


QUALITY STANDARD SYSTEM MANUAL	 HALCYON MARINE HEALTHCARE SYSTEMS	DOCUMENT NO. QTU 7.0	EFFECTIVITY DATE: November 4, 2019
			VERSION NO.: 1 REVISION NO.: 2
		PREPARED BY: Marilar F. De Guzman, MD QAM	APPROVED BY: Glennnda E. Canlas, MD Medical Director
SUBJECT: QUALITY MANUAL FOR RADIOLOGY DEPARTMENT			

1.0 OBJECTIVES

1.1 The Radiology Department strives to provide state of the art medical imaging and radiology service in a timely and cost effective manner for the benefit of the patients of Halcyon Marine Healthcare Systems, Inc.

1.2 The department is guided by the need to continually reassess all aspects of its activity in order to meet and exceed the expectations of our clients and that of the RHO of the Department of Health.


1.3 The department also aims to provide our staff the requisite skills enabling them to carry forward the tradition of excellence that our institution would like to instill in all of our personnel.

1.4 The department's aim is to obtain fast and high quality x-ray-images while minimizing x-ray dosage or radiation exposure to patients and staff and wastage. A brand new Carestream digital scanner is utilized for faster viewing of radiograph after exposure.

2.0 MEASURABLE OBJECTIVES

- a. To ensure 100% client satisfaction at all times.
- b. To ensure 90% punctuality and completeness of attendance per month.
- c. To ensure 100% accuracy of results released to clients within the day.
- d. To ensure the patient records, particularly x-ray images, ultrasound, panoramic images and x-ray official results are secure and confidential at all times.

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e. To ensure that the radiation exposure falls below the minimum detection limit of 0.15mSv per month.

ULTRASOUND AND PANORAMIC X-RAY

f. To ensure that there are no questionable results issued due to faulty ultrasound examination at all times.

g. To ensure that all patients are facilitated for ultrasound and panoramic and that no complaints of prolonged waiting prior to examination. With less than 5 complaints per month.

3.0 SCOPE

The Radiology Quality Manual shall be applied to all patients of HMHS.

4.0 DEFINITIONS AND ACRONYMS

4.1 X- RAY - a highly penetrating, ionizing radiation

4.2 X-ray machines - equipment used in radiology to take pictures of bones to screen patients non-invasively. A digital radiography with an x-ray power of 350mA, is designed for general radiography.

4.3 RHO - Radiation Health Office

4.4 PNRI - Philippine Nuclear Research Institute

4.5 mA - milliamperes


4.6 CT - Computed Tomography

4.7 mSv - milliserve

4.8 PTB - Pulmonary Tuberculosis

5.0 UNIT PROFILE

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5.1 The Radiology Department of Halcyon Marine Healthcare Systems, Inc. is composed of a team of skilled professionals with decades of experience in their own field of expertise, a Certified Fellow of the Philippine College of Radiology and the Philippine Society of the Philippines and a board licensed radiologic technologists dedicated to provide the highest quality of x-ray and diagnostic ultrasound procedures as required by Client companies.

6.0 RESPONSIBILITY AND AUTHORITY

6.1 Licensed Radiologic Technologists/X-ray Technician

1. Evaluates the proper positioning of the patient and conducts the x-ray examination.
2. Prepares the patient and assists the Sonologist during the ultrasound procedure.
3. Accurately demonstrate anatomical structures on a radiograph or other imaging receptor and determine exposure factors to achieve optimum radiographic techniques with minimum exposure to the patient.
4. Provide patient care and comfort and apply the radiation protection to the patient, self and others.
5. Ensures proper maintenance by detecting equipment malfunctions, report the issues to the proper authority and know the safe limits of equipment operation.
6. Exercise independent judgment and discretion in the technical performance of medical imaging procedures.

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7. Have an active participation in radiography and ultrasound quality assurance programs.
8. On time renewal of X-ray license to operate and prepare a quarterly renewal of OSL badges.


7.0 DEPARTMENT POLICIES

- 7.1 The Radiology Department ensures that the identification of the patient has been verified before the procedure.
- 7.2 The Radiology Department ensures that all encoded results are verified and completed.
- 7.3 Equipment maintenance schedule is carried out without fail. Calibration Schedule is followed. Records of maintenance, calibration and service records of all equipment should be maintained.
- 7.4 All department results should only be released upon the request of the company or patients with the approval of the company.
- 7.5 Daily backup of the images from the system to the external hard disk should be carried out.

