



QUALITY STANDARD SYSTEM MANUAL	 HALCYON MARINE HEALTHCARE SYSTEMS	DOCUMENT NO. QTU 7.0	EFFECTIVITY DATE: February 14, 2019
		PREPARED BY: Marilar F. De Guzman, MD QAM	REVISION NO.: 1
APPROVED BY: Glennnda E. Canlas, MD Medical Director			
SUBJECT: QUALITY MANUAL FOR THE RADIOLOGY DEPARTMENT			

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I. INTRODUCTION

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.

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.

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.


II. DEFINITION

X- RAY	-	X-ray is a highly penetrating, ionizing radiation
X-ray machines	-	equipment used in radiology to take pictures of bones to screen patients non-invasively.
RHO	-	Radiation Health Office
PNRI	-	Philippine Nuclear Research Institute
mA	-	milliamperes
CT	-	Computed Tomography
mSv	-	milliserve

III. RESPONSIBILITY AND AUTHORITY

Licensed Radiologic Technologists/X-ray Technician

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1. Evaluates the proper positioning of the patient and conducts the x-ray examination.
2. Prepare the patient and assist the Sonologist during the ultrasound procedure.
3. Accurately demonstrate anatomical structures on a radio graph or other imaging receptor and determine the exposure factors to achieve optimum radio graphic techniques with minimum exposures to the patient.
4. Provide a 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 an independent judgment and discretion in the technical performance of medical imaging procedures.
7. Have an active participation in radio graphic and ultrasound quality assurance programs.
8. On time renewal of X-ray license to operate and prepare a quarterly renewal of OSL badges.

IV. DEPARTMENT POLICIES

1. The Radiology Department ensures that the identification of the patient has been verified before the procedure.
2. The Radiology Department ensures that all encoded results are verified and complete.
3. Equipment maintenance schedule is carried out without fail. Calibration Schedule is followed. Records of maintenance, calibration and service records of all equipments should be maintained.
4. All department results should only be released upon the request of the company or patients with the approval of the company.

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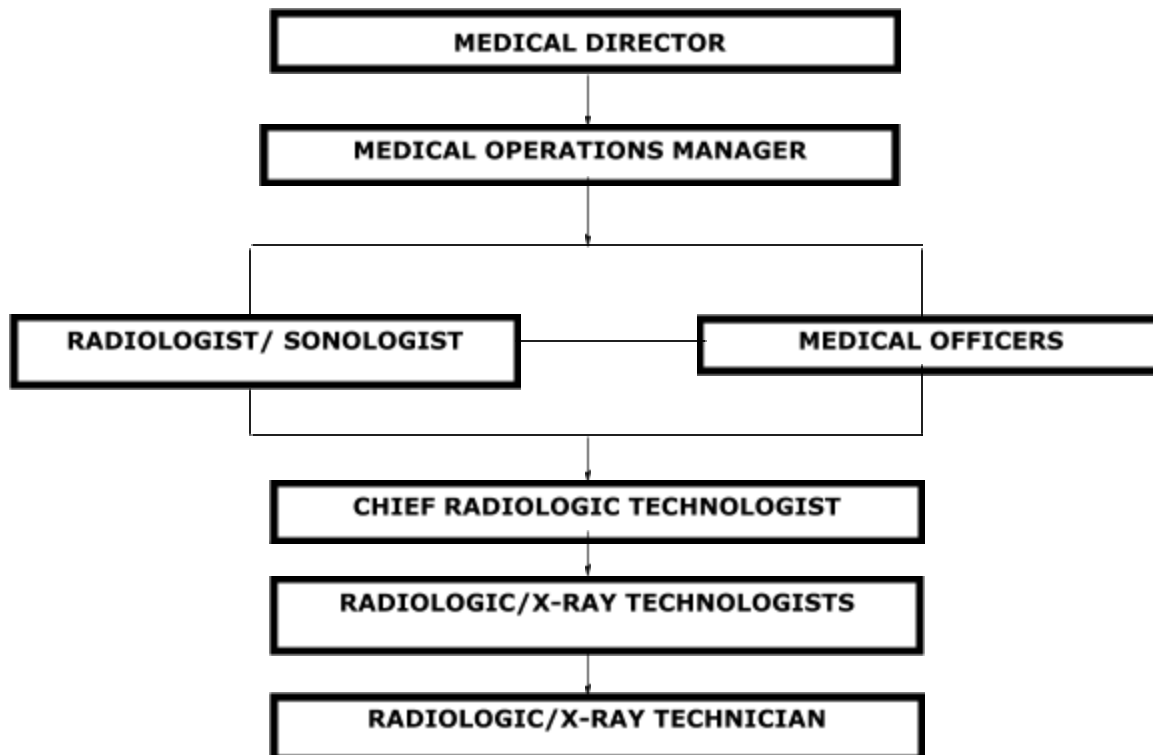
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5. Daily back up of the images from the system to the external hard disk should be carried out.


