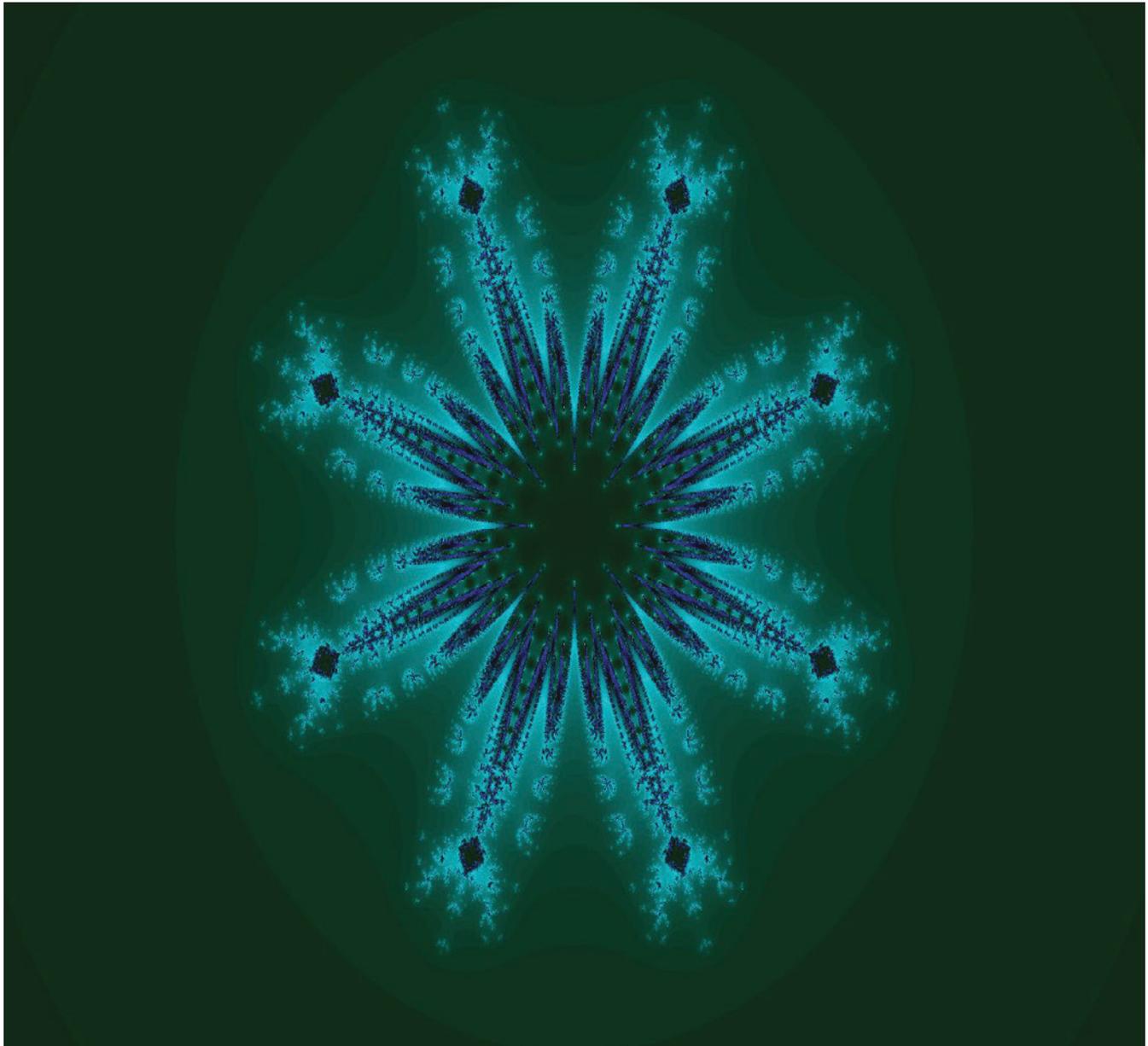


Enrollment Snapshot of Radiography, Radiation Therapy and Nuclear Medicine Technology Programs — 2016

January 2017



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Executive Summary

In late September 2016, an invitation to complete an online questionnaire was sent via email to 916 radiography, radiation therapy, and nuclear medicine technology programs listed by the American Registry of Radiologic Technologists (ARRT). At the close of the survey on December 5, 2016, a total of 372 responses had been received, yielding an overall response rate of 40.6%.

	Return	Population	Percent Sampled	Margin of Error at the 95% Level
R	291	736	39.5%	±4.5%
T	39	110	35.5%	±12.7%
NMT	40	120	33.3%	±12.7%
Overall	370	966	38.3%	±4.0%

This report summarizes findings regarding radiologic sciences enrollment in ARRT-recognized programs based on the responses from program directors.

Demographic Analysis

- A plurality of respondents (38.2%) work at a community college or 2-year institution, 26.6% work at a university or 4-year institution, 20.4% work at a medical center, 8.9% work at a technical college, 2.7% work at a for-profit school, and the remaining 3.0% work at another type of institution.
- Most programs responding to the survey are in radiography (78.2%); of the remaining respondents, 10.8% were nuclear medicine, 10.5% were radiation therapy, and 0.5% were other types of imaging programs.
- The terminal degree granted by programs responding to the survey was most likely to be an associate degree (62.1% of respondents); 21.5% grant a bachelor's degree, and the other 16.4% grant some other type of terminal degree.
- The vast majority of programs surveyed (96.2%) are located in the United States; 3.0% are in Canada, and 0.8% are elsewhere.
 - The US regions with the highest response rates were East North Central and South Atlantic, with a response rate of 19.9% in each. The lowest response rates were in the Mountain region and New England at 5.9% and 5.3%, respectively.

Credit Hours, Accreditation and the State of Education

Respondents were asked several questions pertaining to the number of credits needed to graduate from their program and their institutions accreditation.

- Asked about the level of institutional accreditation in their program, 69.8% of respondents said they have both programmatic and institutional accreditation, 16.4% said they had only programmatic

accreditation, 8.4% said they had only institutional accreditation, and the remaining 5.4% cited an "other" accreditation arrangement.

- The majority of programs responding to the survey (84.1%) use semester hours for their credit system; 6.7% use quarter hours, and the remaining 7.3% use another system.
- Asked whether their state mandates a limit on the maximum number of credit hours allowable for a degree in their program 33.8% of respondents said yes, 33.2% said no, and the remaining 33.0% were unsure.
- On average, programs offering an associate degree require 77.6 total credits while those offering a bachelor's degree require 114.9 total credits.
 - Associate degree programs require an average of 56.3 didactic credits; bachelor's degree programs require 92.9.
 - Associate degree programs require 23.4 clinical credits; bachelor's degree programs require 26.8.
- The average number of clinical hours required for each clinical credit was 62.1 for programs offering an associate degree and 52.1 for programs offering a bachelor's degree.

Enrollment Analysis

- Based on the survey response, an average of 21.1 students entered radiography programs in 2016. This represents an increase of 0.4 students per program from the previous year; average enrollment in 2015 was 20.7 students. This produces an overall estimate of 15,537 students entering ARRT-certified radiography programs in 2016, up from 15,228 in 2015.
- On average, 10.8 students entered radiation therapy programs in 2016. This represents a noticeable decline of 3.1 students per program from 2015, when on average, 13.9 students enrolled in each radiation therapy program. This produces an overall estimate of 1,185 students enrolling in ARRT-certified radiation therapy programs in 2016, down from 1,572 in 2015.
- An average of 11.4 students entered nuclear medicine programs in 2016. This represents an increase of 0.9 students per program from 2015, when on average, 10.5 students enrolled in each nuclear medicine program. Overall, this produces an estimate of 1,368 students enrolling in nuclear medicine programs in 2016, up from 1,276 in 2015.

2016 Student Capacity

- Asked whether their program is currently at full enrollment, 52.4% of radiography programs, 39.5% of

radiation therapy programs, and 32.5% of nuclear medicine programs said that they are at capacity. There were statistically significant differences between groups.

- Programs not at full enrollment were asked how many additional students their program could accommodate. On average, radiography programs said they could accommodate an additional 6.6 students, radiation therapy programs said they could accommodate an additional 4.6 students, and nuclear medicine programs said they could accommodate an additional 7.8 students.
 - This produces an estimate of 2326 additional students across all radiography programs, 309 additional students across all radiation therapy programs, and 631 additional students in nuclear medicine.
- The mean number of qualified students turned away by radiography programs was 23.6; radiation therapy programs turned away an average of 11.3 qualified students, and nuclear medicine programs turned away an average of 3.2 qualified students.
 - This produces an estimate of 9,102 qualified students turned away in radiography, 492 turned away by therapy programs, and 124 turned down by nuclear medicine programs.

Near-term Changes

Most of the programs surveyed plan to maintain their current levels of enrollment; 84.2% of programs across disciplines plan to keep their enrollment at the same level; 14.7% of programs plan to increase enrollment, and the remaining 1.1% plan to decrease their enrollment.

- In radiography, 86.1% of programs plan to maintain current enrollment; 12.8% plan to increase their enrollment, and the remaining 1.0% of programs plan to decrease their enrollment.
- In radiation therapy, 84.6% of programs plan to keep their current enrollment level; 12.8% are planning an increase, and 2.6% plan to decrease enrollment.
- In nuclear medicine, 70.0% of programs plan to leave their enrollment unchanged, 30.0% are planning an increase, and none plan to decrease their enrollment.