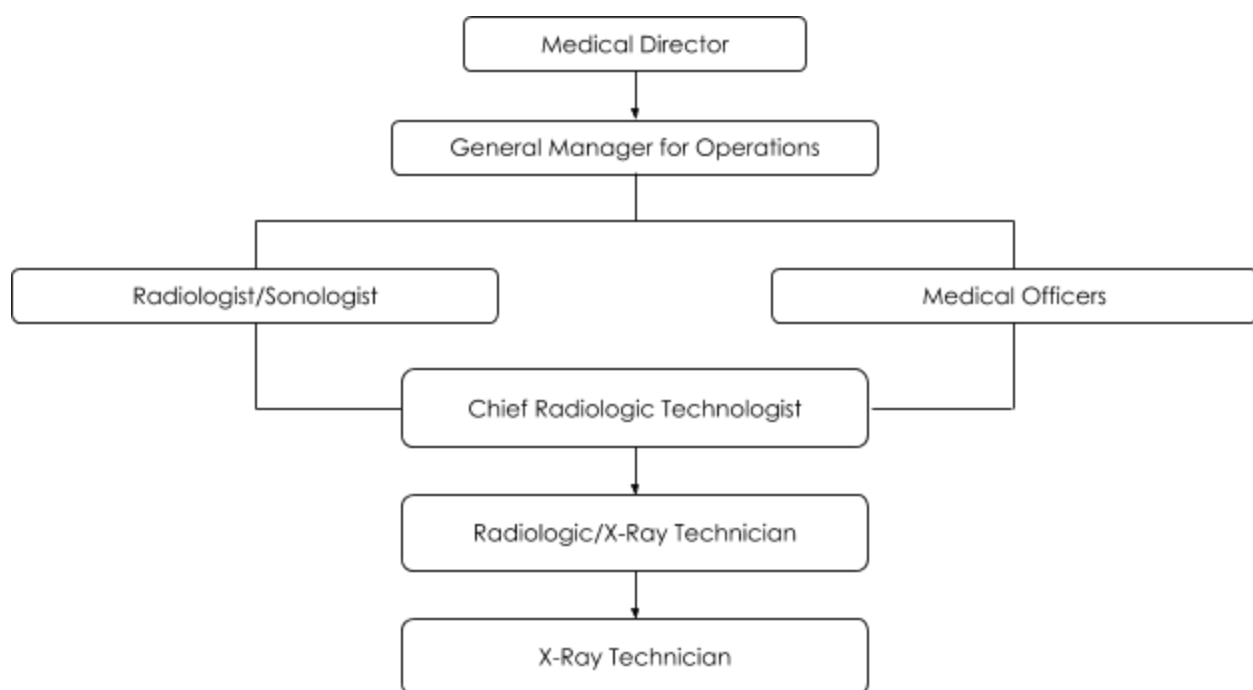
8.0 REFERENCES

- 8.1 Radiology Work Instructional Manual

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9.0 ORGANIZATIONAL CHART



10.0 PTB POLICY

10.1 Only x-rays taken at Halcyon Marine Healthcare Systems will be honored to ensure that the identification of the patient has been verified and is consistent with the patient's information.

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10.2 In cases where the patient's chest x-ray is read as Pulmonary Tuberculosis, he/she will be referred by the medical officer to the accredited Pulmonologist for second opinion and final diagnosis.

10.3 In cases wherein the patient disputes the Clinic findings, the patient will be referred to the Department of Health Peer Review Committee or will be requested to undergo a CT Scan.

11.0 POLICY FOR ULTRASOUND REFERRALS


11.1 In cases of dispute the patient is requested to undergo a repeat ultrasound or a CT scan and is referred to a GI specialist or to the Department of Health Peer Review Committee for the patient's final disposition.

