2009 Staff Utilization Survey
2009 Staff Utilization Survey

This survey was made possible through funding from AGFA HealthCare.
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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 ±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 **mean** 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 x $100 = $1,000,000. 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 **standard error** 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 **median** 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 50th 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

- Part of a system: 50%
- Stand-alone facility: 50%

Exhibit 02
Facility Owner

- Not-for-profit: 63%
- Investor owned: 21%
- Government: 7%
- Other*: 6%
- No answer: 2%

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

Exhibit 03
Facility Setting

- Urban: 33%
- Suburban: 33%
- Rural: 33%

Base: 328 respondents
FINDINGS: Mobile Services and Transportation

Exhibit 33
Percentage of Patients Transported by Entity

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

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**

<table>
<thead>
<tr>
<th>Position</th>
<th>% with one or more</th>
<th>mean*</th>
<th>median*</th>
</tr>
</thead>
<tbody>
<tr>
<td>Radiology Administrative</td>
<td>33%</td>
<td>0.5</td>
<td>0</td>
</tr>
<tr>
<td>Supervisory Technologist</td>
<td>52%</td>
<td>1.1</td>
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</tr>
<tr>
<td>Technologist</td>
<td>93%</td>
<td>13.7</td>
<td>10</td>
</tr>
<tr>
<td>Film/Image Library</td>
<td>17%</td>
<td>0.5</td>
<td>0</td>
</tr>
<tr>
<td>Transcriptionist</td>
<td>11%</td>
<td>0.3</td>
<td>0</td>
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<tr>
<td>Receptionist/Administrative Assistant</td>
<td>34%</td>
<td>0.9</td>
<td>0</td>
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<tr>
<td>Scheduler</td>
<td>15%</td>
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<td>0</td>
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<tr>
<td>Radiology Darkroom Tech/Aide</td>
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<tr>
<td>Transporter</td>
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<tr>
<td>Radiology Nurse</td>
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<tr>
<td>PACS Administrator</td>
<td>20%</td>
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<tr>
<td>IS Department Support</td>
<td>6%</td>
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<td>0</td>
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</table>

_base: 298 respondents offering this specialty

*base: 284 answering respondents offering this specialty

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

<table>
<thead>
<tr>
<th>Position</th>
<th>% with one or more</th>
<th>mean*</th>
<th>median*</th>
</tr>
</thead>
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<td>Radiology Administrative</td>
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<td>Supervisory Technologist</td>
<td>30%</td>
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<td>Film/Image Library</td>
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<td>0</td>
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<tr>
<td>Transcriptionist</td>
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<td>Receptionist/Administrative Assistant</td>
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<td>Scheduler</td>
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<td>0</td>
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<tr>
<td>Radiology Darkroom Tech/Aide</td>
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<td>0</td>
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<tr>
<td>IS Department Support</td>
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</table>

_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

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<tr>
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</table>
| NOTE: results not shown if fewer than 5 valid values

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**AHRA 2009 Staff Utilization Survey**

**P-42**
APPENDIX

Survey Instrument

2009 Staff Utilization Survey

The Association for Medical Imaging Management

You may have received a survey from AHRA earlier this month. This survey is intended to collect information specific to imaging management practices at your facility. Whether or not you completed the first survey, your participation in this current survey is essential and very important for the success of the study.

To complete the survey, please click the following link. The survey will be conducted online and data will be transmitted securely. Your responses will be treated in confidence and will only be used in the above study.

In appreciation for your participation, all those completing the survey will receive a free copy of the survey report. This survey may be published with your permission. A copy of the report will be posted on the AHRA website.

You may also choose to complete the survey by phone. Please call 1-866-426-6363 or email survey@ahra.org.

Please enter your password:

Note that this is a special password associated specifically for the purpose of completing this survey, and it may be found in your original e-mail invitation.

About your facility

The following questions are about the facility. The facility is the single location at which you work. Please answer all questions for your primary or single location. If you have multiple locations, please answer for each location separately.

1. Which one of the following best describes your facility?

   - part of a system
   - stand-alone facility

2. Which one of the following best describes who owns your facility?

   - government
   - not-for-profit
   - investor-owned
   - other (please specify)

3. Which one of the following best describes the primary mission or purpose of your facility?

   - Hospital
   - academic (teaching residency or fellowship)
   - long-term care
   - academic (excluding residency or fellowship)
   - imaging center
   - multi-specialty physician office
   - primary care clinic

NEXT >>
APPENDIX

**3a. If you indicated your facility is hospital-based, approximately how many beds does it have?**

<table>
<thead>
<tr>
<th>Option</th>
<th>Number</th>
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</tr>
<tr>
<td>Not applicable, not hospital-based</td>
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</table>

**3b. Is your facility a Level I trauma center?**

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<tr>
<th>Option</th>
<th>Yes</th>
<th>No</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
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</tbody>
</table>

**3c. Do radiology residents train at your facility?**

<table>
<thead>
<tr>
<th>Option</th>
<th>Yes</th>
<th>No</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
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</tr>
</tbody>
</table>