V. REFERENCES

Radiology Department Quality Manual
Radiology Work Instructional Manual

VI. ORGANIZATIONAL CHART



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VII. UNIT PROFILE

The Radiology Department of Halcyon Marine Healthcare Systems 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.

Our staff aims to make each and every patient visit as pleasant as possible. Providing high quality studies while taking the time to deliver passion and care to patients.

The department's purpose is to obtain fast and high quality x-ray-images while *minimizing* x-ray dosage or radiation exposures to patients and staff and wastage.

The x-ray machine, a portable Advance with an x-ray power of 350mA, is designed for general radiography. A brand new Carestream digital scanner is utilized for faster and regulated developing of radio graphs.

PTB Policy

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.


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.

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 CT Scan.

Policy for Ultrasound Referrals

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.

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Procedure for issuing a copy of digital chest x-ray result in a compact disc

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

VISION

To conduct fast and high quality x-ray and ultrasound procedure.

MISSION

To deliver professional, timely service to patients for pre- employment medical examination and exceed the expectations of our Clients.

MEASURABLE OBJECTIVES

RADIOLOGY DEPARTMENT


- To ensure 100% client satisfaction.
- To ensure 90% punctuality and completeness of attendance per month.
- To ensure 100% accuracy of result released to clients.
- To ensure that all confidential records of patient's x-ray, ultrasound and panoramic images are secured.