12.0 PROCEDURE FOR ISSUING A COPY OF DIGITAL CHEST X-RAY RESULT IN A COMPACT DISC

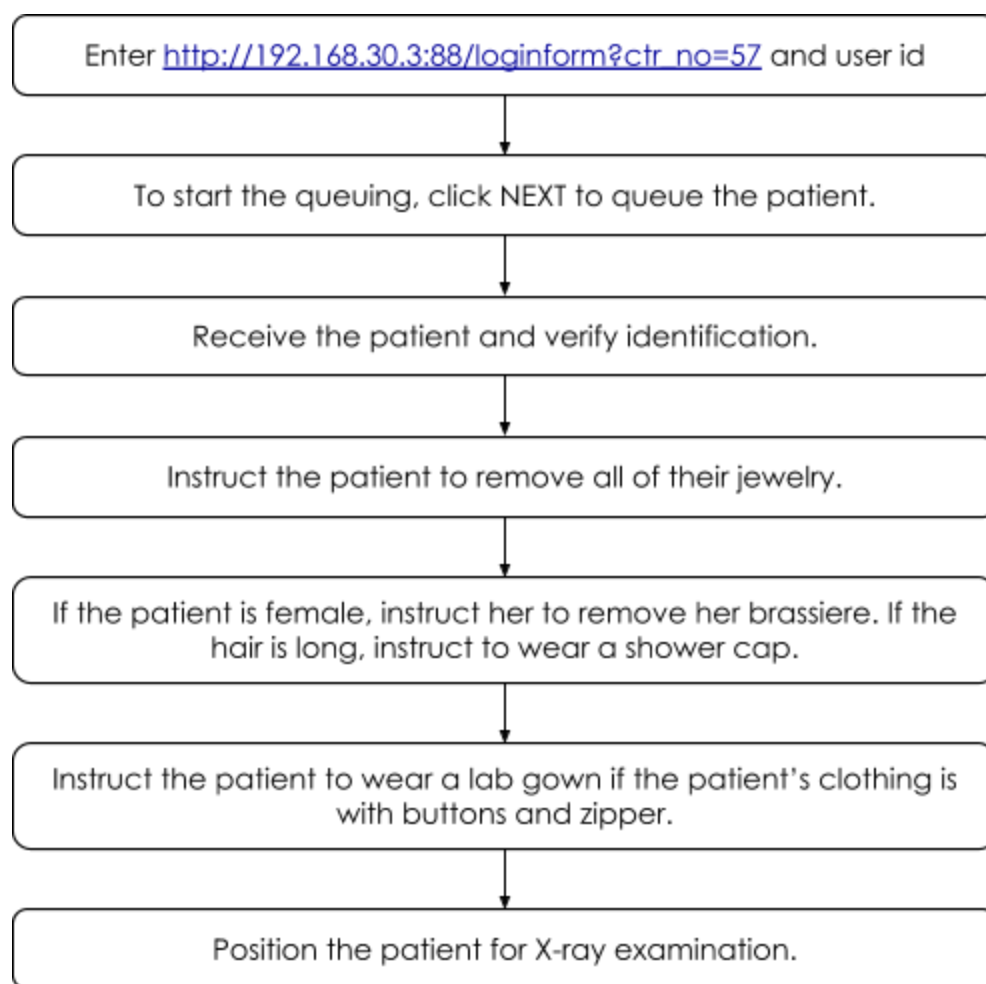
12.1 A patient may request for his x-ray image in a CD format for purposes of consultation or in cases of dispute. The patient is required to present a request from the company or physician – in – charge, a nominal fee per CD is collected at the cashier.

12.2 The patient is issued a receipt which he has to present to the radiology department for the issuance of the CD.


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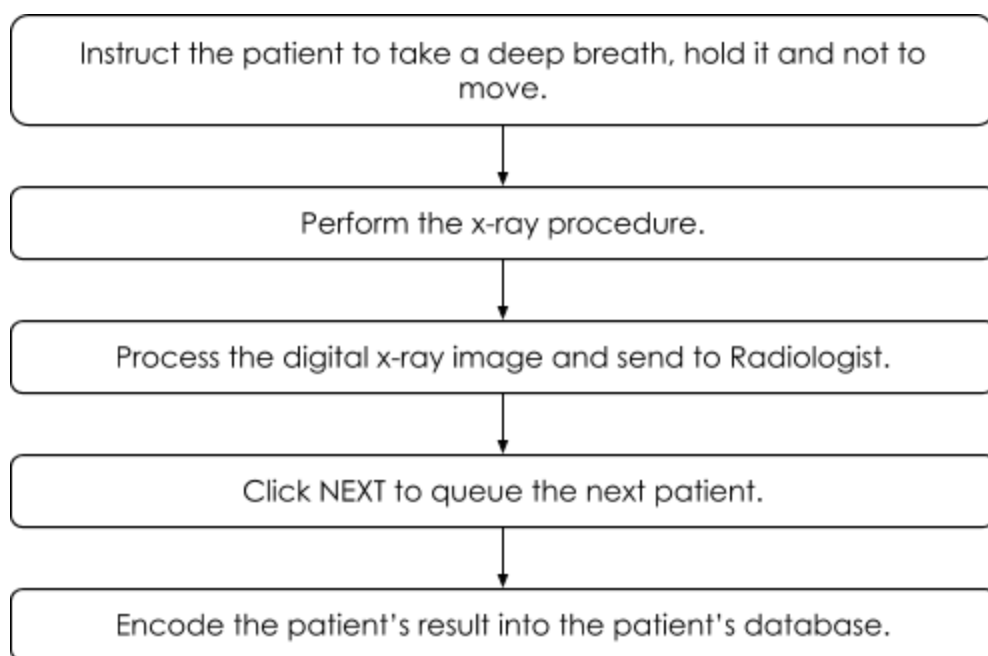
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13.0 X-RAY PROCEDURE




