FTEs, $P = .020$) and their slightly lower proportional representation of ancillary staff (1.0% vs. 3.2%, $P < .001$).

RECRUITMENT AND RETENTION

Recruitment Effort

2. Describe how the recruitment effort for each specialty so far in 2005 compares to the effort expended during the fiscal year that included January 2004.

		Radiation Therapist			Medical Dosimetrist		
		Frequency	Percent	Valid Percent	Frequency	Percent	Valid Percent
Valid	More Difficult	40	10.8	15.1	46	12.4	23.1
	Same	123	33.1	46.4	130	34.9	65.3
	Less Difficult	102	27.4	38.5	23	6.2	11.6
Missing	Don't Know	63	16.9		99	26.6	
	System	44	11.8		74	19.9	
Total		372	100.0	100.0	372	100.0	100.0

		Medical Physicist			Radiation Oncologist		
		Frequency	Percent	Valid Percent	Frequency	Percent	Valid Percent
Valid	More Difficult	81	21.8	37.9	34	9.1	22.1
	Same	118	31.7	55.1	108	29.0	70.1
	Less Difficult	15	4.0	7.0	12	3.2	7.8
Missing	Don't Know	99	26.6		146	39.2	
	System	59	15.9		72	19.4	
Total		372	100.0	100.0	372	100.0	100.0

		Physician Assistant			Nurse		
		Frequency	Percent	Valid Percent	Frequency	Percent	Valid Percent
Valid	More Difficult	1	.3	2.3	27	7.3	15.7
	Same	37	9.9	86.0	111	29.8	64.5
	Less Difficult	5	1.3	11.6	34	9.1	19.8
Missing	Don't Know	216	58.1		127	34.1	
	System	113	30.4		73	19.6	
Total		372	100.0	100.0	372	100.0	100.0

		Ancillary Staff			Administrative Staff		
		Frequency	Percent	Valid Percent	Frequency	Percent	Valid Percent
Valid	More Difficult	6	1.6	5.5	16	4.3	9.1
	Same	80	21.5	72.7	126	33.9	71.6
	Less Difficult	24	6.5	21.8	34	9.1	19.3
Missing	Don't Know	166	44.6		122	32.8	
	System	96	25.8		74	19.9	
Total		372	100.0	100.0	372	100.0	100.0

Radiation Therapy Staffing Survey

		Other Specialty		
		Frequency	Percent	Valid Percent
Valid	More Difficult	7	1.9	15.6
	Same	31	8.3	68.9
	Less Difficult	7	1.9	15.6
Missing	Don't Know	100	26.9	
	System	227	61.0	
Total		372	100.0	100.0

There were no statistically significant differences among facility types in perceived change in recruiting effort for any of the specialists or for the average across all specialties.

**Other Radiation Therapy Specialty for Which Recruitment Effort Change Specified:
2. Other (Please specify)**

Response	Frequency	Percent
Blank	339	91.1
AIDE	2	.5
Although fully staffed, with increased patient load, we were looking for a per diem therapist to help out. It took months and we also hired a temp.	1	.3
ANCILLARY STAFF ARE HOUSED IN THE LARGER CANCER CENTER, NOT BY DEPARTMENT	1	.3
BEEN FULLY STAFFED CONSISTENTLY	1	.3
Currently, looking to fill a dept manager at one of our other facilities, it is very hard to find qualified candidates that are able to relocate within our current salary structure.	1	.3
DIDN'T REALLY NEED TO RECRUIT	1	.3
Don't know because we are at full staff and in no need to recruit.	1	.3
During the past year we have recruited a physicist, therapist, and administrative staff. All have been easy to recruit. We plan to recruit a dosimetrist in 2005, anticipate diff. in recruiting due to supply and demand. We will also recruit a Radiation Oncologist; we too anticipate diff. in this recruitment.	1	.3
Engineers - same, program director - same	1	.3
___ Hospital is the sponsor of a Radiation Therapy Program. We have no difficulty filling treatment planning or therapist positions.	1	.3
Have not been actively recruiting during this time frame.	1	.3
Have not needed to recruit anyone	1	.3
LEAD THERAPIST	1	.3
MAINTENANCE	1	.3
N/A = do not come out of my dept. budget.		
NA	1	.3
NO TURNOVER IN OUR DEPARTMENT SINCE 1998	1	.3
NOT RECRUITING	1	.3
NUCLEAR MED AND CT TECHS	1	.3
NURSE ASST.	1	.3
SIMULATION TECHNOLOGIST	1	.3

Radiation Therapy Staffing Survey

TECHNICAL ASSISTANCE	1	.3
TUMOR REGISTRAR	1	.3
WE ARE NOT RECRUITING FOR THIS OFFICE	1	.3
We contract a physics service to provide 3 days per week service. Our dosimetrist works 24 hrs per week-.60	1	.3
WE HAVE BEEN FULLY STAFFED	1	.3
We have been fully staffed for the past 8 years	1	.3
We have done no recruitment.	1	.3
We have had only one vacancy in the past 2 years, and it was filled within a short period of time.	1	.3
We have not been recruiting anyone because we are fully staffed	1	.3
WE HAVE NOT HAD TO RECRUIT STAFF, BUT HAVE RTTS INTERESTED IN MOVING INTO THE AREA.	1	.3
We have not needed to do any staff recruitment for 4 years.	1	.3
WE HIRED 1 NEW STUDENT WHO DID HIS CLINICAL AT OUR OFFICE, PLUS 1 THERAPIST MOVING TO OUR AREA FOR FAMILY NEEDS.	1	.3
Total	372	100.0

Reasons for Decreases in Budgeted FTEs

3. If budgeted FTEs in any of these specialties have decreased over the past year, what do you believe is the reason for this decrease?

First, what proportion of the facilities showed decreases in budgeted FTEs for each specialty, and what proportion of the facilities showed a decrease in budgeted FTEs for one or more specialties from 2004 to 2005?

	<u>N</u>	<u>Sum</u>	<u>Proportion "Yes"</u>
Did:			
FTEs for any specialty decrease?	345	81.00	.2348
Radiation therapist FTEs decrease?	345	31.00	.0899
Certified medical dosimetrist FTEs decrease?	345	9.00	.0261
Physicist FTEs decrease?	345	14.00	.0406
Radiation oncologist FTEs decrease?	345	24.00	.0696
Physician assistant FTEs decrease?	345	3.00	.0087
Nurse FTEs decrease?	345	17.00	.0493
Ancillary staff FTEs decrease?	345	6.00	.0174
Administrative staff FTEs decrease?	345	23.00	.0667
FTEs for another specialty decrease?	345	7.00	.0203

Many of the respondents checked one or more reasons for a decline in budgeted FTEs, even though the FTEs they reported did not indicate a decrease had occurred for any specialty, or if they had not reported any FTEs for one or both of January '04 or March/April '05. These managers and directors were probably interpreting the question more generally as to what they perceive to be causes of decreases in FTEs, when and if such decreases occur. The percentage of respondents mentioning different reasons is therefore reported separately for each of these subgroups in the following table: One column represents the reasons checked by those who reported no FTEs for one or both years; a second column represents the reasons checked by those whose reported FTEs showed no decrease in any specialty from 2004 to 2005, and a third column is for those respondents whose FTEs showed a decrease for at least one specialty from 2004 to 2005.

Radiation Therapy Staffing Survey

Reason for Decrease in Budgeted FTEs	Did FTEs for any specialty decrease?			Total
	No FTEs reported	No	Yes	
No reason given.	20	218	38	276
	74.0% ^a	82.6%	46.9%	
Patient demand declined.	5	12	20	37
	71.4% ^b	26.1%	46.5%	
Overall department or facility budget declined, forcing downsize.	3	21	24	48
	42.9%	45.7%	55.8%	
Formerly budgeted FTEs were so difficult to fill they were dropped from the budget	1	10	3	14
	14.3%	21.7%	7.0%	
Number of patients that can be processed hourly on each treatment machine increased.	2	3	1	6
	28.6%	6.5%	2.3%	
Number of staff assigned to each treatment machine decreased.	2	6	3	11
	28.6%	13.0%	7.0%	
Average number of hours worked per week by radiation therapy staff increased, so number of specialists required to handle the workload declined.	0	4	1	5
	.0%	8.7%	2.3%	
Other	0	10	9	19
	.0%	21.7%	20.9%	
Total respondents giving one or more reasons	7	46	43	96

Among respondents whose facilities had experienced a decrease in budgeted FTEs for one or more specialties, there were no statistically significant differences among facility types in the percentage of respondents giving various reasons for the decrease.

Other Reasons for Decrease(s) in FTEs:

Response	Frequency	Percent
Blank	329	88.4
ADMINISTRATION NOT DOING ENOUGH	1	.3
BUDGET REMAINS THE SAME	1	.3
BUDGETED FTE'S HAS NOT DECREASED	1	.3
CHANGING DUTIES AND JOB DESCRIPTION OF A THERAPIST TO DOSIMETRIST	1	.3
Closed one site.	1	.3
Department hasn't experienced a decreased	1	.3
DID NOT DECREASE	1	.3

^a Percent of all respondents.