X-RAY

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

ULTRASOUND AND PANORAMIC X-RAY


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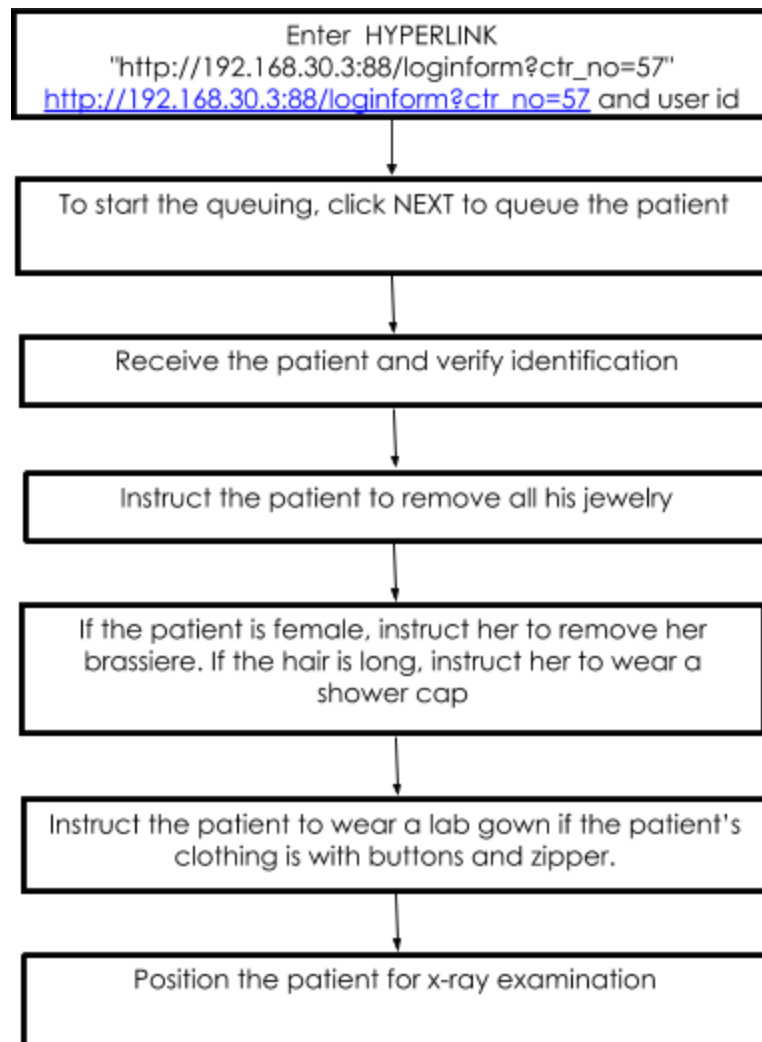
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- a. To ensure that there are no questionable results issued due to faulty ultrasound examinations.
- b. To ensure that all patients are facilitated for ultrasound and that no complaints of prolonged waiting prior to examination. With less than 5 complaints per month.


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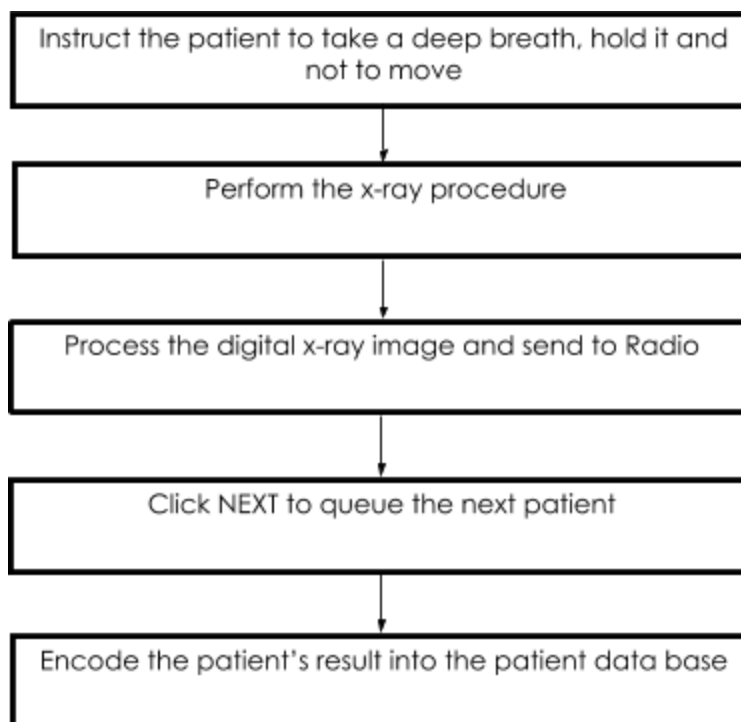
VIII. X-RAY PROCEDURE