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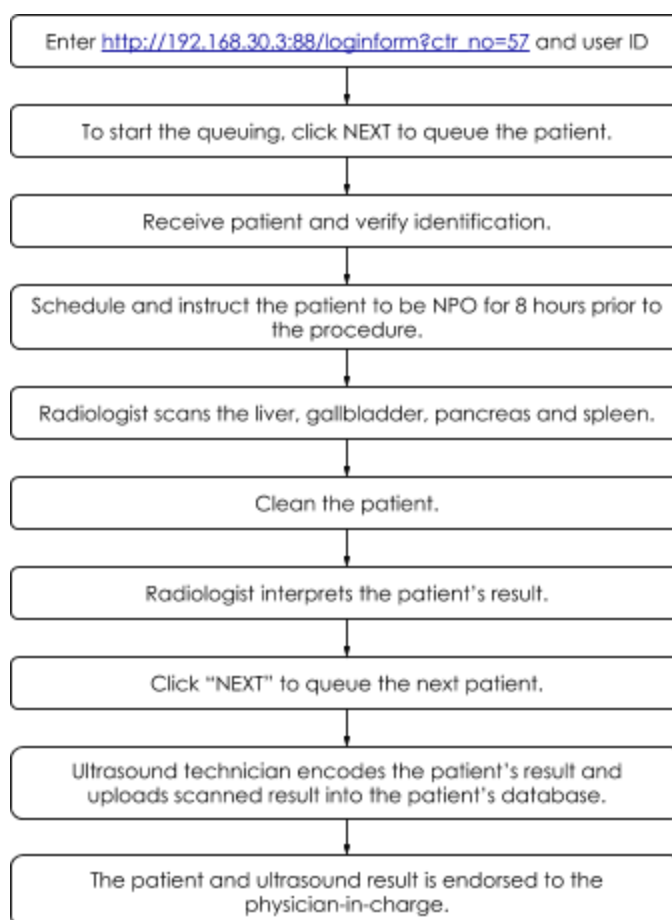
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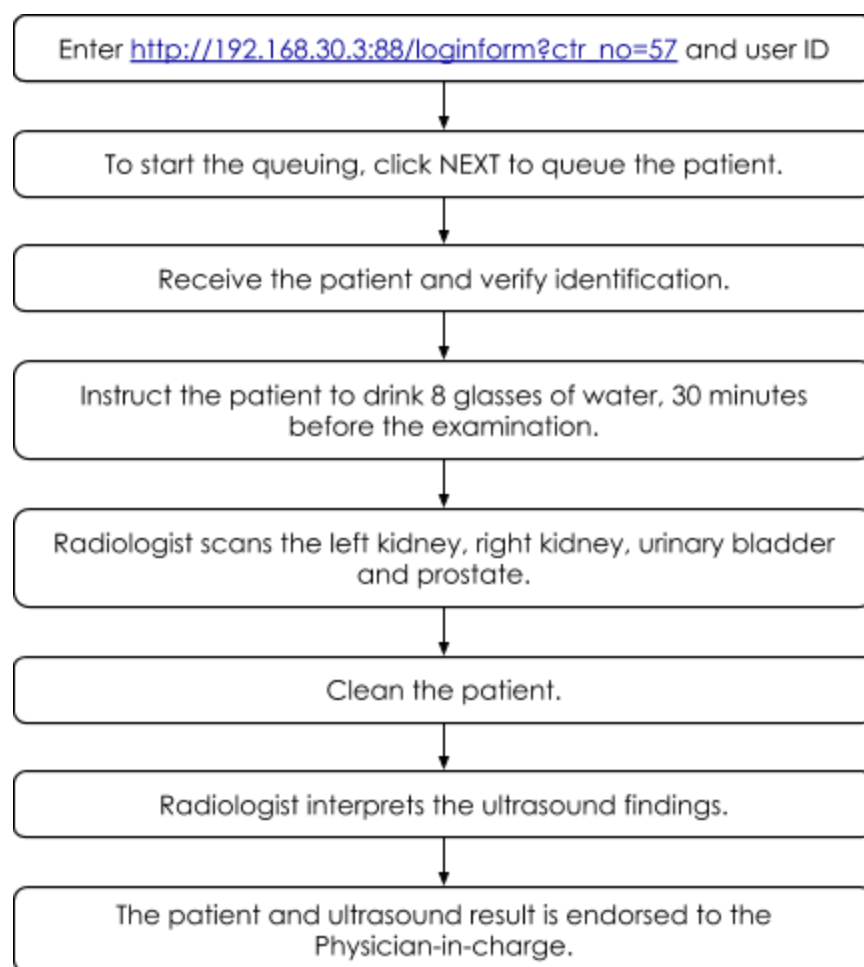
14.0 HEPATOBILIARY AND UPPER ABDOMINAL ULTRASOUND