^b Percent of respondents who gave one or more reasons for decline. These percentages sum to more than 100% because many respondents gave multiple reasons.

Radiation Therapy Staffing Survey

Employee moved to [name of vendor] applications.		
FTE's increased.	1	.3
FTE'S STAYS THE SAME	1	.3
FTES DID NOT DECREASE	1	.3
I AM FINDING IT HARD TO FIND HELP JUST SO I CAN HAVE A VACATION. LOCUMS ARE VERY SHORT IN DEMAND. A LOT OF MY TECH FRIENDS ARE GETTING OUT OF RADIATION THERAPY BECAUSE OF THE SHORTAGE OF TECHS (HENCE THEY MUST WORK HARDER AND LONGER HOURS). THE STRESS OF THIS JOB IS EXTREMELY DIFFICULT AND THE SHORTAGES ARE JUST ACCENTING THE SITUATION. WE TOOK POSITIONS OUT JUST BECAUSE THEY WERE EMPTY FOR SO LONG WITH NO HELP IN SIGHT. IT IS VERY DEPRESSING FOR ME AT TIMES.	1	.3
N/A	6	1.6
new department, no stats for 2004	1	.3
NLA	1	.3
NO CHANGE	2	.5
NO DECREASE	1	.3
No decrease experienced.	1	.3
NO DECREASE OCCURED.	1	.3
No decrease planned.	1	.3
NO TURNOVER IN OUR DEPT. SINCE 1998	1	.3
none have decreased	2	.5
ONLY NURSING DECREASED	1	.3
SAME NUMBER	1	.3
TECHNOLOGY IS MORE SOPHISTICATED REQUIRING DOWNSIZING IN TRANSCRIPTION and BLOCKSHOP AREAS.	1	.3
UNCHANGED FTE	1	.3
HRS WORKED PER WEEK BY RADIATION THERAPY STAFF INCREASED, SO NUMBER OF SPECIALISTS WORKLOAD DECLINED.	1	.3
We hired because we had a need and 2 therapists wanted to work for us.	1	.3
We went down from 4.5 FTE radiation therapists to 4 because we lost our only PTE and did not need to replace her due to increase efficiencies.	1	.3
when employees left, positions were not filled	1	.3
will be losing 1 FTE Radiation Therapist through attrition in 05/05	1	.3
WORKLOAD DECLINED.	7	1.9
Total	372	100.0

Reasons for Increases in Budgeted FTEs

4. If budgeted FTEs for any of these specialties have increased since January 2004, what do you believe is the reason for this increase? (Check all that apply.)

First, what proportion of the facilities showed increases in budgeted FTEs for each specialty, and what proportion of the facilities showed an increase in budgeted FTEs for one or more specialties from 2004 to 2005?

	<u>N</u>	<u>Sum</u>	<u>Proportion "Yes"</u>
Did:			
FTEs for any specialty increase?	345	141.00	.4087
Radiation therapist FTEs increase?	345	60.00	.1739
Certified medical dosimetrist FTEs increase?	345	41.00	.1188
Physicist FTEs increase?	345	41.00	.1188
Radiation oncologist FTEs increase?	345	28.00	.0812
Physician assistant FTEs increase?	345	9.00	.0261
Nurse FTEs increase?	345	36.00	.1043
Ancillary staff FTEs increase?	345	12.00	.0348
Administrative staff FTEs increase?	345	24.00	.0696
FTEs for another specialty increase?	345	7.00	.0203

As with reasons for decreases, reasons for increases in FTEs were given by substantial numbers of respondents whose facilities had experienced no increase in FTEs or for whom whether an increase or a decrease in FTEs had occurred could not be determined.

Radiation Therapy Staffing Survey

Reason for Increase in Budgeted FTEs	Did FTEs for Any Specialty Increase?			Total
	No FTEs reported	No	Yes	
No reason given.	21	157	37	215
	77.8% ^a	77.0%	26.2%	
Patient demand increased.	4	20	71	95
	66.7% ^b	42.6%	68.3%	
Overall department or facility budget increased, making it possible to add FTEs.	2	13	31	46
	33.3%	27.7%	29.8%	
Recruitment within these specialties became easier, making adding FTEs feasible.	0	10	5	15
	.0%	21.3%	4.8%	
Number of patients that can be processed hourly on each treatment machine decreased.	0	5	18	23
	.0%	10.6%	17.3%	
Number of staff assigned to each treatment machine increased.	1	9	23	33
	16.7%	19.1%	22.1%	
Average number of hours worked per week by radiation therapy staff decreased, so number of specialists required to handle the workload increased.	0	1	3	4
	.0%	2.1%	2.9%	
Ancillary staff (e.g., dietitian, social worker) were added to free up therapist/dosimetrist/physicist time and thereby increase patient throughput and/or quality care.	1	2	9	12
	16.7%	4.3%	8.7%	
Administrative staff (e.g., clerical and billing) were added to free up therapist/dosimetrist/physicist time and thereby increase patient throughput and/or quality care.	0	1	8	9
	.0%	2.1%	7.7%	
Other	0	11	17	28
	.0%	23.4%	16.3%	
Total	6	47	104	157

Percentages and totals are based on respondents.

Among respondents whose facilities had experienced an increase in budgeted FTEs for one or more specialties there were no statistically significant differences among facility types in the percentage of respondents giving various reasons for the increase.

^a Percent of all respondents.

^b Percent of respondents who gave one or more reasons for increase. These percentages sum to more than 100% because many respondents gave multiple reasons.

Radiation Therapy Staffing Survey

Other Reasons for Increases:

Response	Frequency	Percent
Blank	321	86.3
Add an additional linac to service requiring additional therapist.	1	.3
ADDED A CLINIC	1	.3
ADDED ANOTHER LINAC AND INCR. PT. VOLUME.	1	.3
ADDED CYBERKNIFE	1	.3
ADDED PROCEDURES	1	.3
ADDING A NURSE PRACTITIONER TO PRACTICE TO ASSIST radiation oncologists with clinical time. They need to spend much more time on tx planning tasks.	1	.3
Additional machines to be added in the next 5 years.	1	.3
BEGAN RECRUITING FOR FT DEDICATED STAFF PHYSICIST AND RADIATION ONCOLOGIST INSTEAD OF CONTRACTED POSITIONS.	1	.3
BUDGET REMAINS THE SAME	1	.3
Department hasn't experienced an increase	1	.3
DID NOT INCREASE	1	.3
Dosimetry is much busier with more complex treatment plans (IMRT, etc.) and cannot simulate and cover the Therapists as readily. More complex treatment and a rise in treatment times.	1	.3
EXTRA RN NEEDED FOR NEW PROCEDURES to be done in our dept.	1	.3
FTES STAYS THE SAME	1	.3
Getting ready to implement IMRT so will be looking for additional dosimetry staff.	1	.3
IMRT IMPLEMENTATION	1	.3
IMRT INCREASED WORKLOAD ON DOSIMETRY STAFF	1	.3
IMRT LOAD ON PHYSICS AND DOSIMETRY	1	.3
IMRT SERVICE TO BEGIN 4/05	1	.3
Increased # of IMRT treatments per machine decreases throughput requiring extended hours and increased overtime	1	.3
INCREASED COMPLEXITY OF TREATMENTS	1	.3
INCREASED DOWN TIME to retrofit IMRT. Juggling between conformal and IMRT. Each time you have to manually change device which weighs 80 lbs.	1	.3
INCREASED USE OF IMRT REQUIRED MORE physics & dosimetry time & staff .	1	.3
JUST ADDED ADDITIONAL CLERICAL staff.	1	.3
Medical Physicist was added due to start up of Gamma Knife.	1	.3
N/A	3	.8
NEW PROCEDURES ADDED/SHIFT IN DUTIES	1	.3
New technology was added to department so added RT(T)'s. Initiation of IMRT and HDR each added one RT(T). We elevate RT(T)'s to Treatment Planning assistants and then to CMD's so we have no problem filling positions especially with our program being on-site and graduates wanting to stay.	1	.3
NO ADDITIONS	1	.3
NO CHANGE	2	.5
NO DECREASE	1	.3
No increase planned.	1	.3
NO INCREASES OCCURRED.	1	.3
no stats for 2004	1	.3
none have increased	1	.3