The majority of programs across disciplines (82.1%) will definitely continue to operate; 16.8% will most likely continue operations, 0.8% will likely close, and the remaining 0.3% will definitely close. There were significant differences between groups.

- In radiography, 83.4% of programs said they would definitely continue to operate; 16.3% will most likely continue operations, and the remaining 0.3% will definitely close.
- In radiation therapy, 79.5% of programs will definitely continue to operate, 15.4% of programs will most likely continue operations, and the remaining 5.1% will likely close.
- In nuclear medicine, 75.0% of programs will definitely continue to operate; 22.5% will likely continue to operate, and the remaining 2.5% will likely close.

¹ Methodological Note: In previous years, no attempt was made to determine the plausibility of responses about attrition. This year responses were recoded according to the following scheme: If the respondent indicated an attrition rate of 59% or lower, the response was left as is. If the respondent indicated

Program Outcomes

Asked about the attrition rate¹ at their program, respondents indicated that, on average:

- 18.2% of students in radiography programs failed to complete their course of study.
- 7.3% of students in radiation therapy programs failed to complete their course of study.
- 11.1% of students in nuclear medicine programs failed to finish their studies.

For those students who successfully completed the program, respondents were asked what percentage of graduates passed the credentialing exam on their first attempt:

- On average, 92.1% of radiography graduates pass the exam on their first attempt.
- On average, 93.7% of radiation therapy graduates pass the exam on their first attempt.
- On average, 94.4% of nuclear medicine graduates pass the exam on their first attempt.

Asked whether graduates of their program were able to find employment in their primary discipline within 6 months of graduating:

- Respondents said that, from the class of 2015, 95.3% of graduates from radiography programs, 88.7% from radiation therapy programs, and 76.3% of graduates of nuclear medicine programs were able to find employment in their field within 6 months.
- These placement rates represent an increase of 2.3% from 93.0% the previous year in radiography, a decrease of 1.9% from 90.6% the previous year in radiation therapy, and a decrease of 5.8% from 82.1% the previous year in nuclear medicine.

Comparing Canadian and U.S. programs

- In radiography, the mean entering class size was larger in Canada than in the United States. On average, 35.7 students entered Canadian programs, compared with an average of 20.8 students entering programs in the United States. In radiation therapy, U.S. programs enrolled slightly more students than their Canadian counterparts, with 10.9 entering students in the U.S. compared with 10.2 in Canada. None of Canada's 5 nuclear medicine programs responded to the survey this year, making any comparison there impossible.
- Overall, based on the survey responses, the calculated mean entering class size, and the total number of programs, the estimated total enrollment for each discipline is:
 - Radiography: 14,636 in the United States and 785 in Canada.
 - Radiation therapy: 987 in the United States and 143 in Canada.
- Canadian radiography programs were more likely to be at full enrollment than their US counterparts:

an attrition rate over 59%, the response was recoded as (1-x) where x = *uncoded user response*. For this reason, reported attrition means on this year's Enrollment Snapshot will be noticeably lower than they have been in previous years.

66.7% of Canadian radiography programs were at full enrollment, compared with 52.3% of U.S. programs. In radiation therapy, 40.0% of Canadian programs and 39.4% of U.S. programs were at capacity.

Glossary

The following statistical results are displayed using a common set of acronyms and symbols for brevity. The symbols and acronyms used are listed here for reference.

N

Number of responses.

Valid Percent

Percentage of total responses.

Mean

the arithmetic average.

Population

The total number of programs.

SD

Standard Deviation.

χ^2

Chi-squared, from Pearson's Chi-Squared Test for statistical significance.

P

Probability, as a measure for statistical significance when $P \leq 0.05$.

F

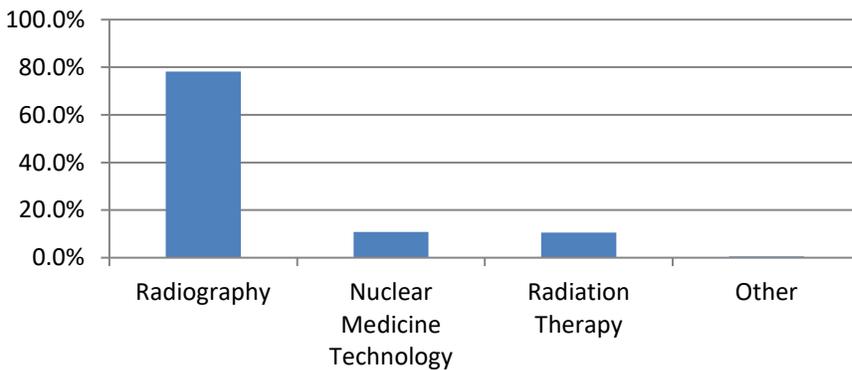
F-statistic, from analysis of variance (ANOVA) to test for statistical significance.

Demographics

Indicate your program type.

	N	Valid Percent	Population	Sample as Percent of Population
Radiography	291	78.2%	736	39.5%
Nuclear Medicine Technology	40	10.8%	122	32.8%
Radiation Therapy	39	10.5%	113	34.5%
Other	2	0.5%	n/a	n/a
Total	372	100.0%	971	38.3%

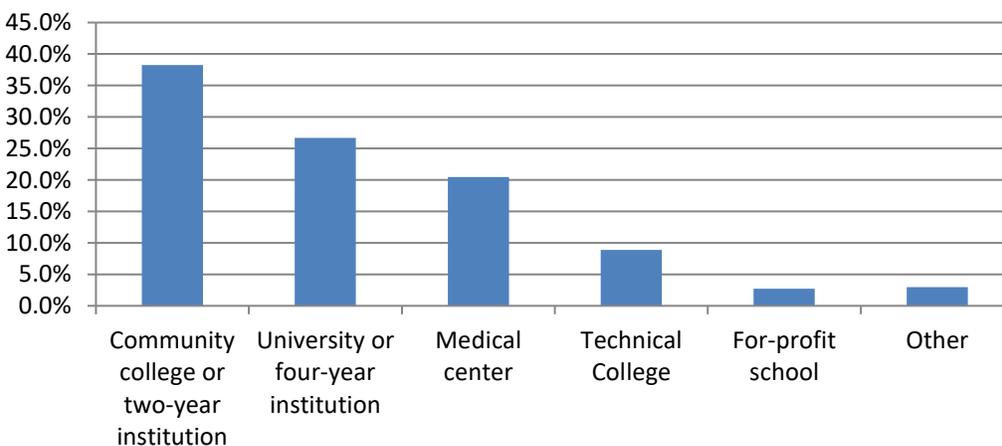
Indicate your program type.



What is your primary place of employment?

	N	Valid Percent
Community college or two-year institution	142	38.3%
University or four-year institution	99	26.7%
Medical center	76	20.5%
Technical College	33	8.9%
For-profit school	10	2.7%
Other	11	3.0%
Total	371	100.0%

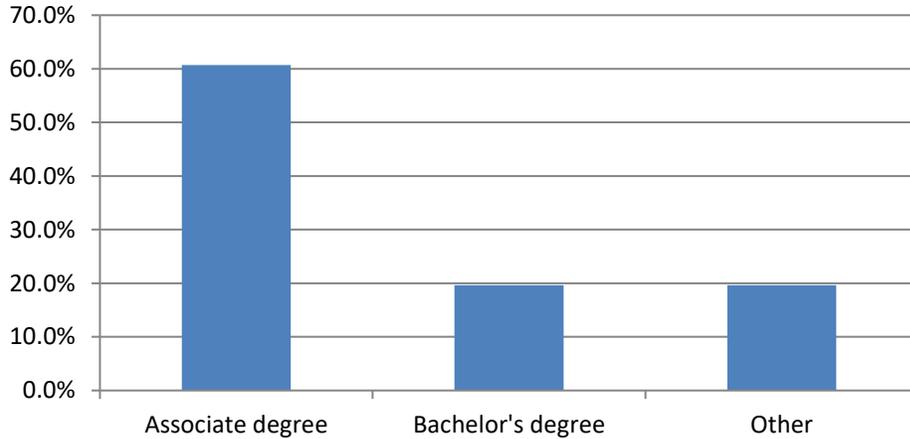
What is your primary place of employment?



What is the terminal degree earned by the graduates in your program?