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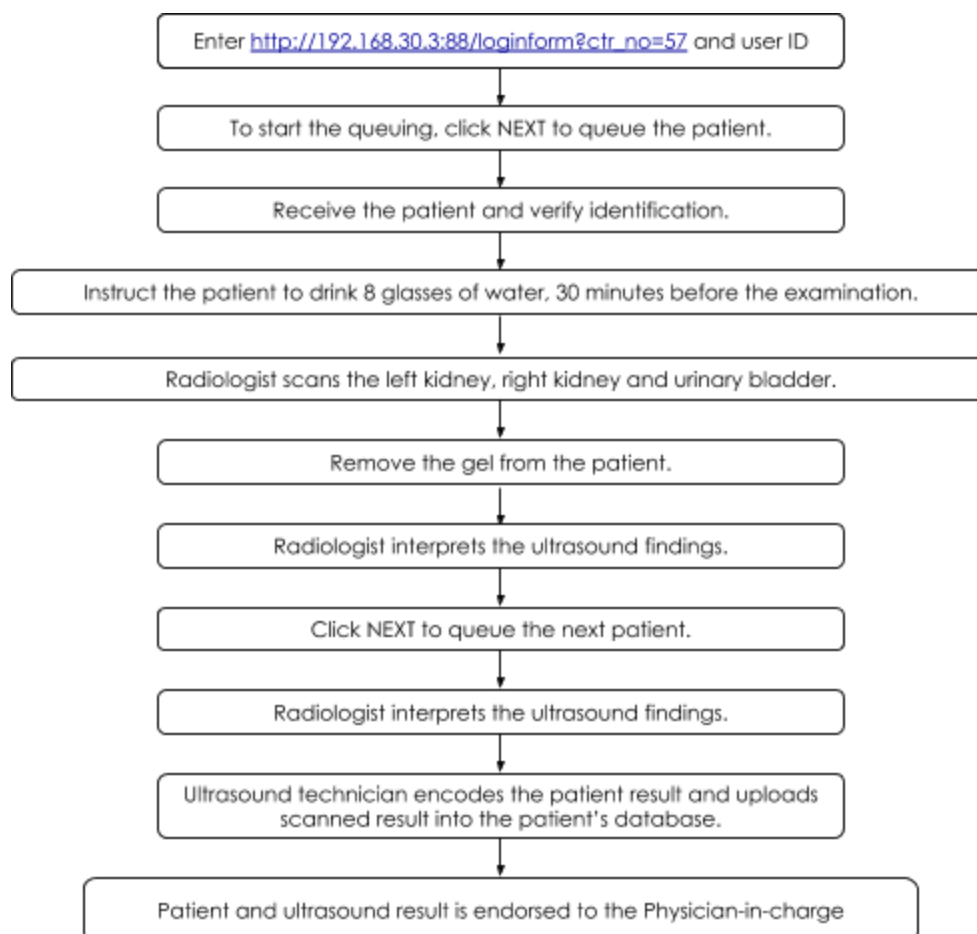
15.0 LOWER ABDOMINAL ULTRASOUND




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16.0 KIDNEYS AND URINARY BLADDER ULTRASOUND



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17.0 PROCEDURE FOR RELEASE OF OFFICIAL ULTRASOUND RESULT

17.1 All ultrasound results encoded by the x-ray technician will be proofread by the Radiologist on duty to ensure the accuracy of the result. The Radiologist signs the official result.


17.2 Release of official result will be encoded into the patient's database by indicating the date of release and the initials of personnel-in-charge.