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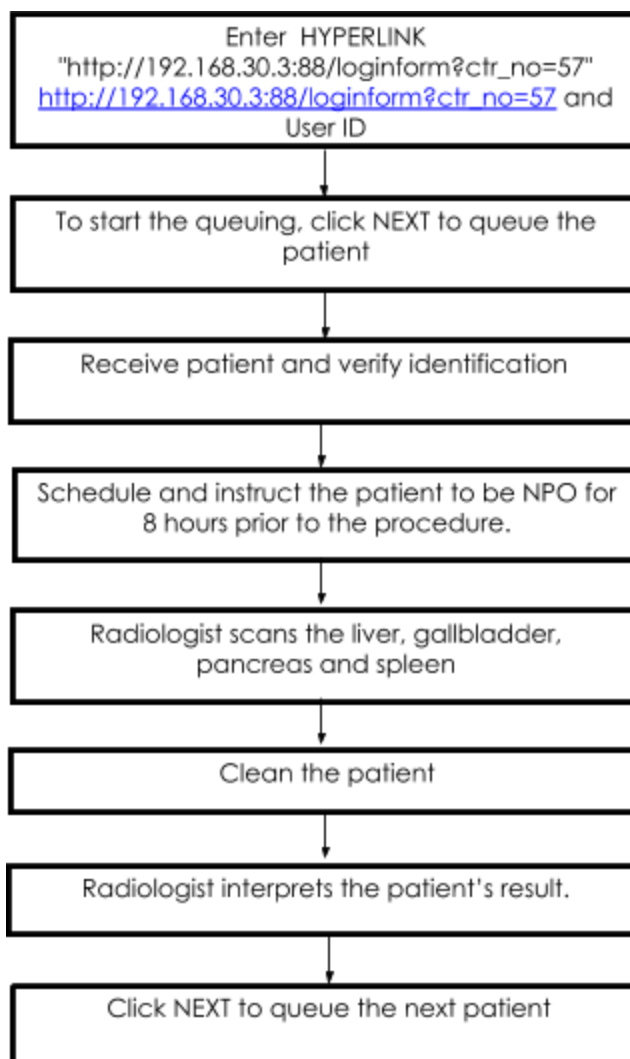
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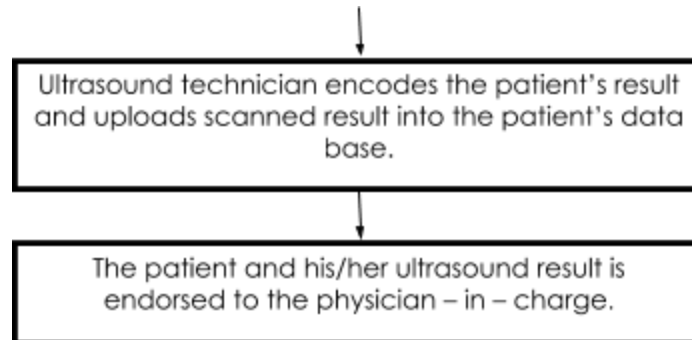
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IX. HEPATOBILIARY AND UPPER ABDOMINAL ULTRASOUND

