







# the association for medical imaging management

# 2009 Staff Utilization Survey

This survey was made possible through funding from AGFA HealthCare.



© 2009 AHRA The Association for Medical Imaging Management

# **Table of Contents**

F	Findings	
	About This Research	
	Facility and Procedures Profile	3
	Technologies Utilized	1
	Mobile Services and Transportation	18
	Staffing Profile	2
	Trends	32
FT	E Staffing Tables	
	Administration	S-
	General Radiography	S-2
	CT	S-í
	PET	S-4
	Ultrasound and/or Vascular Ultrasound	S-:
	Nuclear Medicine	S-0
	MRI	S-′
	Radiation Therapy	S-8
	Mammography	S-9
	Interventional/Angiography	.S-10
	Cardiac Cath Radiology	.S-1

## **Hours of Operations Tables**

	General Radiography	H-
	CT	Н-
	PET	H-
	Ultrasound and/or Vascular Ultrasound	H-1
	Nuclear Medicine - Imaging	H-1
	Nuclear Medicine - In-Vitro	H-1
	Nuclear Medicine - Radioassay	H-1
	MRI	H-2
	Radiation Therapy - Treatments	H-2
	Radiation Therapy - Simulation	H-2
	Mammography	H-3
	Interventional/Angiography	H-3
	Cardiac Cath Radiology	H-3
Pr	ocedure Volume Tables	
	General Radiography	P-
	CT	P-
	PET	P-
	Ultrasound and/or Vascular Ultrasound	P-1
	Nuclear Medicine - Imaging	P-1

Nuclear Medicine - In-Vitro ......P-21



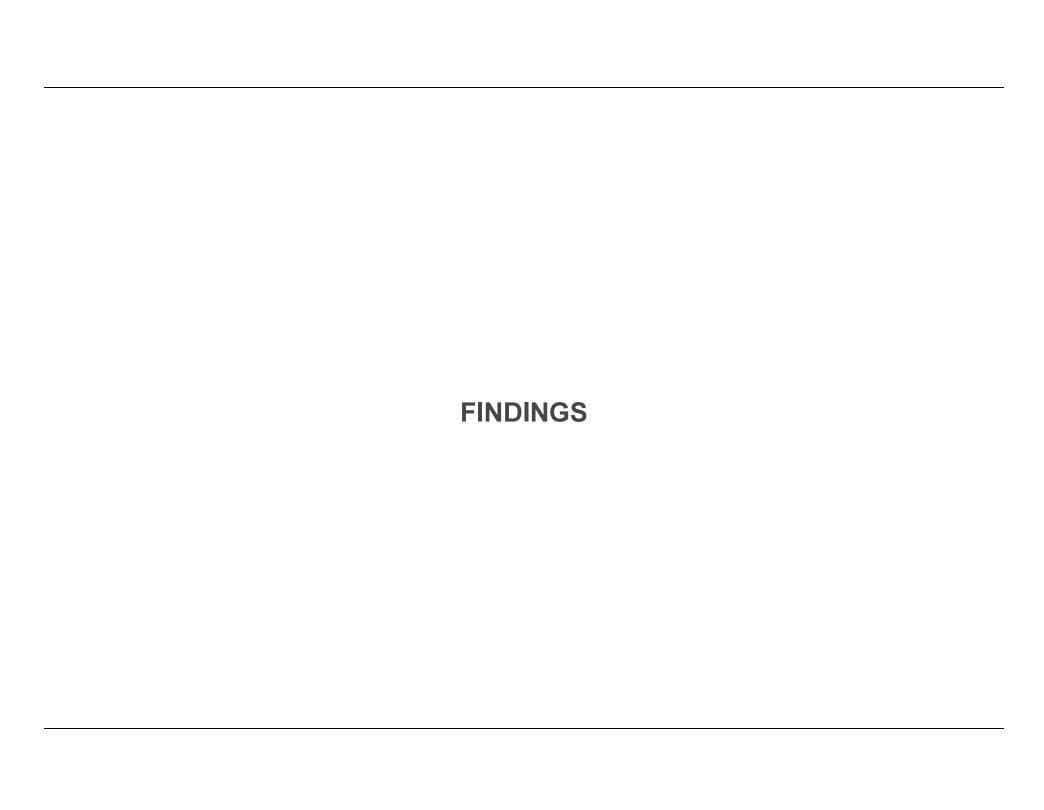
# **Table of Contents**

Procedure Volume Tables (continued)
Nuclear Medicine - Radioassay
MRIP-29
Radiation Therapy - TreatmentsP-33
Radiation Therapy - SimulationP-37
MammographyP-41
Interventional/AngiographyP-45
Cardiac Cath RadiologyP-49
Procedure Volume by Technologist FTE Tables
General RadiographyF-1
CTF-2
PETF-3
Ultrasound and/or Vascular UltrasoundF-4
Nuclear Medicine - ImagingF-5
Nuclear Medicine - In-VitroF-6
Nuclear Medicine - RadioassayF-7
MRIF-8
Radiation Therapy - TreatmentsF-9
Radiation Therapy - SimulationF-10
MammographyF-11
Interventional/AngiographyF-12
Cardiac Cath RadiologyF-13

## **Appendix**

Copy of Survey	Instrument	<b>1-</b> ]	l
----------------	------------	-------------	---





#### **FINDINGS: About This Research**

## **About This Study**

This Internet survey of emailable imaging professionals was conducted on behalf of AHRA: The Association of Medical Imaging Management to develop a profile of the staffing and capabilities at facilities engaged in the imaging professions. It was conducted by Readex Research, an independent research firm.

The survey was designed jointly by AHRA and Readex, building on a similar effort undertaken by AHRA in 2006. The invitation to participate was emailed to all 9384 sample members (including both AHRA members and nonmembers). Data was collected via the Internet between April 8 and April 30, 2009.

A total of 328 sample members responded (4% response rate, based on the net effective mail out). Because a significant fraction of those invited to participate chose not to do so, the possible effects of nonresponse bias on these results should be considered. Percentages based on all 328 responses are subject to a margin of error of  $\pm 5.3\%$  at the 95% confidence level. Percentages calculated on smaller tabulation bases are subject to more statistical variability.

## **About This Report**

This initial Findings section provides a graphical summary of key survey results.

The Tables section of the report presents 4 sets of survey results, broken out by a number of variables.

The Appendix provides a copy of the survey instrument itself.

For the purposes of this survey, the term **procedure** indicates imaging exams performed by a facility during the most recently completed fiscal year. Survey participants were asked to answer for the number of procedures, not the number of patients. For example, if a total of 300 procedures were performed during the treatment of 100 patients, the answer would be 300.

The term **full time equivalent (FTE)** was considered to work 40 or more hours per week, or at least 2080 hours per year.

This report was prepared for AHRA by Readex in accordance with accepted research standards and practices. This report contains all survey results that were provided to AHRA.



## **FINDINGS: About This Research**

## **Data Interpretation**

In addition to percentages, 3 summary statistics may be presented in this report for numeric variables.

A <u>mean</u> is the arithmetic average of a distribution (ie, a set of values). Because it is arithmetically calculated, it can be multiplied by the population represented to present a total volume estimate. For example, if 100 survey respondents (representing 10,000 people in the population) reported mean expenditures of \$100 each, total expenditures for that population are estimated as  $10,000 \times 100 = 10,000,000$ . Means are very much influenced by extremely large or extremely small values in the distribution (eg, one millionaire can substantially raise an estimate of average income).

Means for grouped data are calculated using the midpoint of each range. The lowest valued group is represented by its largest value; the highest valued group by its lowest.