18.0 ON/OFFSITE STORAGE OF X-RAY FILMS

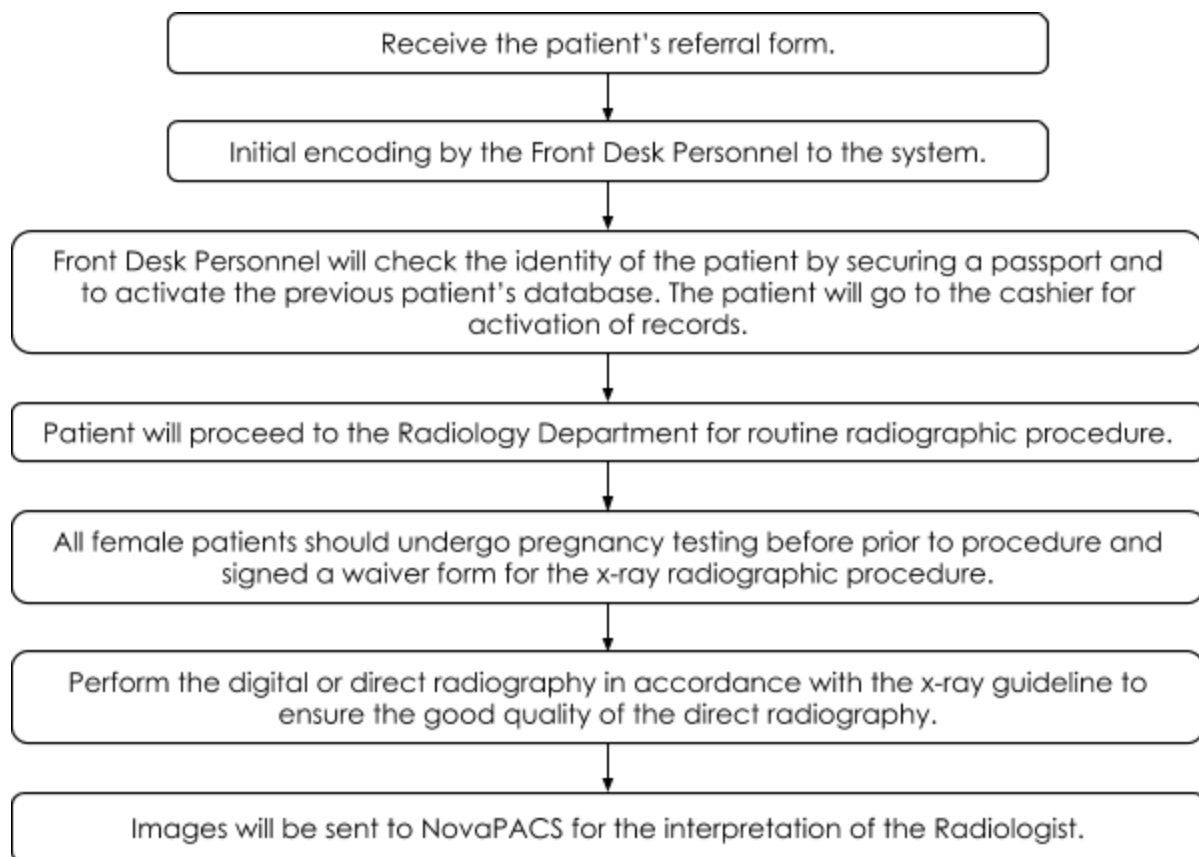
The Radiology unit maintains the storage of x-ray images.

- All x-ray images are sent to Novarad.
- 2013-Present images were saved in the Novarad's backup based in the United States of America. Requesting of old images is sent through email.
- Retention of x-ray images is only up to 3 years as defined by DOH.


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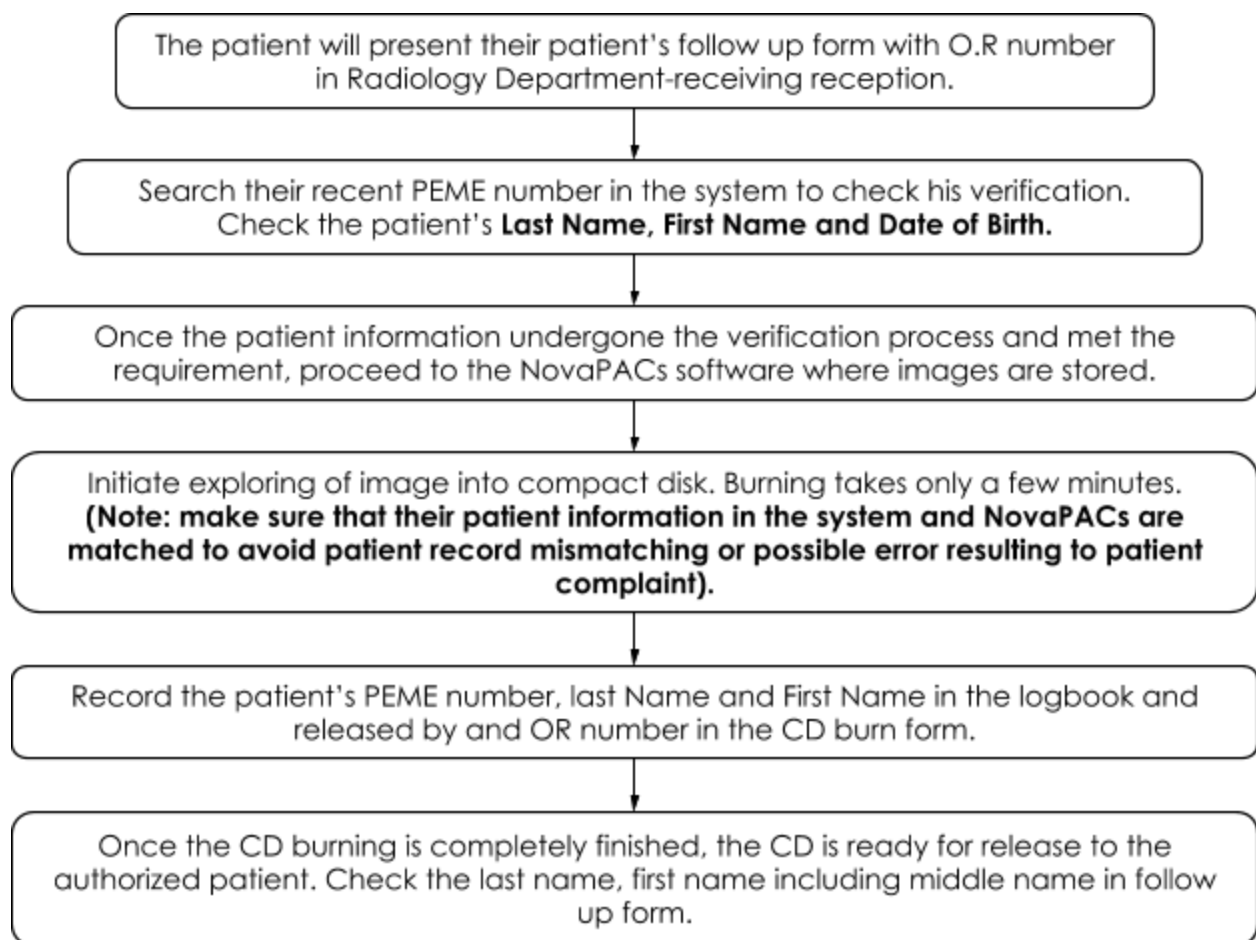
19.0 PROCEDURE OF DIRECT RADIOGRAPHY/DIGITAL RADIOGRAPHY