Radiation Therapy Staffing Survey

None have increased	1	.3
OPENED ANOTHER DEPARTMENT	1	.3
PHYSICIAN REQUESTED ADDITIONAL STAFF	1	.3
PHYSICS WORKLOAD INCREASED	1	.3
SAME	1	.3
TECHNICAL ADVANCES -- IMRT	1	.3
THEY PUT ME THROUGH DOSIMETRY SCHOOL.	1	.3
UNCHANGED FTE	1	.3
We added additional equipment requiring additional technical staff.	1	.3
We had one additional therapist approved in the budget. However, we weren't able to fill it. Finally we hired a therapist on a casual basis. Due to our decrease in patient load, she is not working with us anymore.	1	.3
We opened and acquired 2 regional sights.	1	.3
WHILE OUR NUMBERS HAVE NOT INCREASED DRAMATICALLY OUR COMPLEXITY HAS WITH THE IMPLEMENTATION OF IMRT. Instead of treating 2-4 fields we now treat 7 or more fields, which increases our treatment times per pt.	1	.3
Total	372	100.0

Changes in Tenure and Turnover Rate

5. For each specialty role, how have the following staffing indicators changed since January 2004?

	Radiation Therapist: average length of employment at your facility	Radiation Therapist: Turnover rate	Medical Dosimetrist: average length of employment at your facility	Medical Dosimetrist: Turnover rate	Medical Physicist: average length of employment at your facility	Medical Physicist: Turnover rate	Radiation Oncologist: average length of employment at your facility	Radiation Oncologist: Turnover Rate
Valid	314	274	286	233	292	241	250	204
Missing	58	98	86	139	80	131	122	168
Mean	3.3503	2.5036	3.3112	2.5494	3.1712	2.7676	3.2080	2.6471
Median	3.3113	2.5584	3.2634	2.6347	3.1327	2.8323	3.1667	2.7464
Mode	3	3	3	3	3	3	3	3
Std. Deviation	.80228	.93467	.74764	.92308	.84022	.95522	.84355	.97906
% Much Lower	1.3%	19.3%	1.0%	19.7%	2.7%	14.5%	3.2%	20.1%
% Lower	6.1%	21.2%	4.2%	15.0%	10.3%	13.3%	6.8%	9.3%
% Higher	22.0%	7.3%	17.8%	7.7%	13.7%	13.3%	12.4%	10.3%
% Much Higher	10.8%	1.5%	9.8%	.9%	9.6%	2.9%	10.8%	2.0%

No difference among the various types of facility in mean perceived change in these indicators was statistically significant.

Sign-on Bonuses

6. Were you paying sign-on bonuses for radiation therapy staff in January 2004? Are you paying them currently? If yes, please indicate amount typically paid.

Measure	Percent paying bonus or mean bonus	N	Std. Deviation	Statistical Significance of Difference	
				t (N-2)	P
Pair 1: Radiation Therapist	January 2004	38.4%	318	48.7	3.488 .001
	Currently (2005)	31.1%	318	46.4	
Pair 2: Radiation Therapist	Amount of bonus 2004	\$4,373.33	75	\$2695.21	.910 .366
	Amount of bonus (2005)	\$4,213.33	75	\$2700.32	
Pair 3: Medical Dosimetrist	January 2004	19.5%	277	39.7	.534 .594
	Currently (2005)	18.8%	277	39.1	
Pair 4: Medical Dosimetrist	Amount of bonus 2004	\$4,710.53	38	\$2793.89	.887 .381
	Amount of bonus 2005	\$4,552.63	38	\$2983.72	
Pair 5: Medical Physicist	January 2004	11.15%	260	31.5	.258 .797
	Currently (2005)	10.8%	260	31.2	
Pair 6: Medical Physicist	Amount of bonus 2004	\$5,866.67	15	\$2748.16	-2.99 0.769
	Amount of bonus 2005	\$5,933.33	15	\$2678.40	

Radiation Therapy Staffing Survey

Pair 7: Radiation Oncologist	January 2004	2.6%	234	15.8	-.446	.656
	Currently (2005)	3.0%	234	17.1		
Pair 8: Radiation Oncologist	Amount of bonus 2004	\$15,000.00	1	... ^a	... ^a	... ^a
	Amount of bonus 2005	\$15,000.00	1	... ^a		

There were no statistically significant differences among facility types in the percentage paying sign-on bonuses or in the amount of the sign-on bonus if one was paid for any of the four specialties. However, only one facility of any kind (of the 234 who reported that they pay a sign-on bonus for radiation oncologists) reported the amount of the sign-on bonus, no university medical center reported the amount of the bonus they paid medical physicists, and only one university medical center reported the amount of the bonus they paid medical dosimetrists, so no meaningful estimates of the population means for those three cases were possible.

^a With only one facility reporting the amounts of the radiation oncologist sign-on bonuses for 2004 and 2005, no meaningful standard deviations or *t*-ratio could be computed.

Use of Temporary/Traveling Specialists

Indicate the percentage range you estimate for the following radiation therapy coverage situations:

Respondents could either select from 0%, 1-6%, 7-13%, 14-20%, 21+% or write in a specific percentage. For purposes of this analysis, each range selection was replaced with the midpoint of that range – e.g., if the respondent checked “1-6%,” it was scored as 3.5%.

		Percent of radiation therapist FTEs filled w/ temps/travelers	Percent above average temp/traveling radiation therapists are paid	Percent of Medical dosimetrist FTEs filled w/ temps/travelers	Percent above average temp/traveling dosimetrists are paid
N	Valid	362	288	344	266
	Missing	10	84	28	106
Mean		3.8715	17.6736	1.7980	9.3797
Median ^a		.5833	2.3400	.1781	.7443
Mode		.00	.00	.00	.00
Std. Deviation		14.40883	28.77089	11.45402	23.38102
Minimum		.00	.00	.00	.00
Maximum		100.00	200.00	100.00	100.00
Percent zeroes		84.8%	59.4%	95.1%	82.3%

		Percent of medical physicist FTEs filled w/ temps/travelers	Percent above average temp/traveling physicists are paid	Percent of radiation oncologist FTEs filled w/ temps/travelers	Percent above average <i>locum tenens</i> radiation oncologists are paid
N	Valid	339	272	333	247
	Missing	33	100	39	125
Mean		1.8392	8.2188	2.5676	4.7389
Median ^a		.2262	.2026	.1093	.4910
Mode		.00	.00	.00	.00
Std. Deviation		10.81145	21.12843	13.30478	15.98925
Minimum		.00	.00	.00	.00
Maximum		99.00	100.00	100.00	99.00
Percent zeroes		93.8%	83.1%	90.1%	87.4%

There were no statistically significant differences among the various facility types in the percent of positions filled by temps or in the percent above average which temps are paid for any of these four specialties.

^a Calculated from grouped data.

Work Force Shortage Consequences

8. Has your facility experienced any of the following consequences of a work force shortage?

	Valid N ^a	%Yes	%No
Curtailed plans for facility expansion.	329	5.5	94.5
Curtailed plans for acquiring new technology.	339	14.2	85.8
Reduced number of staffed treatment units.	334	5.4	94.6
Reduced number of staff assigned to each treatment unit.	336	18.8	81.2
Discontinued radiation therapy educational programs.	320	8.8	91.2
Increased patient wait times for procedures.	335	17.0	83.0
Cancelled procedures.	334	5.1	94.9
Decreased patient satisfaction.	329	10.0	90.0
Increased patient complaints.	326	8.3	91.7
Other	86	9.3	90.7

There were no statistically significant differences among the various types of facility in the percentage of facilities that had experienced any of the above-listed consequences of a work force shortage.

Other consequences:

Response	Frequency	Percent
Blank	351	94.4
DIFFICULT TO REQUEST TIME OFF DUE TO STAFFING. FACILITY IS NOT FILLING THE VACANCY WE HAVE.	1	.1
I AM THE ONLY RADIATION THERAPIST HERE AT THIS FACILITY. THE PT. LOAD FLUCTUATES SO MUCH THAT THE #'S AREN'T WHAT THE DR. WANTS TO HIRE ANOTHER TECH/PHYSICIST. EVEN IF WE WANTED TO THOUGH, I CAN'T FIND ANYONE HARDLY TO RELIEVE ME FOR ONE DAY OFF. THE SHORTAGE, AS FAR AS I CAN SEE, IS STILL HERE. I AM GLAD THAT ALOT OF SCHOOLS HAVE OPENED UP. ALOT OF MY FRIENDS ARE 45 AND OLDER. WE ALL HAVE DONE THERAPY FOR 20+ YRS. I SEE US RETIRING SOON (HOPEFULLY) AND THAT CONCERNS ME.	1	.1
I SEE NOW AN INCREASE IN THERAPISTS WILLING TO WORK BUT MAJORITY ONLY 1-2 YEARS. EXPERIENCE WITH MUCH LESS CLINICAL BACKGROUND. CANNOT WORK ALONE OR WITHOUT AN EXPERIENCED THERAPIST	1	.1
INCREASED DUTIES TO THERAPISTS (DOSIMETRY)	1	.1
INCREASED RT PAY SCALE	1	.1
INCREASED STAFF COMPLAINTS	1	.1
INDIVIDUAL THERAPISTS WORKING EXTENDED HOURS TO COVER WORKLOAD AND VOLUME OF PATIENTS.	1	.1
More work for same pay and same # of staff. We have a great seasoned team and do not let patient care suffer.	1	.1
No Shortage	2	.2
No, we have been fully staffed.	1	.1

^a Excludes respondents who chose "Unknown" or who did not select any of the three alternatives.

