

Introduction to the RAD-AID Radiology-Readiness™ Survey

Welcome to the Radiology - Readiness™ Survey. This survey was developed by RAD - AID™ International, a nonprofit nongovernmental organization committed to improving access and quality of radiology services in resource - limited parts of the world. The contents of the Radiology - Readiness™ Survey were modified through a collaboration with the World Health Organization (WHO).

This Radiology Readiness™ Survey is designed to help RAD - AID™:

1. Understand the healthcare benefit and impact your facility is delivering to the local community
2. Identify the potential wider benefit that your institution could provide with radiology services, and how augmenting or introducing medical imaging may help achieve your patient care goals
3. Understand the infrastructural, epidemiological, educational, administrative, logistical, financial and clinical features of your institution in order to optimize radiology service delivery to your patients

All information in the survey will be considered **privileged and confidential**.
The following topics are covered in the survey:

1. Community involvement and patient satisfaction
2. Disease epidemiology
3. Non-radiology clinical resources (including lab testing and referrals)
4. Training and continuing medical education
5. Engineering, communications, and information technology infrastructures
6. Mechanisms for ensuring and evaluating medical image quality and patient safety
7. Medical Imaging device inventory, use, maintenance and repair
8. Facility finances and economic needs/resources of your patient population

General and Background Information

1. Please enter facility name and location.

Facility Name:

Address 1:

Address 2:

City/Town:

State/Province:

Postal code:

Country:

2. Please provide the names of any **other health organizations** (national or international) that serve your community.

3. Who will be RAD-AID™'s **primary contact person** at your facility?

Name:

Title:

Address 1:

Address 2:

City/Town:

State/Province:

Postal code:

Country:

Email Address:

Phone Number:

4. Facility ownership and affiliations. **Select all that apply.**

- Public/government
- Privately owned
- Corporate
- Non - profit
- University affiliated
- Religious entity or religious charity
- Other

If Other, please specify

5. How would you classify your facility?

Please select the single best classification.

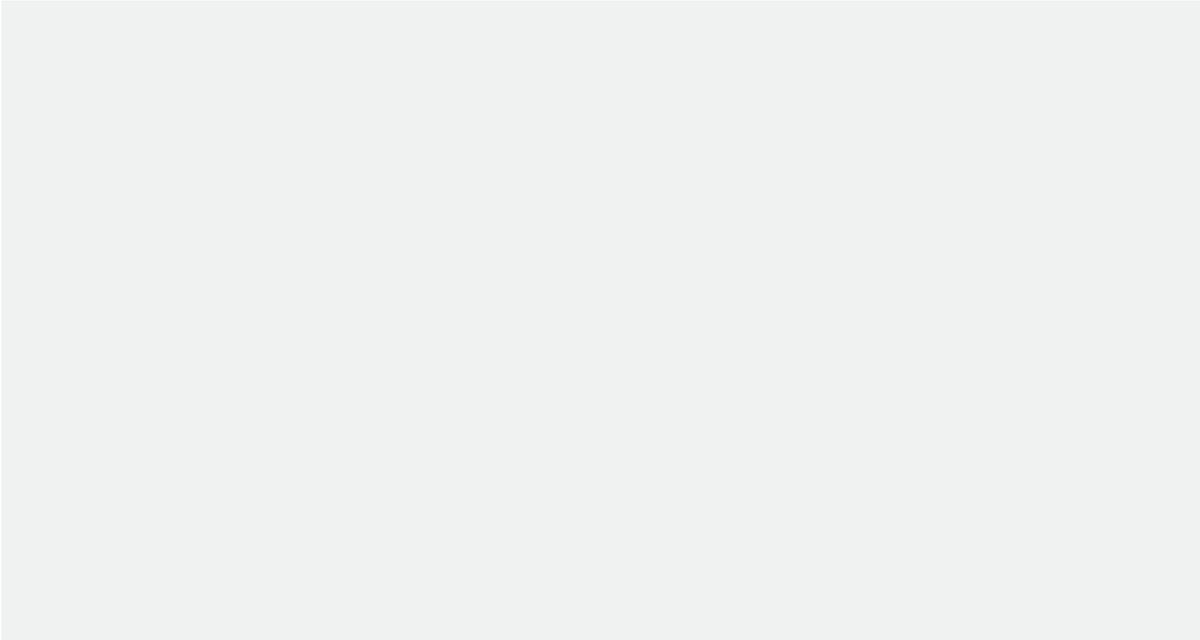
- Tertiary referral center
- Community or district hospital
- Community health center or ambulatory clinic
- Free - standing imaging center
- Small health post or village clinic
- Other

If Other, please specify

6. What is the approximate size of the population served by your facility?

7. Please list the **top three challenges faced by your facility** in order of importance. Please explain the nature of each challenge and why it is particularly problematic for your facility.

8. Additional comments?

A large, empty light gray rectangular box intended for additional comments. It occupies the majority of the page below the question text.

5. On average, how long must a **patient wait** before getting the following services performed on an **outpatient/ambulatory** basis?

	Not available	Within 24 hours	2 - 3 days	Within 1 week	Within 1 month	More than 1 month
See a physician	<input type="radio"/>					
CT	<input type="radio"/>					
Plain Film Radiography	<input type="radio"/>					
Ultrasound	<input type="radio"/>					
MRI	<input type="radio"/>					
Mammography	<input type="radio"/>					
Nuclear Medicine	<input type="radio"/>					
Interventional Radiology	<input type="radio"/>					
GI Fluoroscopy	<input type="radio"/>					

6. How long do patients typically wait to see a physician for **emergent care** ?

- Less than 30 minutes
- 30 minutes to 1 hour
- 1 hour to 2 hours
- 2 hours to 6 hours
- 6 hours to 10 hours
- More than 10 hours

7. Do you have methods and procedures in place to assess **patient satisfaction** ?

- Yes
- No

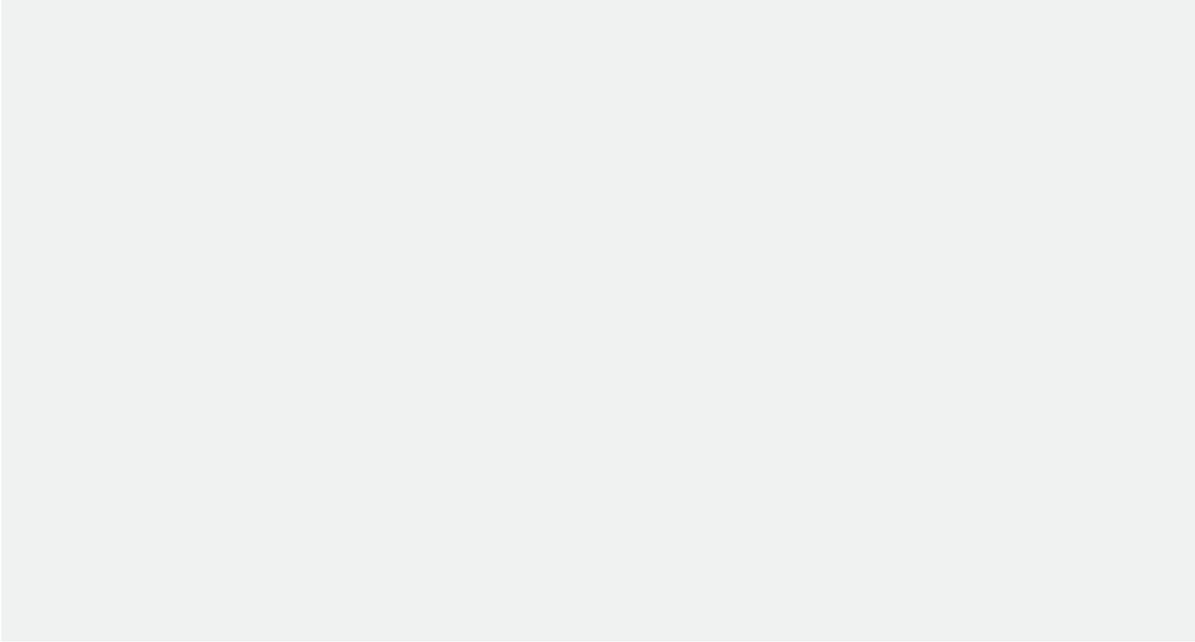
A. What methods do you use to assess **patient satisfaction** ?

Please select all that apply.

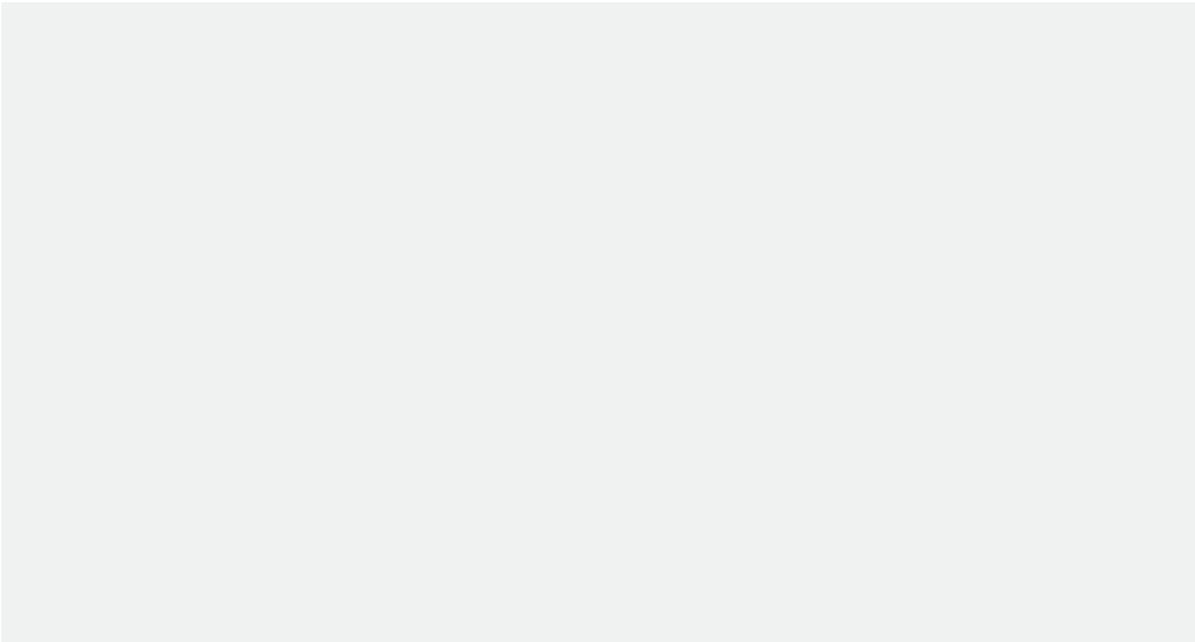
- Paper survey or questionnaire filled by patient
- Computer or web - based survey or questionnaire filled by patient
- Phone call to patient
- Email to and from patient
- In - person discussion with patient
- Other

If Other, please specify

8. What are **your goals** for improving patient service?



9. Additional comments?



Disease Epidemiology

1. Facility Name:

2. How frequently do you treat patients with the following **infectious diseases**?

	Never	Infrequently	Sometimes	Frequently
Diarrheal Illness	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
HIV/AIDS	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Lower respiratory infections	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Tuberculosis	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Viral Hepatitis B or C	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