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20.0 FOLLOW-UP RECEPTION'S REQUISITION OF PATIENT'S X-RAY IMAGE



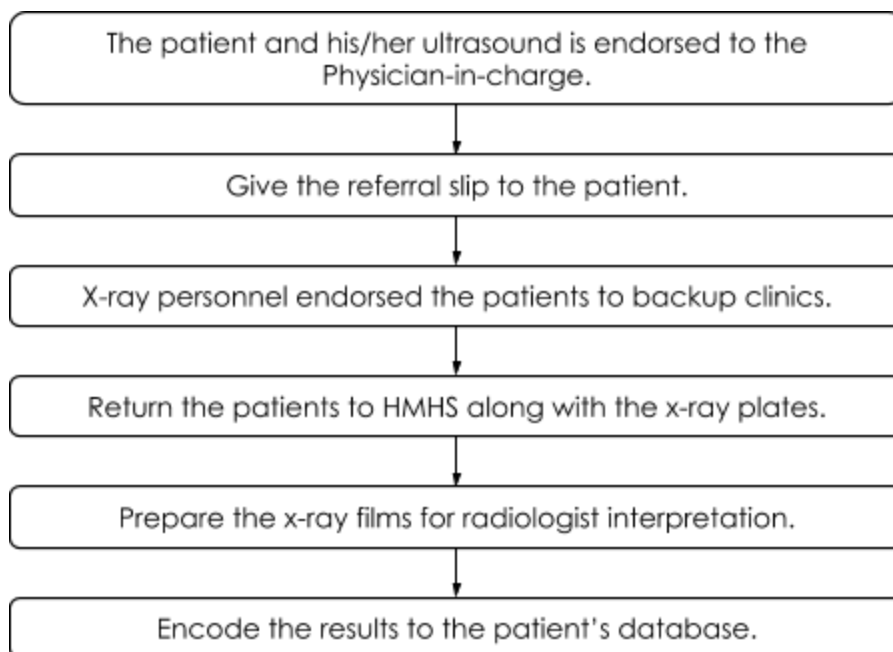
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21.0 PROCEDURE FOR X-RAY BACK UP IN THE EVENT OF THE DIGITAL MACHINE BREAKDOWN

In case of equipment breakdown, patients are sent to backup clinics for x-ray testing while the chief radiologic technologist coordinates with supplier for service equipment or repair.