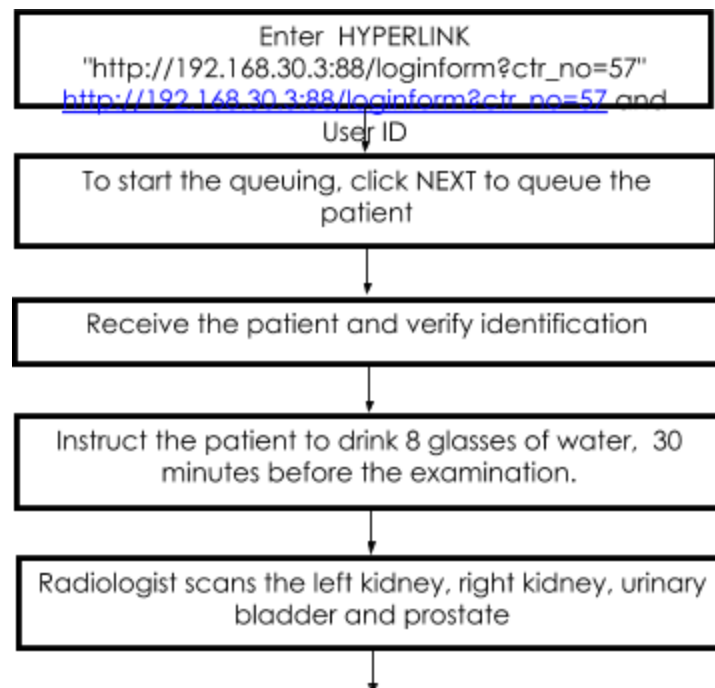


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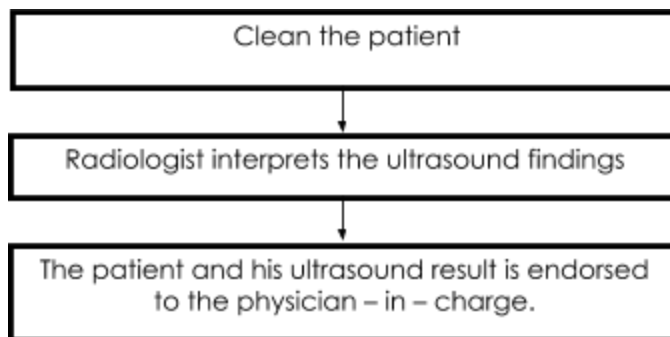


X. LOWER ABDOMINAL ULTRASOUND

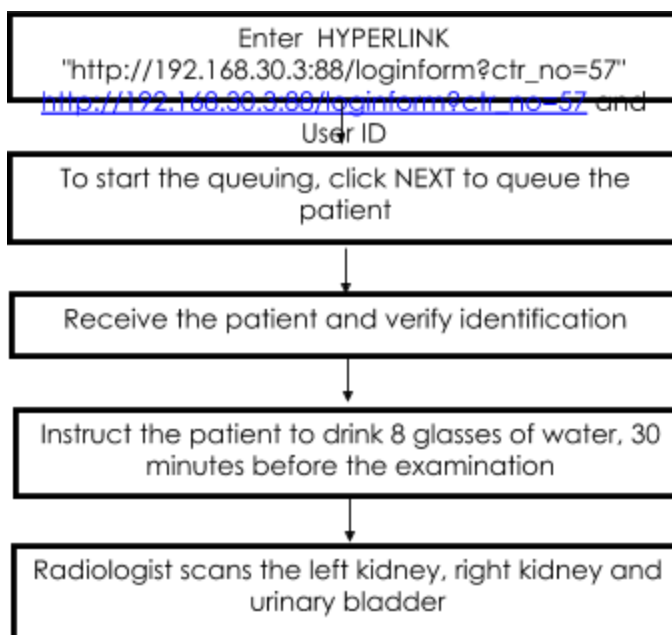


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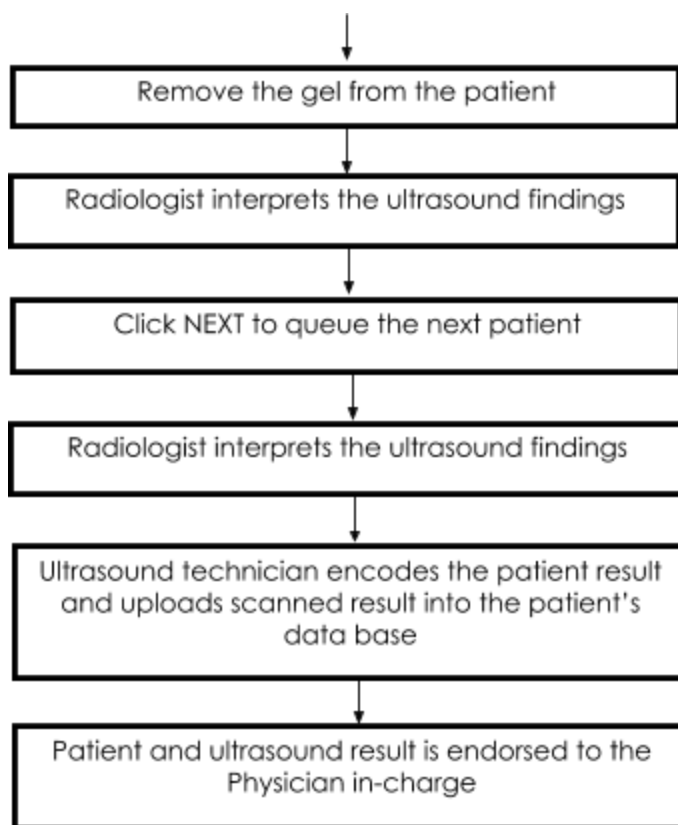
XI. KIDNEYS AND URINARY BLADDER ULTRASOUND