Radiation Therapy Staffing Survey

Our department is fairly new 1.5 yr old and every piece of equipment that was purchased is top of the line but to give you a better picture our whole physics department is outsourced by the hospital which why we do not experience any physics shortage. I have noticed that in my staffing service radiation therapists have become more available which is why I am an advocate for the four year radiation therapist program.	1	.1
OVERTIME	1	.1
Patient load and patient wait time increased drastically last summer. We were up to 50 patients in 10 hours with a wait list. Staff became increasingly dissatisfied and close to quitting until extra, temporary staff was brought in.	1	.1
PRESSURE ON MANAGEMENT TO MAINTAIN HIGH LEVEL OF PRODUCTIVITY	1	.1
Staff dissatisfaction with increased patient load and decreased RT staff - Morale problems.	1	.1
This is a small rural area clinic. Our staff hasn't changed in over 5 yrs.	1	.1
We've been very lucky...knock on wood.	1	.1
We delayed implementation of IMRT due to lack of fulltime medical physicist	1	.1
WE HAVE NO STAFFING PROBLEMS, SORRY.	1	.1
We hired more temp help. Slowly but surely we filled all our positions over a 2.5 year period (hiring some people who didn't work out and we let them go or they quit) until we now have assembled a great team and are finally fully staffed.	1	.1
Total	372	100.0

VERBATIM COMMENTS

9. **Please add any comments you feel are necessary to clarify any of your responses to the preceding seven questions and/or any additional comments you wish to share on your perceptions of the supply of radiation therapy professionals.**

Responses	Frequency	Percent
Blank	263	70.7
1. NOT ENOUGH RADIATION THERAPY SCHOOLS. 2. HIGHER SALARIES AND BONUSES AT COMPETING HOSPITALS	1	.3
ACQUIRING RTS IS DIFFICULT DUE TO WAGE CONSTRAINTS AND DUE TO LACK OF INDUSTRY AND EMPLOYMENT OPPORTUNITIES IN NYS FOR SPOUSES. 2-- AS TECHNOLOGY INCREASES, PROXIMITY SLOWS AND INCREASES THE STAFFING NEEDS FOR FACILITIES AND REIMBURSEMENT DOES NOT MEET The financial needs of the facilities, to be able to afford large salaries & benefit packages.	1	.3
All therapist recruited have been new grads and physicist was not ABR certified. We will be recruiting a full time board certified medical dosimetrist in the near future.	1	.3
Answers are a composite for 7 facilities operated under one parent organization. Physicist Bonus data unavailable. Do not employ radiation oncologists.	1	.3
Because all of our clinical and nonclinical associates are paid in the 90% with great benefits like 12% employer contribution into their retirement account (profit sharing/pension plan) coupled with bonuses given twice a year, we have little to no turnover. As a consequence, allied health professionals call us to see if we are hiring know our reputation.	1	.3
BEING UNDERSTAFFED CREATES A HEAVY BURDEN FOR THE CURRENT RAD THERAPIST AND OPENS THE DOOR TO INCREASED ERROR AND PATIENT DISSATISFACTION. IT PROVIDES A LINK TO LOW MORALE AND DECREASED QUALITY OF CARE.	1	.3
CONSEQUENCES WE HAVE EXPERIENCED ARE NOT DUE TO SHORTAGES, BUT DUE TO THE WAGES THEY REQUIRE AND IN THAT RESPECT IT HAS REDUCED # OF STAFF ASSIGNED TO EACH UNIT AND CURTAILED PLANS FOR ACQUIRING NEW EQUIPMENT.	1	.3
Due to low census, we recently laid off our 2 PTEs.	1	.3
Even though there does appear to be a nationwide shortage of RTTs and radiation oncologists, we have been fortunate enough to staff with natives of this area. We hope to continue to do so as graduates become available.	1	.3
For some reason in WI I have had very few vacancies and can fill openings usually with word of mouth from current employees of others that I know. We will have an opening in the physics area and this is concerning because even in the past that is one role that is difficult for us to fill.	1	.3
FORTUNATELY, MY FACILITY HAS LONG TERM EMPLOYEES WITH VERY LOW TURNOVER. OUR PROBLEM IS DROPPING VOLUME	1	.3
FT EMPLOYEES DO TEND TO WANT MORE UNPAID TIME OFF THESE DAYS. I TRY TO ACCOMODATE BUT STILL HAVE 2 PEOPLE ON A MACHINE. WE ALSO HAVE 1 EXTRA THERAPIST 2 days /wk & we send one of our therapists on those 2 days to cover our other office, which employs 1 FT & 2 PT therapists.	1	.3
I'm glad you are doing this survey. We have been looking for information like this. Also, I am glad you fixed your typos from the written survey (i.e. radiographers, ct specialists).	1	.3
I'm happy to say that we are fully and happily staffed in our department. I know we are very lucky to be in this situation.	1	.3
I'VE BEEN LUCKY (KNOCK ON WOOD). THERE HAS BEEN NO TURNOVER IN MY STAFF, ALTHOUGH LOTS OF THERAPISTS WANT TO COME TO COLORADO. I HAVE LOTS OF APPLICATIONS AND INQUIRIES.	1	.3

Radiation Therapy Staffing Survey

I am concerned about the current training of RTTs being more geared to educational material rather than clinical experience or the valued input from tried-and-true common sense of tenured RTTs (applying "book-smarts" to clinical situations).	1	.3
I AM CONCERNED THAT AS THE NUMBER OF FACILITIES PROVIDING RAD THERAPY INCREASES, THE WAGE DEMANDS FOR THERAPISTS WILL FORCE ROS TO HIRE LESS QUALIFIED ASSISTANTS REGARDLESS OF THE AVAILABILITY OF RTTS.	1	.3
I AM NOT INVOLVED IN HIRING OF DOSIMETRY, PHYSICISTS OR PHYSICIANS, SO I DO NOT KNOW ABOUT SIGN ON BONUS	1	.3
I did not enter a sign on bonus \$ amount for Radiation Therapists because we have offered up to \$15,000 in student loan repayment for 2 years of service.	1	.3
I HAD A LOCUM COME WORK WITH ME FOR ONE DAY (TO LEARN THE FACILITY) SO SHE COULD RELIEVE ME OCCASIONALLY. AT THE END OF THE DAY SHE TOLD ME SHE WOULD NEVER TAKE A FULL TIME POSITION AGAIN. SHE SEES THAT CLINICS/HOSPITALS ARE SO SHORT STAFFED AND VERY OVERWORKED. SHE DOESN'T WANT TO PUT HERSELF IN A POSITION WHERE THE STRESS LEVEL IS SO HIGH, THERE IS NO RELIEF IN SIGHT, AND THE TECH IS EXPECTED TO DO MORE THAN JUST TREAT AND DO CALCULATIONS. I AM EXPECTED TO BE A DOSIMETRIST (WHICH I AM NOT), AN I.T. SPECIALIST, ETC. I WEAR MANY HATS IN THIS DEPARTMENT WHICH HAS BEEN A GREAT LEARNING EXPERIENCE. WE HAVE BEEN OPEN 20 MTHS. AND I AM EXHAUSTED AND BURNT OUT. I HAVE INFORMED THE DR. OF THIS AND SHE SEES BUT DOES EXPECT ME TO FIND A TECH TO WORK FOR ME WHEN I WANT A DAY OFF/VACATION, ETC. I CAN'T WAIT TO SEE THE RESULTS OF YOUR SURVEY. PLEASE SEND ME THE RESULTS AS SOON AS YOU CAN. CAN YOU SEND THE RESULTS OF YOUR SURVEY TO: [Respondent's e-mail address].	1	.3
I have been employed as Department Director since 01/04. One of my goals was to eliminate staff turnover. We provide an open, flexible environment for all staff members. We currently have 13 licensed RTT's. 7 are full time RTT's, 3 are part time RTT's and 3 function as or are licensed CMD's. Recruiting in the Midwest can provide its own challenges. I am proud to represent such a dedicated, knowledgeable staff here at _____ Memorial Hospital. The "Best in the Midwest!" [Name of Respondent], Director, Radiation Oncology	1	.3
I HAVE BEEN EMPLOYED HERE FOR 14 YEARS -- THERE HAS BEEN NO CHANGE IN PHYSICS STAFF OR PHYSICIANS. OUR PRACTICE IS CONTINUING TO GROW WITH POSSIBILITY OF A NEW FACILITY (ADDITIONAL IN 2006)	1	.3
I have been fortunate to be at full staff for the past year. Prior to that we had had openings for 15 years prior with all of the above mentioned problems directly related to the shortage.	1	.3
I have been very fortunate with my staffing and have not had to rely on temporary agencies. I believe the shortage of therapy personnel has significantly had a negative impact on our profession.	1	.3
I LOOKED ONLINE FOR THE STAFFING SURVEY AND COULDN'T FIND IT. WE ARE A SMALL CANCER CENTER THAT BELONGS TO THE LOCAL COMMUNITY HOSPITAL. NOT A LOT OF VOLUME AND FTES HAVE BEEN STABLE OVER THE LAST 2 YEARS.	1	.3
I SEE CORPORATIONS BUYING FREESTANDING CLINICS AND MAKING THE BOTTOM LINE MORE IMPORTANT THAN PATIENT CARE. PERSONNEL BECOMES JUST AN EXPENSE TO THEM WITH LITTLE APPRECIATION FOR DESIRE TO GIVE GOOD PATIENT CARE.	1	.3
I STRONGLY FEEL THAT THERE WILL BE ANOTHER SURPLUS OF THERAPISTS AS IN 95-96. WE ARE A PRIVATE ONCOLOGY CANCER CENTER. WE HAVE 2 RAD ONC. ONE IS THE OWNER; THE SECOND DR. IS FULLTIME TO HELP WITH THE WORK LOAD. WE ARE FULLY STAFFED.	1	.3