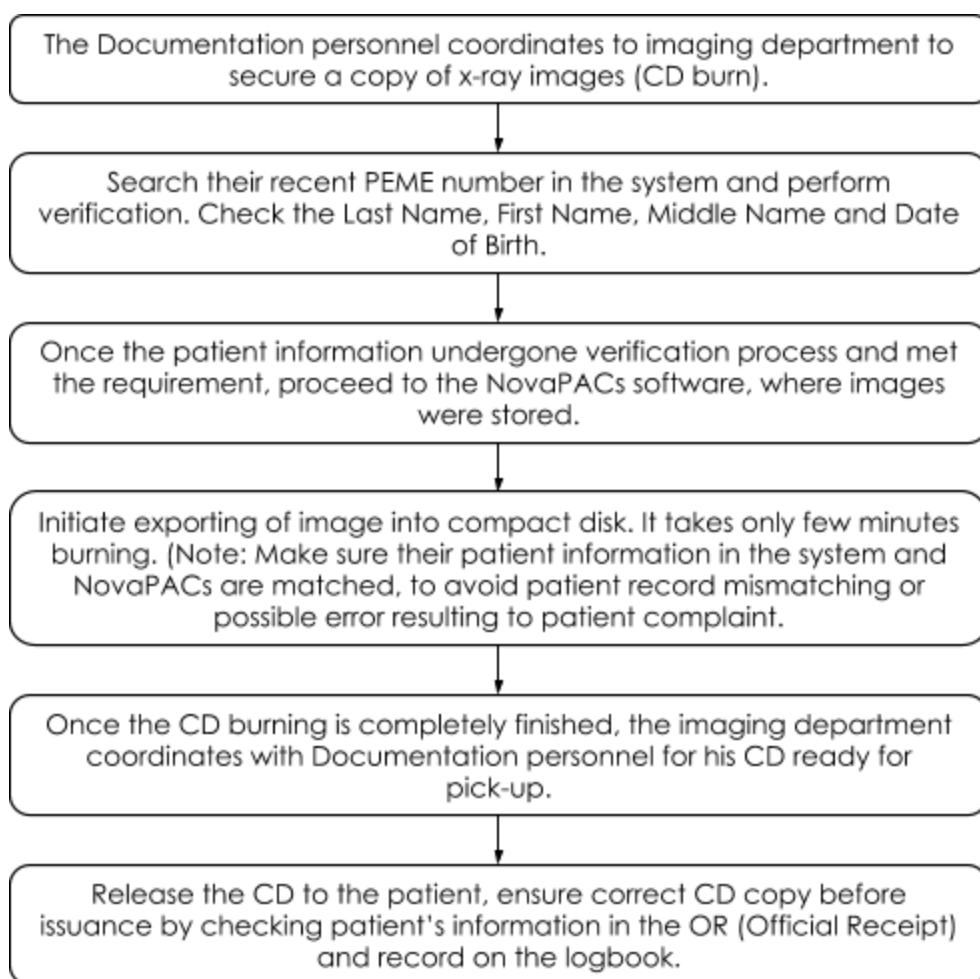
X-rays are interpreted by the Radiologist on duty of HMHS.
Results are released within the day of x-ray testing.




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22.0 DOCUMENTATION UNIT'S REQUISITION OF PATIENT'S X-RAY IMAGE



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23.0 X-RAY PROCEDURE GUIDELINES

23.1 The radiographer will ensure proper identification of the patient according to the patient data and PEME number stated in the system.

23.2 The radiographic image is to be properly dated and labeled.

23.3 Explain the procedures and observe patients to ensure safety and comfort during the process. Instruct the patient to undergo the appropriate position to get accurate images. Position imaging equipment and adjust controls to set exposure time, distance according to specification and examination. Position the patient correctly on the vertical cassette holder.

23.4 Align the center part to be demonstrated to the center of the cassette.


23.5 Position the central ray to the center of the cassette.

23.6 Restrict the size of the radiation field (collimation, cones & shield) and be certain that unnecessary anatomical parts are not included in the radiographic exposure.

23.7 Entire lungs from apices to costophrenic angle should be included & seen without motion.

23.8 Lung and heart should be seen without rotation (as evidenced by equal distance from between sterna ends of clavicles & vertebral column to the lateral border both sides).

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23.9 Ten parts of the posterior ribs should be seen projected above the diaphragm (in full inspiration).

23.10 Scapulae should not be superimposed in the lungs.

23.11 The lungs should be demonstrated with an optimum scale of contrast & exposure (thoracic, intervertebral disk spaces & ribs should be faintly visualized through the heart shadow)

23.12 Air filled trachea is generally seen in the midline of the vertebral column.

24.0 X-RAY PROCEDURE GUIDELINES


24.1 The Radiographer will ensure proper identification of the patient according to the patient data and PEME number stated in the system.

24.2 The radiographic image is to be properly dated and labeled.

24.3 Explain the procedure and observe patients to ensure safety and comfort during the procedure. Instruct the patient to undergo the appropriate position to get accurate images. Position imaging equipment and adjust controls to set exposure time, distance according to specification and examination. Position the patient correctly on the vertical cassette holder.

24.4 Align the cassette to the center part.

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25.0 PROCEDURE FOR QUALITY CONTROL

25.1 Data on the logbook must be the same in the INet system and vice versa.

25.2 If there are discrepancy with the encoded result, the person in-charge must report the error to Operations Deputy for editing of results.

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25.3 General Manager for Operations can only edit the wrong report.

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