	N	Valid Percent
Associate degree	231	62.1%
Bachelor's degree	80	21.5%
Other	61	16.4%
Total	372	100.0%

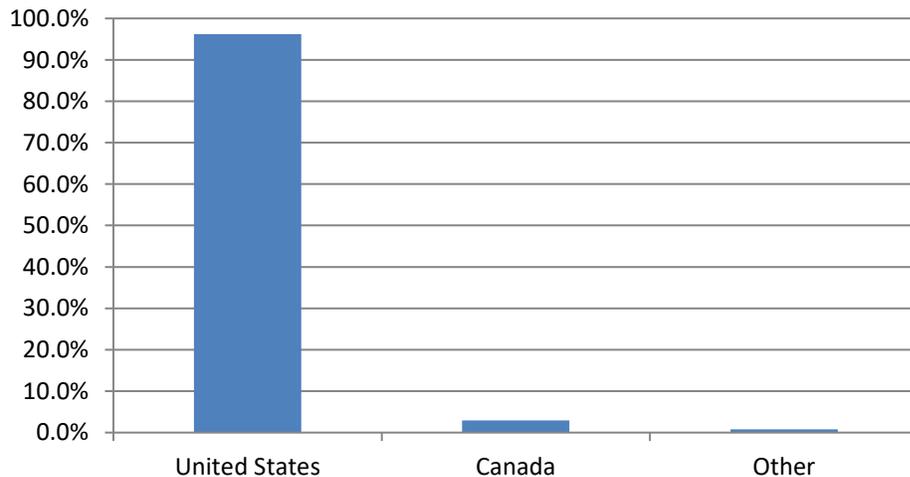
What is the terminal degree earned by the graduates in your program?



In what country is your program located?

	N	Valid Percent
United States	357	96.2%
Canada	11	3.0%
Other	3	0.8%
Total	371	100.0%

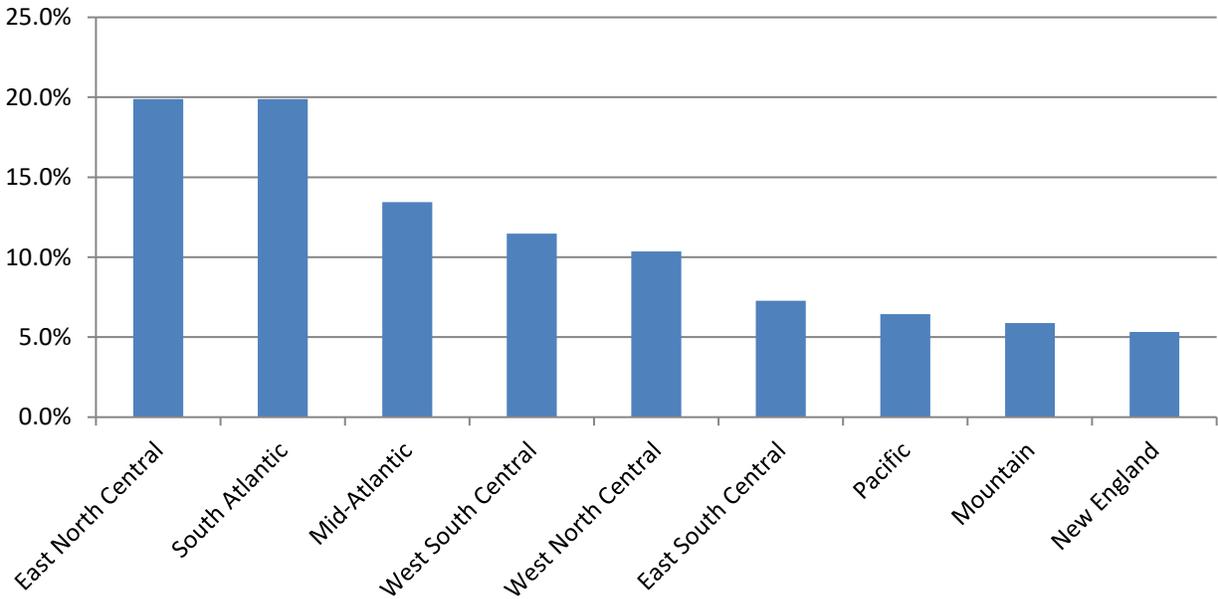
In what country is your program located?



If you chose the United States in the question above, please indicate in which region your program is located.

	N	Valid Percent
East North Central (WI, MI, IL, IN, OH)	71	19.9%
South Atlantic (DE, MD, DC, VA, WV, NC, SC, GA, FL, PR)	71	19.9%
Mid-Atlantic (NY, PA, NJ)	48	13.4%
West South Central (OK, TX, AR, LA)	41	11.5%
West North Central (ND, SD, NE, KS, MN, IA, MO)	37	10.4%
East South Central (KY, TN, MS, AL)	26	7.3%
Pacific (AK, WA, OR, CA, HI)	23	6.4%
Mountain (ID, MT, WY, NV, UT, CO, AZ, NM)	21	5.9%
New England (ME, NH, VT, MA, RI, CT)	19	5.3%
Total	357	100.0%

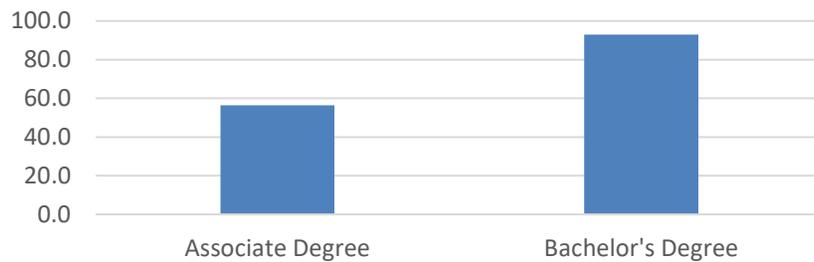
If you chose the United States in the question above, please indicate in which region your program is located.



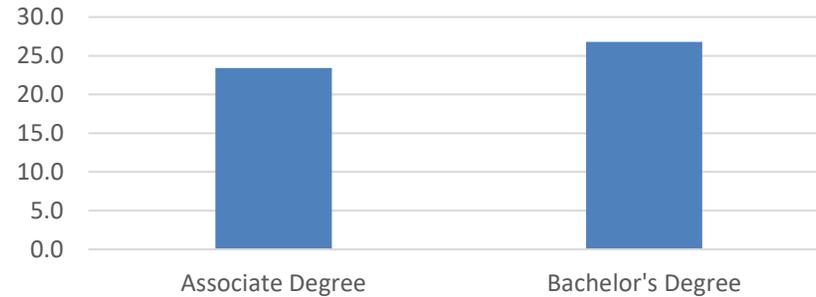
Credit Hours, Accreditation and the State of Education

	Associate Degree			Bachelor's Degree		
	N	Mean	SD	N	Mean	SD
How many didactic credits are required for students to graduate from your program? (including pre-requisites)	197	56.3	14.3	66	92.9	31.0
How many clinical credits are required for students to graduate from your program?	194	23.4	12.4	66	26.8	19.2
Total Credits for Program Completion	223	77.6	19.4	73	114.9	36.0
How many hours of clinical time are required for each clinical credit?	185	62.1	48.9	62	52.1	45.9

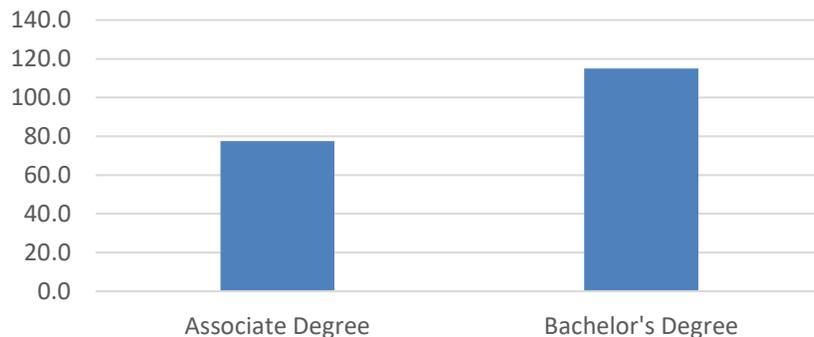
How many didactic credits are required for students to graduate from your program? (including pre-requisites)



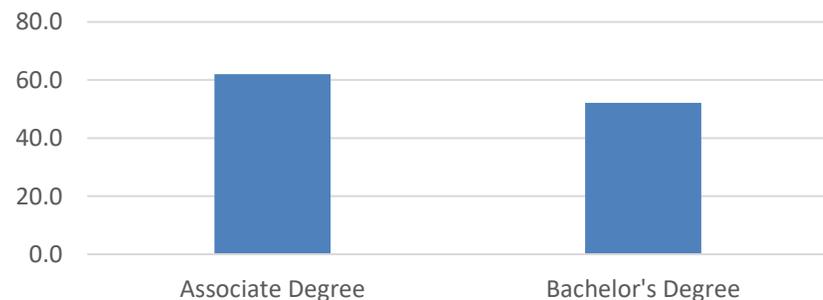
How many clinical credits are required for students to graduate from your program?



Total Credits for Program Completion



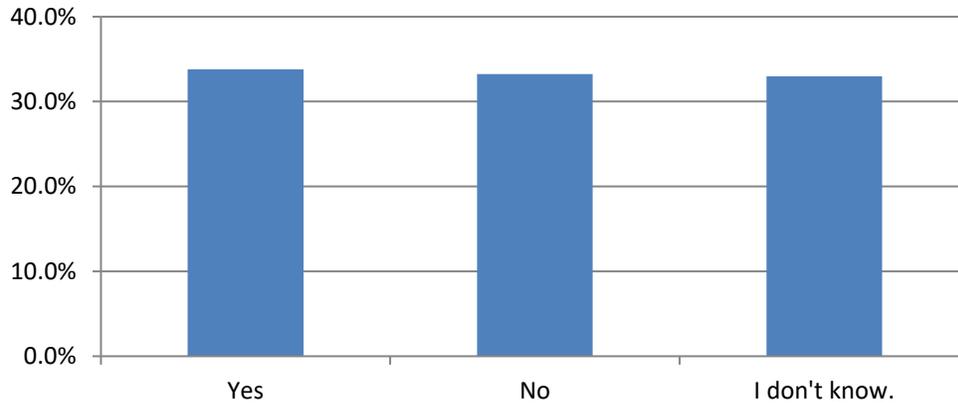
How many hours of clinical time are required for each clinical credit?