Radiation Therapy Staffing Survey

I THINK THE TEMP PROFESSION ACTUALLY HELPS DRIVE THE SHORTAGE. SO MANY RTT THINK THEY CAN LEAVE A FT JOB AND TRAVEL THEY MAKE MUCH MORE MONEY WHICH IN TURN COSTS THE HOSPITALS MORE MONEY WHICH INCREASES COSTS TO PATIENTS. WE NEED TO DO MORE TO STOP THE TEMP PROFESSION. IN MY OPINION THE ONLY REASON IT EXISTS IS GREED, NOT THE DESIRE TO HELP PATIENTS. I ALSO THINK SALARIES ARE GETTING WAY OUT OF CONTROL. AT WHAT POINT DOES IT STOP? SOMETHING IS WAY WRONG. THANKS FOR LISTENING.	1	.3
I took over as manager of this facility in August 2004. At that time they had 2 agency therapists. I have since attained full staffing and eliminated the need for agency therapists. We are fully staffed in all areas of our Cancer Center, including nursing. I WOULD LIKE TO ADD THAT OUR LARGEST PERCENTAGE OF RADIATION THERAPISTS ARE REACHING 50 YEARS OLD. THE SCHOOL IN THIS AREA WAS CLOSED 5 YEARS AGO AND THERE ARE FEWER THERAPISTS IN THE AREA TO FILL THE VACANCIES IN THE NEXT 5-10 YEARS. ALSO, I WOULD LIKE TO ADD THAT WITH ALL THE NEW TECHNOLOGIES THAT WORKING WITH 2 THERAPISTS PER MACHINE IS BECOMING INCREASINGLY DIFFICULT AND I FELL PATIENT CARE WILL START TO SUFFER FIRST.	1	.3
IMRT HAS MADE THE LARGEST IMPACT RECENTLY ON WORKLOAD FOR DOSIMETRY, PHYSICS AND PHYSICIANS PREDOMINANTLY THERAPISTS HAVE BEEN IMPACTED SOMEWHAT, BUT MORE SO IN REGARD TO PRETREATMENT QA CHECKING FOR THESE PATIENTS. THE INCREASE IN TREATMENT TIMES HAS IM	1	.3
IN 2003 WE EXPERIENCED A SHORTAGE OF RTTS; HOWEVER, WITH THE _____ CLINIC SCHOOL OF RTT OPENING AGAIN, WE FILLED THOSE VACANCIES WITH GRADUATES OF THIS LOCAL PROGRAM.	1	.3
IN THE MIAMI AREA, WE HAME MORE RTT GRADUATES THAN POSITIONS. THIS IS A SIGNIFICANT PARADIGM SHIFT THAT HAS OCCURRED OVER THE PAST 2 YEARS.	1	.3
Inability of programs to substantially increase graduates (recruitment problems??) has impacted manpower supply. Most guidance counselors are directing HS graduates to 4 year colleges and majority of programs are 1 or two year diploma/AS degree. This will continue to be a problem as the BS/BA degree has become an accepted standard of post HS education. PA, OT, PT etc. which have increased educational requirements to BS level and beyond have waiting lists for students to enroll.	1	.3
INCREASED STRESS ON THE THERAPISTS WORKING UNDERSTAFFED. INCREASED ERRORS DUE TO STRESS OF UNDERSTAFFING. RURAL AREAS ARE VERY HARD TO RECRUIT THERAPISTS TO. INCREASED CLASS SIZES AT CURRENT SCHOOLS ARE NEEDED. REOPEN CLOSED SCHOOLS IN SOME AREAS.	1	.3
INCREASED TIME FOR IMRT IS NOT TRULY SHOWN IN THE PRODUCTIVITY WHICH HAS CAUSED THE LOSS OF 1 FTE RAD THERAPIST.	1	.3
IT SEEMS AS IF THE SHORTAGE OF THERAPISTS IS DECREASING. LOCAL SCHOOLS ARE GRAD ABOUT 13-15 STUDENTS A YEAR AS OPPOSED TO 3-5 YEARS AGO.	1	.3
More and more I believe machines are being covered with one Rad Therapist instead of increasing FTEs to ensure that there are two therapists treating patients. I cannot stress enough my belief that it is imperative to have two therapists per machine at all times. Budget constraints have compromised patient care and safety. I believe this to be a dangerous conundrum.	1	.3
MY VACANT 1 RTT POSITION IS DUE TO LOW PATIENT VOLUME I HAVE A NUMBER OF APPLICANTS IF WISHED TO FILL RTT POSITION.	1	.3
OBVIOUSLY THIS SURVEY IS INTENDED TO SHOW A SHORTAGE. VERY LEADING QUESTIONS FOR A NEUTRAL QUESTIONNAIRE. WE MUST CONTROL OUR NUMBERS TO KEEP OUR PROFESSION DESIRABLE. FLOOD THE MARKET AND WE WILL BE LIKE THE XRAY TECHS (LOW PAY, NO RESPECT). EXAMPLE: [Name of program] had 5 radiation therapists in 2004 program 16 in 2005 is way too many. Supply and demand will determine if we all make a reasonable living. [Name and title provided]	1	.3

Radiation Therapy Staffing Survey

Oncologist is not employed by the hospital. We do not have a formal education program for Therapy. We do partner with another hospital and their students rotate at our hospital.	1	.3
ONE FULL TIME THERAPIST LEFT FOR ANOTHER JOB. THE ADMINISTRATION IS NOT GOING TO FILL THE VACANCY IN ORDER TO SAVE MONEY.	1	.3
OUR DEPARTMENT CONSISTS OF 8 FACILITIES. HOSPITAL AND FREESTANDING THE ABOVE INFORMATION IS FOR 1 FACILITY ONLY	1	.3
OUR DEPT. ALSO PAYS THERAPISTS A \$1000 YEARLY RETENTION BONUS, WHICH IS A LOT LOWER THAN THE OTHER NEARBY [name of city] HOSPITALS.	1	.3
SALARIES CONTINUE TO BE VERY COMPETITIVE IN OUR AREA.	1	.3
OUR FACILITY HAS BEEN EXTREMELY FORTUNATE. WE HAVE HAD 0 TURNOVER FOR APPROX. 2 TO 3 YEARS.	1	.3
Our facility has been open for 2.5 Years. I have not had any turnover in my staff to date.	1	.3
Our Medical Physicist and his associate are contracted individuals who work full time at another facility and cover various hospitals on weekends.	1	.3
OUR RADIATION THERAPIST SHORTAGE HAS BEEN ELIMINATED DUE TO OUR CURRENT AFFILIATION WITH WASHBURN UNIVERSITY'S ONLINE PROGRAM.	1	.3
Physicists and dosimetrist continue to be more difficult to recruit. Therapists are easier to recruit now as the graduates have increased.	1	.3
Physics and dosimetry services are contracted out.	1	.3
[PA city] has an over supply of Therapists. I know this sounds crazy, but it is true. We have a Community College Radiation Therapy program in [name of city]. ____ graduates 15 certificate students and 8-15 A.S. degree students every year. Only one year out of the last 15 years, we had difficulty finding a Therapist. If you are looking for staff, come to [name of city] PA.	1	.3
Please check above to number (8) for my opinion. [Our department is fairly new 1.5 yr old and every piece of equipment that was purchased is top of the line but to give you a better picture our whole physics department is outsourced by the hospital which why we do not experience any physics shortage. I have noticed that in my staffing service radiation therapist have become more available which is why I'm an advocate for the four year radiation therapist program.]	1	.3
PT LOAD HAS DECREASED DUE TO THE ABUNDANCE OF RADIATION THERAPY DEPARMENTS. I FEEL CERTIFICATE OF NEED SHOULD BE RETURNED TO INDIANA.	1	.3
RADIATION ONCOLOGIST LEAVING -- MAY NEED TO UTILIZE LOCUM IN NEAR FUTURE, USING CONTRACTED PHYSICS SERVICE AND HAVING DIFFICULTY FINDING FT PHYSICIST IN A SALARY RANGE AFFORDABLE FOR A SMALL CLINIC TREATING 15 PATIENTS A DAY.	1	.3
RADIATION ONCOLOGIST, PHYSICISTS AND DOSIMETRISTS ARE CONTRACTED FROM A LARGER TEACHING HOSPITAL. THE THERAPISTS AND RN, OFFICE STAFF ARE THE COMMUNITY HOSPITAL/STAFF.	1	.3
RADIATION ONCOLOGISTS NOT HIRED BY THE MEDICAL CENTER. MEDICAL PHYSICISTS CONTRACTED BY THE MEDICAL CENTER.	1	.3
RADIATION THERAPIST POSITION NOT FILLED DUE TO BUDGET AND LOW CENSUS FOR A SHORT TRIAL	1	.3
SAME STAFF HAS BEEN HERE FOR YEARS	1	.3
SINCE THE ADDITION OF A NEW RADIATION THERAPIST SCHOOL WAS STARTED IN OUR AREA WE NO LONGER FIND A SHORTAGE OF THERAPISTS, PRESENTLY WE HAVE 2 SCHOOLS IN OUR AREA. I FEEL THERE NEEDS TO BE ADDITONAL DOSIMETRY SCHOOLS AND PHYSICISTS TO THE FIELD.	1	.3
SINCE THE NEW TECHNOLOGY REQUIRES MORE PHYSICS. SINCE THERE IS A PHYSICS SHORTAGE THEIR SALARIES ARE OUT OF CONTROL. Also, on Q6: We paid prior to 2004 \$2,000 per therapist. We no longer do.	1	.3
SORRY, I'M NOT HELPFUL. MY FACILITY IS A SMALL CLINIC CONSISTING OF MYESELF, PHYSICIAN, PHYSICIST, AND PART TIME DOSIMETRIST. WE FUNCTION EXTREMELY WELL WITH OUR CLOSE TEAMWORK AND SMALL PT. LOAD.	1	.3

