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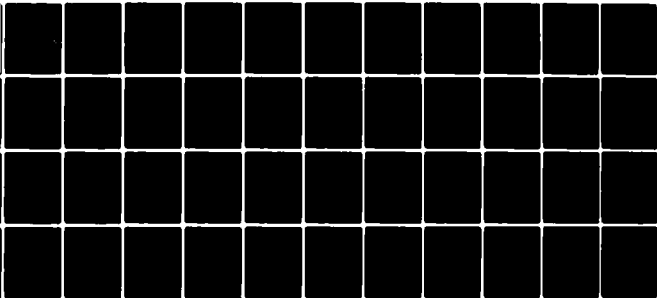
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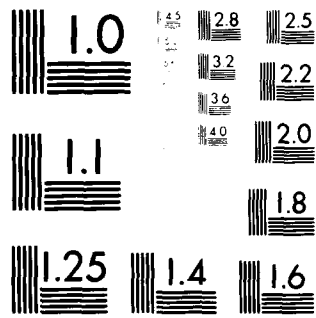
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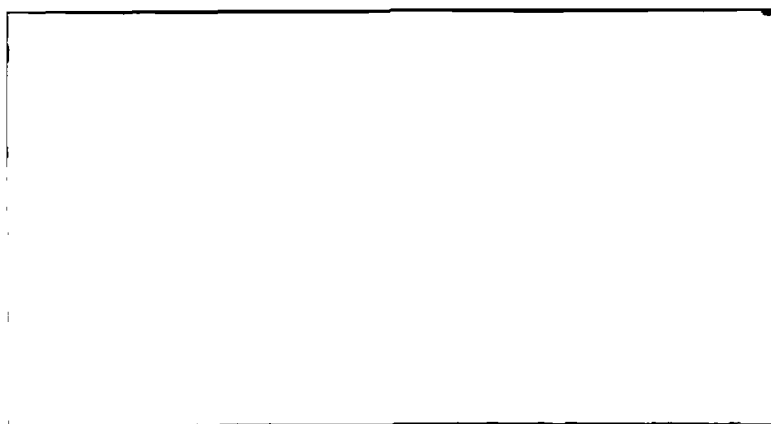
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APPENDIX 35.

COMPETENCY CURRICULUM FOR  
UROLOGY ASSISTANT

APPLICATION OF A SYSTEM APPROACH  
U.S. NAVY MEDICAL DEPARTMENT  
EDUCATION AND TRAINING PROGRAMS  
FINAL REPORT

AUGUST 31, 1974

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Prepared under Contract to  
OFFICE OF NAVAL RESEARCH  
U.S. DEPARTMENT OF THE NAVY

Quida C. Upchurch, Capt., NC, USN  
Program Manager  
Education and Training R&D  
Bureau of Medicine and Surgery (Code 71G)

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20. ABSTRACT (Continue on reverse side if necessary and identify by block number) The study objective consisted of a determination of what the health care personnel in the Navy's Medical Department, Bureau of Medicine and Surgery actually do in their occupations; improving the personnel process (education and training); and building a viable career pathway for all health care personnel. Clearly the first task was to develop a system of job analyses applicable to all system wide health care manpower tasks. A means of postulating simplified occupational clusters covering some 50		

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currently designated Navy enlisted occupations, 20 Naval Enlisted Classification Codes (NEC's) were computerized. A set of 16 groupings that cover all designated occupations was developed so as to enhance the effectiveness of professionals and sub-professionals alike.

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## FOREWORD

The project, "Application of a System Approach to the Navy Medical Department Education and Training Programs," was initiated in May of 1969 as a realistic, comprehensive response to certain objectives set forth in ADO 43-03X, and to memoranda from both the Secretary of Defense and the Assistant Secretary of Defense, Manpower and Reserve Affairs. The Secretary's concern was stated in his memorandum of 29 June 1965, "Innovation in Defense Training and Education." More specific concerns were stated in the Assistant Secretary's memorandum of 14 June 1968, "Application of a System Approach in the Development and Management of Training Courses." In this he called for "vigorous and imaginative effort," and an approach "characterized by an organized training program with precise goals and defined operational interrelation among instructional system components." He also noted, "Job analyses with task descriptions expressed in behavioristic terms are basic and essential to the development of precise training goals and learning objectives."