**4. In what state is your facility located?**

- [ ] State
- [ ] Out of state

**5. Which best describes the setting in which your facility is located?**

- [ ] Urban
- [ ] Suburban
- [ ] Rural
- [ ] Other

**6. Which of the following imaging specialties were offered at your facility during the most recently completed fiscal year?**

<table>
<thead>
<tr>
<th>Specialty</th>
<th>FTEs</th>
</tr>
</thead>
<tbody>
<tr>
<td>General radiology</td>
<td></td>
</tr>
<tr>
<td>CT</td>
<td></td>
</tr>
<tr>
<td>MRI</td>
<td></td>
</tr>
<tr>
<td>Nuclear medicine</td>
<td></td>
</tr>
<tr>
<td>Other</td>
<td></td>
</tr>
</tbody>
</table>

**About staffing and procedures at your facility:**

The next several questions ask about the number of full-time equivalents (FTEs) working in the various specialties offered by your facility.

First, please consider those primarily dedicated to administration. That is, those not dedicated to any specialty; rather they are in an overall administrative role in medical imaging. (FTEs working in such specialty will be accounted for in a later question.)

**7a. How many paid (not worked) FTEs does your facility currently have dedicated to administration?**

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 enter a number below.)

**7b. How many paid (not worked) FTEs does your facility currently have dedicated to administration?**

Please enter a number below.

**8. If yes, what percentage of the full time is spent performing procedures, and what percentage is spent in administrative duties?**

- [ ] % of time spent performing procedures
- [ ] % of time spent in administrative duties

Please enter a number below.

**9. Is there a technological training program in administrative at your facility (excluding affiliated)?**

- [ ] Yes
- [ ] No

Please enter a number below.

**10. If yes, is the program sponsored by your facility or is it affiliated with a school?**

- [ ] Sponsored by facility
- [ ] Affiliated with a school

**11. How many students are currently enrolled in your technologist training program in administration?**

Please enter a number below.

**12. How many FTE clinical instructors are employed in your technologist training program in administration?**

Please enter a number below.

<table>
<thead>
<tr>
<th>Question</th>
<th>Answer</th>
</tr>
</thead>
<tbody>
<tr>
<td>3a.</td>
<td></td>
</tr>
<tr>
<td>3b.</td>
<td></td>
</tr>
<tr>
<td>3c.</td>
<td></td>
</tr>
<tr>
<td>4.</td>
<td></td>
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<tr>
<td>5.</td>
<td></td>
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<tr>
<td>6.</td>
<td></td>
</tr>
<tr>
<td>7a.</td>
<td></td>
</tr>
<tr>
<td>7b.</td>
<td></td>
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<tr>
<td>8.</td>
<td></td>
</tr>
<tr>
<td>9.</td>
<td></td>
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<td>10.</td>
<td></td>
</tr>
<tr>
<td>11.</td>
<td></td>
</tr>
<tr>
<td>12.</td>
<td></td>
</tr>
</tbody>
</table>
APPENDIX

(Questions 13 through 24 will be shown consecutively for each specialty indicated at question 6)

15a. How many paid (not worked) full-time equivalents (FTEs) does your facility currently have dedicated to general radiology? Please include current staff only, NOT approved budgeted staff.

15b. Of the paid FTEs dedicated to general radiology, how many are in each of the following positions? Please report only one FTE per position. Please report only one FTE per position.

16. What percentage of the total procedures performed at your facility in general radiology are performed on patients under 18 years of age? "appropriate " is a number between 1 and 100 (should equal 100%)

17. If yes, is this program sponsored by your facility or is it affiliated with a school? (Please enter a number between 1 and 100)

18. Do you consider your facility's general radiology department to be fully staffed?

19. Generally speaking, for how many hours is your facility's general radiology department staffed by radiologic technologists during the following days? (Please enter the number of hours in each category below. If none, enter "0")

20. Do your radiologic technologists in general radiology perform procedures, in addition to any administrative duties? (Please enter a percentage in each category below. Each total should equal 100%)

21. Approximately how many general radiography 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 100 procedures were performed during the treatment of 100 patients, the answer would be 100. To calculate procedure volume, please count procedures as CPT "codes. General MV is a number for each. For 10, MV is 10. The sum totals of all these categories should equal the number of all imaging procedures and exams performed by your facility during its most recently completed fiscal year.

22. Do you consider your facility's general radiology department to be fully staffed?

23. If yes, what percentage of the time is spent performing procedures and what percentage is spent in administrative duties? (Please enter a percentage in each category below. Each total should equal 100%)

24. What percentage of the patients imaged at your facility in general radiography have conscious sedation? (Please enter a percentage between 1 and 100)

25. What percentage of the total procedures performed at your facility in general radiography are performed on patients under 18 years of age? (Please enter a number between 1 and 100)

26. Do your radiologic technologists in general radiology perform procedures, in addition to any administrative duties? (Please enter a percentage in each category below. Each total should equal 100%)

27. Do you consider your facility's general radiology department to be fully staffed?

28. Approximately how many general radiography 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 100 procedures were performed during the treatment of 100 patients, the answer would be 100. To calculate procedure volume, please count procedures as CPT "codes. General MV is a number for each. For 10, MV is 10. The sum totals of all these categories should equal the number of all imaging procedures and exams performed by your facility during its most recently completed fiscal year.