The <u>standard error</u> measures the variability associated with the survey's estimate of a population mean. The standard error is analogous to the margin of error associated with percentages: that is, 95% of the time we expect the true (unknown) population mean to be within plus-or-minus 2 standard errors of the mean calculated from the sample. A standard error that is large in proportion to the mean indicates a high level of statistical instability; trending and projections against such estimates should be undertaken cautiously.

A <u>median</u> is the value which lies at the middle of a distribution: that is, 50% of the values are above it and 50% are below. It represents the "typical" response, and is not influenced by extreme values. For most distributions, the median will be either roughly equal to or significantly smaller than the mean.

Medians for grouped data are calculated by locating the group which contains the 50<sup>th</sup> percentile, then interpolating between the lower and upper bounds to estimate the precise value.

#### **About Readex Research**

Readex Research is a nationally recognized independent research company located in Stillwater, MN. Its roots are in survey research for the magazine publishing industry, but specialization in conducting high-quality survey research (by mail and/or the Internet) has brought clients from many other markets, including associations, corporate marketers and communicators, and government agencies. Since its founding in 1947, Readex has completed thousands of surveys for a lengthy and diverse list of clients.

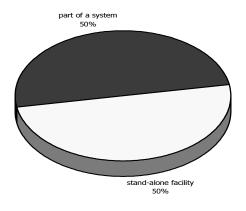
As a full-service survey research supplier, Readex provides in-house processing of all phases of each project (traditional mailing, broadcast emailing, and data processing) to ensure complete control over project quality and schedule. Analytical capabilities include a range of multivariate statistics and modeling techniques, in addition to the more traditional stub-and-banner tabulations.

This survey was conducted and this report was prepared by Readex in accordance with accepted research standards and practices. A complete report containing all survey results was provided to AHRA.



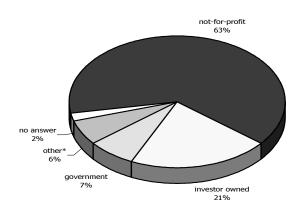
# **FINDINGS: Facility and Procedures Profile**

Exhibit 01 Facility Type



base: 328 respondents

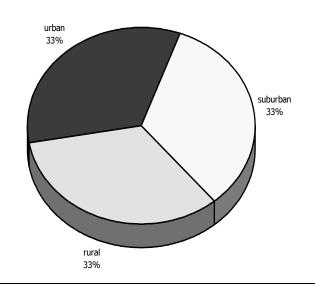
Exhibit 02 Facility Owner



base: 328 respondents

\*Others include physician owned (5%) and others (2%)

Exhibit 03 Facility Setting



base: 328 respondents

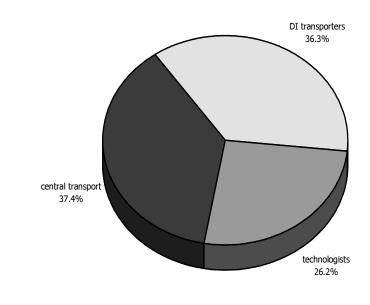


# **FINDINGS: Mobile Services and Transportation**

Exhibit 33
Percentage of Patients Transported by Entity

6% 12% 15% 6% 30% 26% **■**100% ■ 50% - 99% **□**1% - 49% 4% 8% **□**0% 53% 51% 48% 20% central transport DI transporters technologists mean: 36.3% mean: 37.4% mean: 26.2% median: 0% median: 0% median: 10%

Exhibit 34
Percentage of Patients Transported by Entity (on Average)



base: 121 answering respondents providing transportation

base: 130 respondents providing transportation

note: mean and median are based on 121 answering respondents

# **FINDINGS: Staffing Profile**

Exhibit 39 Number of FTEs by Position: General Radiography

	% with one or		
	more	mean*	median*
Radiology Administrative	33%	0.5	0
Supervisory Technologist	52%	1.1	1
Technologist	93%	13.7	10
Film/Image Library	17%	0.5	0
Transcriptionist	11%	0.3	0
Receptionist/Administrative Assistant	34%	0.9	0
Scheduler	15%	0.5	0
Radiology Darkroom Tech/Aide	10%	0.2	0
Transporter	17%	0.8	0
Radiology Nurse	13%	0.3	0
PACS Administrator	20%	0.2	0
IS Department Support	6%	0.1	0

base: 298 respondents offering this specialty

\*base: 284 answering respondents offering this specialty

Exhibit 40 Number of FTEs by Position: Ultrasound/Vascular Ultrasound

	% with one or		
	more	mean*	median*
Radiology Administrative	12%	0.1	0
Supervisory Technologist	30%	0.4	0
Technologist	86%	4.3	3
Film/Image Library	1%	0.0	0
Transcriptionist	0%	0.0	0
Receptionist/Administrative Assistant	5%	0.1	0
Scheduler	5%	0.0	0
Radiology Darkroom Tech/Aide	5%	0.1	0
Transporter	3%	0.0	0
Radiology Nurse	1%	0.0	0
PACS Administrator	1%	0.0	0
IS Department Support	0%	0.0	0

base: 290 respondents offering this specialty

\*base: 272 answering respondents offering this specialty

# **TABLES: Procedure Volume**

Procedure Volume: Mammography: Inpatient Procedures
By Organization Type, Number of Beds, Level 1 Trauma Center, Residents Train On Site, Use PACS, Region and Setting

	n	average	25th percentile	50th percentile	75th percentile ————————————————————————————————————	
Total	208	17	0	0		
Organization Type						
NET: Hospital	166	21	0	3	17	
academic	12	81	0	38	104	
teaching community	22 132	39 13	0 0	1 3	50 11	
long term care	0					
pediatric rehabilitation	0					
NET: Non-Hospital	42	2	0	0	0	
radiologist practice imaging center	6 22	0 3	0 0	0 0	0 0	
mobile service	0					
multi-specialty primary care clinic	12 2	0	0	0	0	
Number of Beds						
more than 200 200 or less	71 95	40 7	0	6 1	50 8	
Level 1 Trauma Center						
yes	26	63	0	16	64	
no	172	11	0	0	10	
Residents Train On Site						
yes	29	56	0	6	54	
no	172	11	0	0	9	
Use PACS						
yes no	196 9	18 6	0	0 1	10 14	
Region and Setting						
New England	14 4	39	0	1	13	
urban suburban	4 2					
rural	8	52	0	1	9	
Middle Atlantic	22	19	0	1	21	
urban suburban	5 9	15 13	0 0	0 0	37 28	
rural	7	32	2	10	20	

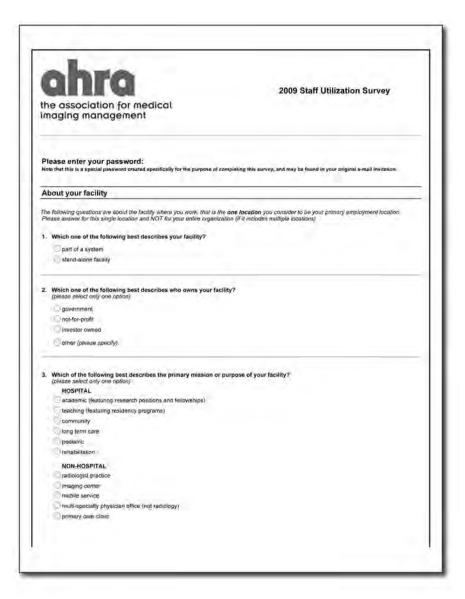
	n	average	25th percentile	50th percentile	75th percentile
Region and Setting					
East North Central	36	34	0	2	32
urban	10	86	0	20	135
suburban	11	28	0	5	50
rural	15	4	0	1	5
West North Central	22	6	0	0	7
urban	5	6	0	0	16
suburban	6	2	0	0	5
rural	11	7	0	0	25
South Atlantic	45	11	0	2	10
urban	8	15	0	3	41
suburban	16	6	0	0	15
rural	19	15	0	3	8
East South Central	17	7	0	0	6
urban	3				
suburban	5	3	0	0	7
rural	9	6	0	0	1
West South Central	20	26	0	3	22
urban	6	63	0	13	138
suburban	6	12	0	2	23
rural	8	9	0	4	9
Mountain	13	3	0	1	5
urban	3				
suburban	8	2	0	0	1
rural	2				
Pacific	18	4	0	0	5
urban	6	4	ő	Ö	6
suburban	8	4	Õ	1	8
rural	4			-	