### The Project

System survey and analysis was conducted relative to all factors affecting education and training programs. Subsequently, a job-analysis sub-system was defined and developed incorporating a series of task inventories ". . . expressed in behavioristic terms . . ." These inventories enabled the gathering of job activity data from enlisted job incumbents, and data relating to task sharing and delegation from officers of the Medical, Nurse and Dental Corps. A data management sub-system was devised to process incumbent data, then carry out needed analyses. The development of initial competency curricula based upon job analysis was implemented to a level of methodology determination. These methods and curriculum materials constituted a third (instructional) sub-system.

Thus, as originally proposed, a system capability has been developed in fulfillment of expressed needs. The system, however, remains untested and unevaluated. ADO 43-03X called for feasibility test and cost-effectiveness determination. The project was designed to so comply. Test and evaluation through the process of implementation has not proved feasible in the Navy Medical Department within the duration of the project. As designed and developed the system does have ". . . precise goals and defined operational interrelation among instructional system components." The latter has been achieved in terms of a recommended career structure affording productive, rewarding manpower utilization which bridges manpower training and health care delivery functions.

## Data Management Sub-System

Job analysis, involving the application of comprehensive task inventories to thousands of job incumbents, generates many millions of discrete bits of response data. They can be processed and manipulated only by high speed computer capability using rigorously designed specialty programs. In addition to numerical data base handling, there is the problem of rapidly and accurately manipulating a task statement data base exceeding ten thousand carefully phrased behavioral statements. Through the use of special programs, task inventories are prepared, printouts for special purposes are created following a job analysis application, access and retrieval of both data and tasks are efficiently and accurately carried out, and special data analyses conducted. The collective programs, techniques and procedures comprising this sub-system are referred to as the Navy Occupational Data Analysis Language (NODAL).

## Job Analysis Sub-System

Some twenty task inventory booklets (and associated) response booklets) were the instruments used to obtain job incumbent response data for more than fifty occupations. An inventory booklet contains instructions, formatted questions concerning respondent information ("bio-data"), response dimension definitions, and a list of tasks which may vary in number from a few hundred to more than a thousand per occupational field.

By applying NODAL and its associated indexing techniques, it is possible to assemble modified or completely different inventories than those used in this research. Present inventories were applied about three years ago. While they have been rendered in operational format, they should not be reapplied until their task content is updated.

Response booklets were designed in OPSCAN mode for ease of recording and processing responses.

Overall job analysis objectives and a plan of administration were established prior to inventory preparation, including the setting of provisional sample target sizes. Since overall data attrition was forecast to approximate twenty percent, final sample and sub-sample sizes were adjusted accordingly. Stratified random sampling techniques were used. Variables selected (such as rating, NEC, environment) determined stratifications, together with sub-population sizes. About fifteen percent of large sub-populations were sought while a majority of all members of small sub-populations were sought.

Administration procedures were established with great care for every step of the data collecting process, and were coordinated with sampling and data analysis plans. Once set, the procedures were formalized as a protocol and followed rigorously.

## Instructional Sub-System

Partial "competency curricula" have been composed as an integral sub-system bridging what is required as performance on the job with what is, accordingly, necessary instruction in the training process. Further, curriculum materials were developed to meet essential requirements for implementing the system so that the system could be tested and evaluated for cost effectiveness. However, due to the fact that test and evaluation was not feasible in the Navy Medical Department within the duration of the project, it was not possible to complete the development of the system through the test and evaluation phase. The inability to complete this phase also interrupted the planned process for fully developing the curricula; therefore, instead of completed curricula ready for use in the system, the curricula were partially developed to establish the necessary sub-system methodology. The competency curricula are based on tasks currently performed by job incumbents in 1971. (The currency of a given curriculum depends upon periodic analysis of incumbents' jobs, and its quality control resides in the evaluation of the performance competency of the program's graduates.)

A competency curriculum provides a planned course of instruction or training program made up of sequenced competency units which are, in turn, comprised of sequenced modules. These modules, emphasizing performance objectives, are the foundation of the curriculum.