3. How frequently do you treat patients with the following **neglected tropical diseases?**

	Never	Infrequently	Sometimes	Frequently
Buruli Ulcer	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Chagas disease (American trypanosomiasis)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Cysticercosis	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Dengue/Severe dengue	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Dracunculiasis (guinea - worm disease)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Echinococcosis	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Fascioliasis	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Human African trypanosomiasis	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Leishmaniasis	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Leprosy	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Lymphatic filariasis	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Onchocerciasis	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Rabies	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Schistosomiasis	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Soil transmitted helminthiasis (Ascaris lumbricoides, Trichuris trichiura and the hookworms)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Trachoma	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Yaws	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Podoconiosis	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Strongyloidiasis	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

4. How frequently do you treat patients with the following **PRIMARY** cancers?

	Never	Infrequently	Sometimes	Frequently
Bladder cancer	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Breast cancer	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Cervical and uterine cancer	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Colon and rectum cancers	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Esophageal cancer	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Leukemia	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Liver cancer	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Lung, bronchus, trachea cancers	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Lymphomas and multiple myeloma	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Melanoma and other skin cancers	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Mouth and oropharynx cancers	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Ovary cancer	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Pancreas cancer	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Prostate cancer	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Stomach cancer	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

5. How frequently do you treat patients with the following **chronic, noncommunicable illnesses?**

	Never	Infrequently	Sometimes	Frequently
Alcohol use disorders	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Alzheimer and other dementia	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Cerebrovascular disease	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
COPD/Emphysema	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Diabetes mellitus	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Ischemic or hypertensive heart disease	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Unipolar depressive disorders	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

6. How frequently do you treat patients with the following **maternal/fetal and traumatic medical conditions?**

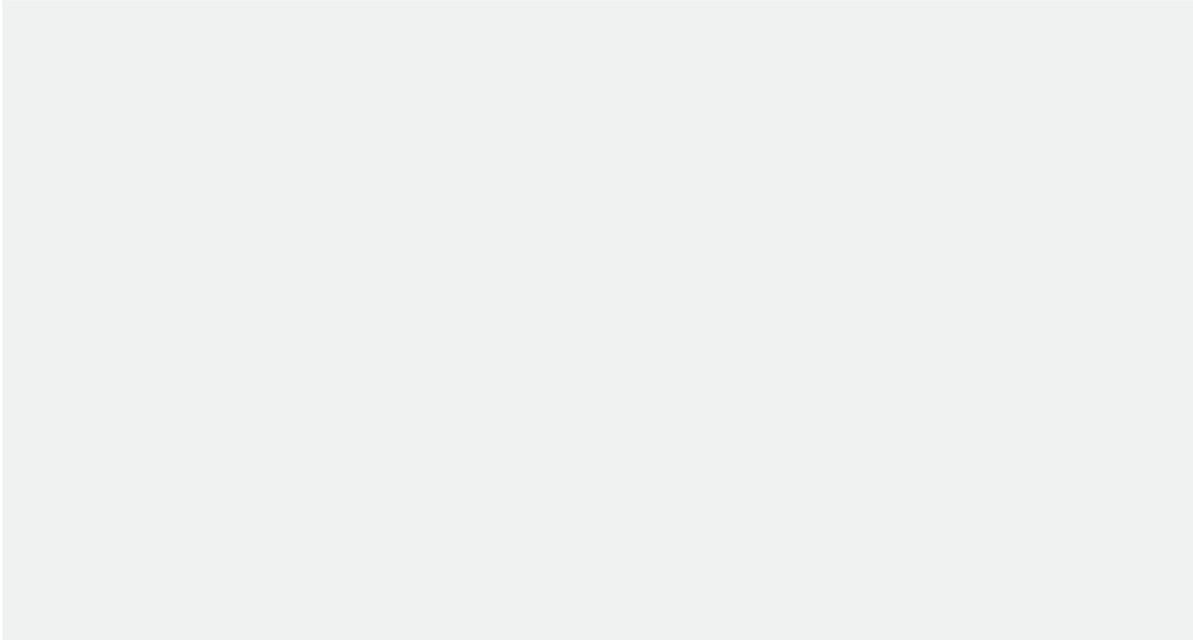
	Never	Infrequently	Sometimes	Frequently
Pregnancy	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Peripartum hemorrhage	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Neonatal infections	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Birth asphyxia and birth trauma	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Prematurity and low birth weight	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Trauma and Musculoskeletal Injury	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Road traffic accidents	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

7. Which of the following procedures are available at your facility?

Please select all that apply.

- Cesarean section delivery of pregnancy
- Image - guided biopsy
- Surgical biopsy
- Percutaneous fluid/abscess drainage

8. Additional comments?



Patient Demographics, Capacity, and Referral Patterns

1. **Facility Name:**

2. What percentage of your patients belong to each of the following **demographic categories**?

	None	Less than 10%	10%-33%	34%-66%	67% - 99%	All
Patients under 18 years of age	<input type="radio"/>					
Patients over 50 years of age	<input type="radio"/>					
Female patients	<input type="radio"/>					

3. How many **inpatient beds** are in your facility?

4. What is your average **inpatient bed occupancy rate** at any given time?

- N/A
- <10%
- 10 - 33%
- 34% - 66%
- 67% - 90%
- >90%

5. On average, how many **outpatients (ambulatory patients)** are seen in your facility each day?

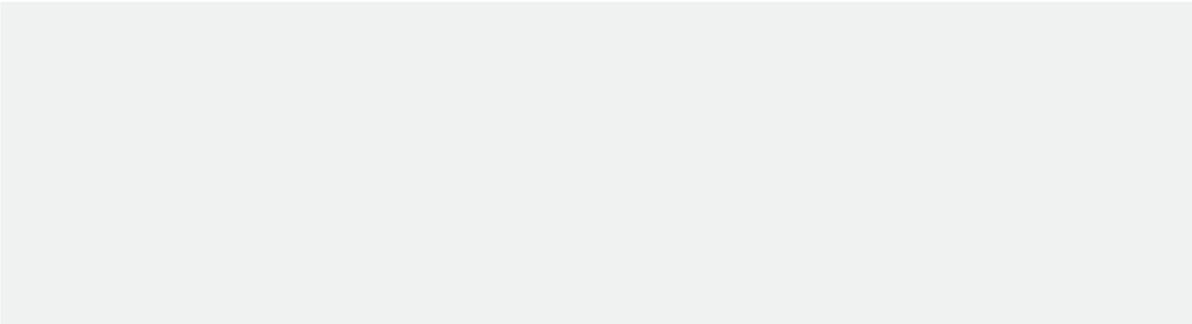
6. How often do your **physicians** practice medicine outside their area of residency or fellowship training (for example, internists performing surgeries)?

- Infrequently
- Sometimes
- Frequently

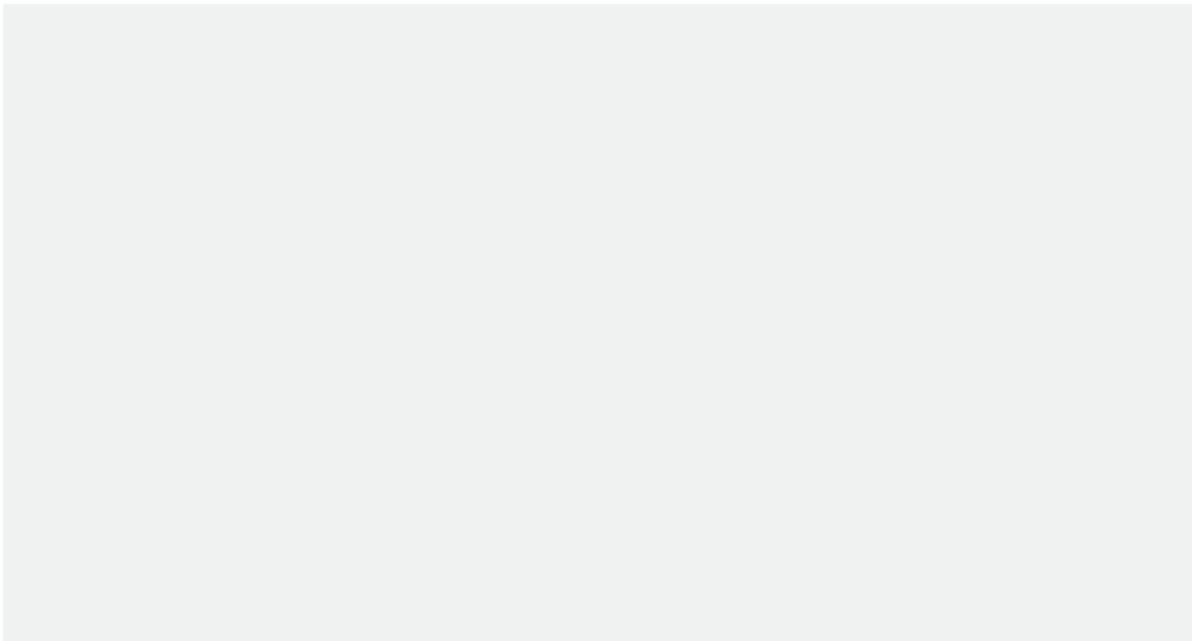
7. Does your facility **refer patients to other facilities** ?

- Yes
- No

If Yes, please list the hospitals and clinics where you refer your patients.
Please also note the distance from your facility to these places.



8. Additional comments?



Clinical Tests

1. Facility Name:

2. Which of the following **clinical microbiology tests** are available at your facility? **Please select all that apply.**

- Fecal culture
- Urine culture and analysis
- Mycobacterial culture
- Acid Fast Bacillus (AFB) stain
- Tuberculosis PCR
- Bacterial culture
- Bacterial antibiotic sensitivity
- HIV ELISA
- HIV Western Blot
- HIV PCR

3. Which of the following **clinical chemistry tests** are available at your facility? **Please select all that apply.**

- Electrolytes (Na,K,HCO₃,Cl,Ca,Mg,Fe,PO₄)
- Kidney Function Tests (BUN,Cr)
- Glucose
- Albumin and Total Protein
- Liver Function Tests (AST,ALT,GGT,Alk Phos,Bili)
- Blood gases (O₂,CO₂)