Does your state mandate a limit on the maximum number of credits required for a degree in your program?

	N	Valid Percent
Yes	123	33.8%
No	121	33.2%
I don't know.	120	33.0%
Total	364	100.0%

Does your state mandate a limit on the maximum number of credits required for a degree in your program?

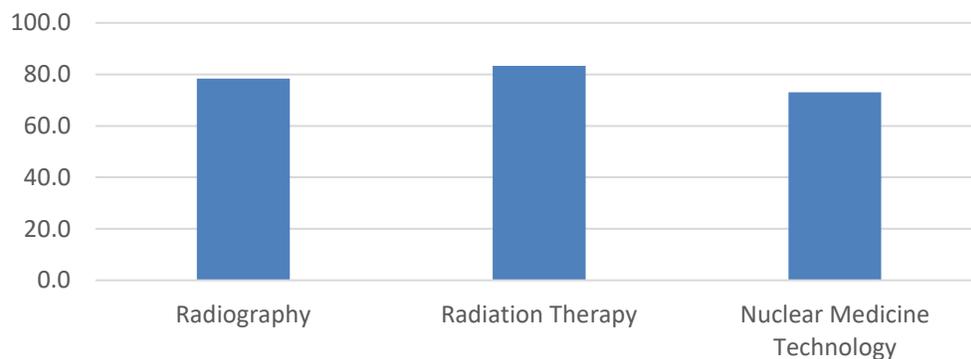


If your state mandates a maximum number of credits for a degree in your program, what is the limit?

	Mean	N	SD
Radiography	78.4	92	20.8
Radiation Therapy	83.3	6	31.9
Nuclear Medicine Technology	73.0	14	29.0
Total	78.0	112	22.4

There were no statistically significant differences in the means between groups.

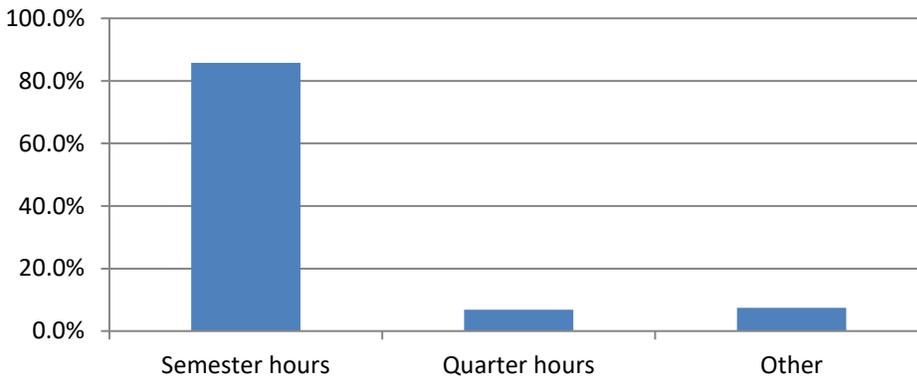
If your state mandates a maximum number of credits for a degree in your program, what is the limit?



What type of credit system do you use in your program?

	N	Valid Percent
Semester hours	313	85.8%
Quarter hours	25	6.8%
Other	27	7.4%
Total	365	100.0%

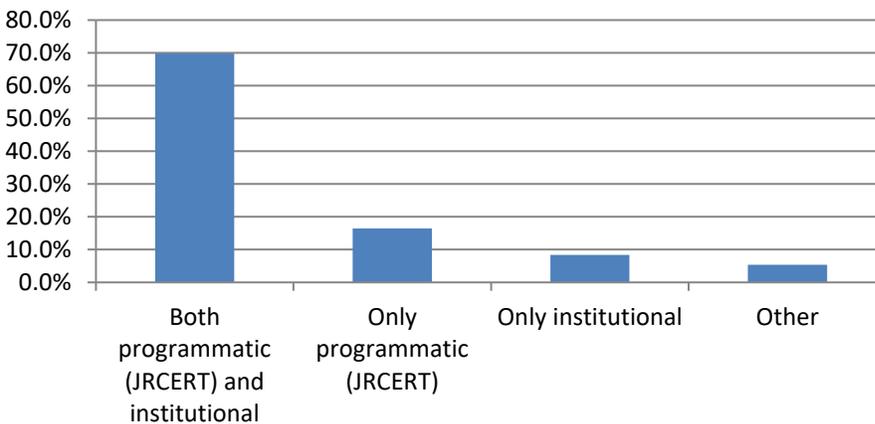
What type of credit system do you use in your program?



What is the level of educational accreditation in your program?

	N	Valid Percent
Both programmatic (JRCERT) and institutional	259	69.8%
Only programmatic (JRCERT)	61	16.4%
Only institutional	31	8.4%
Other	20	5.4%
Total	371	100.0%

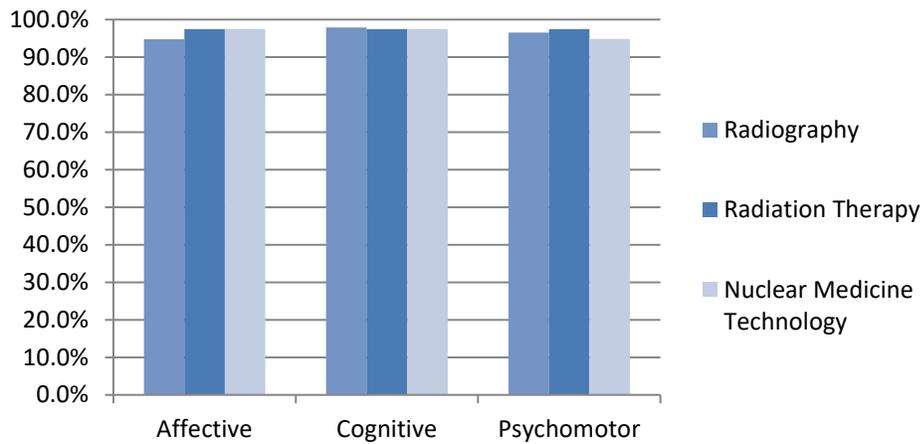
What is the level of educational accreditation in your program?



**Which domains of learning do you include when writing objectives for clinical rotations?
(Select all that apply)**

		Affective	Cognitive	Psychomotor
Radiography	N	273	282	278
	%	94.8%	97.9%	96.5%
Radiation Therapy	N	38	38	38
	%	97.4%	97.4%	97.4%
Nuclear Medicine Technology	N	38	38	37
	%	97.4%	97.4%	94.9%

Which domains of learning do you include when writing objectives for clinical rotations? (Select all that apply)



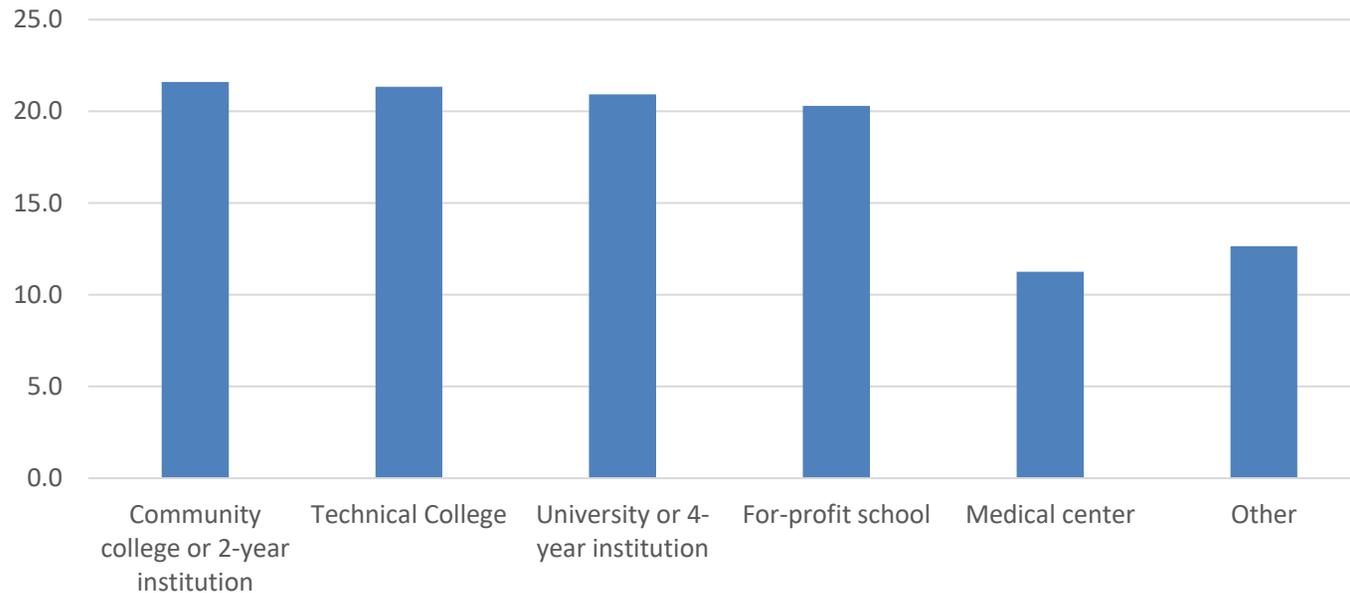
2016 Enrollment Analysis

Mean number of students entering by program and institution type.