NOTE: results not shown if fewer than 5 valid values

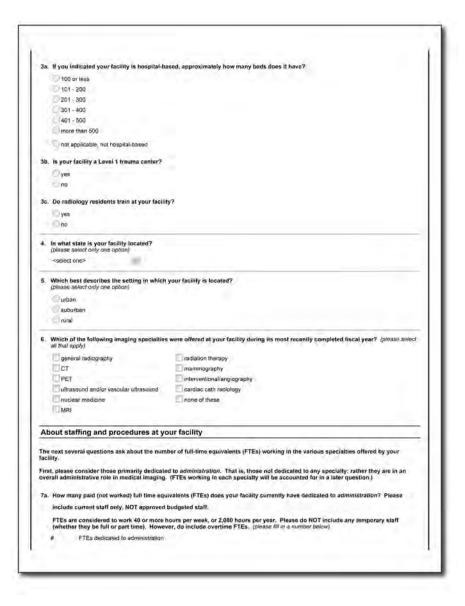


## **Survey Instrument**









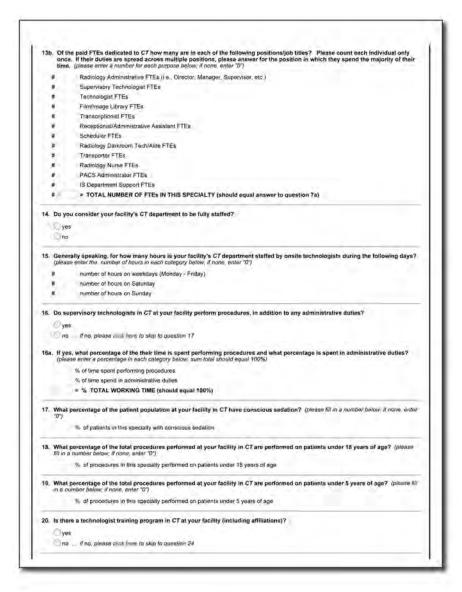
	Individu	aid FTEs dedicated to administration how many are in each of the following positions/job titles? Please count each at only once. If their duties are spread across multiple positions, please answer for the position in which they spend the of their time, (please enter a number for each purpose below, if none, enter "O").
	æ	Radiology Administrative FTEs (i.e., Director, Manager, Supervisor, etc.)
		Supervisory Technologist FTEs
		Technologist FTEs
		Film/Image Library FTEs
		Transcriptionist FTEs
	H	Receptionist/Administrative Assistant FTEs
	œ.	Scheiduler FTEs
	6	Radiology Darkroom Tech/Aide FTEs
	a .	Transporter FTEs
		Radiology Nurse FTEs
		PACS Administrator FTEs
	4	IS Department Support FTEs
	u ·	= TOTAL NUMBER OF FTEs IN ADMINISTRATION (should equal answer to question 7a)
8.	Do super	visory technologists in administration at your facility perform procedures, in addition to any administrative duties?
	yes.	
	no	If no, please click here to skip to question 9
		ik of time spent performing procedures 6 of time spent in administrative dubes 5 % TOTAL WORKING TIME (should equal 100%)
	Is there a	ver Questions 9 through 15 for each specialty you indicated at question 6.  Itechnologist training program in administration at your facility (including affiliations)? That is, the training program is a imaging administration?
		If no, please click here to skip to question 13a
	If yes, is	the program sponsored by your facility or is it affiliated with a school?
10.	spons	ored by facility
10.	affilia	ted with a school
10.		
		ny students are currently enrolled in your technologist training program in administration? (please enter a number below) students enrolled in your facility's training program in administration
	How ma	discussion of the state of the
11.	#	
11.	#	ny FTE clinical instructors are employed in your technologist training program in administration? (please enter a number
11.	# How ma	ny FTE clinical instructors are employed in your technologist training program in administration? (please enter a number FTE clinical instructors in your facility's training program in administration

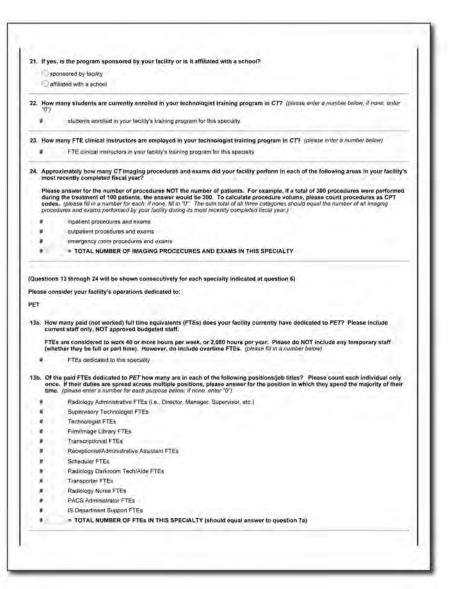




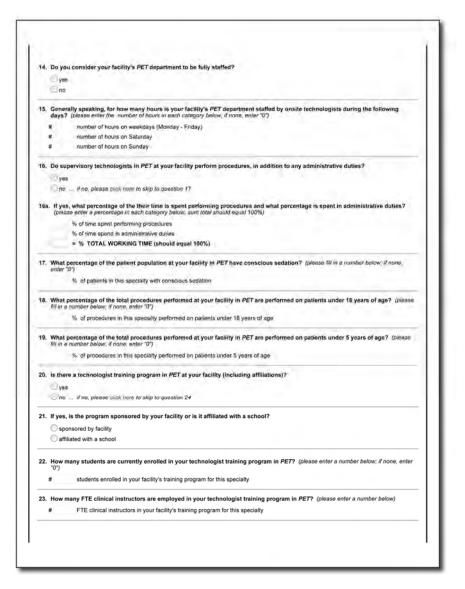
17.		ercentage of the patient population at your facility in general radiography have conscious sedation? (please fill in a number finance, enter "0")
		% of patients in this specialty with conscious sedation
ij.	What p	ercentage of the total procedures performed at your facility in <i>general radiography</i> are performed on patients under 18 years (prease fill in a number below; if none, enter '0')
		% of procedures in this specially performed on palients under 18 years of age
9.	What p	ercentage of the total procedures performed at your facility in general radiography are performed on patients under 5 years (gloads fill in a number below, 4 rone, enter "0")
		W. of procedures in this specialty performed on patients under 5 years of age
Ø.		i a technologist training program in general radiography at your facility (including affiliations)? Training may include is through various modelities.
	yes	valueting closed but
	no	if na, pleasa click here to skip to question 24
1.	If yes,	s the program sponsored by your facility or is it affiliated with a school?
	spor	asored by facility
	affill	ated with a school
2.	How m	any students are currently enrolled in your technologist training program in general radiography? (please enter a number frome, enter "0")
	a	students enrolled in your facility's training program for this specialty
3.		any FTE clinical instructors are employed in your technologist training program in general radiography? (please enter a below)
	D	FTE clinical instructors in your facility's training program for this specially
4.		imately how many general radiography imaging procedures and exams did your facility perform in each of the following nyour facility's most recently completed fiscal year?
	during codes.	answer for the number of procedures NOT the number of patients. For example, if a total of 300 procedures were performed the freatment of 100 patients, the answer would be 300. To calculate procedure volume, please count procedures as CPT (please fill in a number for each; if none, fill in "0". The sum total of all three categories should equal the number of all imaging res and exams performed by your facility during its most recently completed fiscal year.)
	B	inpallent procedures and exams
	8	outpatient procedures and exams
	e e	emergency room procedures and exams  = TOTAL NUMBER OF IMAGING PROCECURES AND EXAMS IN THIS SPECIALTY
í		- IOTAL RUMBER OF MANING PROCESURES AND EXAMS IN THIS SPECIAL IT
u	estions	13 through 24 will be shown consecutively for each specialty indicated at question 6)
e	use cons	ider your facility's operations dedicated to:
T		
31	. How a	nany paid (not worked) tull time equivalents (FTEs) does your facility currently have dedicated to C7? Please include current inly, NOT approved budgeted staff.
	FTEs (whel	are considered to work 40 or more hours per week, or 2,080 hours per year. Please do NOT include any temporary staff her they be full or part time). However, de include overtime FTEs. (please fill in a number below)
	E .	FTEs dedicated to this specialty