AHRA 2009 Staff Utilization Survey
<table>
<thead>
<tr>
<th>Question</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>16.</td>
<td>What percentage of the total population at your facility was scanned in the CT scanner during the last year?</td>
</tr>
<tr>
<td>17.</td>
<td>What percentage of the total population at your facility was scanned in the MRI scanner during the last year?</td>
</tr>
<tr>
<td>18.</td>
<td>What percentage of the total population at your facility was scanned in the PET scanner during the last year?</td>
</tr>
<tr>
<td>19.</td>
<td>What percentage of the total population at your facility was scanned in the SPECT scanner during the last year?</td>
</tr>
<tr>
<td>20.</td>
<td>What percentage of the total population at your facility was scanned in the PET/CT scanner during the last year?</td>
</tr>
<tr>
<td>21.</td>
<td>What percentage of the total population at your facility was scanned in the PET/MR scanner during the last year?</td>
</tr>
<tr>
<td>22.</td>
<td>What percentage of the total population at your facility was scanned in the PET/LCT scanner during the last year?</td>
</tr>
<tr>
<td>23.</td>
<td>What percentage of the total population at your facility was scanned in the PET/CT/LCT scanner during the last year?</td>
</tr>
</tbody>
</table>

*TOTAL NUMBER OF CTs, MRI, PET, SPECT, PET/CT, PET/MR, PET/LCT, PET/CT/LCT scans performed at your facility during the last year.*
APPENDIX

14. Do you consider your facility’s PET department to be fully staffed?

☐ Yes  ☐ No

15. Generally speaking, for how many hours is your facility’s PET department staffed by onsite technologists during the following days? (please enter the number of hours in each category below, if more than one)

☐ number of hours on weekdays (Monday - Friday)  ☐ number of hours on Saturday  ☐ number of hours on Sunday

16. Do supervisory technologists in PET at your facility perform procedures, in addition to any administrative duties?

☐ Yes  ☐ No ... F.Y. please pass questions to dr. (sic) in question 17

17. If yes, what percentage of the 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 spent in administrative duties

18. What percentage of the patient population at your facility in PET have respiratory disease? (please enter a number between 0 and 100)

☐ % of patients in the specialty with respiratory disease

19. What percentage of the total procedures performed at your facility in PET are performed on patients under 18 years of age? (please enter a number between 0 and 100)

☐ % of procedures in this specialty performed on patients under 18 years of age

20. What percentage of the total procedures performed at your facility in PET are performed on patients over 65 years of age? (please enter a number between 0 and 100)

☐ % of procedures in this specialty performed on patients over 65 years of age

21. Is there a technologist training program in PET at your facility (excluding affiliations)?

☐ Yes  ☐ No ☐ Other ...

22. If yes, is the program sponsored by your facility or is it affiliated with a school?

☐ sponsored by facility  ☐ affiliated with a school

23. How many students are currently enrolled in your technologist training program in PET? (please enter a number below if more than one)

☐ students enrolled in your facility’s training program for this specialty

24. Approximately how many PET 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 100 procedures were performed during the treatment of 100 patients, the answer would be 100. To calculate procedure volume, please count procedures as CPT codes. Please list a number for each. Formula: M 100 V. The sum total of all line items should equal the number of all imaging procedures and exams performed by your facility during your most recently completed fiscal year.

☐ interventional procedures and exams  ☐ noninvasive procedures and exams  ☐ support services and exams  ☐ total number of imaging procedures and exams in this specialty

(Questions 13 through 24 will be shown consecutively for each specialty instigated at question 8)

Please consider your facility’s operations dedicated to:

Ultrasound and/or Vascular Ultrasonography

13a. How many full-time equivalents (FTEs) does your facility currently have dedicated to ultrasound and/or vascular ultrasonography? 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 part- or full-time). However, do include on-call FTEs. (please list a number below, if more than one)

☐ FTEs dedicated to this specialty

13b. Of the full-time equivalents dedicated to ultrasound and/or vascular ultrasonography, 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 position below, if more than one)

☐ Radiology Technologist FTEs (e.g., Director, Manager, Supervisor, etc.)

☐ Sonographer/Technologist FTEs

☐ Technologist FTEs

☐ Ultrasound FTEs

☐ Technologist/Technologist Assistant FTEs

☐ Technologist/Manager FTEs

☐ Radiology Technologist/Technologist Assistant FTEs

☐ Ultrasound/Technologist Assistant FTEs

☐ Support FTEs

☐ Radiology/Technologist FTEs

☐ PACS Administrator FTEs

☐ RS Department Support FTEs

☐ TOTAL NUMBER OF FTEs IN THIS SPECIALTY (should equal answer in question 7a)

14. Do you consider your facility’s ultrasound and/or vascular ultrasound department to be fully staffed?

☐ Yes  ☐ No

15. Generally speaking, for how many hours is your facility’s ultrasound and/or vascular ultrasound department staffed by onsite technologists during the following days? (please enter the number of hours in each category below, if more than one)

☐ number of hours on weekdays (Monday - Friday)  ☐ number of hours on Saturday  ☐ number of hours on Sunday
APPENDIX