Radiation Therapy Staffing Survey

The effect of IMRT treatments has not been considered. The state department of health still counts per patient treatment when an IMRT treatment takes twice as long or longer to deliver depending on the amount of beams. Staffing of facilities with IMRT currently is the same as for regular external beam treatments. This needs to be addressed.	1	.3
The FTE section didn't allow any number other than a whole number. 21 vs. 21.4 etc. Don't handle MDs or physician assistants and could not provide that information. My numbers include 3 sites, one of which is a university setting; the other two are community based.	1	.3
the Milwaukee/Wisconsin market is very aggressive in educating future therapists	1	.3
THE RAD ONC. SCHOOL AT ____ (____, LA) WAS OPENED LAST YEAR AFTER _____'S SCHOOL SHUT DOWN IN THE MID 90S. UNFORTUNATELY, THEY TAKE MOSTLY STUDENTS FROM THE LOCAL AREA. STUDENTS WILL EVENTUALLY HAVE TO LEAVE THE STATE TO FIND EMPLOYMENT BECAUSE THEY WILL FLOOD THE LOCAL MARKET AS THEY DID IN THE 90S	1	.3
The radiation oncologists are not employed by the hospital	1	.3
The shortage has eased up in our area. I think it is still varied across the country depending on the geographical area and people's willingness to move. People got sick of paying the high price of temp help and some of the attitudes of lack of accountability in temps. This isn't true of all temps but there were certainly some real bad apples! They unfortunately gave the others a bad reputation, quite unfairly. I was at a CART meeting in Chicago last weekend and it really varied for jobs depending on location - graduates need to be prepared to move if they want jobs and understand they may not get to stay in their home town if they want to work in radiation therapy.	1	.3
The staff in this office are caring and are patient oriented. Over the years I have observed, that the MDs have a hard time working as a team even though their staff does. With a new MD on the scene it has become more difficult to keep peace. Is it all about the money? I'm not sure as I enter my 35th year of Radiation Therapy. Young fresh ideas are good but the work ethic suffers I feel. Newer technology is not the only thing a patient needs to survive the diagnosis of cancer. The article in the Scanner (#7) said something to me about the generations of RTT's to me. What about the MDs and their generations? We participate in a student program. We try to give well rounded training, not just technical. I believe the administration and the MDs need to work together, not just their staff. I'm not sure what will happen when it's "out with the old and in with the new." Thanks for the interest.	1	.3
THE STAFF RATIO AT OUR PROTON FACILITY IS DIFFERENT THAN THAT FOR PHOTONS. 8 RTTS: 40 PATIENTS! DUE TO LENGTH OF PROCEDURES AND EQUIPMENT CHALLENGES WE OPERATE 10 HOURS/DAY 5 DAYS PER WEEK. 3 RTTS/MACHINE EACH DAY WITH 1 OFF.	1	.3
THIS FACILITY DOES NOT OFFER HIGHER PAY OR INCENTIVES TO ATTRACT RADIATION THERAPISTS. THE ONLY ATTRACTION IN WORKING FOR THIS FACILITY IS THAT ONLY PROSTATE CANCER IS TREATED. CT SCANS FOR FOLLOWUPS ARE ALSO DONE, WITHOUT CONTRAST AND READ BY RADIATION ONCOLOGISTS ONSITE. Bone densitometry done on CT without protocols (height/weight).	1	.3
THIS HOSPITAL WENT THROUGH A MAJOR UPGRADE BY JOINING A BIGGER HEALTH SYSTEM WHICH PROVIDED MANAGEMENT TO HELP THEIR FACILITY EVERYTHING WAS IMPROVED BY ALMOST 100%.	1	.3
Two items to note about our facility: 1. The RadOnc pays for his own locum tenens when he takes his time off.2. The department manager also is the medical dosimetrist and the job split for time is 50/50.	1	.3
We're lucky to have too many therapists and dosimetrists in the state. Not good for the new grads because there aren't enough jobs, so many are returning to Radiology.	1	.3
WE'VE MADE SOME PERSONNEL CHANGES THAT HAVE BEEN GREAT. WE HAVE A HIGH PATIENT EMPLOYEE SATISFACTION AND JUST FINISHED A \$2.4 MILLION EXPANSION INCLUDING CONSTRUCTION, a new Varian 2100 accelerator, upgraded ADAC pinnacle planning, KMPAC & all new physics equipment.	1	.3
We are a new department (3 years) fully staffed with 0 turnover 2004.	1	.3

Radiation Therapy Staffing Survey

WE ARE A SMALL DEPT WITH 2 THERAPISTS WHICH 1 ALSO DOES DOSIMETRY. ONE NURSE, ONE PART TIME PHYSICIST AND 1 RAD ONC. WE'VE ALL BEEN WORKING FOR 3 YEARS IN SAME POSITION EXCEPT FOR OUR PHYSICIST -- HE COMES ONCE A WEEK.	1	.3
We are a small rural radiation oncol. dept. This info is from our office and none of the other 9 offices around the state.	1	.3
WE ARE CURRENTLY IN THE PROCESS OF OBTAINING CT SIMULATOR, AND NEW LINEAR WITH IMRT. WE HAVE NEW ONCOLOGISTS AND WILL BE LOOKING FOR DOSIMETRISTS AND ANOTHER THERAPIST.	1	.3
WE ARE FULLY STAFFED AND HAVE BEEN FOR YEARS. I guess we are lucky.	1	.3
WE ARE FULLY STAFFED AND VERY HAPPY.	1	.3
WE ARE HAVING A HARD TIME RECRUITING A COMPETENT PHYSICIST WITHIN OUR PRICE RANGE. WE ARE FULLY STAFFED FOR THERAPISTS AND DOSIMETRISTS AND EVEN HAVE OTHERS INTERESTED	1	.3
WE ARE LUCKY. WE HAVE A GREAT PLACE AND STAY FULLY STAFFED. MOST EMPLOYEES HAVE BEEN HERE SEVERAL YEARS.	1	.3
WE ARE NOT EXPERIENCING STAFF RETENTION PROBLEMS.	1	.3
We are very fortunate in that our turnover rate is nearly 0%. Average length of employment for our staff is 10-12 years.	1	.3
WE ARE WORKING TO ESTABLISH A WORKING CLINIC affiliated w/ program.	1	.3
WE DO NOT HAVE A STAFFING PROBLEM. I BELIEVE THE SCHOOLS SHOULD NOT ACCEPT AS MANY STUDENTS AS THEY ARE. THEY ARE PUSHING THEM THROUGH AND THEY WON'T GET JOBS.	1	.3
We do not have employee turnover here. Most of our Therapists and staff have been here for at least 5 years or more.	1	.3
WE DO NOT HAVE OUR OWN ANCILLARY OR ADMINISTRATIVE STAFF AS WE ARE PART OF A CANCER CENTER THAT INCLUDES MEDICAL ONCOLOGY. THE CENTER HAS ANCILLARY AND ADMINISTRATIVE STAFF THAT SERVES US AS WELL.	1	.3
WE DO NOT USE RECRUITERS; WE DOWNSIZED DUE TO LOW PT. LOAD; OUR DEPT DECREASED BY 1 FTE; WE HAVE A LOW TURNOVER RATE; WE PAID \$5000 IN 2003; OUR PHYSICS STAFF ARE CONTRACT EMPLOYEES; WE ARE OVER STAFFED.	1	.3
WE HAD A LONG STRETCH OF TIME USING TEMPS. MANY TIMES 3 AT A TIME. WE HAVE BEEN FULLY STAFFED SINCE MAY OF 2004.	1	.3
WE HAVE A SMALL FACILITY -- 2 THERAPISTS THAT NOW DO THE DOSIMETRY ALSO. THERE IS ONE LPN AND ONE SECRETARY. EVERYONE IS VERY BUSY COVERING ALL JOBS. EVERYONE HAS BEEN EMPLOYED 10+YEARS - NO TURNOVER. HOPE THIS HELPS.	1	.3
We have a stable workforce for radiation therapists and dosimetrists with no turnover for the past 10 year. We recently hired a fulltime medical physicist after having locums and part time help for about 2 years	1	.3
We have a very low turnover rate and high staff & patient satisfaction. The physician is great to work with.	1	.3
We have also used retention bonuses for staff in 2003, 2004, 2005 to retain existing radiation therapists and dosimetrists.	1	.3
We have been able to maintain a fully staffed department. Because our school changed to a 2 year program we were granted an overstaff position to maintain our staffing levels incase there was turnover.	1	.3
WE HAVE BEEN FORTUNATE ENOUGH TO BE FULLY STAFFED. I HAVE OBSERVED A SWING TOWARD LESS OPENINGS FOR RTS. I am getting constant calls about "I have an RT or dosimetrist who wants to come to your area."	1	.3
WE HAVE BEEN FORTUNATE NOT TO BE AFFECTED BY STAFFING ISSUES. WE HAVE HAD EXCELLENT STAFF RETENTION.	1	.3
We have been fully staffed for over a year. If any of the above occurred, it was not because of a staffing shortage.	1	.3
WE HAVE BEEN LUCKY FOR THE LAST 5 YEARS. NO TURNOVER.	1	.3
THERAPISTS HAVE STAYED PUT IN THE _____ AREA	1	.3