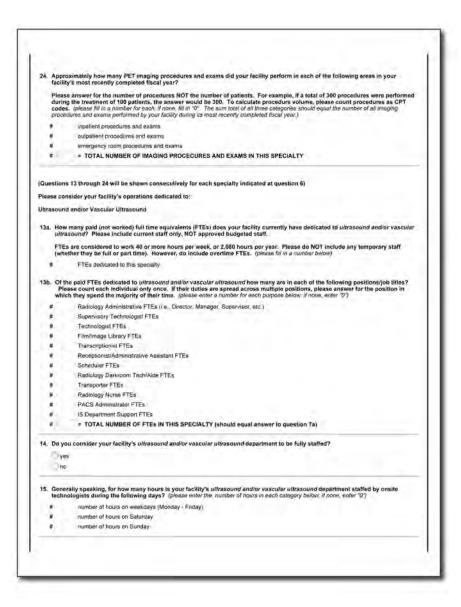




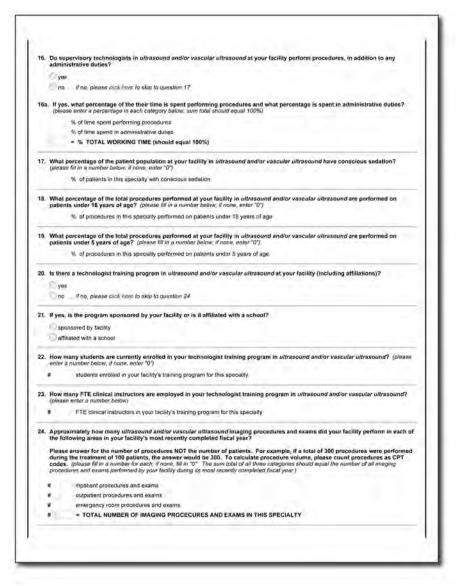








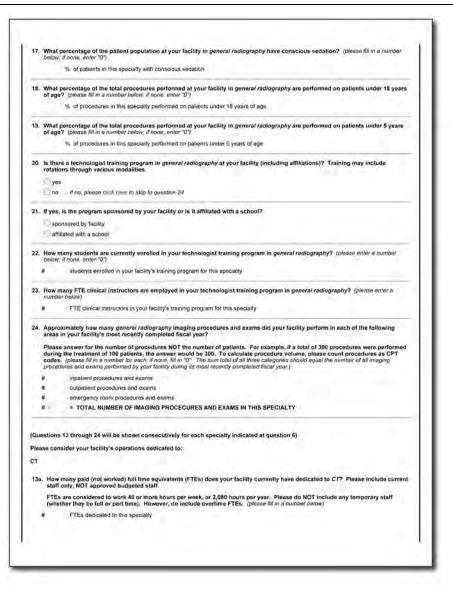




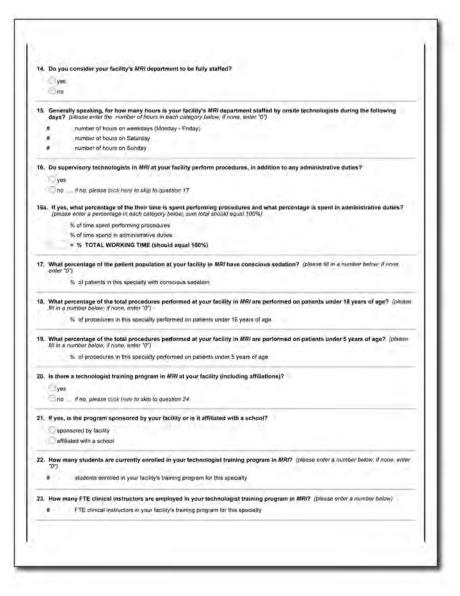
Questi	ons 13 through 24 will be shown consecutively for each specialty indicated at question 6)
Please	consider your facility's operations dedicated to:
	Medicine
	ow many paid (not worked) full time aquivalents (FTEs) does your facility corrently have dedicated to <i>nuclear medicine</i> ? Please clude current staff only, NOT approved budgeted staff.
F (v	Es are considered to work 40 or more hours per week, or 2,080 hours per year. Please do NOT include any temporary staff helher they be full or part time). However, do include overtime FTEs. (please lill in a number below).
n	FTEs dedicated to this specially
in	the paid FTEs dedicated to nuclear medictine how many are in each of the following positions/job titles? Please count each dividual only once. If their duties are spread across multiple positions, please answer for the position in which they spend the jainty of their time. I please enter a number for each purpose believ, if none, enter "0")
	Radiology Administrative FTEs (i.e., Director Manager, Supervisor, etb.)
	Supervisory Technologist FTEs
	Technologist FTEs
· ·	Film/Image Library FTEs
	Transcriptionist FTEs
a	Receptionist/Administrative Assistant FTEs
22	Scheduler FTEs
	Radiology Darkroom Tech/Aide FTEs
	Transporter FTEs
	Radiology Nurse FTEs
	PACS Administrator FTEs
	IS Department Support FTEs
	⇒ TOTAL NUMBER OF FTEs IN THIS SPECIALTY (should equal answer to question 7a)
14. Do	you consider your facility's nuclear medicine department to be fully staffed?
im	ves
6	
- 50	10
	nerally speaking, for how many hours is your facility's nuclear medicine department staffed by onsite technologists during the owing days? (please enter the 'number of hours in each category below: If none, enter "0")
n	number of hours on weekdays (Monday - Friday)
n	number of hours on Saturday
n	number of hours on Sunday
_	supervisory technologists in nuclear medicine at your facility perform procedures, in addition to any administrative duties?
0	no if no, please click here to skip to question 17
16a. If	yes, what percentage of the their time is spent performing procedures and what percentage is spent in administrative duties? lease enter a percentage in each category below; sum total should equal 100%)
	% of time spent performing procedures
	% of time spend in administrative duties
0	= % TOTAL WORKING TIME (should equal 100%)
	at percentage of the patient population at your facility in nuclear medicine have conscious sedation? (please fill in a number ov; if none, enter "0")
	% of patients in this specialty with conscious sedation