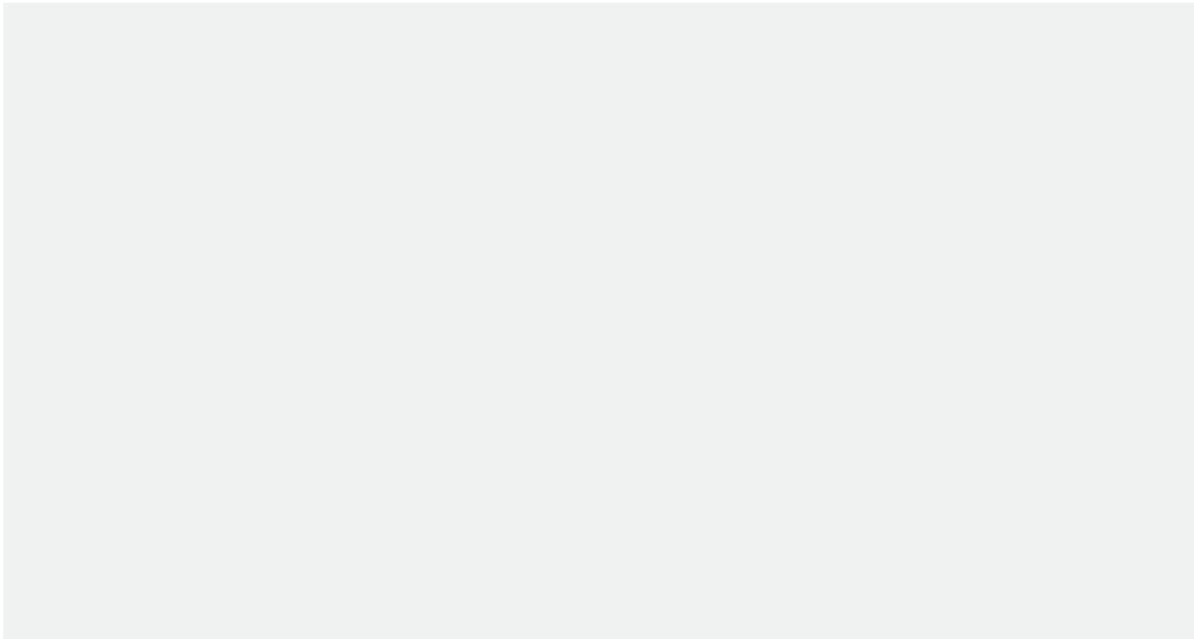
4. Which of the following **clinical hematology tests** are available at your facility? **Please select all that apply.**

- Hematocrit/Hemoglobin
- White blood cell count
- Platelets
- White cell differential
- Blood smear
- INR/PT
- PTT

5. Which of the following **clinical pathology resources** are available at your facility? **Please select all that apply.**

- Surgical pathology (microscopic)
- Cytopathology
- Autopsy pathology
- Colposcopy
- Pap smear

6. Additional comments?



Pharmaceutical Agents and other Clinical Consumables

1. Facility Name:

2. Which of the following **general pharmaceuticals and other agents** are available at your facility? **Please select all that apply.**

- | | |
|--|---|
| <input type="checkbox"/> Intravenous Fluids | <input type="checkbox"/> Disinfectants and antiseptics (e.g. alcohol, iodine, etc.) |
| <input type="checkbox"/> Oxygen | <input type="checkbox"/> Oral rehydration |
| <input type="checkbox"/> General anesthetics | <input type="checkbox"/> Antacids and other antiulcer medicines |
| <input type="checkbox"/> Local anesthetics | <input type="checkbox"/> Thyroid hormones and antithyroid medicines |
| <input type="checkbox"/> Sedation for short - term procedures (e.g. midazolam, propofol, fentanyl, etc.) | |

3. Which of the following **antimicrobials** are available at your facility? **Please select all that apply.**

- | | |
|--|---|
| <input type="checkbox"/> Anthelmintics (e.g. antischistosomes) | <input type="checkbox"/> Systemic antifungal medicines (e.g. Fluconazole) |
| <input type="checkbox"/> Antibacterials (e.g. penicillin) | <input type="checkbox"/> Antiretrovirals (HIV) |
| <input type="checkbox"/> Antituberculosis medicines (e.g. Isoniazid) | <input type="checkbox"/> Antimalarial medicines (e.g. Mefloquin) |

4. Which of the following **cardiovascular and pulmonary medications** are available at your facility? **Please select all that apply.**

- | | |
|---|---|
| <input type="checkbox"/> Antianginal medicines (e.g. nitroglycerin) | <input type="checkbox"/> Lipid - lowering agents (e.g. statins) |
| <input type="checkbox"/> Antiarrhythmic medicines (e.g. amiodarone) | <input type="checkbox"/> Diuretics |
| <input type="checkbox"/> Antihypertensive medicines | <input type="checkbox"/> Antiasthmatics and medicines for chronic obstructive pulmonary disease |

5. Which of the following **anti - inflammatory agents** are available at your facility? **Please select all that apply .**

- NSAIDs
- Corticosteroids

6. Which of the following **vaccines** are available at your facility?

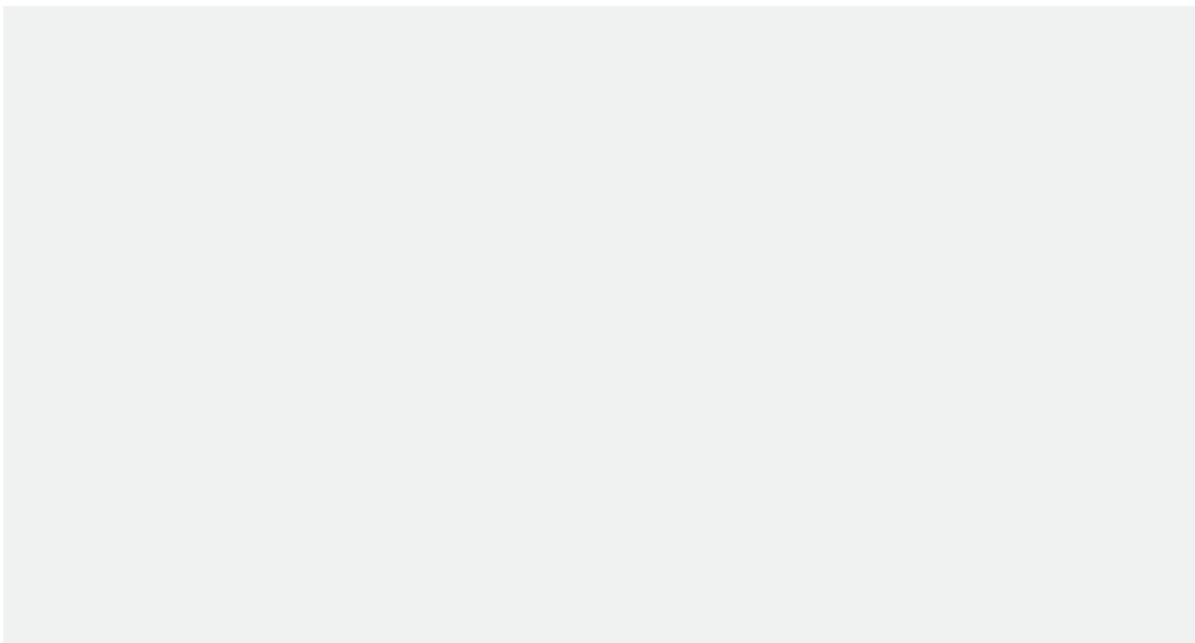
Please select all that apply.

- | | | |
|---|--|--|
| <input type="checkbox"/> Hepatitis B vaccine | <input type="checkbox"/> Live Polio vaccine | <input type="checkbox"/> Human Papilloma Virus vaccine |
| <input type="checkbox"/> Hepatitis A vaccine | <input type="checkbox"/> Influenza vaccine | <input type="checkbox"/> Rabies vaccine |
| <input type="checkbox"/> Diphtheria, Tetanus, Pertussis vaccine | <input type="checkbox"/> Measles, Mumps, Rubella vaccine | <input type="checkbox"/> Yellow Fever vaccine |
| <input type="checkbox"/> Haemophilus influenza type B vaccine | <input type="checkbox"/> Varicella vaccine | <input type="checkbox"/> Typhoid vaccine |
| <input type="checkbox"/> Pneumococcal vaccine | <input type="checkbox"/> Meningococcal vaccine | <input type="checkbox"/> Dengue vaccine |
| <input type="checkbox"/> Inactivated Polio vaccine | <input type="checkbox"/> Rotavirus vaccine | <input type="checkbox"/> Japanese Encephalitis vaccine |

7. What method(s) do you use to **sterilize and disinfect** reusable surgical equipment? **Please select all that apply.**

- Steam and high pressure (e.g. autoclave)
- Dry heat (e.g. oven)
- Chemical gas sterilization (e.g. ethylene oxide, ozone)
- Chlorine bleach
- Aldehydes (e.g. formaldehyde, Ortho - phthalaldehyde, glutaraldehyde)
- Hydrogen peroxide
- Acid (e.g. peracetic acid)
- Ionizing (X-ray) radiation
- Ultraviolet (UV) radiation

8. Additional comments?



Human Resources

1. Facility Name:

2. Please indicate the number of **non - radiology physicians** you have in your facility in each specialty shown below.

	None	1 - 4	5 - 10	>10
Anesthesiology	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Allergy & Immunology	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Breast Surgery	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Cardiology	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Cardiothorac Surgery	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Dermatology	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Emergency Medicine	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Endocrinology	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Gastroenterology	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
General Internal Medicine	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
General Surgery	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Gynecology (non - obstetrical)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Hematology	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Infectious Diseases	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Intensive Care/ICU	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Mastology	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Maxillofacial surgery	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Neonatology/NICU	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Nephrology	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Neurology	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Neurosurgery	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Obstetrics	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Oncology, Medical	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Oncology, Surgical	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Ophthalmology	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Orthopedic Surgery	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Otorhinolaryngology (ENT)	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Pathology	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Pediatrics	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Physical Medicine & Rehabilitation	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Plastic Surgery	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Podiatric Medicine	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Psychiatry	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Pulmonology	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Radiation therapy	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Rheumatology	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Urology	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Vascular Surgery	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

3. Please indicate the number of **radiology personnel** you have in your facility in each category shown below

	None	1 - 4	5 - 10	>10
Radiologists (all)	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Specialty/Fellowship trained radiologists (please list in comments section)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
X - ray Technicians/Technologists/Radiographers	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Sonographers	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Medical Physicists	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Please list radiology specialties here (if any)

4. Are radiologists in your facility allowed to work at other non-affiliated facilities (for example, both a public and a private hospital)?

- Yes
- No

5. Please indicate the number of **non - physician staff** you have in your facility in each category shown below.

	None	1 - 4	5 - 10	>10
Nurses	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Midwives	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Health Extension Worker, Medical Assistant, or other ancillary clinical personnel	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Pharmacists/pharmacy technicians	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Information technology personnel, Computer technicians	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Non - radiology Lab Technicians	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Administrators, bookkeepers, accountants, and other managerial or business staff	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

6. What types of personnel work at your facility? **Select all that apply.**

- Full - time or part - time employees
- Volunteers
- Resident or fellowship physicians who are in training (just out of medical school)
- Medical students

7. Is your facility currently **under - staffed** in any of the above positions? If so, select "Yes" and please describe below in "Comments".