	Radiography			Radiation Therapy			Nuclear Medicine Technology			Overall		
	Mean	N	SD	Mean	N	SD	Mean	N	SD	Mean	N	SD
Community college or two-year institution	23.3	120	10.0	11.6	9	5.0	12.2	12	6.0	21.6	141	10.3
Technical College	21.7	32	17.5	-	-	-	10.0	1	-	21.3	33	17.4
University or four-year institution	25.3	62	17.1	12.3	18	7.8	14.6	18	16.9	20.9	98	16.7
For-profit school	20.3	10	7.2	-	-	-	-	-	-	20.3	10	7.2
Medical center	12.9	57	8.0	8.4	10	6.3	4.2	9	2.7	11.3	76	7.9
Other	14.2	9	12.7	5.5	2	.7	-	-	-	12.6	11	11.9
Total	21.1	290	13.2	10.8	39	6.8	11.4	40	12.4	19.0	369	13.2

The overall mean number of students entering in medical centers was statistically different than the other institution types, $F(5,365) = 8.19, P < .001$

Mean number of students entering by program and institution type. - Overall

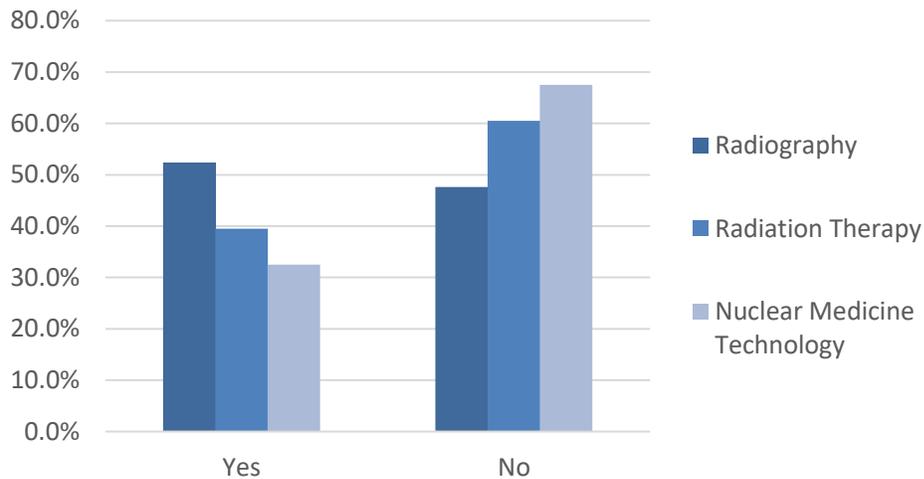


Is your program currently at full enrollment?

		Radiography	Radiation Therapy	Nuclear Medicine Technology	Total
Yes	N	152	15	13	180
	%	52.4%	39.5%	32.5%	48.9%
No	N	138	23	27	188
	%	47.6%	60.5%	67.5%	51.1%
Total	N	290	38	40	368
	%	100.0%	100.0%	100.0%	100.0%

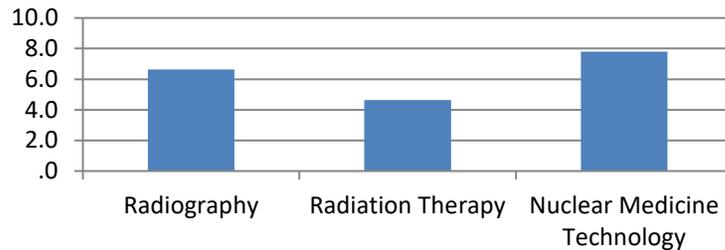
The percentage differences were statistically significant $\chi^2(2, n = 368) = 7.09, P = .029$.

Is your program currently at full enrollment?

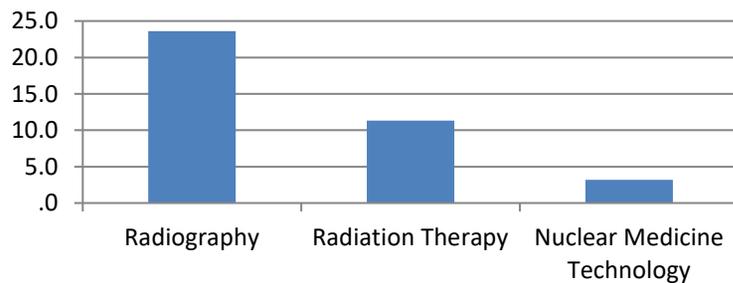


	Radiography			Radiation Therapy			Nuclear Medicine Technology			Total		
	Mean	N	SD	Mean	N	SD	Mean	N	SD	Mean	N	SD
If you are not at full enrollment, how many additional students could be accommodated by your program?	6.6	146	8.6	4.6	25	3.7	7.8	27	9.7	6.5	198	8.3
How many qualified students did you turn away this fall?	23.6	270	40.9	11.3	37	13.7	3.2	39	6.2	20.0	346	37.2
Attrition rate in 2016	18.2%	285	13.7%	7.3%	38	10.3%	11.1%	40	15.7%	16.3%	363	14.1%
What percentage of students graduating in 2016 passed the credentialing exam on the first try?	92.1%	285	12.1%	93.7%	37	9.7%	94.4%	39	10.7%	92.5%	361	11.7%

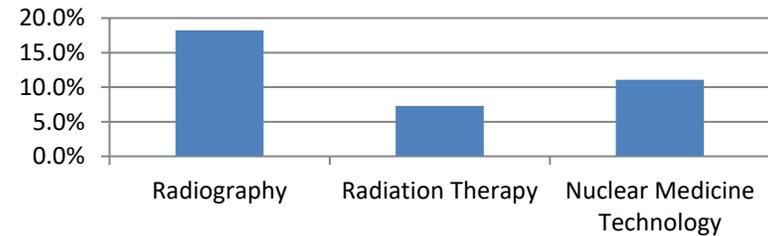
If you are not at full enrollment, how many additional students could be accommodated by your program?



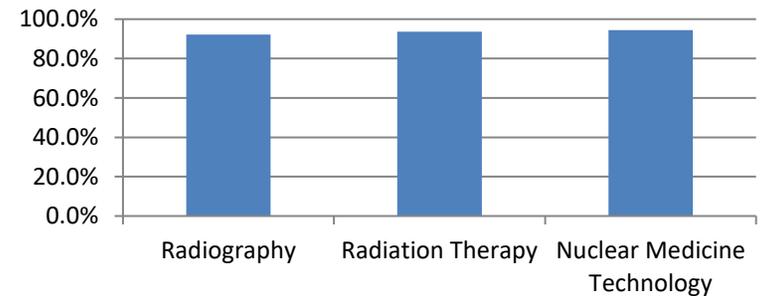
How many qualified students did you turn away this fall?



What was the attrition rate for the class of 2016?



What percentage of students from the class of 2016 passed the credentialing exam on the first try?

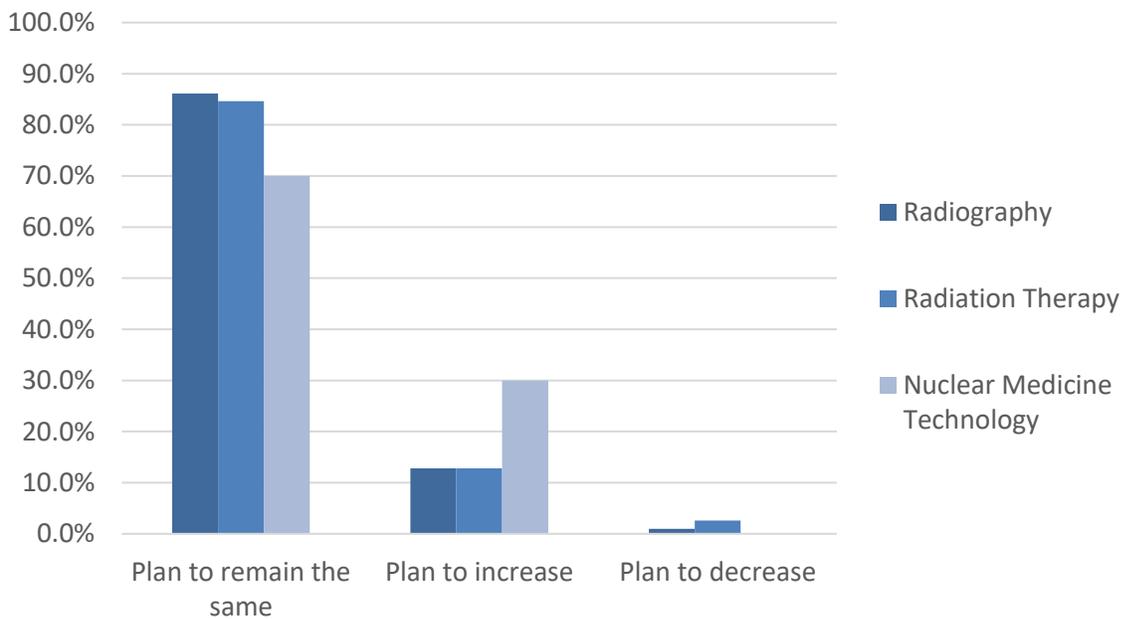


Do you plan any changes related to enrollment?