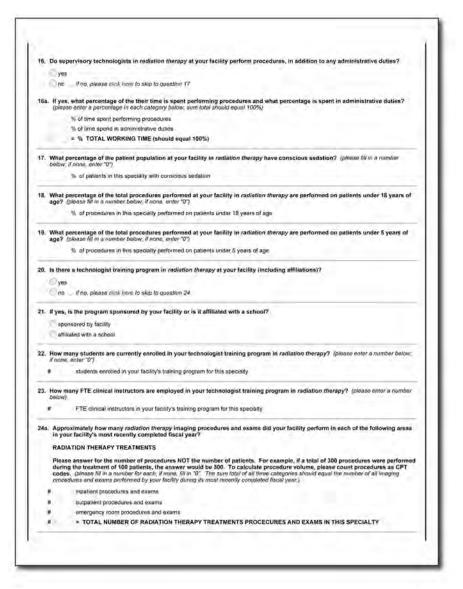






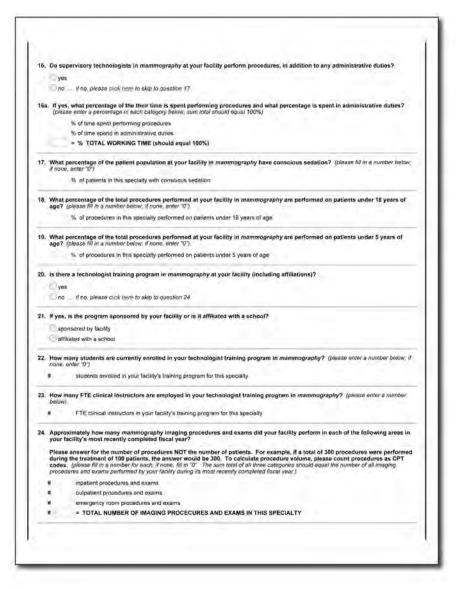
24.	Approximately how many MRI imaging procedures and exams did your facility perform in each of the following areas in your facility's most recently completed fiscal year?				
	during the tr codes. (plea	er for the number of procedures NOT the number of patients. For example, if a total of 300 procedures were performed eatment of 100 patients, the answer would be 300. To calculate procedure volume, please count procedures as CPT set fill in a number for each: if none, fill in 10° The sum total of all three categories should equal the number of all imaging and exams performed by your facility during its most recently completed fiscal year.)			
	e inp	atient procedures and exams			
	a but	patient procedures and exams			
	e em	ergency room procedures and exams.			
-	#	TOTAL NUMBER OF IMAGING PROCECURES AND EXAMS IN THIS SPECIALTY			
Que	estions 13 thr	ough 24 will be shown consecutively for each specialty indicated at question 6)			
Dian	su consider s	our facility's operations dedicated to:			
Rad	ation Therap				
13a	. How many paid (not worked) full time equivalents (FTEs) does your facility currently have dedicated to radiation therapy? Please include current staff only, NOT approved budgeted staff.				
	FTEs are co	ensidered to work 40 or more hours per week, or 2,080 hours per year. Please do NOT include any temporary staff by be full or part time). However, do include overtime FTEs. (please fill in a number below)			
	e ET	Es dedicated to this specially			
13b. Of the paid FTEs dedicated to radiation therapy how many are in each of the following positions/job titles? Please individual only once. If their duties are spread across multiple positions, please answer for the position in which the majority of their time. (please enter a number for each purpose before, if none enter 10").		only once. If their duties are spread across multiple positions, please answer for the position in which they spend the			
	g Ra	diology Administrative FTEs (i.e., Director, Manager, Supervisor, etc.)			
	r Su	pervisory Technologist FTEs			
	t Te	hnologist FTEs			
1	# File	vimage Library FTEs			
	u Tra	nscriptionist FTEs			
-7	# Re	ceptionist/Administrative Assistant FTEs			
- 3	f Sci	eduler FTEs			
	g Ra	diology Darkroom Tech/Aide FTEs			
	# Tra	nsporter FTEs			
		diology Nurse FTEs			
-	e PA	CS Administrator FTEs			
		Department Support FTEs			
		OTAL NUMBER OF FTEs IN THIS SPECIALTY (should equal answer to question 7a)			
14.	Do you cons	ider your facility's radiation therapy department to be fully staffed?			
	yes				
	no				
15.	Generally sp following da	eaking, for how many hours is your facility's radiation therapy department staffed by onsite technologists during the rs? (please anter the number of fecurs in each category ballow if norm, enter "0")			
	a nur	nber of hours on weekdays (Monday - Friday)			
	p pyr	nber of hours on Saturday			
	ø mu	nber of hours on Sunday			
		C.VI. I WYO. III			





24b. Approximately how many radiation therapy imaging procedures and exams did your facility perform in each of the following areas in your facility's most recently completed liscal year? RADIATION THERAPY STIMULATION Please answer for the number of procedures NOT the number of patients. For example, if a total of 300 procedures were performed during the treatment of 100 patients, the answer would be 300. To calculate procedure volume, please count procedures as CPT codes. (please fill in a number for each; if none, fill in "0". The sum total of all three categories should equal the number of all imaging procedures and exams performed by your facility during its most recently completed fiscal year.) inpatient procedures and exams. outpatient procedures and exams emergency room procedures and exams = TOTAL NUMBER OF RADIATION THERAPY STIMULATION PROCECURES AND EXAMS IN THIS SPECIALTY (Questions 13 through 24 will be shown consecutively for each specialty indicated at question 6) Please consider your facility's operations dedicated to: Mammography. 13a. How many paid (not worked) full time equivalents (FTEs) does your facility currently have dedicated to mammography? Please include current staff only, NOT approved budgeted staff. FTEs are considered to work 40 or more hours per week, or 2,080 hours per year. Please do NOT include any temporary staff (whether they be full or part time). However, do include overtime FTEs. (please fill in a number below) FTEs dedicated to this specialty 13b. Of the paid FTEs dedicated to mammography how many are in each of the following positions/job titles? Please count each individual only once. If their duties are spread across multiple positions, please answer for the position in which they spend the majority of their time. (please enter a number for each purpose below; if none, enter "0") Radiology Administrative FTEs (i.e., Director, Manager, Supervisor, etc.) Supervisory Technologist FTEs Technologist FTEs Film/Image Library FTEs Transcriptionist FTEs Receptionist/Administrative Assistant FTEs Scheduler FTFs Radiology Darkroom Tech/Aide FTEs Transporter FTEs Radiology Nurse FTEs PACS Administrator FTEs IS Department Support FTEs = TOTAL NUMBER OF FTES IN THIS SPECIALTY (should equal answer to question 7a) 14. Do you consider your facility's mammography department to be fully staffed? yes, no 15. Generally speaking, for how many hours is your facility's mammography department staffed by onsite technologists during the following days? (please enter the number of hours in each category below; if none, enter '0') number of hours on weekdays (Monday - Friday) number of hours on Saturday number of hours on Sunday





(Questions 13 through 24 will be shown consecutively for each specialty indicated at question 6) Please consider your facility's operations dedicated to: Interventional/Anglography 13a. How many paid (not worked) full time equivalents (FTEs) does your facility currently have dedicated to interventional/angiography? Please include current staff only, NOT approved budgeted staff. FTEs are considered to work 40 or more hours per week, or 2,880 hours per year. Please do NOT include any temporary staff (whether they be full or part time). However, do include overtime FTEs, (please fill in a number below) FTEs dedicated to this specially 13b. Of the paid FTEs dedicated to interventional/angiography how many are in each of the following positions/job titles? Please count each individual only once. If their duties are spread across multiple positions, please answer for the position in which they spend the majority of their time. [please epider a number for each purpose down; if name, epider "O". Radiology Administrative FTEs (i.e., Director, Manager, Supervisor, etb.) Supervisory Technologist FTEs Technologisi FTEs Film/Image Library FTEs Transcriptionist FTEs Receptionist/Administrative Assistant FTEs Scheduler FTEs Radiology Darkroom Tech/Aide FTEs Transporter FTEs Radiology Nurse FTEs PAGS Administrator FTEs IS Department Support FTEs = TOTAL NUMBER OF FTEs IN THIS SPECIALTY (should equal answer to question 7a) 14. Do you consider your facility's interventional/angiography department to be fully staffed? yes no Generally speaking, for how many hours is your facility's interventional/angiography department staffed by onsite technologists during the following days? (please enter-the 'number of hours in each category below, if none, enter "0") number of hours on weekdays (Monday - Friday) number of hours on Saturday number of hours on Sunday 16. Do supervisory technologists in interventional/angiography at your facility perform procedures, in addition to any administrative yes. no If no please click here to skip to question 17 15a. If yes, what percentage of the their time is spent performing procedures and what percentage is spent in administrative duties? (please anter a percentage in each category below: sum total should equal 100%) % of time spent performing procedures % of time spend in administrative duties. = % TOTAL WORKING TIME (should equal 180%)