16. Do supervisory technologists in ultrasound and/or vascular ultrasound at your facility perform procedures, in addition to any administrative duties?

| yes | no | if yes, please click here to be able to question 17 |

16a. If yes, what percentage of the clinician's 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%)%

16b. % of time spent performing procedures

16c. % of time spent in administrative duties

16d. % TOTAL WORKING TIME (should equal 100%)

17. What percentage of the patient population at your facility in ultrasound and/or vascular ultrasound have conscious sedation?

| patients in this specialty with conscious sedation |

18. What percentage of the total procedures performed at your facility in ultrasound and/or vascular ultrasound are performed on patients under 16 years of age?

| procedures in this specialty performed on patients under 16 years of age |

19. What percentage of the total procedures performed at your facility in ultrasound and/or vascular ultrasound are performed on patients under 5 years of age?

| procedures in this specialty performed on patients under 5 years of age |

20. Is there a technologist training program in ultrasound and/or vascular ultrasound at your facility (including affiliations)?

| yes | no | if yes, please click here to be able to question 24 |

21. If yes, is the program sponsored by your facility or is it affiliated with a school?

| sponsored by facility | affiliated with a school |

22. How many students are currently enrolled in your technologist training program in ultrasound and/or vascular ultrasound? (please enter a number below if none, enter "0")

23. How many FTE clinical instructors are employed in your technologist training program in ultrasound and/or vascular ultrasound? (please enter a number below)

| FTE clinical instructors in your facility's training program for this specialty |

24. Approximately how many ultrasound and/or vascular ultrasound imaging procedures and exams did your facility perform in each of the following areas in your facility's most recently completed fiscal year?

| please enter the number of procedures not the number of patients. for example, if a total of 100 procedures were performed during the most recent fiscal year, the answer would be 100. to calculate procedure volume, please report procedures as OPP codes. please enter a number for each. if none, enter "0". for the sum total of all these categories should equal the number of all imaging procedures and exams performed by your facility during the most recently completed fiscal year. |

25. What percentage of the patient population at your facility in ultrasound and/or vascular ultrasound have conscious sedation?

| % of patients in this specialty with conscious sedation |

(Questions 13 through 24 will be shown consecutively for each specialty indicated at question 8)
### APPENDIX

(Questions 13 through 24 will be shown consecutively for each specialty indicated at question 5)

Please consider your facility’s operations dedicated to:

**General Radiography**

13a. How many paid full-time equivalents (FTEs) does your facility currently have dedicated to general radiography?
   - Include current staff only.
   - Do not include蓬勃 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 general radiography how many are in each of the following positions (list)? Please count each individual only once.
   - Those duties are spread across multiple positions, please answer for the positions in which they spend the majority of their time.
   - Please enter a number for each position below.2
   1. Radiology Administrators (FT/PT)
   2. Direct Care (Technologists, Nurses, Support Staff)
   3. Supervisory Technical FTEs
   4. Technologist FTEs
   5. Radiographs/Linear FTEs
   6. Transplant FTEs
   7. Regions/Radiology Assistants/Technicians
   8. Sonography FTEs
   9. Radiology Technicians/Staff
   10. Transport FTEs
   11. Technology Support FTEs
   12. PACS Administrators
   13. IS Department/Research FTEs
   - TOTAL NUMBER OF FTEs IN THIS SPECIALTY (should equal answer to question 52)

14. Do you consider your facility’s general radiography department to be fully staffed?
   - Yes
   - No

15. Generally speaking, for how many hours is your facility’s general radiography department staffed by radiology technologists during the following shifts? Please enter the number of hours in each category below. If none, enter “0”
   - Number of hours on weekdays (Mon - Fri)
   - Number of hours on weekends (Sat - Sun)
   - Number of hours on Sunday

16. Do supervisory technologists in general radiography at your facility perform procedures, in addition to any administrative duties?
   - Yes
   - No
   - If yes, please state how to skip to question 7.

17. If yes, what percentage of the 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 spent in administrative duties
   - % TOTAL WORKING TIME (should equal 100%)

17a. What percentage of the patient population at your facility in general radiography have cancerous lesions? (Please fill in a number below. If none, enter “0”)
   - % of patients in the specialty with cancerous lesion

18. What percentage of the total procedures performed at your facility in general radiography are performed on patients under 18 years of age? (Please fill in a number below. If none, enter “0”)
   - % of procedures in the specialty performed on patients under 18 years of age

19. What percentage of the total procedures performed at your facility in general radiography are performed on patients under 5 years of age? (Please fill in a number below. If none, enter “0”)
   - % of procedures in the specialty performed on patients under 5 years of age

20. Is there a technician training program in general radiography at your facility (including affiliations)? Training may include rotations through various modalities.
   - Yes
   - No
   - If yes, 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?
   - Sponsored by facility
   - Affiliated with a school

22. How many students are currently enrolled in your technician training program in general radiography? (Please enter a number below. If none, enter “0”)
   - # of students enrolled in your facility’s training program for this specialty

23. How many FTEs (clinical or didactic) are employed in your technician training program in general radiography? (Please enter a number below. If none, enter “0”)
   - # of FTEs (clinical or didactic) in your facility’s training program for this specialty