Radiation Therapy Staffing Survey

<p>We have been very lucky for the last several years not to have any openings. Many of the people live in _____, TN and since we are the only hospital in town-it does not open us up for much relocation since we are competitive with pay and we have excellent working conditions. We are also in the process of opening a new cancer center with a brand new radiation therapy department. As part of this new project, we replaced our old linear accelerator and fluoro simulator and replaced with a Varian 21EX with portal imaging-the therapists love it-many have turned down offers at other facilities paying a little more because they did not want to go back to taking port films the old fashioned way. In addition, we purchased a CT-PET scanner to do our simulations etc-a machine shared with nuclear medicine. [Respondent name, facility name, and e-mail address.]</p>	1	.3
<p>WE HAVE FEWER PTS BECAUSE OF A FREESTANDING FACILITY BEING BUILT NEARBY. WE CONTRACT FOR PHYSICS COVERAGE.</p>	1	.3
<p>We have had a very stable work force. No turnover in any of the categories above for 4 years.</p>	1	.3
<p>We have had no therapists/dosimetrists quit in the 6 yrs since our clinic opened. we have just expanded and hired 2 full time and 1 part time therapist, and have trained one therapist to do basic treatment planning</p>	1	.3
<p>WE HAVE HAD NO TURNOVER IN THE PAST 7 YEARS -- MOST OF THE STAFF HAS BEEN WITH US FOR 11 YEARS.</p>	1	.3
<p>We have had only 3 vacancies during the past 5 years, and we have been able to fill all of the positions within 3 months.</p>	1	.3
<p>We have not recruited for approximately 2 years. The tough part is to compete with the temporary staff wages. Young unattached therapists are willing to travel and be paid much higher wages that a clinic is willing/able to provide</p>	1	.3
<p>WE NEED TREATMENT PLANNING SYSTEM TO DESIGN TPS TO MAKE DOSIMETRISTS MORE PRODUCTIVE SO WE NEED LESS OF THEM. THIS WOULD INCREASE THE NUMBER AVAILABLE FOR EMPLOYMENT.</p>	1	.3
<p>WE REALLY HAVE NOT NOTICED A NEED FOR ADDITIONAL STAFFING SINCE THE BEGINNING OF 2004. HOWEVER, PATIENT LOAD HAS BEEN INCREASED THE LAST THREE MONTHS, SO HIRING ADDITIONAL STAFFING WILL BE CONSIDERED.</p>	1	.3
<p>WE SPECIALIZE IN HDR BRACHYTHERAPY ONLY</p>	1	.3
<p>WE STARTED A RADIATION THERAPY PROGRAM AND THIS HAS HELPED WITH STAFF SHORTAGES. IN 2002, 2003, WE WERE VERY SHORT STAFFED. LIMITED THERAPISTS AND DOSIMETRISTS. WE USED LOCUMS FOR TWO YEARS.</p>	1	.3
<p>will have data at the end of 2005 to submit</p>	1	.3
<p>WITH MULTILEAF AND IMRT AUTOMATION WE MAY DECREASE OUR THERAPIST STAFF. WE MAY USE SOMEONE TO ASSIST IN SET UP AND THE THERAPIST WILL RUN THE MACHINE.</p>	1	.3
<p>Total</p>	372	100.0

APPENDIX

THE QUESTIONNAIRE



March 2005

Dear Radiation Therapy Facility Manager,

ASRT would appreciate your help in gauging the current status of the unmet demand for radiation therapists and other specialists needed to provide radiation therapy. Few matters could be more important for the profession – radiation therapy specialists, their facility managers and educators alike – than an accurate assessment of the current supply and demand for radiation therapy personnel.

As you probably know, ASRT recently posted on our Web site (www.asrt.org; click on “Research”) a survey of the staffing and vacancy rates for the various diagnostic imaging specialties. The enclosed questionnaire is designed to provide similar detailed information about radiation therapy professionals and about what directors/managers believe to be the reasons behind unfilled vacancies. This information will be shared with the radiation therapy community via a report posted on the ASRT Web site. The report’s accuracy will depend on your willingness to share your facility’s staffing data and your views on staffing issues by completing the Radiation Therapy Staffing Survey.

There are two ways for you to participate in this survey. Our preference (because of its lower cost and greater ease of data entry) is for you to complete the questionnaire online by going to www.asrt.org and clicking on “Radiation Therapy Staffing Survey” in the “Research” section just right of the middle of the page. (Please enter the survey code, “RadTher,” as your response to the second question on the online form.) Alternatively, you may complete the hardcopy questionnaire enclosed with this note and return it to the ASRT Research Department in the enclosed postage-paid reply envelope. Please respond within the next two weeks if possible.

Finally, ASRT wants to stay in contact with you. We obviously have your name and address, but we have found e-mail to be a much more timely tool for staying in touch. Please provide your e-mail address on the form at the end of this letter and return it in the reply envelope. It will be separated from the questionnaire upon receipt. (Alternatively, you can supply the same contact information as part of the online response process.)

Thanks for your help with this important survey.

Sal’s signature

Sal Martino
Executive Vice President and Chief Academic Officer

Contact Information*

Name (optional) _____
Title (optional) _____
Telephone _____ E-mail address _____

*This form will be separated from the questionnaire (if enclosed) upon receipt; your responses to the questionnaire will remain anonymous. This information will be shared only between radiation therapy facility managers and ASRT; it will not be sold or otherwise provided to any commercial enterprise.



Radiation Therapy Staffing Survey

Thank you for completing this important survey. Please return the completed questionnaire in the enclosed postage-paid reply envelope within the next two weeks, or go to www.asrt.org and click on "Staffing Survey" to provide your data online. (You'll need to provide the survey code, RadTherStaf.)

Facility Demographics	
Your Title	<input type="checkbox"/> Department/Facility Manager or Director <input type="checkbox"/> Chief Therapist <input type="checkbox"/> Chief Dosimetrist <input type="checkbox"/> Other (<i>Please specify:</i> _____)
Type of Facility	<input type="checkbox"/> Community hospital <input type="checkbox"/> Government hospital <input type="checkbox"/> University medical center <input type="checkbox"/> Freestanding clinic <input type="checkbox"/> Teaching facility <input type="checkbox"/> Other (<i>Please specify:</i> _____)
Radiation therapy services provided in your facility [Not intended to be exhaustive]	<input type="checkbox"/> CT simulation <input type="checkbox"/> Brachytherapy <input type="checkbox"/> IMRT <input type="checkbox"/> Whole-body irradiation <input type="checkbox"/> Pediatric therapy <input type="checkbox"/> Stereotactic/gamma knife/MammoSite <input type="checkbox"/> Fractionated stereotactic therapy <input type="checkbox"/> Conformal radiation therapy delivery <input type="checkbox"/> Other (<i>Please specify:</i> _____)
Patient load for your facility	New patients per year _____ Patients treated per day _____
Equipment staffing	Therapists per treatment machine during a given treatment session _____ Reliability of treatment machines <input type="checkbox"/> Excellent <input type="checkbox"/> Good <input type="checkbox"/> Fair <input type="checkbox"/> Poor
Location	<input type="checkbox"/> Urban <input type="checkbox"/> Suburban <input type="checkbox"/> Rural State (two-letter ZIP abbreviation): _____

Staffing

- For each of the following specialists needed to provide radiation therapy services, please provide the budgeted and vacant FTEs for your organization in January 2004 and today. (Leave blank the rows for any specialists who do not work in your facility's radiation therapy suite.)