		Radiography	Radiation Therapy	Nuclear Medicine Technology	Total
Plan to remain the same	N	248	33	28	309
	%	86.1%	84.6%	70.0%	84.2%
Plan to increase	N	37	5	12	54
	%	12.8%	12.8%	30.0%	14.7%
Plan to decrease	N	3	1	0	4
	%	1.0%	2.6%	0.0%	1.1%
Total	N	288	39	40	367
	%	100.0%	100.0%	100.0%	100.0%

There were no statistically significant differences between groups.

Do you plan any changes related to enrollment?

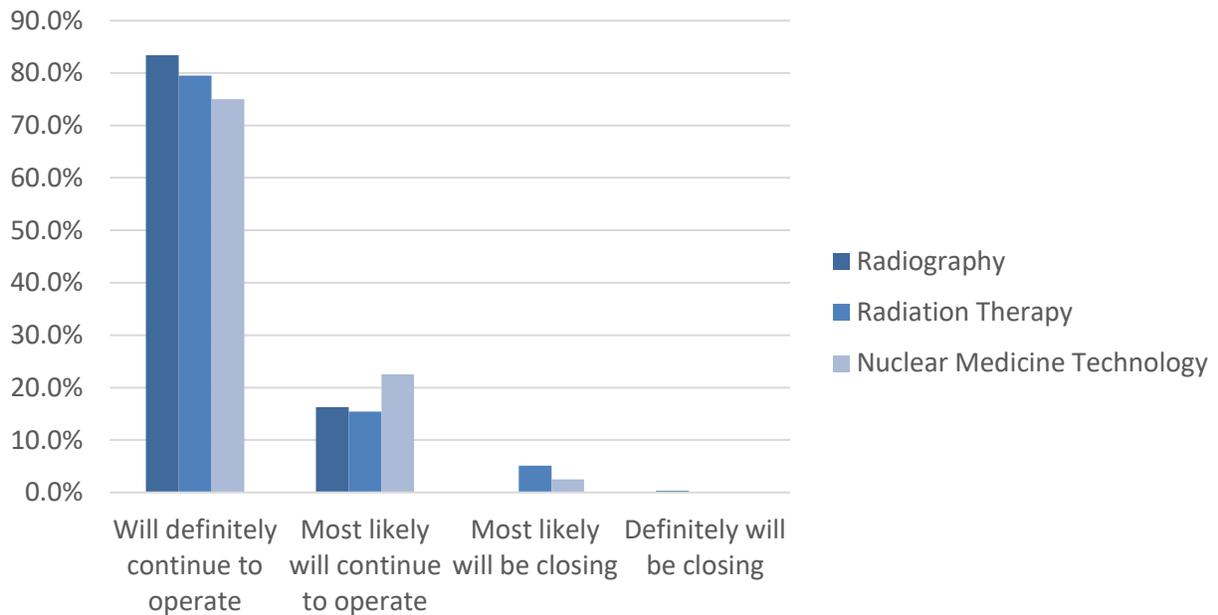


How viable is your program over the next few years?

		Radiography	Radiation Therapy	Nuclear Medicine Technology	Total
Will definitely continue to operate	N	241	31	30	302
	%	83.4%	79.5%	75.0%	82.1%
Most likely will continue to operate	N	47	6	9	62
	%	16.3%	15.4%	22.5%	16.8%
Most likely will be closing	N	0	2	1	3
	%	0.0%	5.1%	2.5%	0.8%
Definitely will be closing	N	1	0	0	1
	%	0.3%	0.0%	0.0%	0.3%
Total	N	289	39	40	368
	%	100.0%	100.0%	100.0%	100.0%

The percentage differences were statistically significant $\chi^2(4, n = 368) = 16.8, P = .002$.

How viable is your program over the next few years?

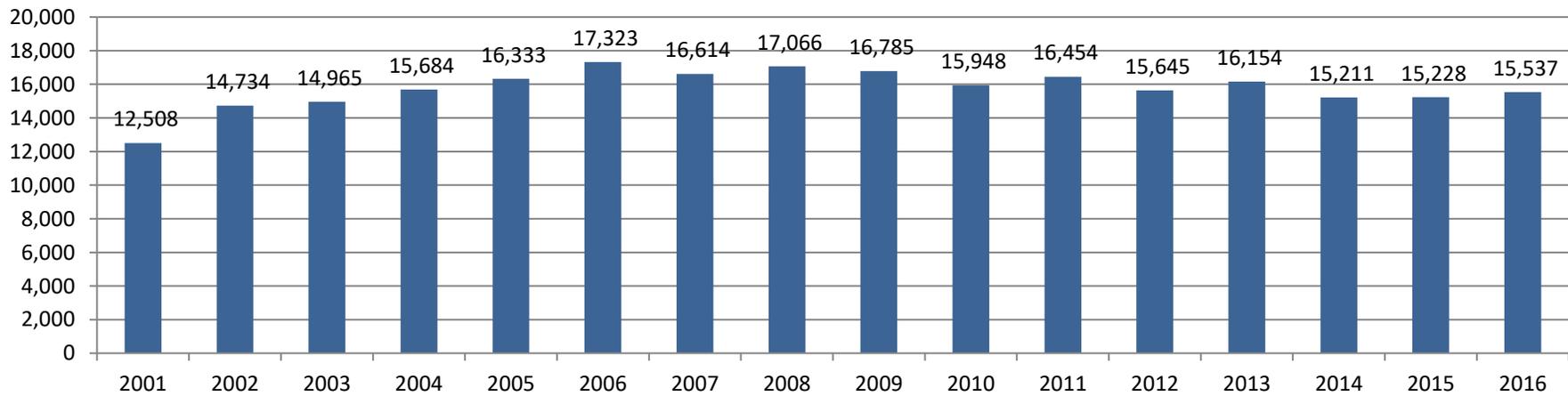


Longitudinal Enrollment Trends

Radiography

Year	ARRT-recognized programs	Percent of programs responding to survey with enrollment data	Mean number of students entering classroom	Estimated total students enrolled for all programs	Mean attrition Rate	Percent of programs not at full capacity	Mean additional students per program for those not at full capacity	Estimated total additional students for programs not at full capacity	Mean qualified students per program turned away	Estimated total qualified students turned away
2001	590	75.4%	21.2	12,508	21.6%	50.2%	.	-	.	-
2002	631	67.5%	23.4	14,734	23.6%	30.9%	8.7	1,696	31.6	13,778
2003	639	71.4%	23.4	14,965	21.6%	21.2%	5.8	786	46.8	23,565
2004	684	68.7%	22.9	15,684	20.5%	21.7%	7.5	1,113	55.1	29,510
2005	715	66.4%	22.8	16,333	18.1%	20.9%	7.4	1,106	50.9	28,787
2006	723	74.7%	24.0	17,323	18.4%	22.6%	7.0	1,144	59.2	33,128
2007	729	69.3%	22.8	16,614	17.8%	30.2%	7.1	1,563	56.8	28,902
2008	742	71.0%	23.0	17,066	21.1%	33.3%	8.4	2,076	50.4	24,944
2009	746	61.0%	22.5	16,785	20.8%	40.0%	3.7	1,104	43.4	19,426
2010	751	65.5%	21.2	15,948	23.3%	43.7%	7.6	2,490	39.1	16,528
2011	751	57.8%	21.9	16,454	25.8%	46.2%	7.6	2,637	37.1	14,978
2012	750	62.8%	20.9	15,645	29.1%	44.9%	8.3	2,785	39.5	16,336
2013	741	50.5%	21.8	16,154	27.9%	46.5%	7.8	2,688	36.3	14,391
2014	739	49.1%	20.6	15,211	31.2%	50.3%	7.2	2,682	34.1	12,522
2015	736	54.2%	20.7	15,228	36.7%	49.9%	8.7	3,195	27.7	10,214
2016	736	39.5%	21.1	15,537	18.2%	47.6%	6.6	2,326	23.6	9,102