24. As a technician providing general radiography 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 100 procedures were performed during the treatment of 100 patients, the answer would be 100. 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 these categories should equal the number of all imaging procedures and exams performed by your facility during the most recently completed fiscal year.
   - # indicated procedures and exams
   - Outpatient procedures and exams
   - Emergency room procedures and exams
   - TOTAL NUMBER OF IMAGING PROCEDURES AND EXAMS IN THIS SPECIALTY

(Questions 13 through 24 will be shown consecutively for each specialty indicated at question 5)

Please consider your facility’s operations dedicated to:

**CT**

13a. How many paid full-time equivalents (FTEs) does your facility currently have dedicated to CT? Please include current staff only.
   - Do not include蓬勃 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
APPENDIX

14. Do you consider your facility's MRI department to be fully staffed?
   □ yes □ no

15. Generally speaking, for how many hours is your facility's MRI department staffed by onsite technologists during the following days? (Determine 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 MRI at your facility perform procedures, in addition to any administrative duties?
   □ yes □ no … fill in here to skip this question.

17. 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 spent in administrative duties
   % TOTAL WORKING TIME (should equal 100%)

18. What percentage of the patient population at your facility is MRI with conscious sedation? (Please enter a number below. If none, enter "0")
   % of patients in the specialty with conscious sedation

19. What percentage of the total procedures performed at your facility in MRI are performed on patients under 18 years of age? (Please enter a number below. If none, enter "0")
   % of procedures in this specialty performed on patients under 18 years of age

20. What percentage of the total number of procedures performed at your facility in MRI are performed on patients under 5 years of age? (Please enter a number below. If none, enter "0")
   % of procedures in this specialty performed on patients under 5 years of age

21. Is there a technologist training program in MRI at your facility (including affiliations)?
   □ yes □ no … fill in here to skip this question.

22. If yes, is the program sponsored by your facility or is it affiliated with a school?
   □ sponsored by facility
   □ affiliated with a school

23. How many students are currently enrolled in your technologist training program in MRI? (Please enter a number below)
   # students are enrolled in your facility's training program in this specialty

24. 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?
   Please answer for the number of procedures NOT the number of patients. For example, if 100 procedures were performed during the treatment of 200 patients, the answer would be 100. To calculate procedure volume, please count procedures as CPI codes. Please fill in a number for each of the areas below. If none, enter "0". The total number of all imaging procedures and exams performed by your facility during its most recently completed fiscal year:
   # protonate procedures and exams
   # sedation procedures and exams
   # emergency room procedures and exams
   # procedures and exams in this specialty
   # TOTAL NUMBER OF IMAGING PROCEDURES AND EXAMS IN THIS SPECIALTY

(Questions 13 through 24 will be shown consecutively for each specialty indicated at question 6)

13. What percentage of the patient population at your facility is MRI with conscious sedation? (Please enter a number below. If none, enter "0")
   % of patients in the specialty with conscious sedation

14. What percentage of the total number of procedures performed at your facility in MRI are performed on patients under 18 years of age? (Please enter a number below. If none, enter "0")
   % of procedures in this specialty performed on patients under 18 years of age

15. What percentage of the total number of procedures performed at your facility in MRI are performed on patients under 5 years of age? (Please enter a number below. If none, enter "0")
   % of procedures in this specialty performed on patients under 5 years of age

16. Is there a technologist training program in MRI at your facility (including affiliations)?
   □ yes □ no … fill in here to skip this question.

17. If yes, is the program sponsored by your facility or is it affiliated with a school?
   □ sponsored by facility
   □ affiliated with a school

18. How many students are currently enrolled in your technologist training program in MRI? (Please enter a number below)
   # students are enrolled in your facility's training program in this specialty

19. 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?
   Please answer for the number of procedures NOT the number of patients. For example, if 100 procedures were performed during the treatment of 200 patients, the answer would be 100. To calculate procedure volume, please count procedures as CPI codes. Please fill in a number for each of the areas below. If none, enter "0". The total number of all imaging procedures and exams performed by your facility during its most recently completed fiscal year:
   # protonate procedures and exams
   # sedation procedures and exams
   # emergency room procedures and exams
   # procedures and exams in this specialty
   # TOTAL NUMBER OF IMAGING PROCEDURES AND EXAMS IN THIS SPECIALTY

20. What percentage of the patient population at your facility is MRI with conscious sedation? (Please enter a number below. If none, enter "0")
   % of patients in the specialty with conscious sedation

21. What percentage of the total number of procedures performed at your facility in MRI are performed on patients under 18 years of age? (Please enter a number below. If none, enter "0")
   % of procedures in this specialty performed on patients under 18 years of age

22. What percentage of the total number of procedures performed at your facility in MRI are performed on patients under 5 years of age? (Please enter a number below. If none, enter "0")
   % of procedures in this specialty performed on patients under 5 years of age

23. Is there a technologist training program in MRI at your facility (including affiliations)?
   □ yes □ no … fill in here to skip this question.