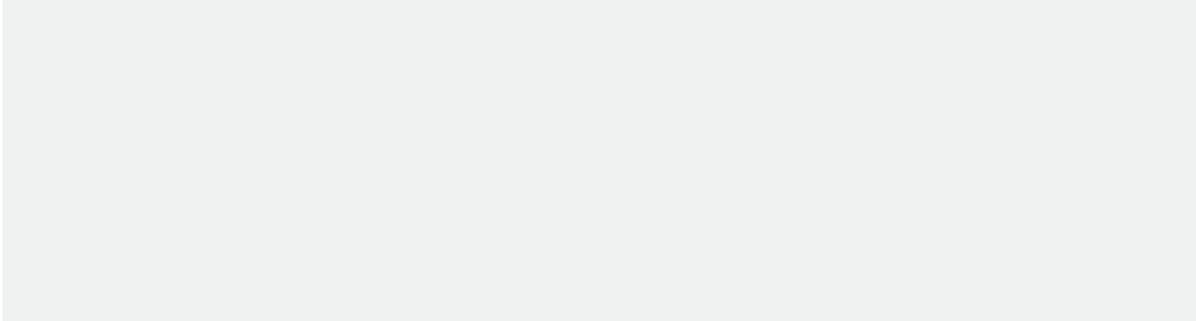
- Yes
- No

Comments

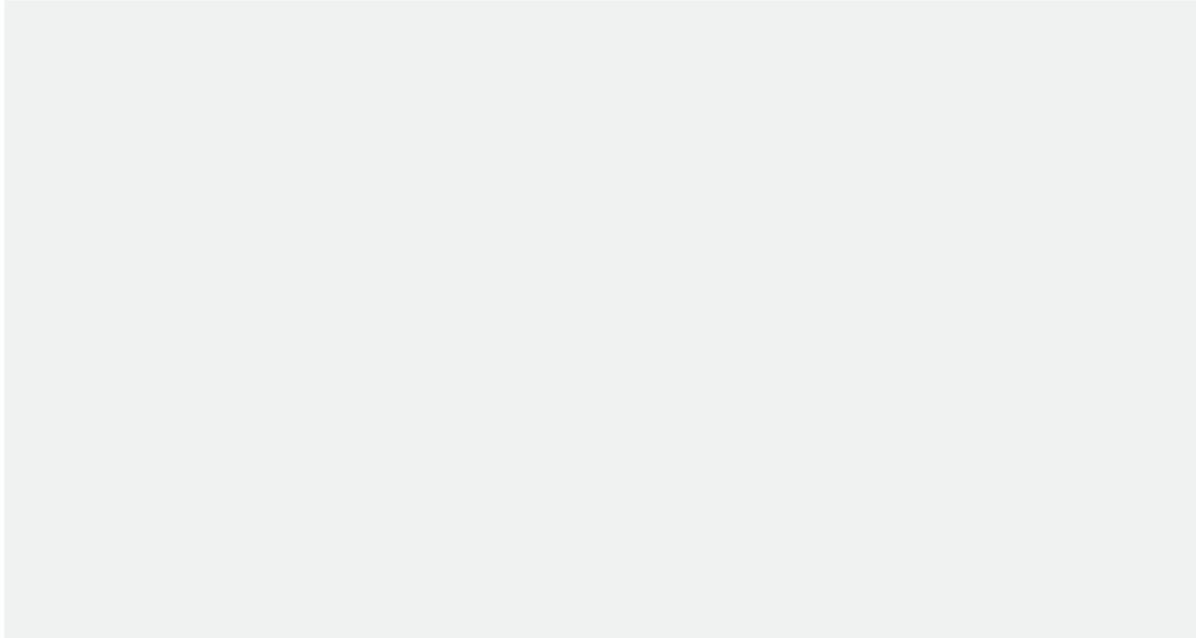
8. Does your facility have **high employee turnover** in any of the above positions? If so, select "Yes" and please describe below in "Comments".

- Yes
- No

Comments



9. Additional comments?



Training and Continuing Education

1. Facility Name:

2. Please indicate the **highest level of training required** for each of the following professions.

	I don't know	High School/ Vocational Training	Associate Degree (usually 2 years after high school)	College/ University
Radiologist	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
X - ray Technologist/Technician/ Radiographer	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Sonographer	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Nurse	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Radiation safety officer	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Medical Physicist	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

3. Which of the following careers require career - long participation in **continuing medical education?** Please select all that apply.

- Radiologist
- Xray Technologist/Technician/Radiographer
- Sonographer
- Nurse
- Radiation safety officer
- Medical Physicist

4. How accessible are the following forms of **continuing medical education** to **Radiologists** at your facility? You may elaborate on the specific reasons for your selections below under "Comments". **Please leave blank if you do not have any radiologists at your facility.**

	Rarely or never accessible	Accessible but in limited supply	Usually accessible	Always or nearly always accessible
Training (in person)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Training (online)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Paper Journals	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Online Journals	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Local conferences/meetings	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
National conferences/meetings	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
International conferences/meetings	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Comments

5. How accessible are the following forms of **continuing medical education** to **Xray Technologists/Technicians/Radiographers** at your facility? You may elaborate on the specific reasons for your selections below under "Comments". **Please leave blank if you do not have any technologists/technicians at your facility.**

	Rarely or never accessible	Accessible but in limited supply	Usually accessible	Always or nearly always accessible
Training (in person)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Training (online)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Paper Journals	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Online Journals	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Local conferences/meetings	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
National conferences/meetings	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
International conferences/meetings	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Comments

6. How accessible are the following forms of **continuing medical education** to **Sonographers** at your facility? You may elaborate on the specific reasons for your selections below under "Comments". **Please leave blank if you do not have any technologists/technicians at your facility.**

	Rarely or never accessible	Accessible but in limited supply	Usually accessible	Always or nearly always accessible
Training (in person)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Training (online)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Paper Journals	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Online Journals	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Local conferences/meetings	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
National conferences/meetings	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
International conferences/meetings	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Comments

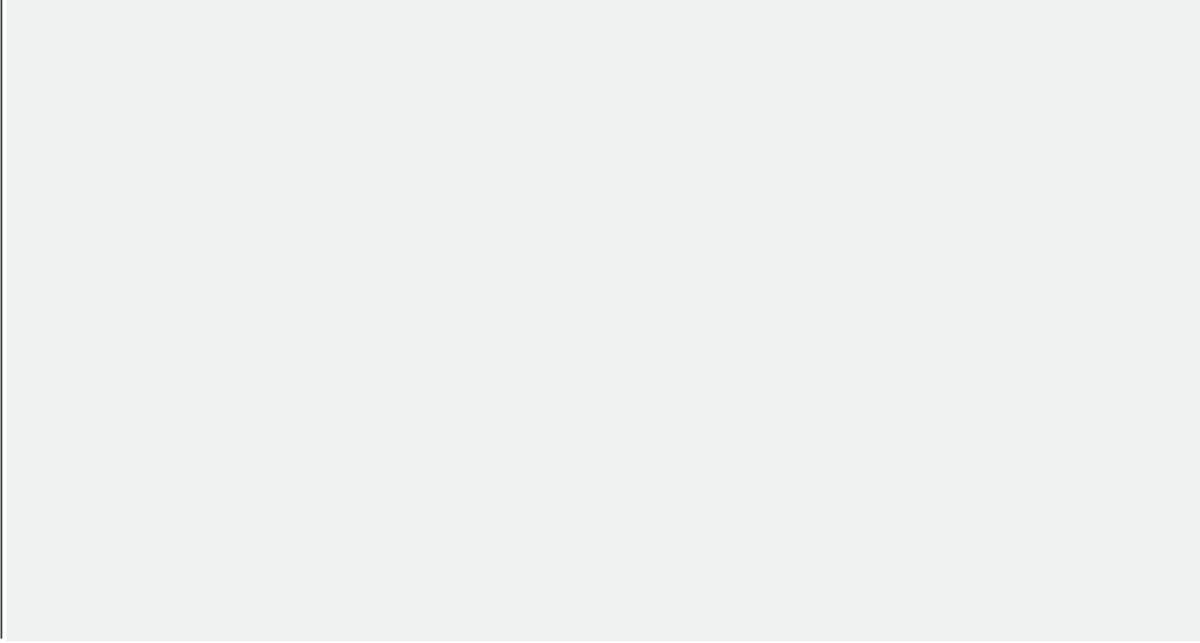
7. Do you train **radiation safety officers** at your facility?

- Yes
- No

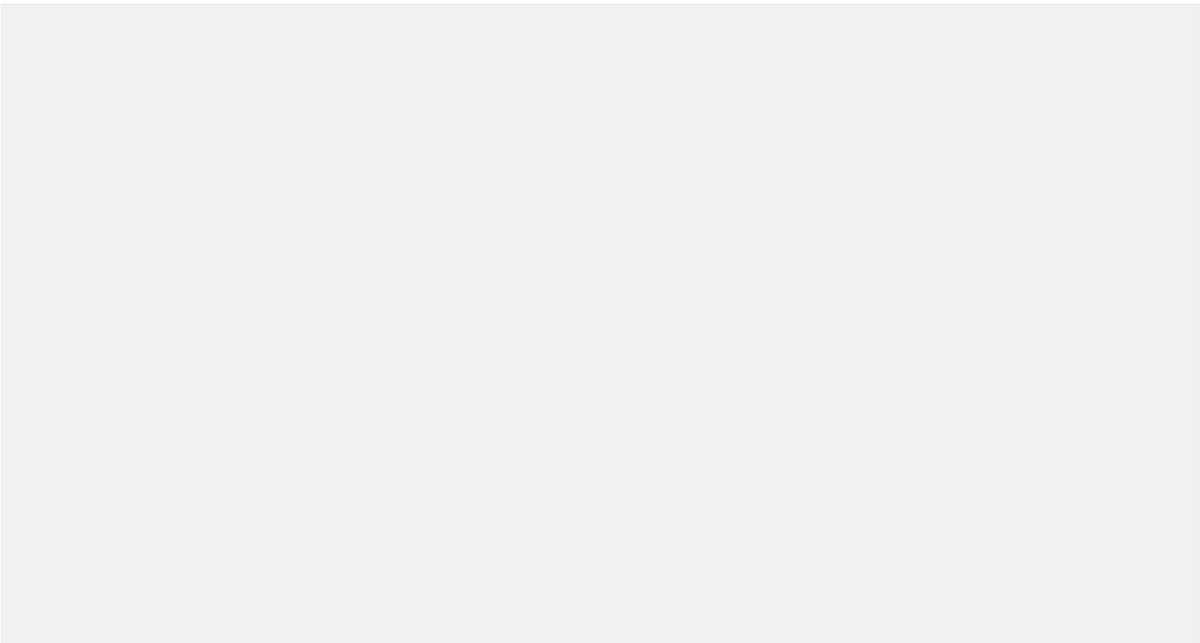
8. Do you train **medical physicists** at your facility?

- Yes
- No

9. Please describe any suggestions you have for future training and development programs you would like at your facility.



10. Additional comments?



Structural, Electrical, Climate Control, and Transportation Infrastructure

1. **Facility Name:**

2. How reliable is your primary **power source** ?

- Power is available 100% of the time
- Power is available 75 - 99% of the time
- Power is available 50 - 74% of the time
- Power is available <50% of the time

3. How stable is your primary **power source** ?

- Always Stable
- Sometimes Stable
- Frequently Unstable

4. Are your electronic devices connected to **voltage stabilizers** ?

- Yes
- No

5. Do you have a source of **back - up power** ?

- Yes
- No

A. What source(s) of **backup power** are used at your facility? Select all that apply.

- | | |
|---|--|
| <input type="checkbox"/> Battery | <input type="checkbox"/> Sunlight |
| <input type="checkbox"/> Diesel or gasoline | <input type="checkbox"/> Hydroelectric |
| <input type="checkbox"/> Natural gas | <input type="checkbox"/> Geothermal |
| <input type="checkbox"/> Propane | |

B. What is the typical working **power output of your backup** generator/
backup energy source (kW)?

6. What is your facility's **total floor area** in square meters?

7. Approximately what percentage of this space is **devoted to radiology**?

8. What material(s) are used in the **frame(s)** of your building(s)?

Select all that apply.