A complete module would be comprised of seven parts: a cluster of related tasks; a performance objective; a list of knowledges and skills implied by the objective; a list of instructional strategies for presenting the knowledges and skills to the learner; an inventory of training aids for supporting the instructional strategies; a list of examination modes; and a statement of the required training time. In this project, curriculum materials have been developed to various levels of adequacy, and usually comprise only the first three parts; the latter four need to be prepared by the user.

The performance objective, which is the most crucial part of the module, is the basis for determining curriculum content. It is composed of five essential elements: the stimulus which initiates the behavior; the behavior; the conditions under which the behavior takes place; the criteria for evaluating the behavior; and the consequence or results of the behavior. A sixth element, namely next action, is not essential; however, it is intended to provide linkage for the next behavior.

Knowledges and skills listed in the module are those needed by the learner for meeting the requirements of the performance objective.

Instructional strategies, training aids, examination modes and training time have been specified only for the Basic Hospital Corps Curriculum. The strategies, aids and modes were selected on the basis of those considered to be most supportive in presenting the knowledges and skills so as to provide optimum learning effectiveness and training efficiency. The strategies extend from the classroom lecture as traditionally presented by a teacher to the more sophisticated mediated program for self-instruction. The training aids, like strategies, extend from the traditional references and handout material in the form of a student syllabus to mediated programs for self-instruction supported by anatomical models. Examination modes extend from the traditional paper and pencil tests to proficiency evaluation of program graduates on the job, commonly known as feedback. Feedback is essential for determining learning effectiveness and for quality control of a training program. The kind of instructional strategies, training aids and examination modes utilized for training are limited only by such factors as staff capability and training budget.

The training time specified in the Basic Hospital Corps Curriculum is estimated, based upon essential knowledge and skills and program sequence.

The competency curriculum module, when complete, provides all of the requirements for training a learner to perform the tasks set forth in the module. A module may be used independently or related modules may be re-sequenced into modified competency units to provide training for a specific job segment.

Since the curricula are based upon tasks performed by job incumbents in 1971, current analysis of jobs needs to be accomplished using task inventories that have been updated to reflect changes in performed tasks. Subsequent to job analysis, a revision of the curricula should be accomplished to reflect task changes. When the foregoing are accomplished, then faculty and other staff members may be indoctrinated to the competency curricula and to their relationship to the education and training system.

In addition to the primary use for the systematic training of job incumbents, these curricula may be used to plan for new training programs, develop new curricula, and revise existing curricula; develop or modify performance standards; develop or modify proficiency examinations; define billets; credentialize training programs; counsel on careers; select students; and identify and select faculty.

## The System

Three sub-systems, as described, comprise the proposed system for Education and Training Programs in the Navy Medical Department. This exploratory and advanced developmental research has established an overall methodology for improved education and training incorporating every possible means of providing bases for demonstrating feasibility and cost effectiveness. There remains only job analysis sub-system up-dating, instructional sub-system completion, and full system test and evaluation.

## Acknowledgements

The authors wish to acknowledge the invaluable participation of the several thousands of Naval personnel who served as respondents in inventory application. The many military and civilian personnel who contributed to developmental efforts are cited by name in the Final Report.

The authors also wish to acknowledge former colleagues for singularly important contributions, namely, Elias H. Porter, Ph.D., Carole K. Kauffman, R.N., M.P.H., Mary Kay Munday, B.S.N., R.N., Gail Zarren, M.S.W., and Renee Schick, B.A.

Identity and acknowledgement of the project Advisory Group during the project's final year is recorded in the Final Report.

Lastly, the project could not have been commenced nor carried out without the vision, guidance and outstanding direction of Ouida C. Upchurch, Capt., NC, USN, Project Manager.