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XII. PROCEDURE FOR RELEASE OF OFFICIAL ULTRASOUND RESULT

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

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

XIII. ON/OFFSITE STORAGE OF X-RAY FILMS

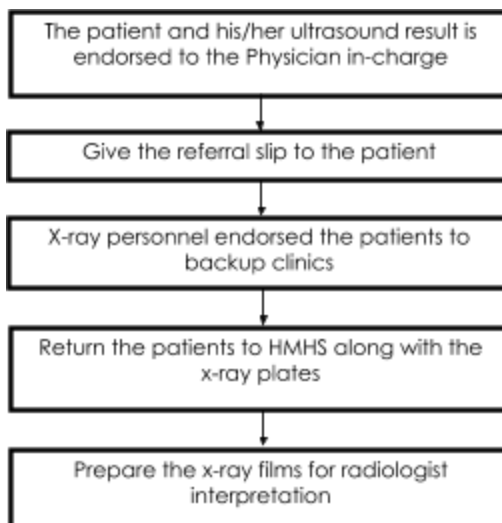
The Radiology unit maintains the storage of x-ray images.

- All x-ray images send 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 thru email.
- Retention of x-ray images is only up to 3 years as defined by DOH.


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

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

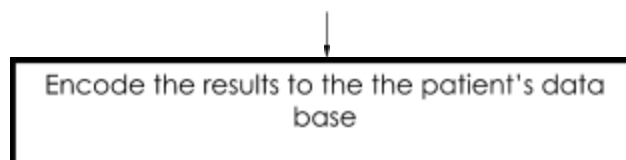
X-rays are interpreted by the radiologist on duty of HMHS.
Results are released within the day of x-ray testing.



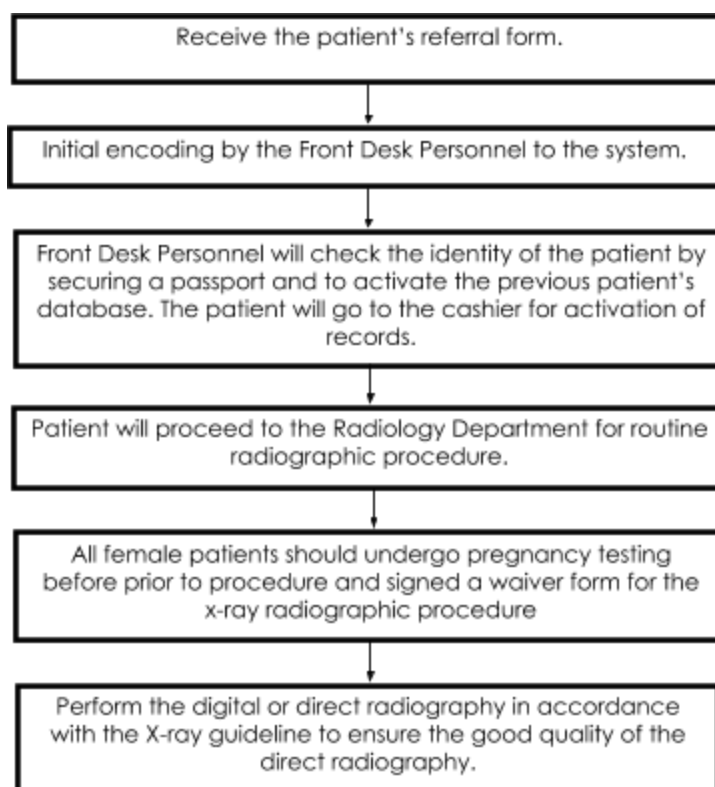
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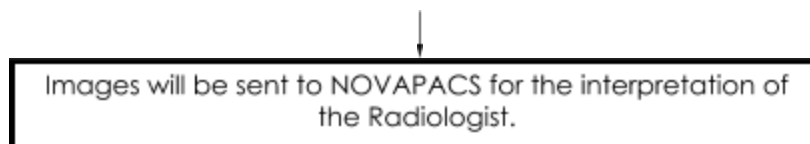