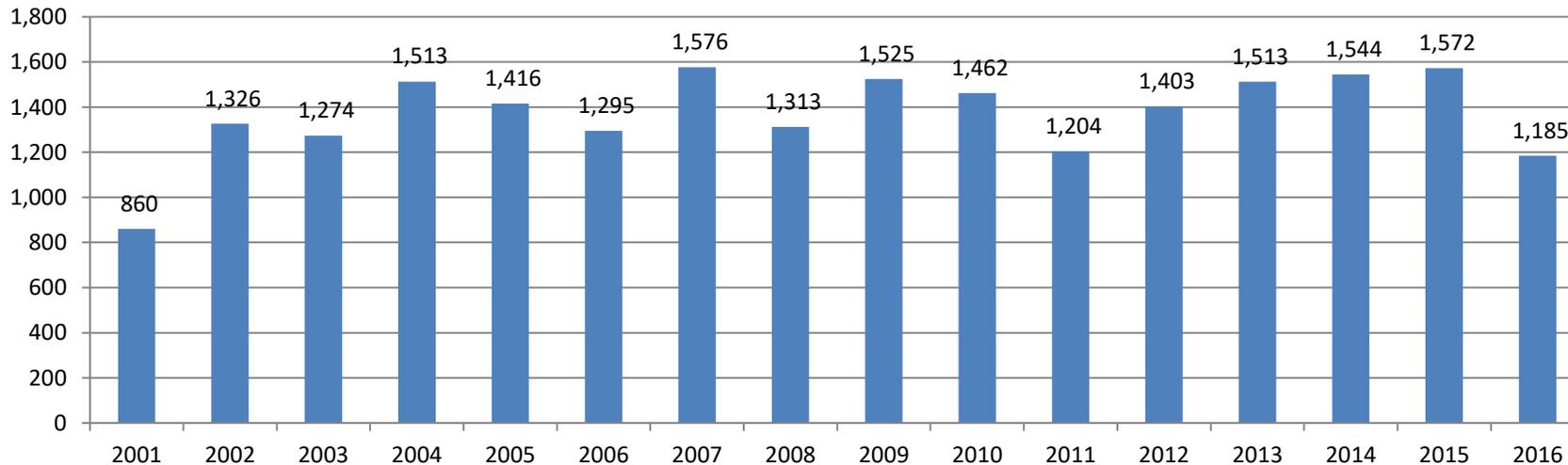
Estimated total students enrolled for all radiography programs



Radiation Therapy

Year	ARRT-recognized programs	Percent of programs responding to survey with enrollment data	Mean number of students entering classroom	Estimated total students enrolled for all programs	Mean attrition Rate	Percent of programs not at full capacity	Mean additional students per program for those not at full capacity	Estimated total additional students for programs not at full capacity	Mean qualified students per program turned away	Estimated total qualified students turned away
2001	86	60.5%	10.0	860	18.1%	44.4%	.	-	.	-
2002	95	58.9%	14.0	1,326	11.1%	48.0%	5.7	260	9.1	450
2003	101	57.4%	12.6	1,274	18.0%	44.6%	4.4	198	13.6	761
2004	105	55.2%	14.4	1,513	11.9%	30.5%	12.5	400	13.4	978
2005	113	63.7%	12.5	1,416	16.8%	32.1%	3.4	123	24.5	1880
2006	118	68.6%	11.0	1,295	16.6%	49.3%	6.4	372	21.6	1292
2007	122	57.4%	12.9	1,576	15.2%	51.5%	6.3	396	13.3	787
2008	125	49.6%	10.5	1,313	14.4%	58.6%	4.5	330	33.0	1708
2009	122	50.8%	12.5	1,525	10.9%	55.5%	3.7	251	15.8	858
2010	122	58.2%	12.0	1,462	18.3%	49.3%	7.9	475	18.0	1112
2011	123	42.3%	9.8	1,204	21.9%	51.9%	6.1	388	14.3	846
2012	122	48.4%	11.5	1,403	18.9%	53.4%	6.9	451	14.4	818
2013	121	55.4%	12.5	1,513	21.8%	57.6%	5.7	397	17.1	877
2014	117	45.3%	13.2	1,544	26.5%	49.1%	6.2	355	15.7	935
2015	113	49.6%	13.9	1,572	24.6%	55.4%	7.1	444	14.8	746
2016	110	35.5%	10.8	1,185	7.3%	60.5%	4.6	309	11.3	492

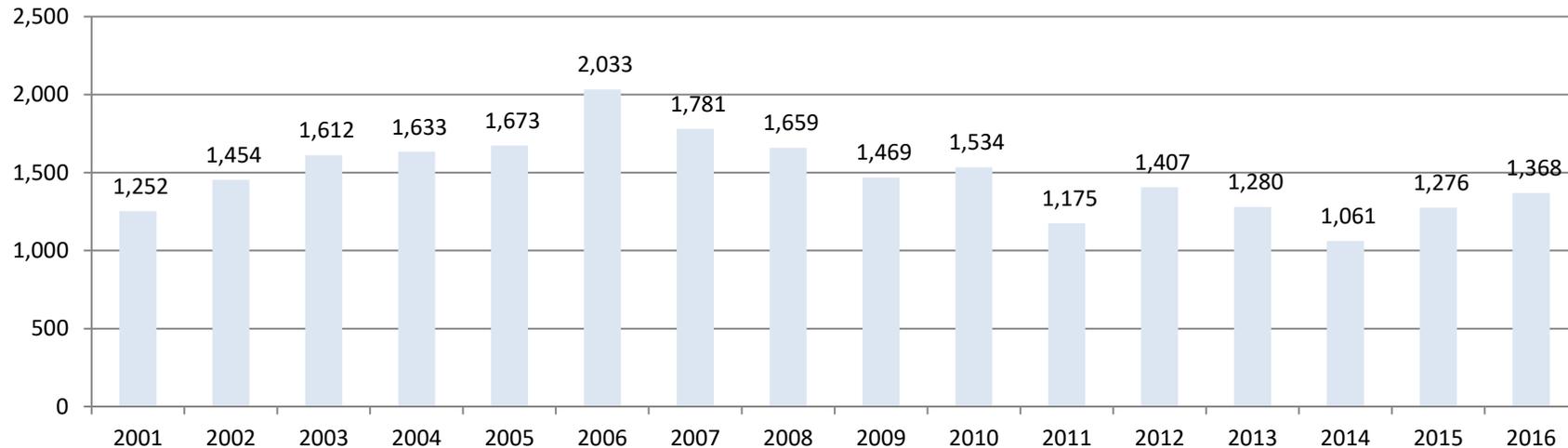
Estimated total students enrolled for all radiation therapy programs



Nuclear Medicine Technology

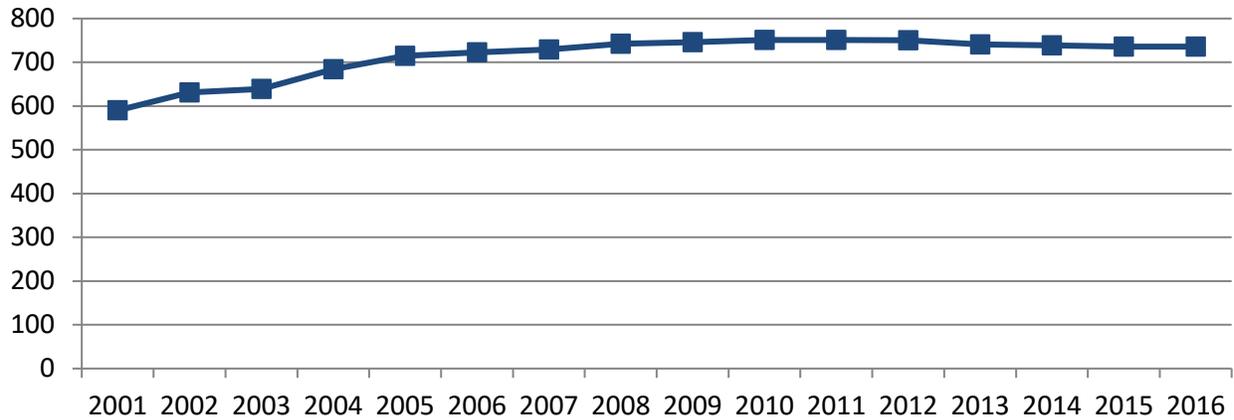
Year	ARRT recognized programs	Percent of programs responding to survey with enrollment data	Mean number of students entering classroom	Estimated total students enrolled for all programs	Mean attrition Rate	Percent of programs not at full capacity	Mean additional students per program for those not at full capacity	Estimated total additional students for programs not at full capacity	Mean qualified students per program turned away	Estimated total qualified students turned away
2001	101	62.4%	12.4	1,252	11.8%	53.2%	-	-	-	-
2002	104	55.8%	14.0	1,454	8.0%	35.7%	6.7	248.8	19.7	1317
2003	111	59.5%	14.5	1,612	7.1%	33.3%	2.7	99.8	32.1	2377
2004	117	58.1%	14.0	1,633	9.8%	20.9%	3.6	88.0	24.4	2258
2005	122	57.4%	13.7	1,673	8.6%	30.6%	5.1	190.4	32.9	2786
2006	131	71.8%	15.5	2,033	10.2%	31.8%	5.7	237.5	30.2	2698
2007	132	56.8%	13.5	1,781	8.3%	39.7%	6.3	330.1	24.2	1926
2008	136	59.6%	12.2	1,659	12.3%	58.4%	10.0	794.2	18.2	1030
2009	136	48.5%	10.8	1,469	7.0%	63.0%	4.3	368.4	9.3	468
2010	136	48.5%	11.3	1,534	12.9%	78.8%	7.0	747.9	12.9	372
2011	134	47.0%	8.8	1,175	11.3%	82.5%	7.2	796.0	8.0	187
2012	134	56.7%	10.5	1,407	18.4%	73.0%	8.7	851.0	6.4	231
2013	128	46.9%	10.0	1,280	23.8%	76.1%	7.9	769.5	7.8	239
2014	125	42.4%	8.5	1,061	36.7%	79.2%	8.1	802.4	8.3	216
2015	122	50.8%	10.5	1,276	17.3%	68.9%	6.0	504.3	4.5	171
2016	120	33.3%	11.4	1,368	11.1%	67.5%	7.8	631.8	3.2	124