17.	What percentage of the patient population at your facility in interventional/angiography have conscious sedation? (please fill in a number below. If none, enter '0')				
	% of patients in this specialty with conscious sedation				
18.	What percentage of the total procedures performed at your facility in interventional/angiography are performed on patients under 18 years of age? (please fill in a number below: fi.none, enter "0"):				
	% of procedures in this specialty performed on patients under 18 years of age				
19.	What percentage of the total procedures performed at your facility in interventional/angiography are performed on patients under 5 years of age? (please fill in a number below, if none, enter "0")				
	% of procedures in this specialty performed on patients under 5 years of age				
20.	is there a technologist training program in interventional/angiography at your facility (including affiliations)?				
	no if no, please dick here to skip to question 24				
	If yes, is the program sponsored by your facility or is it affiliated with a school?				
21.					
	affiliated with a school				
-					
22.	How many students are currently enrolled in your technologist training program in Interventional/angiography? (please enfor a number below. If none, enter '0')				
	# students enrolled in your facility's training program for this specialty				
22	How many FTE clinical instructors are employed in your technologist training program in interventional/angiography? (please enter				
43.	How many FTE clinical instructors are employed in your technologist training program in interventional/angiography? (please enter a number below)				
	# FTE clinical instructors in your facility's training program for this specialty				
24.	Approximately how many interventional/angiography imaging procedures and exams did your facility perform in each of the following areas in your facility's most recently completed fiscal year?				
	Please answer for the number of procedures NOT the number of patients. For example, if a total of 300 procedures were performed during the treatment of 100 patients, the answer would be 300. To calculate procedure volume, please count procedures as CPT codes. (please fill in a number for each; if none, fill in "0". The sum total of all three categories should equal the number of all imaging procedures and exams partnered by your facility during its most recaulify completed fiscal year.)				
	# inpalient procedures and exams				
	outpatient procedures and exams				
	# emergency room procedures and exams = TOTAL NUMBER OF IMAGING PROCECURES AND EXAMS IN THIS SPECIALTY				
	■ TOTAL NUMBER OF IMAGING PROCECURES AND EXAMS IN THIS SPECIALTY  ■ TOTAL NUMBER OF IMAGING PROCECURES AND EXAMS IN THIS SPECIALTY  ■ TOTAL NUMBER OF IMAGING PROCECURES AND EXAMS IN THIS SPECIALTY  ■ TOTAL NUMBER OF IMAGING PROCECURES AND EXAMS IN THIS SPECIALTY  ■ TOTAL NUMBER OF IMAGING PROCECURES AND EXAMS IN THIS SPECIALTY  ■ TOTAL NUMBER OF IMAGING PROCECURES AND EXAMS IN THIS SPECIALTY  ■ TOTAL NUMBER OF IMAGING PROCECURES AND EXAMS IN THIS SPECIALTY  ■ TOTAL NUMBER OF IMAGING PROCECURES AND EXAMS IN THIS SPECIALTY  ■ TOTAL NUMBER OF IMAGING PROCECURES AND EXAMS IN THIS SPECIALTY  ■ TOTAL NUMBER OF IMAGING PROCECURES AND EXAMS IN THIS SPECIALTY  ■ TOTAL NUMBER OF IMAGING PROCECURES AND EXAMS IN THIS SPECIALTY  ■ TOTAL NUMBER OF IMAGING PROCECURES AND EXAMS IN THIS SPECIALTY  ■ TOTAL NUMBER OF IMAGING PROCECURES AND EXAMS IN THIS SPECIALTY  ■ TOTAL NUMBER OF IMAGING PROCECURES AND EXAMS IN THIS SPECIALTY  ■ TOTAL NUMBER OF IMAGING PROCECURES AND EXAMS IN THIS SPECIALTY  ■ TOTAL NUMBER OF IMAGING PROCECURES AND EXAMS IN THIS SPECIAL THI				
Que	estions 13 through 24 will be shown consecutively for each specialty indicated at question 6)				
lea	ase consider your facility's operations dedicated to:				
arc	diac Cath Radiology				
13a	a. How many paid (not worked) full time equivalents (FTEs) does your facility currently have dedicated to cardiac cath radiology? Please include current staff only, NOT approved budgeted staff.				
	FTEs are considered to work 40 or more hours per week, or 2,080 hours per year. Please do NOT include any temporary staff (whether they be full or part time). However, do include overtime FTEs. (please fill in a number below)				
	# FTEs dedicated to this specialty				

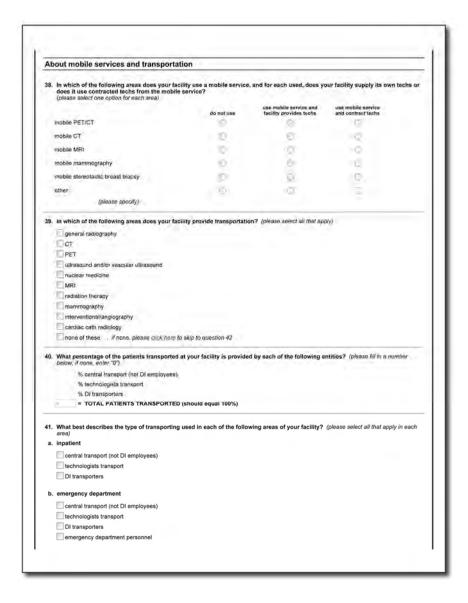
13b.	Of the paid FTEs dedicated to cardiac cath radiology how many are in each of the following positions/job fitles? Please count each individual only once. If their duties are spread across multiple positions, please answer for the position in which they spend the majority of their time. (please enter a number for each purpose below, if none, enter "Of			
	Radiotogy Administrative FTEs (i.e., Director, Manager, Supervisor, etc.)			
	Supervisory Technologist FTEs			
	Tachnologist FTEs			
	Film/mage Library FTEs			
	Transcriptionist FTEs			
-	Receptionst/Administrative Assistant FTEs			
1	Scheduler FTEs			
	Radiology Darkroom Tech/Aide FTEs			
	Transporter FTEs			
	Radiology Nurse FTEs			
	PACS Administrator FTEs			
	IS Department Support FTEs			
*	TOTAL NUMBER OF FTEs IN THIS SPECIALTY (should equal answer to question 7a)			
14.	Do you consider your facility's cardiac cath radiology department to be fully staffed?			
74)	ves			
	One Control of the Co			
15.	Generally speaking, for how many hours is your facility's cardiac cath radiology department staffed by onsite technologists during the following days? (please enter the number of hours in each category below: if none, enter '0')			
	number of hours on weekdays (Monday - Friday)			
	number of hours on Sunday			
16.	Do supervisory technologists in cartilac cath radiology at your facility perform procedures, in addition to any administrative duties?			
	ves			
	on If no, please click here to skip to question 17			
	2 (or 11 years and use to subtractions to			
16a	If yes, what percentage of the their time is spent performing procedures and what percentage is spent in administrative duties? (please enter a percentage in each category below: sum total should equal 100%).			
	% of time spent performing procedures			
	% of time spend in administrative duties			
	= % TOTAL WORKING TIME (should equal 100%)			
	What percentage of the patient population at your facility in cardiac cath radiology have conscious sedation? (please fill in a number below, if none, enter '0').			
	% of patients in this specialty with conscious sedation			
18.	What percentage of the total procedures performed at your facility in cardiac cath radiology are performed on patients under 18 years of age? (please fill in a number below, if none, enter "0")			
	% of procedures in this specially performed on patients under 18 years of age			
	What percentage of the total procedures performed at your facility in cardiac cath radiology are performed on patients under 5 years of age? (please fill in a number below, if none, enter "2")			
	M. of procedures in this specialty performed on patients under 5 years of age			