- Steel frame
- Wooden frame
- Stone or brick frame

9. What material(s) are used in the **walls** of your building(s)? **Select all that apply.**

- Lead shielding
- Sheet rock
- Plaster
- Wood
- Brick or stone

10. What type(s) of **sub - flooring** do you have on the lowest level of your building (s)? **Select all that apply.**

- Concrete flooring
- Dirt flooring

11. Does your facility have capacity (size and load - bearing limit) to **install heavy equipment** in excess of two metric tonnes, such as a CT or MRI unit?

- Yes
- No
- Unsure

12. What is your **indoor temperature range** ?

Please enter the yearly low and the yearly high in degrees centigrade.

Yearly Indoor Low (degrees centigrade)

Yearly Indoor High (degrees centigrade)

13. How often are the following available?

	Always or nearly always	Most of the time	Some of the time	Rarely or never
Air conditioning (cooling)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Air heating	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Dehumidification	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

14. Do you have a problem with **water condensation** on walls and/or equipment at any time during the year?

- Yes
- No

15. Do you have a problem with **dust** accumulating on equipment?

- Yes
- No

16. Please rate the **availability** of each of the following at your facility.

	Unavailable	Usually in short supply	Usually available	Always available
Potable water (not necessarily sterile)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Sterile water	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
An intact, functional plumbing system for automatically distributing water around your facility	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
An intact, functional sewage system, such as a sewer or septic tank, for disposal of human waste.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

17. Are most of the **roads** leading to your facility paved with asphalt or concrete?

- Yes
- No

18. How often are the following **modes of transportation** used by patients to reach your facility?

	Infrequently	Sometimes	Frequently
Helicopter/Medivac	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Medical Ambulance	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Car or truck (including taxis)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Boat	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Bus	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Motorcycle	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Train	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
On Foot	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Non - motorized bicycle	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Animal (e.g. mule, donkey, horse, ox)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

19. Comments?

Communications

1. **Facility Name:**

2. Which of the following best describes the availability and reliability of **land - line telephone service** at your facility? Mobile telephone services will be addressed later.

- Available continuously (all day, every day)
- Available with infrequent to occasional interruptions
- Available with frequent interruptions
- Usually to always unavailable

3. Is the **number of land - line telephone lines** adequate to meet your needs?

- Yes
- No

4. Are you able to easily (financially and logistically) make **international calls on your land - line telephones** ?

- Yes
- No

5. Which of the following best describes the availability and reliability of the following **mobile/cellular telephone** services at your facility?

	Available continuously (24/7/365)	Available with infrequent to occasional interruptions	Available with frequent interruptions	Usually to always unavailable
Voice transmission	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Text messaging	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Data transmission	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

6. Do you have **3G or 4G** mobile internet access?

- Yes
- No
- Unsure

7. Is the **number of mobile lines** among your staff adequate to meet your facility's needs?

- Yes
- No
- N/A

8. Are you able to easily (financially and logistically) make **international calls on your mobile telephones** ?

- Yes
- No

9. Which of the following best describes the availability and reliability of **Internet access** at your institution?

- Available continuously (24/7/365)
- Available with infrequent to occasional interruptions
- Available with frequent interruptions
- Usually to always unavailable

10. What are the available **type(s) of internet connectivity** at your institution. **Please select all that apply.**

- Dial - up modem
- DSL
- Cable
- T1 or other dedicated, unshared high - speed access line
- Mobile broadband access (e.g. WiMAX, 3G, 4G)
- Satellite Internet

11. What is your **maximum Internet bandwidth (Mbps)** ?

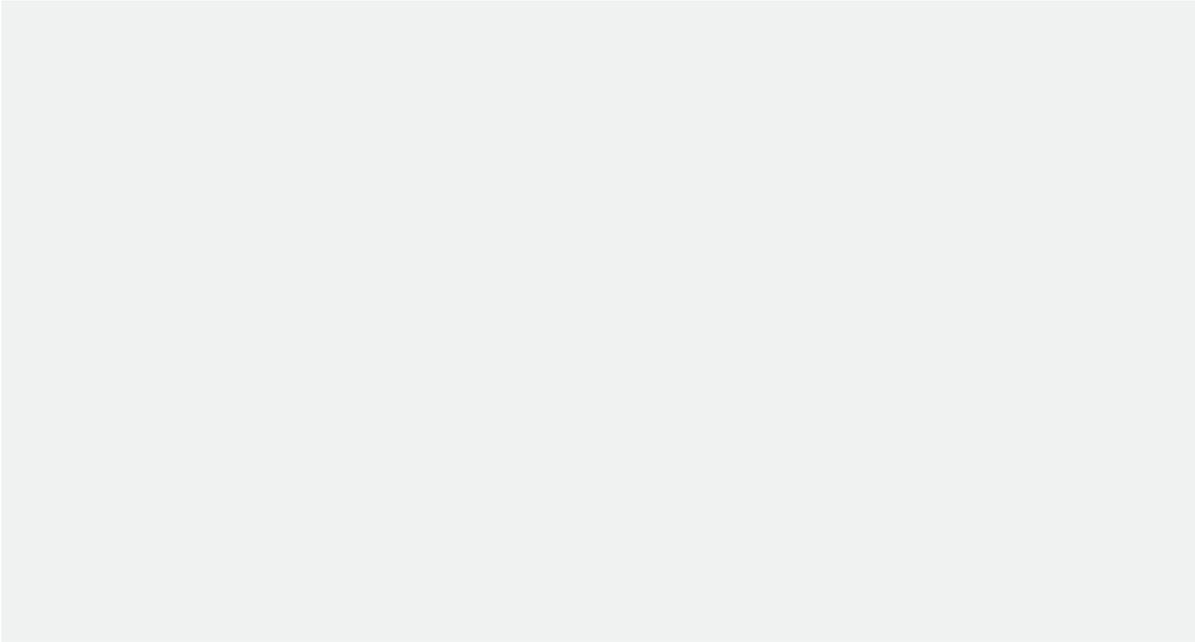
12. Is your **Internet bandwidth** adequate to meet your needs?

- Yes
- No

13. Do you have access to **web conferencing** technology?

- Yes
- No

1. Additional comments?

A large, empty light gray rectangular box intended for additional comments. It occupies the majority of the page below the question.

Information Technology

1. Facility Name:

2. Do you have **general - use computer workstations** available for staff?

- Yes
- No

3. Do you have access to **email** ?

- Yes
- No

4. Do you have access to **electronic file sharing** , such as FTP, Microsoft Sharepoint, group web storage, etc.?

- Yes
- No

5. Do you have basic **word processing** capabilities (e.g. Microsoft Word)?

- Yes
- No

6. Do you have the ability to create basic **electronic presentations** (e.g. Microsoft Powerpoint)?

- Yes
- No

7. Do you use an **electronic medical record (EMR) system** ?

- Yes
- No

If so, please describe it.

8. Do you use an electronic **Radiology Information System** that supports such things as radiology workflow management, radiology result(s) entry, and radiology report (s) output.

- Yes
- No

If so, please describe it.

9. Do you use an electronic **Health Management Information System (HMIS or HIS)** that helps you keep track of administrative issues like patient registration, appointment scheduling, admission/discharge/transfer, bed management, and billing?

- Yes
- No

If so, please describe it.

10. Are there existing government standards for **patient record privacy** in your country?

- Yes
- No

11. How many **digital radiology image viewing workstations** does your facility have?

- 0
- 1 - 5
- 6 - 10
- 11 - 20
- >20

12. Do you have a **Picture Archiving and Communication System (PACS)** to store, retrieve, and distribute medical images?

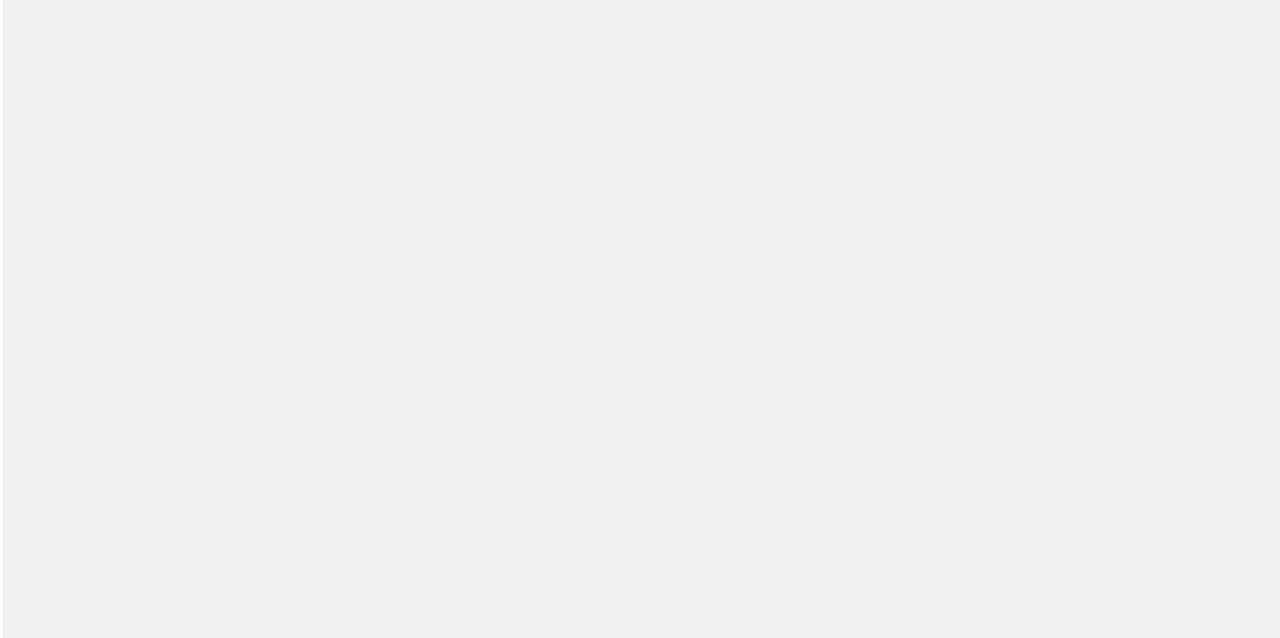
- Yes
- No

If Yes, please specify PACS vendor, software and version

13. Does your facility use **teleradiology**? Teleradiology is defined as the transmission of medical images electronically from your facility to another location for the purposes of interpretation and/or consultation.

- Yes
- No

14. Additional comments?



Medical Imaging Capabilities and Limitations

1. Facility Name:

2. Please indicate for each of the following modalities whether or not your facility uses **digital image acquisition (CR or DR)** instead of plain film.

	We do not have this modality	Already digital	We have a firm plan to change to digital	No firm plan to change to digital
Radiography	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Mammography	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
General Fluoroscopy	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
C - arm Fluoroscopy (e.g. interventional radiology)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Planar Nuclear Medicine	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Bone Densitometry	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

3. Please indicate for each of the following modalities whether or not your facility uses a **PACS (Picture Archiving and Communication System)** .