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Competency: UROLOGY ASSISTANT (URA)

COMPETENCY UNIT I: CATHETERIZATION

This unit includes the following modules:

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1	Intermittent Urethral Catheterization, Male . .	2
2	Self-Retaining Urethral Catheterization, Male . . . . .	3
3	Urethral Catheterization, Female . . . . .	4

Competency: UROLOGY ASSISTANT (URA)

Unit I: Catheterization

MODULE 1: INTERMITTENT URETHRAL CATHETERIZATION, MALE

- TASKS
- a. Perform aseptic urethral catheterization, male
  - b. Obtain sterile culture/urine for examination/analysis
  - c. Collect and measure residual/retained urine volume
  - d. Irrigate bladder
  - e. Explain/answer patient's questions regarding examination/test/treatment procedures
  - f. Assist patient to void, e.g., credes method

PERFORMANCE OBJECTIVE

- (Stimulus) Upon request of supervisor  
(Behavior) The URA will insert urethral catheter in a male patient, collect urine specimen for culture/analysis, and measure total volume  
(Conditions) With indirect supervision; using appropriate equipment  
(Criteria) Properly obtain volume sufficient for examination procedure specified, according to standard techniques and observing aseptic technique  
(Consequence) Specimen free from alien pathogens  
(Next Action) Report findings/specimen to supervisor and enter in patient's record

KNOWLEDGES AND SKILLS

Anatomy and common abnormalities of the male genitourinary tract  
Principles of standard aseptic urethral catheterization technique  
Indications for intermittent urethral catheterization  
Precautions, safeguards in performing catheterization  
Standard procedure for collection of specimen for specific examination  
Technique for irrigating bladder  
Technique for explaining catheterization procedure to patient  
Dexterity

Competency: UROLOGY ASSISTANT (URA)

Unit I: Catheterization

MODULE 2: SELF-RETAINING URETHRAL CATHETERIZATION, MALE

- TASKS
- a. Perform aseptic urethral catheterization, male
  - b. Obtain sterile culture/urine for examination/analysis
  - c. Collect and measure residual/retained urine volume
  - d. Irrigate bladder
  - e. Explain/answer patient's questions regarding examination/test/treatment procedures
  - f. Assist patient to void, e.g., credes method
  - g. Select proper equipment, catheter for specific intubation
  - h. Establish aseptic closed drainage system
  - i. Establish means of irrigation, filling the bladder
  - j. Select proper solution for specific irrigation procedure

PERFORMANCE OBJECTIVE

- (Stimulus) When assigned patient for self-retaining catheterization by supervisor
- (Behavior) The URA will select proper equipment and perform the standard technique for catheterization, collect and measure urine specimen, irrigate the bladder and establish a closed drainage system
- (Conditions) With indirect supervision; using appropriate equipment and observing aseptic technique
- (Criteria) Urine specimen obtained will be adequate for test specified
- (Consequence) Intubated bladder for pertinent inlet/outlet functions
- (Next Action) Report procedure accomplished to supervisor and enter in patient's record

KNOWLEDGES AND SKILLS

Intermittent urethral catheterization procedure  
Basic pathology of male genitourinary tract  
Indications for continuous/self-retaining catheter  
Selection and specific use of various catheters, collection devices and irrigation equipment  
Basic techniques, indications for various urologic procedures requiring self-retaining catheter  
Positioning of various devices to maintain efficient functioning of equipment

Competency: UROLOGY ASSISTANT (URA)

Unit I: Catheterization

MODULE 3: URETHRAL CATHETERIZATION, FEMALE

- TASKS
- a. Select proper equipment, catheter specific to female
  - b. Perform urethral catheterization, female

PERFORMANCE OBJECTIVE

- (Stimulus) When requested by supervisor to perform female catheterization
- (Behavior) The URA will select standard and special equipment and catheterize the female patient
- (Conditions) With indirect supervision; using appropriate equipment and observing aseptic technique
- (Criteria) Properly obtain/perform the functions outlined by the procedure
- (Consequence) Intubated urinary bladder/urethra
- (Next Action) Report procedure accomplished to supervisor and enter in patient's record

KNOWLEDGES AND SKILLS

Principles and techniques of urethral catheterization, female

Anatomy of female reproductive and urinary tracts

Basic gynecologic problems/pathology

Selection and use of special equipment, catheters specific to female patient

Professional courtesy

Competency: UROLOGY ASSISTANT (URA)

COMPETENCY UNIT II: UROLOGIC NURSING

This unit includes the following modules:

<u>Number</u>	<u>Title</u>	<u>Page</u>
1	Medications . . . . .	6
2	Patient Care and Maintenance of External Urinary Drainage Equipment . . . . .	7
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4	Instructing Patient in Self-Care of Stoma/ Diversion and Maintenance of Collection Appliance . . . . .	9

