**3 Day Quality Management Training**

8:00 – 11:00 NCRC Testing

11:00 – 12:00 Lunch on your own

Day 1 – Analog quality Management

12:00 – 1:00 Film/Screen Image Receptors, Darkrooms, and Viewing Conditions

Objectives:
Students have the ability to:

* Explain the conditions for proper film and chemical storage
* Discuss the factors affecting screen speed
* Describe the different types of image resolutions

1:00 – 2:00 Film Processing

Objectives:
Students have the ability to:

* Describe the main differences between manual and automatic film processing
* Discuss the functions of the develop and fixer solutions
* Explain the function of the six main systems of automatic film processors

2:00 – 3:00 Processor Quality Control

Objectives:
Students have the ability to:

* Discuss the importance of a processor quality control program in diagnostic imaging
* Identify and explain the main components of a processor quality control program
* Describe sensitometric tests to monitor processor function and chemical activity performance

3:00 – 3:55 Silver Recovery

Objectives:
Students have the ability to:

* Discuss the reasons for silver recovery in diagnostic imaging
* Describe the methods of recovering silver from processing solutions
* Compare the methods of recovering silver from film

3:55 – 4:05 Break

4:05 – 5:00 Quality Control of X-Ray Generators and Ancillary Radiographic Equipment

Objectives:
Students have the ability to:

* Contrast the differences between single-phase, three-phase, and high-frequency x-ray generators
* Discuss the voltage ripple values for the three types of x-ray generators
* Calculate the power output rating for the three types of x-ray generators
* Describe the performance tests for radiographic equipment

5:00 – 6:00 Quality Control of Fluoroscopic Equipment

Objectives:
Students have the ability to:

* Describe the main components of a fluoroscopic system
* Discuss the various methods of monitoring fluoroscopic images
* Describe the performance tests for fluoroscopic equipment

Day 2 Digital Quality Management and Modalities

8:00 – 10:00 Digital and Advanced Imaging Equipment

Objectives:
Students have the ability to:

* Discuss the methods of obtaining digital radiographs
* Compare and contrast the advantages/disadvantages of digital radiography versus film/screen radiography
* Describe the quality control procedures for evaluating digital radiographic systems
* Describe the quality control procedures for evaluating digital fluoroscopic systems
* Discuss the quality control procedures for various types of electronic display devices
* Discuss the basic quality control process for special procedures equipment

9:55 – 10:05 Break

10:05 – 12:00 Mammographic Quality Standards

Objectives:
Students have the ability to:

* Compare and contrast dedicated mammographic equipment and conventional equipment
* Explain the advantages of compression during mammographic procedures
* Discuss the image receptor systems currently used in mammography
* Contrast the basic differences between film/screen mammography and full field digital mammography
* Describe the quality control tasks relating to the radiologist and the medical physicist
* Explain the quality control duties of the mammographer on a daily, weekly, quarterly, and semiannual basis
* Discuss the various components of a Food and Drug Administration/Mammography Quality Standards Act inspection

12:00 – 1:00 Lunch on your own

1:00 – 3:00 Mammographic Quality Standards (continued) – Objectives listed above

3:00 – 4:00 Quality Control in Computed Tomography

Objectives:
Students have the ability to:

* Differentiate between high and low-contrast resolution
* Discuss how basic quality control tests for computed tomography are conducted
* Explain the selection factors for quality control measurements
* Discuss the parameters under the technologist’s control that influence noise and spatial resolution

Day 3 Data Collection and Analysis – Prepping for the QM Registry

8:00 – 9:00 Introduction to Quality Management

Objectives:
Students have the ability to:

* Describe the need for quality management in diagnostic imaging
* Contrast the differences between quality assurance, quality control, and quality management
* Discuss the five steps of a process

9:00 – 9:55 Quality Management Tools and Procedures

Objectives:
Students have the ability to:

* Discuss the four main components of a quality management program
* Discuss the components of a risk management program
* Explain the radiation safety protocols for patients and radiation personnel

9:55 – 10:05 Break

10:05 – 12:00 Outcomes Assessment of Radiographic Images

Objectives:
Students have the ability to:

* Discuss the importance of a repeat analysis program
* Describe artifacts that may appear on radiographic images
* Discuss corrective actions required for elimination of the appearance of image artifacts
* Contrast the differences between accuracy, sensitivity, and specificity

12:00 – 1:00 Preparing for the QM Registry – Prepping for Clinicals, Projects, and the Registry

Objectives:
Students have the ability to:

* Discuss the clinical requirements of the QM registry
* Describe various projects that will meet QM registry eligibility
* Discuss the layout of the QM registry

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