	We do not have this modality	Already using a PACS	We have a firm plan to install a PACS	No firm plan to install a PACS
Radiography	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Mammography	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
CT	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
MRI	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
General Fluoroscopy	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
C - arm Fluoroscopy (e.g. interventional radiology)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Sonography	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Planar Nuclear Medicine	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
PET	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
SPECT	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Bone Densitometry	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

4. How often is **final image interpretation** performed by a...

	Never	Infrequently	Sometimes	Frequently	Always
Radiologist?	<input type="radio"/>				
Non-radiologist physician?	<input type="radio"/>				
Non - physician?	<input type="radio"/>				

5. Do you think it is necessary to train **physician extenders** (physician assistants (PA), radiologist assistants (RA), nurse practitioners (NP), etc.) in medical image interpretation?

- Yes
- No
- Maybe

7. Please indicate the **availability** of the following **radiology consumables** .

	Unavailable or not used	Usually in short supply	Usually available	Always available
Iodinated Contrast	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Gadolinium Contrast	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Barium oral contrast	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Water soluble oral contrast	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Film	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Film Cassettes	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Radiopharmaceuticals	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Catheters and sheaths	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Needles	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Ultrasound probe sleeves	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Ultrasound jelly	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Gloves	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Gauze	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

8. Please indicate how often patients are **referred to your facility** to undergo each of the following types of medical imaging.

	Rarely to never	Sometimes	Frequently to always
Radiography	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Mammography	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
CT	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
MRI	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
General Fluoroscopy	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
C - arm Fluoroscopy (e.g. interventional radiology)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Sonography	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Planar Nuclear Medicine	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
PET	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
SPECT	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Bone Densitometry	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

9. If you received a donated piece of medical imaging equipment, would you be willing and **able to accept the full responsibility of customs clearance** ? This could include filling out necessary forms and possibly also having a representative present at the port of entry (among other requirements that vary by country).

- Yes
- No

10. Please select the maximum **weight of medical imaging equipment** you could safely transport from port of entry to final destination.

- We are unable to transport equipment and would require assistance
- Up to 100 kg
- Up to 500 kg
- Up to 1000 kg
- Over 1000 kg

11. What equipment(s) are you interested in receiving through donation?

Please select all that apply.

- | | |
|--|---|
| <input type="checkbox"/> Film radiography | <input type="checkbox"/> MRI |
| <input type="checkbox"/> Digital radiography | <input type="checkbox"/> Conventional fluoroscopy |
| <input type="checkbox"/> Film mammography | <input type="checkbox"/> C - arm fluoroscopy |
| <input type="checkbox"/> Digital mammography | <input type="checkbox"/> PET |
| <input type="checkbox"/> Ultrasound/Sonography | <input type="checkbox"/> Planar/SPECT scintillation camera device |
| <input type="checkbox"/> CT | <input type="checkbox"/> Other |

If Other, please specify

12. Do radiology personnel at your facility use **personal dosimeters** to monitor their exposure to radiation over time?

- Yes
- No

13. Do you have an adequate supply of intact **personal radiation protection equipment** (lead aprons, leaded gloves, leaded shields, etc.)?

- Yes
- No

14. Are there **radiation safety standards** established by your local or national government?

- Yes
- No

A. If Yes, please identify the governing/regulating body here.

B. Are you able to comply with these **radiation safety standards** ?

- Yes
- No

15. Is there regulation requiring **registration of radiologic and medical devices** in your country?

- Yes
- No

16. For each of the following types of imaging equipment, please indicate the number of **working (not broken)** units at your facility?

Film Radiography	<input type="text"/>
Film Developer	<input type="text"/>
Computed Radiography (CR)	<input type="text"/>
Direct Digital Radiography (dDR)	<input type="text"/>
Mammography	<input type="text"/>
Ultrasound	<input type="text"/>
CT	<input type="text"/>
MRI	<input type="text"/>
Standard Fluoroscopy Unit	<input type="text"/>
C - Arm/Angiography Fluoroscopy Unit	<input type="text"/>
PET	<input type="text"/>
SPECT Gamma	<input type="text"/>
Non - SPECT Gamma	<input type="text"/>
Bone Densitometer	<input type="text"/>

17. For each of the following types of imaging equipment, please indicate the number of **non - operational or broken** units at your facility?

Film Radiography	<input type="text"/>
Film Developer	<input type="text"/>
Computed Radiography (CR)	<input type="text"/>
Direct Digital Radiography (dDR)	<input type="text"/>
Mammography	<input type="text"/>
Ultrasound	<input type="text"/>
CT	<input type="text"/>
MRI	<input type="text"/>
Standard Fluoroscopy Unit	<input type="text"/>
C - Arm/Angiography Fluoroscopy Unit	<input type="text"/>
PET	<input type="text"/>
SPECT Gamma	<input type="text"/>
Non - SPECT Gamma	<input type="text"/>
Bone Densitometer	<input type="text"/>

18. What is the **total study volume** at your facility for each of the following modalities? Please indicate units in your answer. For example, "patients per day", "studies per month", etc.

Radiography	<input type="text"/>
Mammography	<input type="text"/>
CT	<input type="text"/>
MRI	<input type="text"/>
General Fluoroscopy	<input type="text"/>
C - arm Fluoroscopy (e.g. interventional radiology)	<input type="text"/>
Sonography	<input type="text"/>
Planar Nuclear Medicine	<input type="text"/>
PET	<input type="text"/>
SPECT	<input type="text"/>
Bone Densitometry	<input type="text"/>

19. Please indicate how many of each type of **CT scanner** you currently have at your facility.

320 slice	<input type="text"/>
256 slice	<input type="text"/>
128 slice	<input type="text"/>
64 slice	<input type="text"/>
32 slice	<input type="text"/>
16 slice	<input type="text"/>
8 slice	<input type="text"/>
4 slice	<input type="text"/>
2 slice	<input type="text"/>
1 slice	<input type="text"/>

20. Please indicate how many of each type of **MRI scanner** you currently have at your facility. If you do not have MRI, leave blank.

3 Tesla	<input type="text"/>
1.5 Tesla	<input type="text"/>
1 Tesla	<input type="text"/>
Less than 1 Tesla	<input type="text"/>

21. Additional Comments?

Medical Imaging Device Maintenance

1. **Facility Name:**

2. Who is in charge of radiology **quality control (QC)** ? A radiology QC program involves regularly testing the various components involved in creating medical images to make sure they are functioning properly.

- We do not have a radiology QC program
- Medical Physicist
- Radiation Safety Officer
- Technician
- Physician
- Nurse
- Other

(If Other, please specify)

3. What is the **affordability of radiology repair** at your institution for each of the following.

	We do not have this equipment	Unaffordable	Difficult to afford	Affordable
Film Radiography	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Film Developer	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Computed Radiography (CR)	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Direct Digital Radiography (dDR)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Mammography	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Ultrasound	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
CT	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
MRI	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Standard Fluoroscopy	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
C-Arm/ Angiography Fluoroscopy	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
PET	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
SPECT Gamma	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Non - SPECT Gamma	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Bone Densitometry	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

4. How much **time** does it usually take to repair the following pieces of equipment?

	We do not have this equipment	Less than 1 week	1 to 4 weeks	More than 4 weeks
Film Radiography	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Film Developer	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Computed Radiography (CR)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Direct Digital Radiography (dDR)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Mammography	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Ultrasound	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
CT	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
MRI	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Standard Fluoroscopy	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
C - Arm/ Angiography Fluoroscopy	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
PET	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
SPECT Gamma	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Non - SPECT Gamma	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Bone Densitometry	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

5. **Who repairs** the following pieces of medical equipment at your facility?

We do not have this equipment Usually repaired by our staff Usually repaired by manufacturer or other outside repair service We do not have access to repair services for this equipment

	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Film Radiography	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Film Developer	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Computed Radiography (CR)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Direct Digital Radiography (dDR)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Mammography	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Ultrasound	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
CT	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
MRI	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Standard Fluoroscopy	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
C - Arm/ Angiography Fluoroscopy	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
PET	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
SPECT Gamma	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Non - SPECT Gamma	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Bone Densitometry	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

6. Please indicate **approximate cost of repairs and maintenance (annually)** for each of the following. **Please indicate currency (e.g. "US Dollars", "Euros", "RMB" etc.)**

Film Radiography	<input type="text"/>
Film Developer	<input type="text"/>
Computed Radiography (CR)	<input type="text"/>
Direct Digital Radiography (dDR)	<input type="text"/>
Mammography	<input type="text"/>
Ultrasound	<input type="text"/>
CT	<input type="text"/>
MRI	<input type="text"/>
Standard Fluoroscopy	<input type="text"/>
C - Arm/Angiography Fluoroscopy	<input type="text"/>
PET	<input type="text"/>
SPECT Gamma	<input type="text"/>
Non - SPECT Gamma	<input type="text"/>
Bone Densitometry	<input type="text"/>

7. Additional Comments?

Patient Financial Issues

1. Facility Name:

In the following pages, we ask several questions regarding **the finances of your patients** . We recognize the sensitive nature of this information and only seek it to assist you in **developing a financially sustainable radiology practice** . All information collected in this financial section will be kept **strictly confidential** unless you provide us with permission to do otherwise. Our shared goal is to **provide the highest quality sustainable care to your patients** by helping you:

1. Optimize your ability to serve more patients in your community
2. Create options to make radiology more accessible to your patients
3. Design marketing tools to help educate your community about the potential benefits of radiology

1. What is the **out - of - pocket price** charged to the **patient** for the following radiology services? For this and the following questions, **Please indicate which currency you will be using to make your estimates.** For example "US Dollars", "Euros", "RMB", etc. **Please use the same currency throughout.**

- Single view radiograph
- Screening mammogram (Bilateral CC and MLO views)
- Complete abdominal ultrasound
- Chest CT without intravenous (IV) contrast
- Brain MRI without intravenous contrast
- Whole body skeletal scintigraphy (" bone scan ")
- Diagnostic mesenteric angiography (without intervention)

2. What is the **price** charged to the **patient's insurance provider** for the following radiology services?

- Single view radiograph
- Screening mammogram (Bilateral CC and MLO views)
- Complete abdominal ultrasound
- Chest CT without intravenous (IV) contrast
- Brain MRI without intravenous contrast
- Whole body skeletal scintigraphy (" bone scan ")
- Diagnostic mesenteric angiography (without intervention)

3. How much does it **cost** you to perform the following radiology services?

- Single view radiograph
- Screening mammogram (Bilateral CC and MLO views)
- Complete abdominal ultrasound
- Chest CT without intravenous (IV) contrast
- Brain MRI without intravenous contrast
- Whole body skeletal scintigraphy (" bone scan ")
- Diagnostic mesenteric angiography (without intervention)

4. How is the price of radiology service determined? **Select all that apply.**

- Regulated by the government
- Determined by the marketplace
- Set by third party non - government payers (insurance)
- Other

If Other (please specify)

3. How many **healthy, working age people (over 17)** does your average patient household contain?

- 4 or more
- 2 - 3
- 1
- 0

4. What percentage of your patients have the following as their **household's principal occupation?**

	None	Less than 10%	10% - 33%	34% - 66%	67% - 99%	All
Unemployed	<input type="radio"/>					
Farmers	<input type="radio"/>					
Low - skill laborers (e.g. janitors, street sweepers)	<input type="radio"/>					
Skilled laborers (e.g. construction, plumbing, electrician)	<input type="radio"/>					
Clerical office workers (e.g. secretary, clerks)	<input type="radio"/>					
Professionals (e.g. technicians, managers, executives, directors, supervisors, teachers, physicians, nurses, attorneys)	<input type="radio"/>					
Others	<input type="radio"/>					

If Others, please specify

1. Approximately what percentage of your patients pay some amount of their medical care costs **out - of - pocket** (i.e. using their own money with no insurance reimbursement)?