Estimated total students enrolled for all nuclear medicine programs

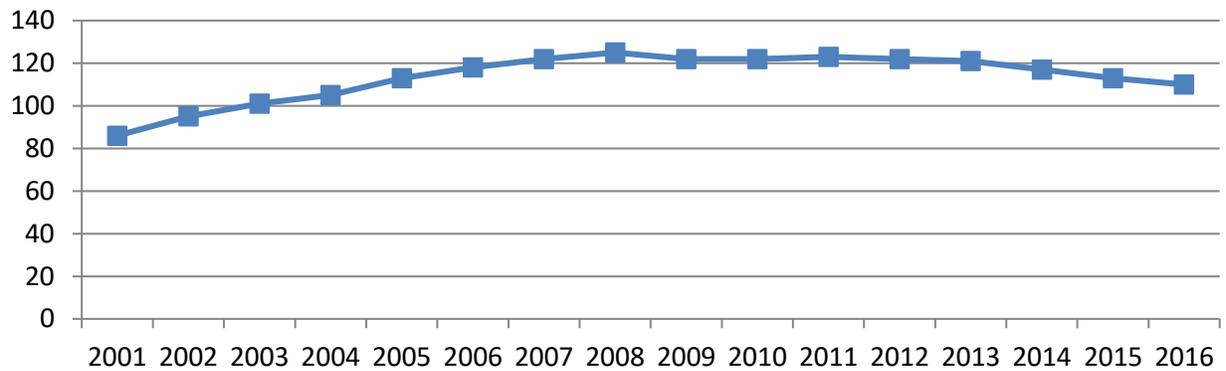


ARRT-recognized Programs

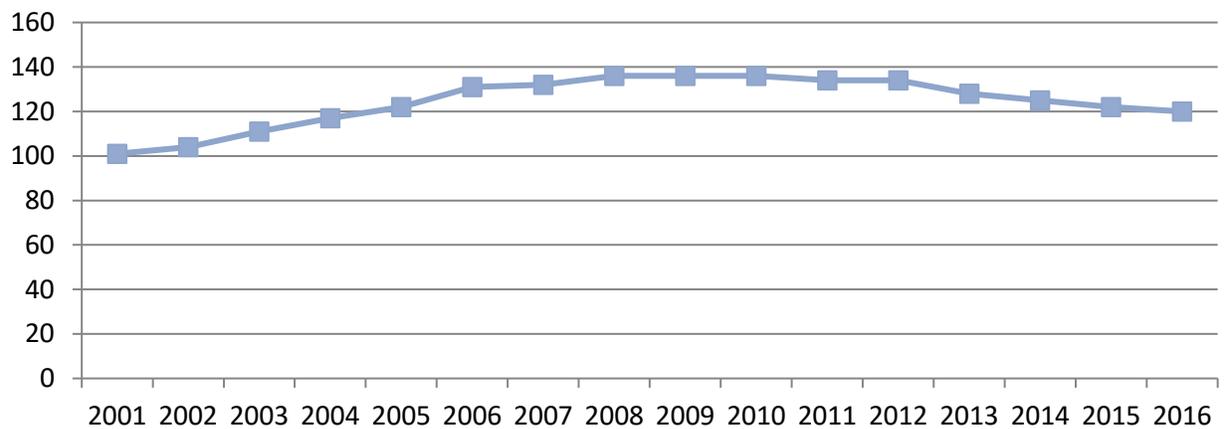
Radiography



Radiation Therapy



Nuclear Medicine Technology



2016 Comparison of U.S. and Canadian Programs

Radiography

Year	ARRT-recognized programs	Percent of programs responding to survey with enrollment data	Mean number of students entering classroom	Estimated total students enrolled for all programs	Mean attrition Rate	Percent of programs not at full capacity	Mean additional students per program for those not at full capacity	Estimated total additional students for programs not at full capacity	Mean qualified students per program turned away	Estimated total qualified students turned away
United States	705	40.0%	20.8	14,636	18.2%	47.7%	6.7	2,267	23.5	8,672
Canada	22	27.3%	35.7	785	17.8%	33.3%	1.5	11	33.3	489

Radiation Therapy

Year	ARRT-recognized programs	Percent of programs responding to survey with enrollment data	Mean number of students entering classroom	Estimated total students enrolled for all programs	Mean attrition Rate	Percent of programs not at full capacity	Mean additional students per program for those not at full capacity	Estimated total additional students for programs not at full capacity	Mean qualified students per program turned away	Estimated total qualified students turned away
United States	91	37.4%	10.9	987	6.6%	60.6%	4.8	263	11.48	412
Canada	14	35.7%	10.2	143	12.0%	60.0%	3.7	31	10.0	56

Nuclear Medicine Technology

Year	ARRT-recognized programs	Percent of programs responding to survey with enrollment data	Mean number of students entering classroom	Estimated total students enrolled for all programs	Mean attrition Rate	Percent of programs not at full capacity	Mean additional students per program for those not at full capacity	Estimated total additional students for programs not at full capacity	Mean qualified students per program turned away	Estimated total qualified students turned away
United States	115	33.9%	11.5	1,324	11.3%	69.2%	7.8	620.7	3.1	111
Canada	5	0.0%	-	-	-	-	-	-	-	-

Job Placement of Graduates

What percentage of students were able to find employment in their discipline within six months after graduation?

	New England (ME, NH, VT, MA, RI, CT)	Mid-Atlantic (NY, PA, NJ)	East North Central (WI, MI, IL, IN, OH)	West North Central (ND, SD, NE, KS, MN, IA, MO)	South Atlantic (DE, MD, DC, VA, WV, NC, SC, GA, FL, PR)	East South Central (KY, TN, MS, AL)	West South Central (OK, TX, AR, LA)	Mountain (ID, MT, WY, NV, UT, CO, AZ, NM)	Pacific (AK, WA, OR, CA, HI)	Total
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Radiography

2009	86.2%	80.3%	81.1%	84.1%	82.7%	86.3%	84.5%	79.1%	77.8%	82.2%
2010	82.1%	76.2%	80.8%	82.3%	80.1%	88.5%	85.6%	78.9%	74.2%	80.8%
2011	85.9%	87.0%	87.7%	86.7%	84.0%	90.0%	93.0%	86.8%	81.0%	86.9%
2012	80.3%	84.6%	87.7%	88.7%	86.3%	86.7%	77.8%	82.2%	84.7%	85.3%
2013	76.9%	86.6%	87.2%	87.9%	85.2%	81.9%	80.4%	86.1%	85.2%	85.1%
2014	87.8%	92.9%	92.3%	97.6%	89.7%	94.8%	95.9%	94.4%	90.5%	93.0%
2015	96.8%	94.3%	94.4%	99.0%	94.9%	96.8%	96.0%	91.0%	95.8%	95.3%

Radiation Therapy

2009	84.2%	83.2%	70.4%	85.3%	70.5%	63.3%	79.8%	.	92.0%	77.4%
2010	74.1%	78.5%	87.7%	79.0%	78.7%	78.3%	89.7%	.	93.3%	81.9%
2011	87.5%	85.0%	77.3%	86.1%	68.6%	82.5%	85.0%	70.0%	96.0%	81.4%
2012	92.5%	88.7%	83.9%	79.6%	94.2%	100.0%	78.8%	97.5%	82.2%	87.2%
2013	85.0%	92.3%	76.8%	87.0%	96.3%	95.0%	65.8%	91.5%	89.7%	85.6%
2014	93.2%	86.0%	87.2%	92.5%	92.6%	93.8%	85.0%	90.0%	97.5%	90.6%
2015	98.0%	80.0%	88.7%	94.8%	89.3%	96.7%	95.0%	55.0%	95.0%	88.7%

Nuclear Medicine Technology

2009	83.8%	79.4%	76.7%	86.0%	80.0%	91.2%	90.1%	87.3%	83.9%	83.2%
2010	63.8%	61.6%	63.6%	69.6%	72.4%	87.4%	77.0%	81.7%	76.7%	70.6%
2011	48.8%	41.9%	48.9%	86.1%	70.5%	70.5%	77.3%	75.0%	92.3%	63.6%
2012	83.2%	80.8%	76.9%	90.0%	84.2%	90.0%	71.7%	93.3%	100.0%	83.8%
2013	70.3%	80.0%	88.4%	95.0%	81.7%	89.6%	80.0%	89.3%	92.0%	83.7%
2014	64.5%	45.3%	81.9%	85.0%	88.4%	84.0%	84.9%	96.7%	93.3%	82.1%
2015	71.0%	59.3%	76.8%	93.8%	65.3%	83.8%	83.8%	90.0%	80.0%	76.3%

Overall Mean Placement Rates for Graduates