XV. PROCEDURE OF DIRECT RADIOGRAPHY / DIGITAL RADIOGRAPHY:

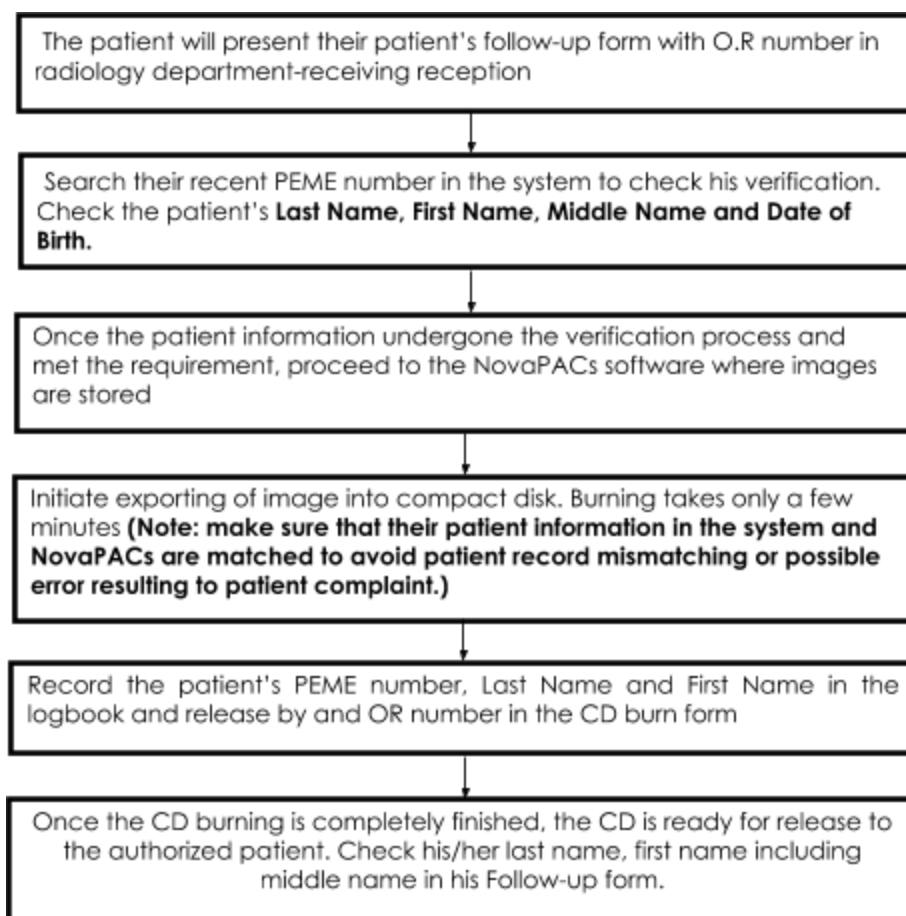


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XV. FOLLOW-UP RECEPTION 'S REQUISITION OF PATIENT'S X-RAY IMAGE



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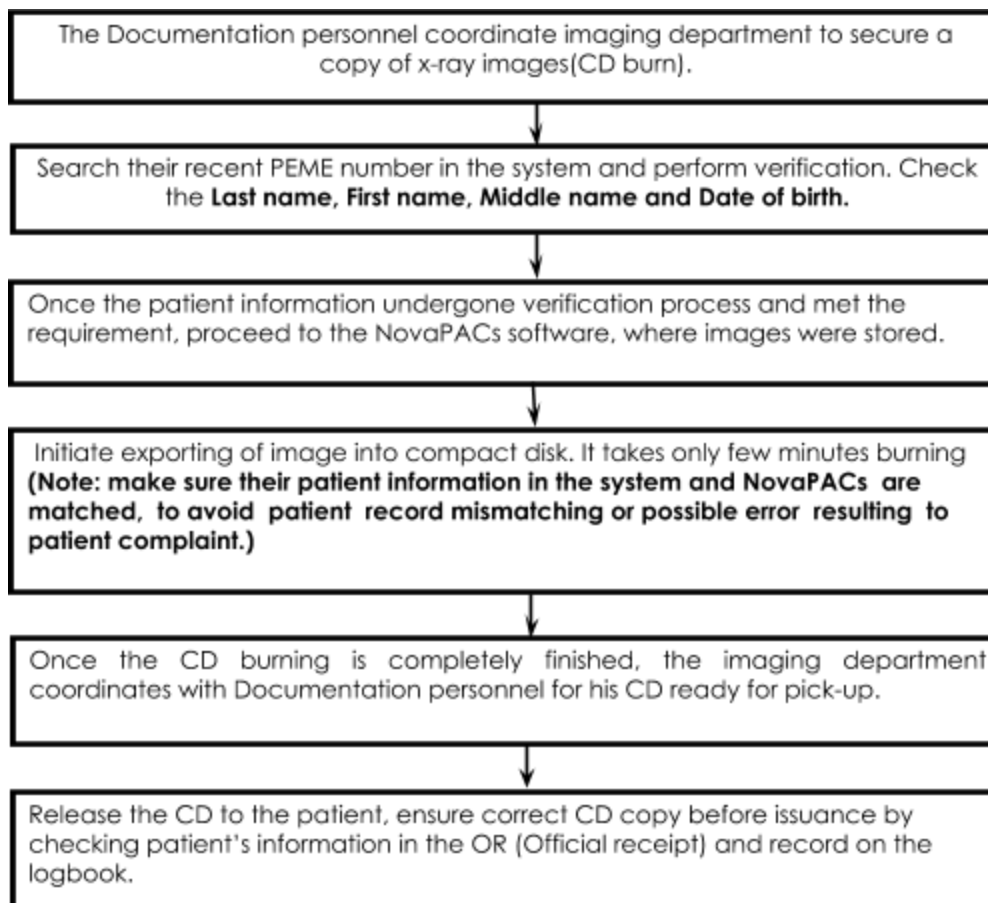
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XVI. DOCUMENTATION UNIT'S REQUISITION OF PATIENT'S X-RAY IMAGE

Purpose:

- * For comparison in other institution
- * For operation
- * For further clinical evaluation
- * Company request.



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XVII. X-RAY PROCEDURE GUIDELINES:

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

The radiographic image is to be properly dated and labeled.

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

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

Position the central ray to the center of the cassette.

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

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

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


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

Scapulae should not be superimposed in the lungs.

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)

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

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XVII. GOALS AND STANDARDS FOR THE RADIOLOGY DEPARTMENT OF HALCYON MARINE HEALTHCARE SYSTEMS, INC.

SET GOALS	WEIGHT	STANDARDS %	REMARKS
To ensure 100% client satisfaction.	10	100	
To ensure 90% punctuality and completeness of attendance per month.	10	100	
To ensure 100% accuracy of results released to clients.	10	100	
To ensure the patient records, particularly x-ray images, ultrasound, panoramic images and x-ray official result are secure and confidential	10	100	
To ensure that the radiation exposure falls below the minimum detection limit of 0.15mSv per month.	10	100	
To ensure that there are no questionable results issued due to faulty ultrasound examinations.	10	100	
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.	10	100	

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