- None
- Less than 10%
- 10% - 33%
- 34% - 66%
- 67% - 99%
- All

2. On average, what **percentage** of a patient's total medical cost is paid **out - of - pocket**?

3. For those patients who pay some or all of their bills out - of - pocket, how often do you receive **timely and/or sufficient payment** ?

- Never or nearly never
- Sometimes
- Always or nearly always

4. What usually happens when a **patient who cannot afford services** visits your facility?

- They are provided services anyway
- They are referred to a different facility for services
- They are not provided services

5. What percentage of patients who come to your facility receive **pro - bono (free) medical services**?

- Very few
- About 5%
- About 10%
- About 15%
- More than 15%

6. Are patients allowed to pay their medical bills in **installments** as opposed to paying everything at one time?

- Yes
- No

7. Do you charge patients **interest** if they choose to pay their medical costs through installments?

- Yes
- No
- N/A

1. What entities underwrite **health insurance** or pay for health care in your region (not necessarily at your facility)? **Select all that apply.**

- Government (including national health care systems)
- Private, for - profit
- Private, non - profit
- Co - operative (patients grouping together)
- Other

If Other, please specify

2. What percentage of your total revenues are from **funds paid by a third party payer** (i.e. not paid by the patient)? Example third party payers include insurance companies, cooperatives, and the government.

- None
- Less than 10%
- 10% - 33%
- 34% - 66%
- 67% - 99%
- All

3. How often do you or your patients **receive timely and/or sufficient reimbursement** from third party payers like insurance?

- Always or nearly always
- Sometimes
- Uncommonly
- Never or nearly never

If difficulty is significant, please describe potential reason for difficulty

4. How many of your patients lack insurance because they are **not fully aware of available insurance options** ?

- None or nearly none
- Some
- Many

5. How many of your patients lack insurance because they **cannot afford it** ?

- None or nearly none
- Some
- Many

6. How many of your patients lack insurance because they **do not qualify for it** ?

- None or nearly none
- Some
- Many

7. Please rank the following reasons for a patient at your facility **not qualifying for insurance coverage**.

	Most common (1)	2	3	4	Least common (5)
Patient income is too high	<input type="radio"/>				
Patient has a pre - existing medical condition	<input type="radio"/>				
Patient income is too low	<input type="radio"/>				
Patient lives/ resides in the wrong area/region of the country	<input type="radio"/>				
Patient is not a citizen of your country or region	<input type="radio"/>				

8. What could your facility do (or has your facility done) to assist patients in obtaining insurance?

9. Do your patients have **national identification numbers**?

- Yes
- No

1. Does your facility use **tiered pricing** ? Tiered pricing is the practice of pricing your services differently based on patient income and ability to pay.

- Yes
- No

2. Does your facility offer special additional patient services based on the patient's ability to pay? **Select all that apply.**

- Special accommodations (e.g. single room, more food options, air conditioning)
- Special scheduling options (e.g. faster appointment scheduling)
- Providing care at the patient's home
- Other

If Other (please specify)

3. Does your facility accept **alternative forms of payment** other than cash, check, insurance, or credit? For example, bartering for goods.

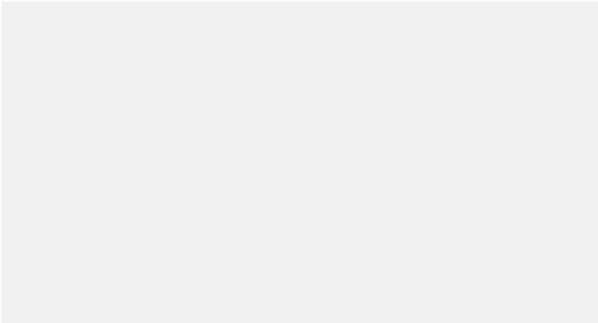
- Yes
- No

If Yes, please describe

4. Are there any **microfinance** or other finance organizations active in the community that your **patients can use to finance their own medical expenses** or help them with their businesses?

- Yes
- No

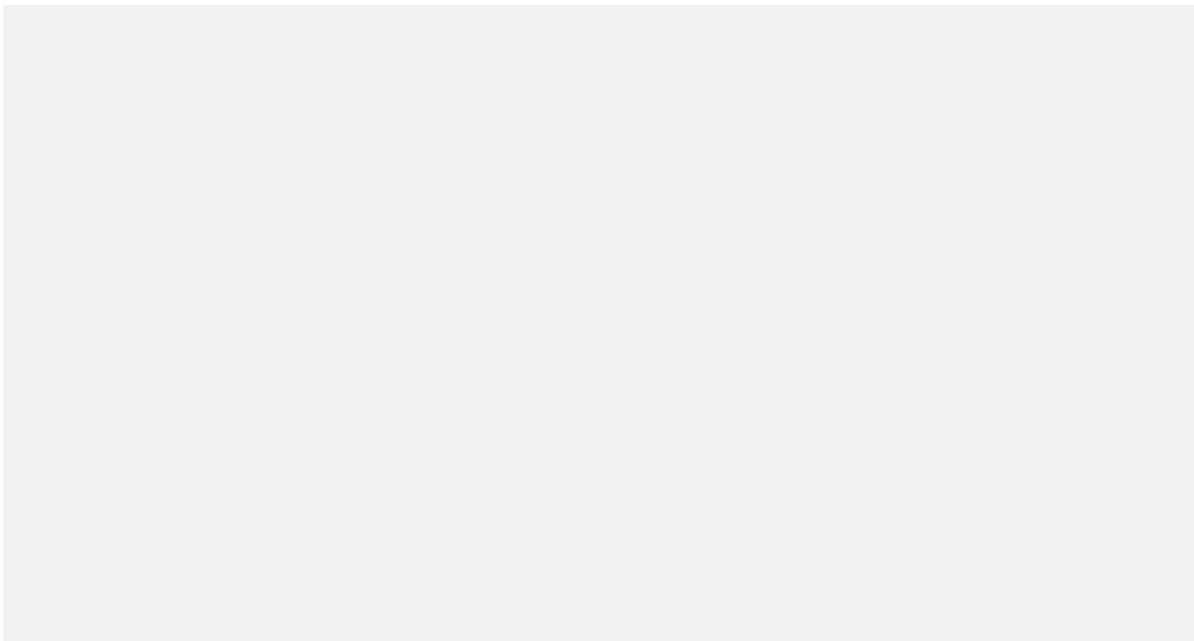
If Yes, please describe.



5. What percentage of your patients receive **non - insurance payment assistance** , such as subsidies and loans?

- None
- Some
- Many
- Most

6. Additional Comments?



Financial Infrastructure

1. Facility Name:

In the following pages, we ask several questions regarding **your facility's business plan, finances, and financial infrastructure** . We recognize the sensitive nature of this information and only seek it to assist you in **developing a financially sustainable radiology practice** . All information collected in this financial section will be kept **strictly confidential** unless you provide us with permission to do otherwise. Our shared goal is to **provide the highest quality sustainable care to your patients** . Your financial and business data will be used to:

1. Enhance your current financial management infrastructure to regional standards
2. Provide you with useful templates for financial documents
3. Create a sustainability plan for your facility's radiology practice
4. Incorporate business and finance topics of interest to you and your management team as part of a tailored "health care entrepreneurship" educational program
5. Help you develop an effective approach to applying for loans and other forms of capital financing to fund the purchase, operation, and maintenance of radiology equipment
6. Identify the most useful borrowing options for you as your institution grows

1. What is the typical length of your **billing cycle with suppliers** (i.e. **"accounts payable"**)?
 - 1 month
 - 2 months
 - 3 months
 - More than 3 months

2. What is the typical length of your **billing cycle** with patients and insurers (i.e. **"accounts receivable"**)?
 - 1 month
 - 2 months
 - 3 months
 - More than 3 months

3. Do you have **business professionals** working to help your facility?
 - Yes
 - No
 - Sometimes, but not on a regular basis

4. Do you have a **dedicated person/department** for billing, accounting and finances?
 - Yes
 - No
 - Sometimes, but not on a regular basis

5. Do you have personnel **trained to handle capital financing** from banks or other financial institutions?
 - Yes
 - No
 - Sometimes, but not on a regular basis

1. Does your facility receive **financial assistance from the government** in the form of loans, grants, or other forms of monetary support?

- Yes
- No

2. Do **other facilities** in your country receive financial assistance from the government in the form of loans, grants, or other forms of monetary support?

- Yes
- No

3. Does your facility receive **tax benefits** from the government?

- Yes
- No

4. Is your facility interested in approaching your government for more financial support to purchase, repair, or maintain medical imaging equipment?

- Yes
- No

1. What types of **financing sources** is your facility **legally able** to approach for a loan or grant to purchase, repair, or maintain medical imaging equipment? Select all legal possibilities, no matter how remote the likelihood of success.

- National, regional, or local government
- Conventional banks
- Microfinance institutions
- NGO's
- Medical imaging device vendors or manufacturers
- Private individuals

2. What types of **financing sources** does your facility **actually use or has your facility used** in the past (not just for radiology)? Please select all that apply.

- National, regional, or local government
- Conventional banks
- Microfinance institutions
- NGO's
- Medical imaging device vendors or manufacturers
- Private individuals

3. What additional types of **non - governmental financing sources** is your facility interested in approaching for financial support to purchase, repair, or maintain medical imaging equipment? Select all that apply.