Competency: UROLOGY ASSISTANT (URA)

Unit II: Urologic Nursing

MODULE 1: MEDICATIONS

- TASKS
- a. Classify and store drugs
  - b. Issue filled prescriptions
  - c. Inventory drugs other than narcotics
  - d. Calculate and prepare percent solutions
  - e. Mix bladder irrigation solution
  - f. Order non-narcotic drugs from pharmacy
  - g. Administer prescribed medication

PERFORMANCE OBJECTIVE

- (Stimulus) Upon delivery of drug order from the pharmacy or when requested to administer certain medications
- (Behavior) The URA will store drugs, check expiration dates on existing stock, return expired drugs to pharmacy for disposal, distribute prefilled prescriptions, prepare bladder irrigation solutions, e.g., Neosporin GU unguent, order needed non-narcotic drugs from pharmacy and administer medications
- (Conditions) With minimum supervision; using non-narcotic drugs, formulary, PDR, drug cabinet
- (Criteria) Establish adequate order of pharmaceutical handling and dispensing/administration; following standard procedures
- (Consequence) Safe handling and management of non-narcotic drugs such as antibiotics, etc.

KNOWLEDGES AND SKILLS

Basic urologic pharmacology, i.e., oriented to pharmaceuticals specific to urology

Competency: UROLOGY ASSISTANT (URA)

Unit II: Urologic Nursing

MODULE 2: PATIENT CARE AND MAINTENANCE OF EXTERNAL URINARY DRAINAGE EQUIPMENT

- TASKS
- a. Perform basic urethral catheter care
  - b. Maintain and care for drainage tubes, e.g., suprapubic cystostomy, nephrostomy, pyelostomy, ureterostomy tubes
  - c. Maintain and care for drainage collection devices
  - d. Collect urine specimen from patient with a urinary drainage tube
  - e. Maintain and apply external collection devices, e.g., texas catheter
  - f. Maintain proper position of collection device to assure adequate drainage
  - g. Explain/answer patient's questions concerning procedure
  - h. Teach patient the care of equipment, etc.

PERFORMANCE OBJECTIVE

- (Stimulus) When assigned a patient with a urinary drainage tube/external collection device
- (Behavior) The URA will clean, maintain and change the collection equipment, collect a urine specimen and teach patient care of equipment, when appropriate
- (Conditions) With indirect supervision; using the appropriate equipment
- (Criteria) Properly establish patient care and assure drainage adequate to the specific equipment, using aseptic technique and following standard procedures
- (Consequence) This action will result in maintaining an adequate drainage system, and afford the patient proper medical care
- (Next Action) Inform supervisory personnel of any recognized problems, enter in patient's record or corresponding work-sheet list

KNOWLEDGES AND SKILLS

Basic principles of patient care  
Basic principles of urethral catheter care  
Basic anatomy and physiology of urinary tract  
Basic principles of urinary tract intubation  
Basic aseptic collection technique  
Basic principles of urinary collection devices  
Basic techniques for applying external collection devices  
Basic principles and techniques for irrigation  
Use and operation of irrigation equipment

Competency: UROLOGY ASSISTANT (URA)

Unit II: Urologic Nursing

MODULE 3: PATIENT CARE AND MAINTENANCE OF ANATOMIC URINARY DIVERSION

- TASKS
- a. Perform basic urologic patient care, anatomic urinary diversion
  - b. Remove temporary/permanent collection appliance
  - c. Perform basic stoma care
  - d. Cleanse/examine collection device prior to reapplication
  - e. Ascertain need for apparatus or equipment change/replacement
  - f. Make/report equipment changes and/or changes in stoma site
  - g. Explain/answer patient's questions regarding procedure

PERFORMANCE OBJECTIVE

- |               |  |
|---------------|--|
| (Stimulus)    | When assigned a patient with anatomic urinary diversion                                    |
| (Behavior)    | The URA will change, clean, reapply/replace the necessary equipment and perform stoma care |
| (Conditions)  | With indirect supervision  |
| (Criteria)    | Establish proper appliance care and stoma hygiene  |
| (Consequence) | This action will result in maintaining adequate post-operative stoma care                  |
| (Next Action) | Properly record the procedure; instruct patient in self-care of particular diversion       |