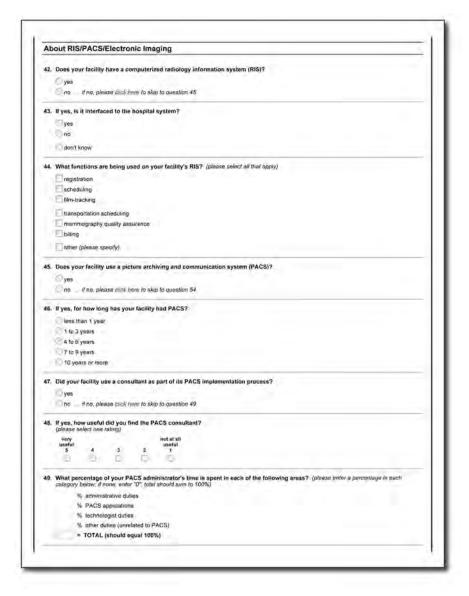


	is there	a technologist training program in cardiac cath radiology at your facility (including affiliations)?			
	yes				
	One	If no, please click here to skip to question 24			
21.	if yes, is	the program sponsored by your facility or is it affiliated with a school?			
	Sanon	sored by facility			
	- C	ted with a school			
22	How ma	ny students are currently enrolled in your technologist training program in cardiac cath radiology? (please enler a number			
	balow, it	rone anter "0")			
_	4	students enrolled in your facility's training program for this specialty			
	How ma	ny FTE clinical instructors are employed in your technologist training program in cardiac cath radiology? (please enter a below)			
1	2	FTE clinical instructors in your facility's training program for this specialty			
	Approximately how many cardiac cath radiology imaging procedures and exams did your facility perform in each of the following areas in your facility's most recently completed fiscal year?				
	during t	answer for the number of procedures NOT the number of patients. For example, it a total of 300 procedures were performed he treatment of 100 patients, the answer would be 300. To calculate procedure volume, please count procedures as CPT (please fill in a number for each if none, fill in "O". The sum total of all three cologories should equal the number of all imaging res and exams performed by your facility during its most recently completed fiscal year.)			
		inpatient procedures and exams			
		outpatient procedures and exams			
. 0	2	emergency room procedures and exams			
	1	######################################			
		TOTAL HUMBER OF IMAGING PROCECURES AND EXAMS IN THIS SPECIALTY			
-		■ TOTAL NUMBER OF IMAGING PROCECURES AND EXAMS IN THIS SPECIALTY			
-		######################################			
Mo	re abo	TOTAL NUMBER OF IMAGING PROCECURES AND EXAMS IN THIS SPECIALTY  ut your facility and staffing			
Mo	re abo	TOTAL NUMBER OF IMAGING PROCECURES AND EXAMS IN THIS SPECIALTY  Ut your facility and staffing  uny total FTEs handle the IS needs of DI, including PACS, RIS, voice recognition (VR)? (please enter a number below)			
Mo	re abo	TOTAL NUMBER OF IMAGING PROCECURES AND EXAMS IN THIS SPECIALTY  ut your facility and staffing			
Mo 25.	re abo	TOTAL NUMBER OF IMAGING PROCECURES AND EXAMS IN THIS SPECIALTY  Ut your facility and staffing  uny total FTEs handle the IS needs of DI, including PACS, RIS, voice recognition (VR)? (please enter a number below)			
Mo 25.	How ma	TOTAL NUMBER OF IMAGING PROCECURES AND EXAMS IN THIS SPECIALTY  ut your facility and staffing  uny total FTEs handle the IS needs of DI, including PACS, RIS, voice recognition (VR)? (please enter a number below)  FTEs handling the IS needs of DI  of the following positions perform PET/CT procedures at your facility?			
Mo 25.	How ma	TOTAL NUMBER OF IMAGING PROCECURES AND EXAMS IN THIS SPECIALTY  ut your facility and staffing  uny total FTEs handle the IS needs of DI, including PACS, RIS, voice recognition (VR)? (please enter a number below)  FTEs handling the IS needs of DI  of the following positions perform PETICT procedures at your facility?			
Mo 25.	Which of (please)	TOTAL NUMBER OF IMAGING PROCECURES AND EXAMS IN THIS SPECIALTY  Let your facility and staffing  Let your facility (VR)? (please enter a number below)  FTEs handling the IS needs of Di  Let your facility?			
Mo 25.	Which of (please)	TOTAL NUMBER OF IMAGING PROCECURES AND EXAMS IN THIS SPECIALTY  ut your facility and staffing  uny total FTEs handle the IS needs of DI, including PACS, RIS, voice recognition (VR)? (please enter a number below)  FTEs handling the IS needs of DI  of the following positions perform PET/CT procedures at your facility?			
Mo 25.	Which o	TOTAL NUMBER OF IMAGING PROCECURES AND EXAMS IN THIS SPECIALTY  Let your facility and staffing  Let your facility (VR)? (please enter a number below)  FTEs handling the IS needs of Di  Let your facility?			
Mo 25. 26.	Which o	TOTAL NUMBER OF IMAGING PROCECURES AND EXAMS IN THIS SPECIALTY  ut your facility and staffing  my total FTEs handle the IS needs of DI, including PACS, RIS, voice recognition (VR)? (please exter a number below)  FTEs handling the IS needs of DI  of the following positions perform PETICT procedures at your facility?  select all that apply)  ar med techs  pplicable (do not provide PET/CT procedures)			
Mo 25. 26.	Which control of the	TOTAL NUMBER OF IMAGING PROCECURES AND EXAMS IN THIS SPECIALTY  ut your facility and staffing  my total FTEs handle the IS needs of DI, including PACS, RIS, voice recognition (VR)? (please exter a number below)  FTEs handling the IS needs of DI  of the following positions perform PETICT procedures at your facility?  select all that apply)  ar med techs  pplicable (do not provide PET/CT procedures)			
Mo 25. 26.	Which of (please)  RTs  not a  Does you yes no	TOTAL NUMBER OF IMAGING PROCECURES AND EXAMS IN THIS SPECIALTY  ut your facility and staffing  my total FTEs handle the IS needs of DI, including PACS, RIS, voice recognition (VR)? (please enter à number below)  FTEs handling the IS needs of DI  of the following positions perform PET/CT procedures at your facility?  air med techs  pplicable (do not provide PET/CT procedures)  our facility allow technologists to perform fluoroscopy (terminal Illium) without a radiologist's supervision?			
Mo 25. 26.	Which o	TOTAL NUMBER OF IMAGING PROCECURES AND EXAMS IN THIS SPECIALTY  ut your facility and staffing  my total FTEs handle the IS needs of DI, including PACS, RIS, voice recognition (VR)? (please enter a number below)  FTEs handling the IS needs of DI  if the following positions perform PET/CT procedures at your facility?  air med techs  pplicable (do not provide PET/CT procedures)  pur facility allow technologists to perform fluoroscopy (terminal Illium) without a radiologist's supervision?  If the following activities do technologists perform at your facility as a routine part of their responsibilities? (please select all y)			
Mo 25. 26.	How make the work of the work	TOTAL NUMBER OF IMAGING PROCECURES AND EXAMS IN THIS SPECIALTY  ut your facility and staffing  my total FTEs handle the IS needs of DI, including PACS, RIS, voice recognition (VR)? (please enter a number below)  FTEs handling the IS needs of DI  if the following positions perform PETICT procedures at your facility?  select all that apply)  are med techs  pplicable (do not provide PETICT procedures)  sur facility allow technologists to perform fluoroscopy (terminal Illium) without a radiologist's supervision?  If the following activities do technologists perform at your facility as a routine part of their responsibilities? (please select all ly)			
Mo 25. 26.	How male which c c please or please	TOTAL NUMBER OF IMAGING PROCECURES AND EXAMS IN THIS SPECIALTY  ut your facility and staffing  my total FTEs handle the IS needs of DI, including PACS, RIS, voice recognition (VR)? (please exter a number below)  FTEs handling the IS needs of DI  of the following positions perform PET/CT procedures at your facility?  select all that apply)  are med fachs  pplicable (do not provide PET/CT procedures)  our facility allow technologists to perform fluoroscopy (terminal litum) without a radiologist's supervision?  of the following activities do technologists perform at your facility as a routine part of their responsibilities? (please select all VIV)  on tract administrator.			
Mo. 25. 25. 226. 227.	Which control of the	TOTAL NUMBER OF IMAGING PROCECURES AND EXAMS IN THIS SPECIALTY  ut your facility and staffing  my total FTEs handle the IS needs of DI, including PACS, RIS, voice recognition (VR)? (please enter a number below)  FTEs handling the IS needs of DI  of the following positions perform PET/CT procedures at your facility?  select all that apply)  are med techs  pplicable (do not provide PET/CT procedures).  fur facility allow technologists to perform fluoroscopy (terminal Illium) without a radiologist's supervision?  of the following activities do technologists perform at your facility as a routine part of their responsibilities? (please select all ly)  IVe  intract jaministrator  is testing (nuclear medicine)			
Mo 25. 26.	Which of please you yes not a sprease you which of not a possible yes	TOTAL NUMBER OF IMAGING PROCECURES AND EXAMS IN THIS SPECIALTY  ut your facility and staffing  my total FTEs handle the IS needs of DI, including PACS, RIS, voice recognition (VR)? (please enter a number below)  FTEs handling the IS needs of DI  if the following positions perform PET/CT procedures at your facility?  all this apply)  are med techs  pullcable (do not provide PET/CT procedures).  pur facility allow technologists to perform fluoroscopy (terminal illium) without a radiologist's supervision?  If the following activities do technologists perform at your facility as a routine part of their responsibilities? (please select all y).  If the following activities do technologists perform at your facility as a routine part of their responsibilities? (please select all y).  If the following activities do technologists perform at your facility as a routine part of their responsibilities? (please select all y).			
Mo 25. 26.	Which control of the	TOTAL NUMBER OF IMAGING PROCECURES AND EXAMS IN THIS SPECIALTY  ut your facility and staffing  my total FTEs handle the IS needs of DI, including PACS, RIS, voice recognition (VR)? (please enter a number below)  FTEs handling the IS needs of DI  if the following positions perform PET/CT procedures at your facility?  all this apply)  are med techs  pullcable (do not provide PET/CT procedures).  pur facility allow technologists to perform fluoroscopy (terminal illium) without a radiologist's supervision?  If the following activities do technologists perform at your facility as a routine part of their responsibilities? (please select all y).  If the following activities do technologists perform at your facility as a routine part of their responsibilities? (please select all y).  If the following activities do technologists perform at your facility as a routine part of their responsibilities? (please select all y).			