24. If yes, is the program sponsored by your facility or is it affiliated with a school?
   □ sponsored by facility
   □ affiliated with a school

25. How many students are currently enrolled in your technologist training program in MRI? (Please enter a number below)
   # students are enrolled in your facility's training program in this specialty

26. 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?
   Please answer for the number of procedures NOT the number of patients. For example, if 100 procedures were performed during the treatment of 200 patients, the answer would be 100. To calculate procedure volume, please count procedures as CPI codes. Please fill in a number for each of the areas below. If none, enter "0". The total number of all imaging procedures and exams performed by your facility during its most recently completed fiscal year:
   # protonate procedures and exams
   # sedation procedures and exams
   # emergency room procedures and exams
   # procedures and exams in this specialty
   # TOTAL NUMBER OF IMAGING PROCEDURES AND EXAMS IN THIS SPECIALTY

(Questions 13 through 24 will be shown consecutively for each specialty indicated at question 6)
16. Do supervisory technologists in radiation therapy at your facility perform procedures in addition to any administrative duties? 

- Yes
- No
- Not applicable
- Other

16a. If yes, what percentage of the time is spent performing procedures and what percentage is spent in administrative duties? (please enter a percentage in each category below, question should equal 100%)

- % of time spent performing procedures
- % of time spent in administrative duties
- TOTAL WORKING TIME (should equal 100%)

17. What percentage of the patient population at your facility in radiation therapy have concurrent radiation therapy and chemotherapy? (please enter a number below, if none, enter "0")

- % of patients in this specialty with concurrent radiation

18a. What percentage of the total procedures performed at your facility in radiation therapy are performed on patients under 18 years of age? (please enter a number below, if none, enter "0")

- % of procedures in this specialty performed on patients under 18 years of age

18b. What percentage of the total procedures performed at your facility in radiation therapy are performed on patients under 5 years of age? (please enter 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 radiation therapy at your facility (including affiliations)?

- Yes
- No
- Not applicable

21. If yes, is the program sponsored by your facility or is it affiliated with a school?

- sponsored by facility
- affiliated with a school

22. How many students are currently enrolled in your technologist training program in radiation therapy? (please enter a number below)

- students enrolled in your facility's training program for this specialty

23. How many FTE clinical instructors are employed in your technologist training program in radiation therapy? (please enter a number below)

- FTE clinical instructors in your facility's training program for this specialty

24a. 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 fiscal year?

RADIATION THERAPY TREATMENTS

- treatment procedures and exams
- concurrent procedures and exams
- emergent exams
- total number of radiation therapy treatments procedures and exams in this specialty

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 fiscal year?

- total number of imaging procedures and exams performed by your facility during the most recently completed fiscal year

25. Generally speaking, how many hours is your facility's mammography department staffed by onsite technologists during the following days? (please enter the number of hours below)

- number of hours on weekdays (Monday - Friday)
- number of hours on Saturday
- number of hours on Sunday

(AHRA 2009 Staff Utilization Survey)
16. Do supervisory technologists in mammography at your facility perform procedures, in addition to any administrative duties?  
   - Yes
   - No

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 (i.e. total should equal 100%).
   - % of time spent performing procedures
   - % of time spent in administrative duties
   - % TOTAL WORKING TIME (should equal 100%)

17. What percentage of the patient caseload at your facility in mammography have a concurrent visit?  
   - Please enter a number below:
   - % at patients in the specialty with concurrent visitation

18. What percentage of the total procedures performed at your facility in mammography at least 15 years of age?  
   - Please enter a number below:
   - % of procedures in the specialty performed on patients under 15 years of age

19. What percentage of the total procedures performed at your facility in mammography at least 5 years of age?  
   - Please enter a number below:
   - % of procedures in the specialty performed on patients under 5 years of age

20. Is there a technologist training program in mammography at your facility (excluding affiliations)?  
   - Yes
   - No

21. If yes, is the program sponsored by your facility or is it affiliated with a school?  
   - Sponsored by facility
   - Affiliated with a school

22. How many students are currently enrolled in your technologist training program in mammography?  
   - Please enter a number below:
   - Number of students in your facility’s training program in this specialty

23. How many FTE clinical instructors are employed in your technologist training program in mammography?  
   - Please enter a number below:
   - Number of FTE clinical instructors in your facility’s training program in this specialty

24. Approximately how many mammography imaging procedures and exams does your facility perform 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 300 patients, the answer would be 300. To calculate procedures performed, please count procedures as CPH codes.  
   - Please enter a number below:
   - % of time spent on imaging procedures and exams
   - % of time spent on imaging procedures and exams
   - % TOTAL NUMBER OF IMAGING PROCEDURES AND EXAMS IN THIS SPECIALTY

(Questions 13 through 24 will be shown consecutively for each specialty indicated at question 6)
17. What percentage of the patient population at your facility in interventionsangiography have conscious sedation? (please fill in a number between 0 and 100)

% of patients in this specialty with conscious sedation

18. What percentage of the total procedures performed at your facility in interventionangiography are performed on patients under 18 years of age? (please fill in a number between 0 and 100)

% 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 interventionangiography are performed on patients under 5 years of age? (please fill in a number between 0 and 100)