KNOWLEDGES AND SKILLS

- Basic anatomy and physiology--organ position and function
- Basic indications for anatomic diversion of urine, e.g., ileostomy (ileal conduit); colostomy (sigmoid conduit, cecovesicostomy, etc.); cutaneous ureterostomy, pyelostomy, vesicostomy, etc.
- Basic principles of the various diversion procedures
- Use, function and maintenance of temporary/permanent drainage devices
- Basic care of stoma sites
- Principles and techniques of uncomplicated intubation/dilation of stoma
- Short term post-op course/complications of stoma
- Use, function and maintenance of permanent stoma appliances

Competency: UROLOGY ASSISTANT (URA)

Unit II: Urologic Nursing

MODULE 4: INSTRUCTING PATIENT IN SELF-CARE OF STOMA/DIVERSION  
AND MAINTENANCE OF COLLECTION APPLIANCE

- TASKS
- a. Explain to patient basic urologic care for anatomic diversion sites/appliances
  - b. Explain to patient methods for removing/ applying collection equipment
  - c. Teach patient proper stoma care
  - d. Teach patient proper care and function of collection appliance

PERFORMANCE OBJECTIVE

- (Stimulus) When adequate post-operative recovery/progress has been attained
- (Behavior) The URA will explain to the patient the basic care of stoma/diversion and collection appliance, and observe patient/self-care
- (Conditions) With limited supervision
- (Criteria) Establish patient self-care of particular urinary diversion situation
- (Consequence) This action will result in patient self-care
- (Next Action) Proper follow-up and consultation with physician/ patient regarding re-equipping, altering, etc.

KNOWLEDGES AND SKILLS

Long term post-op course/complications of stoma  
Instructional techniques

Competency: UROLOGY ASSISTANT (URA)

COMPETENCY UNIT III: LABORATORY AND DIAGNOSTIC PROCEDURES

This unit includes the following modules:

<u>Number</u>	<u>Title</u>	<u>Page</u>
1	Collection of Urine for Examination . . . . .	11
2	Preparation of Urine for Examination . . . . .	12
3	Microscopic Urine Examination . . . . .	13
4	Bacterial Identification by Culturing/ Sensitivity Techniques . . . . .	14
5	Bacterial Identification by Staining . . . . .	15
6	Semen Specimen Collection and Analysis . . . . .	16

Competency: UROLOGY ASSISTANT (URA)

Unit III: Laboratory and Diagnostic Procedures

MODULE 1: COLLECTION OF URINE FOR EXAMINATION

- TASKS
- a. Explain/answer patient's questions concerning examination
  - b. Perform catheterization to aseptically collect specimen
  - c. Instruct/assist patient in method of urine collection, e.g., clean catch, three glass test, catheterization
  - d. Prepare/preserve specimen

PERFORMANCE OBJECTIVE

- (Stimulus) When a urine specimen is required and upon receipt of verbal/written orders
- (Behavior) The URA will instruct the patient/perform the necessary procedures to obtain a specimen
- (Conditions) With supervision
- (Criteria) According to standard procedures for the collection of a urine specimen correlated to a specific examination(s)
- (Consequence) This action will result in proper collection of a urinary specimen for examination
- (Next Action) Examination or delivery of specimen to proper laboratory site

KNOWLEDGES AND SKILLS

Indications for urinalysis and for particular collection methods  
Aseptic catheterization technique  
Urine collection methods  
Verbal communication skills

Competency: UROLOGY ASSISTANT (URA)

Unit III: Laboratory and Diagnostic Procedures

MODULE 2: PREPARATION OF URINE FOR EXAMINATION

- TASKS
- a. Check specific gravity of urine
  - b. Check urine for pH, acetone, glucose, protein, and occult blood by dip stick method

PERFORMANCE OBJECTIVE

- (Stimulus) When urine has been collected for analysis  
(Behavior) The URA will measure the specific gravity and pH, and check the urine for acetone, glucose, protein and occult blood in preparation for microscopic analysis
- (Conditions) Without supervision; using the hydrometer test kits, e.g., clinistix or comparable testing agent
- (Criteria) Tests will be performed in accordance with standard instructions or manufacturer's instructions
- (Consequence) This action will result in the accurate determination of the pH and specific gravity of the urine and the presence of acetone, glucose, protein and/or occult blood
- (Next Action) Record the results of the tests