Job Title	Staffing, in Full-time Equivalents (FTEs)				
	As of 1/1/2004			2005 (Current)	
	Budgeted FTEs	Vacant and Recruiting	Data Not Available	Budgeted FTEs	Vacant and Recruiting
Radiation Therapist			<input type="checkbox"/>		
Medical Dosimetrist			<input type="checkbox"/>		
Medical Physicist			<input type="checkbox"/>		
Radiation Oncologist			<input type="checkbox"/>		
Physician Assistant					
Nurse (including RN, LPN, nurse practitioner)			<input type="checkbox"/>		
Ancillary staff (e.g., Dietitian, Social Worker)			<input type="checkbox"/>		
Administrative staff (e.g., clerical and billing staff)			<input type="checkbox"/>		
Other (Specify below)			<input type="checkbox"/>		
<i>(Please specify:</i> _____)					

Radiation Therapy Staffing Survey

2. Describe how the recruitment effort for each specialty in the past six months compares to the effort expended during the fiscal year that included January 2004.

Job Title	Recruitment Effort – Current vs. FY 2004 (Select one)
Radiation Therapist	<input type="checkbox"/> More difficult <input type="checkbox"/> Same <input type="checkbox"/> Less difficult <input type="checkbox"/> Don't know
Medical Dosimetrist	<input type="checkbox"/> More difficult <input type="checkbox"/> Same <input type="checkbox"/> Less difficult <input type="checkbox"/> Don't know
Medical Physicist	<input type="checkbox"/> More difficult <input type="checkbox"/> Same <input type="checkbox"/> Less difficult <input type="checkbox"/> Don't know
Radiation Oncologist	<input type="checkbox"/> More difficult <input type="checkbox"/> Same <input type="checkbox"/> Less difficult <input type="checkbox"/> Don't know
Physician Assistant	<input type="checkbox"/> More difficult <input type="checkbox"/> Same <input type="checkbox"/> Less difficult <input type="checkbox"/> Don't know
Nurse (including RN, LPN, nurse practitioner)	<input type="checkbox"/> More difficult <input type="checkbox"/> Same <input type="checkbox"/> Less difficult <input type="checkbox"/> Don't know
Ancillary staff (e.g., Dietitian, Social Worker)	<input type="checkbox"/> More difficult <input type="checkbox"/> Same <input type="checkbox"/> Less difficult <input type="checkbox"/> Don't know
Administrative staff (e.g., clerical and billing staff)	<input type="checkbox"/> More difficult <input type="checkbox"/> Same <input type="checkbox"/> Less difficult <input type="checkbox"/> Don't know
Other (Specify below)	<input type="checkbox"/> More difficult <input type="checkbox"/> Same <input type="checkbox"/> Less difficult <input type="checkbox"/> Don't know
<i>(Please specify: _____)</i>	

3. If budgeted FTEs for any of these specialties have decreased since January 2004, what do you believe is the reason for this decrease? (Check all that apply.)

- Patient demand declined.
- Overall department or facility budget declined, forcing downsizing.
- Formerly budgeted FTEs were so difficult to fill they were dropped from the budget.
- Number of patients that can be processed hourly on each treatment machine increased.
- Number of staff assigned to each treatment machine decreased, so number of FTEs required to handle the workload declined.
- Average number of hours worked per week by radiation therapy staff increased, so number of specialists required to handle the workload declined.
- Other (*Please specify:*_____)

4. If budgeted FTEs for any of these specialties have increased since January 2004, what do you believe is the reason for this increase? (Check all that apply.)

- Patient demand increased.
- Overall department or facility budget increased, making it possible to add FTEs.
- Recruitment within these specialties became easier, making adding FTEs feasible.
- Number of patients that can be processed hourly on each treatment machine decreased.
- Number of staff assigned to each treatment machine increased, so number of FTEs required to handle the workload increased.
- Average number of hours worked per week by radiation therapy staff decreased, so number of specialists required to handle the workload increased.
- Ancillary staff (e.g., dietitian, social worker) were added to free up therapist/dosimetrist/physicist time and thereby increase patient throughput and/or quality of care.
- Administrative staff (e.g., clerical and billing) were added to free up therapist/dosimetrist/physicist time and thereby increase patient throughput and/or quality of care.
- Other (*Please specify:*_____)

Radiation Therapy Staffing Survey

Recruitment and Retention

5. For each specialty role, how have the following staffing indicators changed since January 2004:

	Radiation Therapist		Medical Dosimetrist		Medical Physicist		Radiation Oncologist		NA
	ML	L S H MH	ML	L S H MH	ML	L S H MH	ML	L S H MH	
Employees' average length of employment at your facility	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Turnover rate	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

ML: Much lower **L:** Lower **S:** About the same **H:** Higher **MH:** Much higher **NA:** Not applicable

6. Were you paying sign-on bonuses for radiation therapy staff in January 2004? Are you paying them currently? If yes, please indicate amount typically paid.

	Radiation Therapist		Medical Dosimetrist		Medical Physicist		Radiation Oncologist	
	Paid sign-on bonuses?	Amount of bonus*	Paid sign-on bonuses?	Amount of bonus*	Paid sign-on bonuses?	Amount of bonus*	Paid sign-on bonuses?	Amount of bonus*
In January 2004	<input type="checkbox"/> Yes <input type="checkbox"/> No		<input type="checkbox"/> Yes <input type="checkbox"/> No		<input type="checkbox"/> Yes <input type="checkbox"/> No		<input type="checkbox"/> Yes <input type="checkbox"/> No	
Currently (2005)	<input type="checkbox"/> Yes <input type="checkbox"/> No		<input type="checkbox"/> Yes <input type="checkbox"/> No		<input type="checkbox"/> Yes <input type="checkbox"/> No		<input type="checkbox"/> Yes <input type="checkbox"/> No	

*Amount of bonus to nearest \$500.

7. Indicate the percentage range you estimate for the following radiation therapy coverage situations:

	0%	1-6%	7-13%	14-20%	21+%	Or Specify
What percent of your <i>radiation therapist</i> FTEs are you currently filling with temps/travelers?*	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
How much more (in %) above average <i>radiation therapist</i> wages and benefits do you pay for temp/traveling radiation therapists?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
What percent of your <i>medical dosimetrist</i> FTEs are you currently filling with temps/travelers?*	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
How much more (in %) above average <i>dosimetrist</i> wages and benefits do you pay for temp/traveling medical dosimetrists?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
What percent of your <i>medical physicist</i> FTEs are you currently filling with temps/travelers?*	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
How much more (in %) above average <i>medical physicist</i> wages and benefits do you pay for temp/traveling physicists?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
What percent of your <i>radiation oncologist</i> vacancies are you currently filling with <i>locum tenens</i> physicians?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
How much more (in %) above average <i>radiation oncologist</i> salary and benefits do you pay for <i>locum tenens</i> radiation oncologists?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	

*Temps/travelers = traveling staff, locum tenens and radiation therapy staff provided by temporary staffing agencies.

Radiation Therapy Staffing Survey

8. Has your facility experienced any of the following consequences of a work force shortage?

Consequence	Experienced as a result of shortage of radiation therapy specialists?
Curtailed plans for facility expansion	<input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Unknown
Curtailed plans for acquiring new technology	<input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Unknown
Reduced number of staffed treatment units	<input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Unknown
Reduced number of staff assigned to each treatment unit	<input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Unknown
Discontinued radiation therapy educational program(s)	<input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Unknown
Increased patient wait times for procedures	<input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Unknown
Cancelled procedures	<input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Unknown
Decreased patient satisfaction	<input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Unknown
Increased patient complaints	<input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Unknown
Other (Please specify: _____)	<input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Unknown

9. Please add here any comments you feel are necessary to clarify any of your responses to the preceding seven questions and/or any additional comments you wish to share on your perceptions of the supply of potential radiation therapy professionals.

Thank you for completing this important survey. Please return the completed questionnaire or respond online within the next two weeks. Call or e-mail John Culbertson, ASRT research specialist (jculbertson@asrt.org, 800-444-2778, Ext. 1297) if you have questions about the survey. All responses will be kept strictly confidential.