% of procedures in this specialty performed on patients under 5 years of age

20. Is there a technologist training program in interventionalangiography at your facility (including affiliations)?

☐ no
☐ yes - if yes, please click here to list and describe

21. If yes, is the program sponsored by your facility or is it affiliated with a school?

☐ sponsored by facility
☐ affiliated with a school

22. How many students are currently enrolled in your technologist training program in interventionalangiography? (please enter a number between 0 and 100)

number enrolled in your facility's training program for this specialty

23. How many FTE-C clinical instructors are employed in your technologist training program in interventionalangiography? (please enter a number between 0 and 100)

FTE-C clinical instructors in your facility's training program for this specialty

24. Approximately how many interventionalangiography imaging procedures and exams did your facility perform in each of the following years 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 200 procedures were performed during the fiscal year of 100 patients, the answer would be 200. To calculate procedure volume, please count procedures as CPT codes, please fill in a number for each, e.g., 1234. The best total of all these categories should equal the number of imaging procedures and exams performed by your facility during its most recently completed fiscal year:

- open procedures and exams
- closed procedures and exams
- emergency room procedures and exams
- TOTAL NUMBER OF IMAGING PROCEDURES AND EXAMS IN THIS SPECIALTY

(Questions 13 through 24 will be shown consecutively for each specialty indicated at question 1)

Please consider your facility's operations dedicated to:

Cardiac Catheterization Laboratory

12a. How many full-time equivalents (FTEs) does your facility currently have dedicated to cardiac catheterization? (please fill in a number between 0 and 100)

FTEs dedicated to this specialty

12b. Do you consider your facility's current FTEs dedicated to cardiac catheterization to be fully staffed?

☐ yes
☐ no

13b. If the total FTEs dedicated to cardiac catheterization 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 fill in a number between 0 and 100)

- Radiology Administrative FTEs (e.g., Director, Manager, Supervisor, etc.)
- Supervisory Technologist FTEs
- Technologist FTEs
- Radiologic Technologist FTEs
- Imaging Library FTEs
- Transcription FTEs
- Radiography Technologist Assistant FTEs
- Specifying FTEs
- Radiology Dance/Technologist FTEs
- Transporter FTEs
- Radiology Nurse FTEs
- PACS Administration FTEs
- IT Department Support FTEs
- TOTAL NUMBER OF FTEs IN THIS SPECIALTY

(should equal answer to question 7)

14. Do you consider your facility's cardiac catheterization department to be fully staffed?

☐ yes
☐ no

15. Generally speaking, how many hours is your facility's cardiac catheterization department staffed by non-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 cardiac catheterization at your facility perform procedures, in addition to any administrative duties?

- yes
- no

17. What percentage of the patient population at your facility in cardiac catheterization have conscious sedation? (please fill in a number between 0 and 100)

% of patients in this specialty with conscious sedation

18. What percentage of the total procedures performed at your facility in cardiac catheterization are performed on patients under 18 years of age? (please fill in a number between 0 and 100)

% 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 cardiac catheterization are performed on patients under 5 years of age? (please fill in a number between 0 and 100)

% of procedures in this specialty performed on patients under 5 years of age
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20. Is there a technologist training program in cardiac catheterization at your facility (including affiliations)?
   
   yes  no  [ ] if no, please list any to add to question 24

21. If yes, is the program sponsored by your facility or is it affiliated with a school?
   
   sponsored by facility
   
   affiliated with a school

22. How many students are currently enrolled in your technologist training program in cardiac catheterization? (please enter a number below)
   
   # students enrolled in your facility’s training program for this specialty

23. How many FTE clinical instructors are employed in your technologist training program in cardiac catheterization? (please enter a number below)
   
   # FTE clinical instructors in your facility’s training program for this specialty

24. Approximately how many catheterization imaging procedures and exams did your facility perform in each of the following areas in your facility’s most recently completed fiscal year?

25. How many total FTEs handle the IR needs of DI, including PACS, HIS, voice recognition (VR)? (please enter a number below)
   
   # FTE handling the IR needs of DI

26. Which of the following positions perform PET/CT procedures at your facility? (please select all that apply)
   
   [ ] technologist
   
   [ ] fils
   
   [ ] not applicable (do not provide PET/CT procedures)

27. Does your facility allow technologists to perform (thromboprophylaxis—terminal lines) without a radiologist’s supervision?
   
   yes  no

28. Which of the following activities do technologists perform at your facility as a routine part of their responsibilities? (please select all that apply)
   
   [ ] start life
   
   [ ] control, airway
   
   [ ] stress testing (nuclear medicine)
   
   [ ] BV
   
   [ ] other
   
   [ ] none

29. Do technologists at your facility cross train between imaging modalities?
   
   yes  no

30. In which of the following areas does your facility require that technologists be certified (even if there are no state requirements)?
   