- Conventional banks
- Microfinance institutions
- NGO's
- Medical imaging device vendors or manufacturers
- Private individuals

4. How would you rate the **accessibility of credit** to your facility?

- Credit is usually easy for us to get
- Credit is usually difficult for us to get

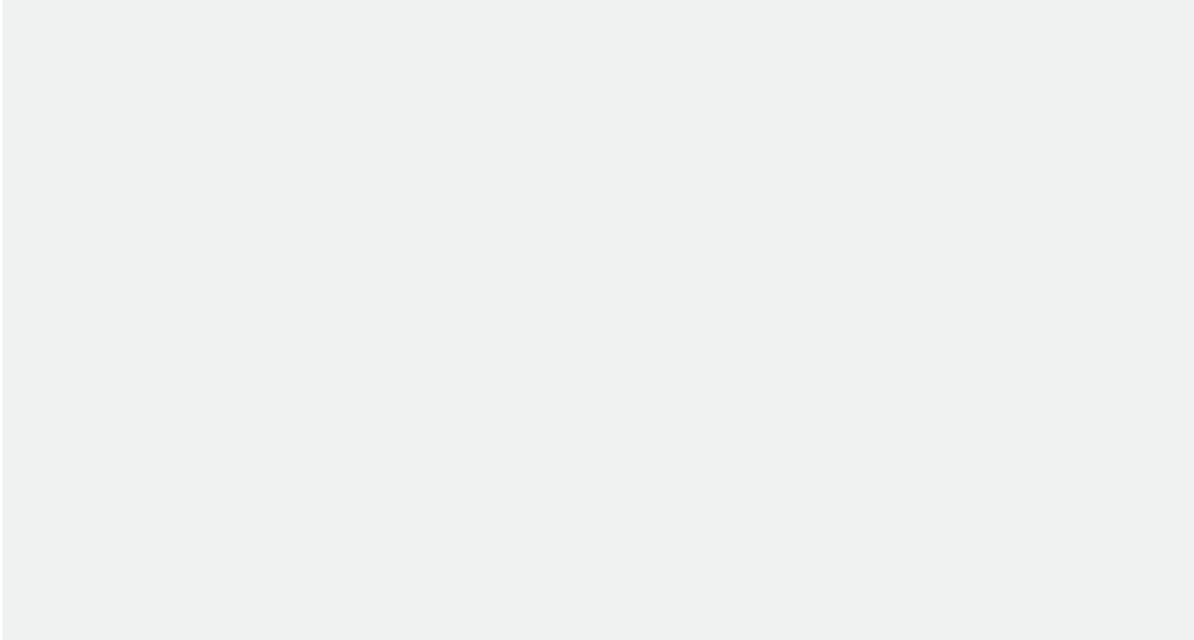
5. Does your facility currently have a **relationship with a bank or other non - governmental financing institution?**

- Yes
- No

6. Is your facility legally able to receive **donated equipment and/or services** from non - government sources?

- Yes
- No

If Yes please provide any necessary details



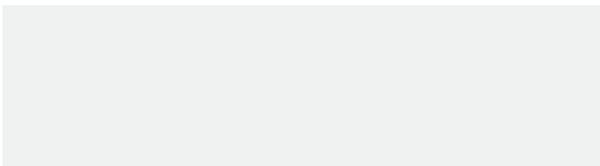
7. Has your facility received **donated equipment and/or services** from non - government sources in the past?

- Yes
- No

8. Is your facility expecting to receive any **donated equipment and/or services** this year?

- Yes
- No

If Yes, please specify



1. Are you required to periodically file **financial statements** with a **regulatory authority**?

- Yes
- No

2. Have you ever shared financial statements with an organization outside of your facility other than your own government? These would include banks, NGO's, foreign governments, etc.

- Yes
- No

3. Do you have **financial statement templates** (income statement, balance sheet, statement of cash flows, ratio analysis, etc)?

- Yes, we have some or all of these templates
- No, we do not have any of these templates, and we have not planned to develop any
- No, we do not have any of these templates, but we are currently developing some or all of them

4. Would you be willing to **share blank copies of these templates** with us so we can better understand your current accounting methods?

- Yes
- No
- N/A

5. Would you be willing to **share some or all of your financial statements** with us so that we can help you better understand your ability to expand the radiology services your facility can offer, and serve more patients?

- Yes
- We can decide after some more discussion
- No
- N/A

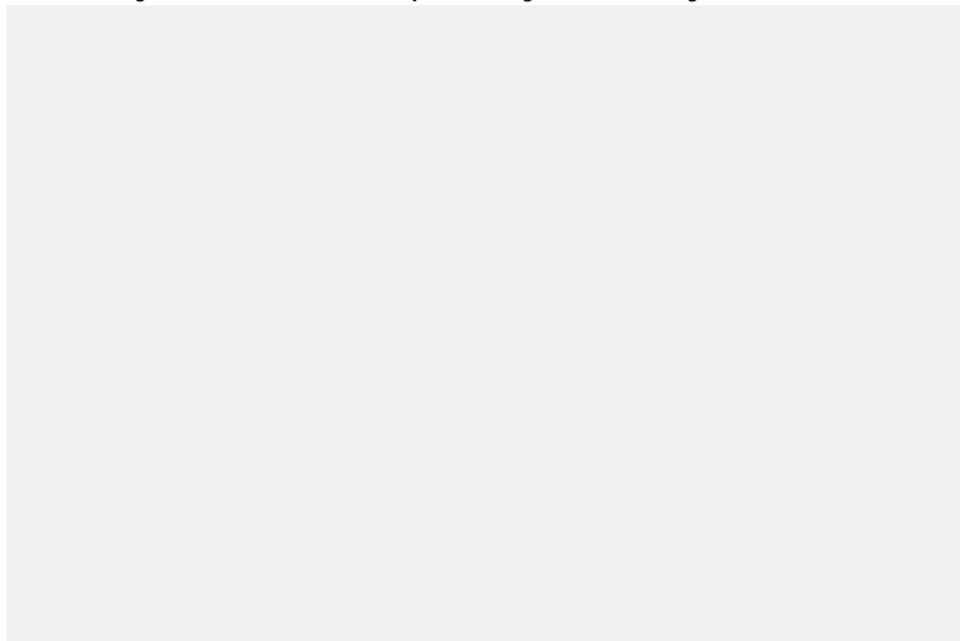
6. What **revenue and expense statistics** and ratios do you track? Select all that apply.

- Debt to income ratio
- Debt to total retained earnings
- Debt to total equity
- Gross/net margin
- Revenue and expense per patient
- Percent of expenses that are non - medical vs. medical
- Tax costs
- Insurance reimbursements
- Percentage of billed patients charged off/never paid

7. Are you willing to **share some or all of these ratios** or their components with us?

- Yes
- No
- N/A

1. What kind of financial assistance, payment plan structures, or donation structures would you find most helpful at your facility?



The below list is a brief summary of some requirements that lenders and grantors will request in considering applications for financial assistance. Many of these have been mentioned in previous questions. **Our goal is to help you develop the tools you need to optimize your financial management and lending profile. You do not need to provide these documents to RAD - AID™ or its partners.** When we meet, we will review this list with you. At that time, or in future correspondences, you may share with us whatever items you deem helpful.

1. Ability to Demonstrate Profits:

- Annual gross and net profitability of the facility
- Distribution of profits
- Retained earnings

2. Ability to Show Sound Financial Budgeting:

- Monthly and annual budgets for the radiology department
- Monthly and annual budgets for the facility as a whole which could help support a loan application for radiology equipment
- Financial statements

3. Ability to Demonstrate Historical Financial Statements (3 Years):

- Cash flows
- Balance sheets
- Income statements

4. Leverage Available to your Institution:

- Who provided the initial investment for the facility?
- Who provides for additional investment in resources and technology (government or private)?
- What was the initial capital investment?
- What is the ongoing annual capital investment?
- Annual retained earnings from operations
- All outstanding loans and obligations
- Debt to income ratio
- Debt to total retained earnings
- Debt to total equity
- Detailed breakdown of existing funding, including domestic and foreign loans, hard or soft currency, interest rate risk and amortization schedule of funding.

5. Financial Data routinely tracked and calculated:

- Gross/net margin
- Revenue and expense per patient
- Percent of expenses that are non - medical vs. medical
- Tax costs
- Insurance reimbursements
- Percentage of billed patients who never pay

6. Annual fixed operating costs:

- Labor
- Loan repayment
- Equipment depreciation

7. Annual variable costs:

- Power
- Water
- Temporary labor
- Consumables (medical supplies)

8. Management Team and Board of Directors

- Background
- Level of Involvement
- Political Affiliations

Funding of Medical Imaging Services

1. Facility Name:

In the following pages, we ask several questions regarding **your facility's current ability and methods of financing medical imaging** . We recognize the sensitive nature of this information and only seek it to assist you in **developing a financially sustainable radiology practice** . All information collected in this section will be kept **strictly confidential** unless you provide us with permission to do otherwise.

Our shared goal is to **provide the highest quality sustainable care to your patients** .

The data gathered in this section will be used to:

1. Create a sustainability plan for your institution's radiology practice
2. Help you develop an effective approach to applying for loans and other forms of capital financing to fund the purchase, operation, and maintenance of radiology equipment
3. Identify the most useful borrowing options for you as your facility grows

1. Please identify the individual (name, occupation, and title) **who makes the final decision** on whether or not to acquire medical imaging equipment. If multiple people make this decision, please identify the primary or most senior decision - maker in the group.

Name

Occupation

Title

2. Has your facility ever **purchased** medical imaging equipment in the past?

- Yes
- No

3. Has your facility ever paid **all or part** of the cost for **purchasing** medical imaging equipment with **cash funds** (i.e. funds other than a loan or some other form of capital financing)?

- Yes
- No

4. If you answered "Yes" to the previous question, what **cash sources** has your facility used to pay all or part of the cost for **purchasing** medical imaging equipment? Please select all that apply.

- Hospital/clinic revenue, endowment, or assets
- Government funds
- Donated funds
- Other

If Other, please specify

5. Has your facility ever paid **all or part** of the cost for **purchasing** medical imaging equipment with **loans or other forms of financing** ?

- Yes
- No

6. If you answered "Yes" to the previous question, what **loan/financing underwriters** has your facility used to pay all or part of the cost for purchasing medical equipment? Please select all that apply.

- Private bank or financial institution
- Government
- Medical imaging device manufacturer or retailer
- Private individual
- Other

If Other, please specify

7. Also, what **fund sources** has your facility **used to pay the principal and interest** ? Please select all that apply.

- Hospital/clinic revenue, endowment, or assets
- Government funds
- Donated funds
- Other

If Other, please specify

8. Which of the following ranges of **interest rates** is most typical of the financing your facility has used to purchase medical equipment?

- N/A
- 0 - 5%
- 6 - 11%
- 12 - 17%
- 18 - 23%
- 24 - 29%
- 30 - 35%
- 36 - 41%
- 42 - 47%
- 48% or more

9. How difficult has it been for your facility to make these loan payments in a timely manner?

- N/A
- Not difficult
- Somewhat difficult
- Very difficult

10. Does your facility receive any **tax benefits or other benefits** for the interest paid on loans for purchasing medical equipment?

- Yes
- No

11. Has your facility paid for **maintenance or repair** of medical imaging equipment in the past?

- Yes
- No

12. How difficult has it been for your facility to afford medical imaging equipment maintenance and repair?

- N/A
- Very difficult
- Somewhat difficult
- Neutral
- Easy
- Very easy

The below list is a brief summary of some requirements that lenders and grantors will request in considering applications for financial assistance. Many of these have been mentioned in previous questions. **Our goal is to help you develop the tools you need to optimize your financial management and lending profile.**

You do not need to provide these documents to RAD - AID™ or its partners.

When we meet, we will review this list with you. At that time, or in future correspondences, you may share with us whatever items you deem helpful.

1. Ability to Demonstrate Profits:

- Annual gross and net profitability of the facility
- Distribution of profits
- Retained earnings

2. Ability to Show Sound Financial Budgeting:

- Monthly and annual budgets for the radiology department
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- Financial statements

3. Ability to Demonstrate Historical Financial Statements (3 Years):

- Cash flows
- Balance sheets
- Income statements

4. Leverage Available to your Institution:

- Who provided the initial investment for the facility?
- Who provides for additional investment in resources and technology (government or private)?
- What was the initial capital investment?
- What is the ongoing annual capital investment?
- Annual retained earnings from operations
- All outstanding loans and obligations
- Debt to income ratio
- Debt to total retained earnings
- Debt to total equity
- Detailed breakdown of existing funding, including domestic and foreign loans, hard or soft currency, interest rate risk and amortization schedule of funding.

5. Financial Data routinely tracked and calculated:

- Gross/net margin
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- Power
- Water
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8. Management Team and Board of Directors

- Background
- Level of Involvement
- Political Affiliations

1. Additional Comments?

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