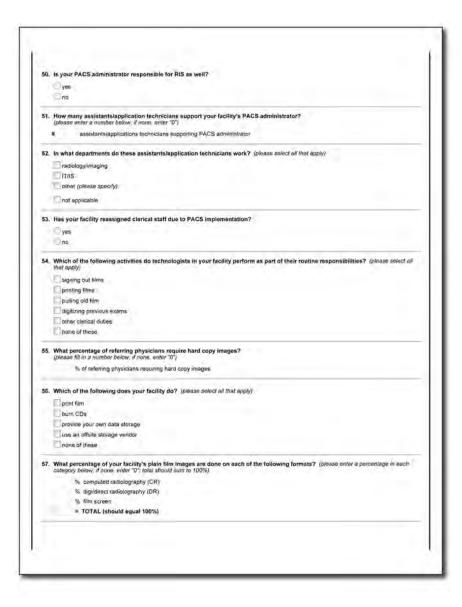
29.	29. Do technologists at your facility cross-train between imaging modalities?  (yes				
	€ Ino				
30.	. In which of the following areas does your facility require that technologists be certified (even if there are no state requirements)?  [please select all that apply].				
	general radiography	radiation therapy			
	СТ	mammography			
	PET	interventional/angiography			
	ultrasound and/or vascular ultrasound	cardiac cath radiology			
	nuclear medicine	none of these			
	MRI				
31.	. Which of the following responsibilities do limited license personnel perform at your facility? (please saled all that apply)				
	fluorescopy	MRI			
	radiography	other (please specify):			
	bone densitometry/DEXA scan	none			
32. In your facility's most recently completed fiscal year, what was the average vacancy rate nane, onlier '90' % a verage vacancy rate.		fiscal year, what was the average vacancy rate for FTEs? (presse fill in a number below, if			
_	the standard remains, rese				
33.	. In its most recently completed fiscal year, with which types of staff did your facility fill vacancies? (please select all that apply)				
	regular overtime staff				
	Locum tenens techs (temporary staff hired for 13 weeks or longer)				
	PRN (registry) techs				
	none of these				
34,	What was your facility's total cost in its most recently completed fiscal year for each of the following types of agency staff positions? (blease fill in a number for each category below, if none, under '0')				
	5 cost for locum tenens techs	Southern Control of the Control of t			
	\$ cost for PRN (registry) fechs				
35.	For your facility's most recently completed fiscal year, what was the percentage of each of the following positions included in your total number of budgeted techs? (Diease fill in a number bullow, if none, onter "O")				
	% con-agency staff				
	% focum tenens				
	% PRN (registry)				
	= TOTAL BUDGETED TECHS (should equal 100%)				
36.	Was the number of locum tenens staff at your facility an increase, decrease, or about the same amount as the year previous?				
	Cincrease				
	© about the same				
	decrease				
37.	Was the number of PRN (registry) staff at your facility an increase, decrease, or about the same amount as the year previous?				
	Increase				
	about the same				
	decrease				

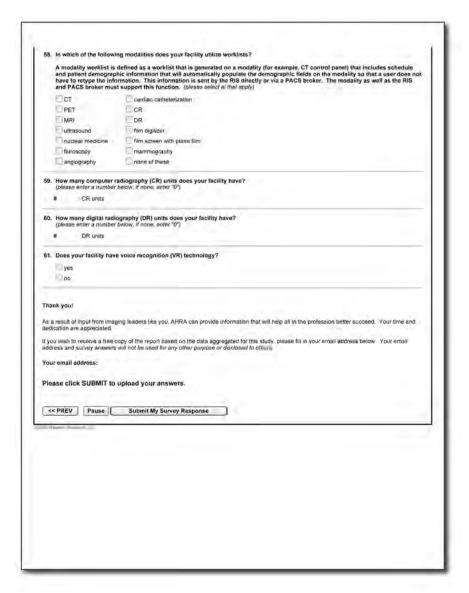
















© 2009 AHRA: The Association for Medical Imaging Management 490-B Boston Post Road, Suite 200, Sudbury, MA 01776

Phone: 978-443-7591 Toll Free: 800-334-AHRA Fax: 978-443-8046 www.ahraonline.org