   [ ] General Radiography
   
   [ ] Nuclear Medicine
   
   [ ] PET
   
   [ ] MRI
   
   [ ] other

31. Which of the following responsibilities do technologists perform at your facility? (please select all that apply)
   
   [ ] General Radiography
   
   [ ] Nuclear Medicine
   
   [ ] PET
   
   [ ] MRI

32. In your facility’s most recently completed fiscal year, what was the average vacancy rate for PET/CT? (please enter a number below)
   
   % average vacancy rate

33. In its most recently completed fiscal year, with which types of staff did your facility fill vacancies? (please select all that apply)
   
   [ ] regular technologists
   
   [ ] non-regular technologists
   
   [ ] PRN (registry) technologists
   
   [ ] 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? (please enter a number below)
   
   $ cost for agency staff
   
   $ cost for PRN (registry) staff

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? (please enter a number below)
   
   % of agency staff
   
   % of non-regular staff
   
   % of PRN (registry) staff
   
   % total budgeted techs (should equal 100%)

36. Was the number of staff at your facility an increase, decrease, or about the same amount as the year previous?
   
   [ ] increase
   
   [ ] decrease
   
   [ ] about the same

37. Was the number of PRN (registry) staff at your facility an increase, decrease, or about the same amount as the year previous?
   
   [ ] increase
   
   [ ] decrease
   
   [ ] about the same

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About mobile services and transportation

39. In which of the following areas does your facility use a mobile service, and for each used, does your facility supply or rent services or does it use contracted services from the mobile service? (please select one option for each area)

(a) mobile PET/CT
(b) mobile CT
(c) mobile MRI
(d) mobile mammography
(e) mobile stereotactic breast biopsy
(f) other: (please specify)

39. in which of the following areas does your facility provide transportation? (please select all that apply)

- general radiology
- CT
- PET
- ultrasound and/or vascular imaging
- nuclear medicine
- MRI
- radiation therapy
- mammography
- interventional radiology
- interventional cardiology
- none of these... if none, please check here to skip to question 42

40. What percentage of the patients transported at your facility is provided by each of the following entities? (please select one option for each area)
- 1% central transport (not DI employees)
- 1% technology transport
- 1% DI transport
- TOTAL: X% (must equal 100%)

41. What best describes the type of transporting used in each of the following areas of your facility? (please select all that apply in each area)
(a) inpatient
- central transport (not DI employees)
- technology transport
- DI transporters

(b) emergency department
- central transport (not DI employees)
- technology transport
- DI transporters
- emergency department personnel

About RIS/PACS/Electronic Imaging

43. Does your facility have a radiology information system (RIS)?
- yes
- no
- if no, please click here to skip to question 49

44. What functions are being used on your facility's RIS? (please select all that apply)
- registration
- scheduling
- time tracking
- transportation scheduling
- mammography quality assurance
- billing
- other: (please specify)

45. Does your facility use a picture archiving and communication system (PACS)?
- yes
- no
- if no, please click here to skip to question 51

46. If yes, for how long has your facility used PACS?
- less than 1 year
- 1 to 3 years
- 4 to 6 years
- 7 to 9 years
- 10 years or more

47. Did your facility use a consultant as part of the PACS implementation process?
- yes
- no
- if no, please click here to skip to question 49

48. If yes, how useful did you find the PACS consultant? (please select one option)
- very useful
- useful
- neutral
- not useful

49. What percentage of your PACS administrator's time is spent in each of the following areas? (please select one percentage in each category below, if more than one, only check one that best applies)
- administrative duties
- PACS operations
- technology duties
- other duties not related to PACS
- TOTAL (must equal 100%)

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50. Is your PACS administrator responsible for RIS as well?
   ○ yes
   ○ no

51. How many assistants/applications technicians support your facility’s PACS administrator?
   (please enter a number below 0, none, enter “0”)
   * assistants/applications technicians supporting PACS administrator

52. In what departments do these assistants/applications technicians work? (please select all that apply)

   ○ radiology/imaging
   ○ IR
   ○ other (please specify):
   ○ not applicable

53. Has your facility reassigned clerical staff due to PACS implementation?
   ○ yes
   ○ no

54. Which of the following activities do technologists in your facility perform as part of their routine responsibilities? (please select all that apply)

   ○ taping out films
   ○ printing films
   ○ digitizing films
   ○ digitizing previous exams
   ○ other (please specify):
   ○ none of these

55. What percentage of referring physicians require hard copy images?
   (please fill in a number below, if none, enter “0”)
   % of referring physicians requiring hard copy images

56. Which of the following does your facility do? (please select all that apply)

   ○ print films
   ○ burn CDs
   ○ receive your data storage
   ○ use an offline storage vault
   ○ none of these

57. What percentage of your facility’s plain film images are done on each of the following formats? (please note a percentage in each category below. If none, enter “0”)

   □ % combined radiography (CR)
   □ % digitized radiography (DR)
   □ % film screen
   □ 100% (should equal 100%)

58. In which of the following modalities does your facility utilize worklist(s)?

   □ CT
   □ MR
   □ PET
   □ CR
   □ DR
   □ fluoroscopy
   □ mammography
   □ other (please specify):

59. How many computer radiography (CR) units does your facility have?
   (please enter a number below, if none, enter “0”)
   # CR units

60. How many digital radiography (DR) units does your facility have?
   (please enter a number below, if none, enter “0”)
   # DR units

61. Does your facility have voice recognition (VR) technology?
   ○ yes
   ○ no

Thank you!

As a result of input from imaging leaders like you, AHRA can provide information that will help us as a profession better serve patients. Your time and dedication are appreciated.

If you wish to receive a reprint of the report based on the data aggregated for this study, please fill in your email address below. Your email address and survey answers will not be used for any other purpose or disclosed to others.

Your email address:

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