KNOWLEDGES AND SKILLS

Technique for reading hydrometer  
Use and operation of hydrometer  
Use and indications for commercial testing agents/  
dip sticks

Competency: UROLOGY ASSISTANT (URA)

Unit III: Laboratory and Diagnostic Procedures

MODULE 3: MICROSCOPIC URINE EXAMINATION

- TASKS
- a. Centrifuge urine
  - b. Check for bacterial presence in urine by microscopic examination
  - c. Examine urine sediment for casts/WBC/RBC/crystals, etc.
  - d. Stain urine sediment

PERFORMANCE OBJECTIVE

- (Stimulus) Upon receipt of an aseptically obtained urine specimen and a request for microscopic examination
- (Behavior) The URA will centrifuge the urine and examine the sediment from the specimen for bacteria, casts, WBC, RBC, crystals, etc., staining the specimen, if necessary
- (Conditions) With limited supervision; using a low-power microscope, slides, coverslips, centrifuge and centrifuge tube
- (Criteria) A thorough and accurate microscopic examination of the urine
- (Consequence) This action will result in ascertaining what is present in the urine/sediment
- (Next Action) Complete appropriate report forms

KNOWLEDGES AND SKILLS

Bacterial morphology  
Appearance and incidence of casts/WBC/RBC/crystals, etc. under the microscope  
Staining technique for urine sediment  
Use and operation of centrifuge

Competency: UROLOGY ASSISTANT (URA)

Unit III: Laboratory and Diagnostic Procedures

MODULE 4: BACTERIAL IDENTIFICATION BY CULTURING/SENSITIVITY  
TECHNIQUES

- TASKS
- a. Streak culture media
  - b. Plate sensitivity discs
  - c. Check for bacterial presence in urine using commercial kit
  - d. Identify bacteria on basic culture media

PERFORMANCE OBJECTIVE

- (Stimulus) Upon receiving urine specimen and a request for a bacteriologic culture of urine
- (Behavior) The URA will streak appropriate culture media/kit, incubate and read the plates for identification of bacterial culture and sensitivity
- (Conditions) With direct supervision; using sterile transfer loop, plates of appropriate media, sensitivity discs, incubators, plate counter and stereomicroscope
- (Criteria) Following standard laboratory procedures, maintaining sterile technique and observing safety precautions to prevent contamination of URA or other cultures
- (Consequence) This action will indicate the presence of any bacteria in the urine specimen and their sensitivity
- (Next Action) Report the results of culturing

KNOWLEDGES AND SKILLS

Principles and techniques of culturing  
Use and operation of transfer loop, plate counter, stereomicroscope and sensitivity discs  
Morphology of bacterial colonies  
Techniques to transfer material without cross-contamination  
Differentiation between different kinds of bacterial colonies

Competency: UROLOGY ASSISTANT (URA)

Unit III: Laboratory and Diagnostic Procedures

MODULE 5: BACTERIAL IDENTIFICATION BY STAINING

- TASKS
- a. Prepare routine stains
  - b. Prepare smears for microscopic analysis
  - c. Examine urethral smears for gonococcus
  - d. Identify bacteria by staining methods
  - e. Examine prostatic secretion

PERFORMANCE OBJECTIVE

- (Stimulus) When patient arrives in clinic with urethral discharge or when a specimen of prostatic secretion is obtained
- (Behavior) The URA will collect a sample on a slide for staining; swab meatus with culturette before collecting voided urine; stain, e.g., Gram stain; and microscopically identify gram-positive/-negative organisms
- (Conditions) Without supervision; using slides, Gram stain, gentian violet, iodine, alcohol-water, safranin O, immersion oil, sink, water, microscope
- (Criteria) A properly stained smear for microscopic examination
- (Consequence) Preliminary determination of bacterial infection of urinary tract
- (Next Action) Report findings to supervisor and record

KNOWLEDGES AND SKILLS

Technique of plate streaking  
Preparation of routine stains

Competency: UROLOGY ASSISTANT (URA)

Unit III: Laboratory and Diagnostic Procedures

MODULE 6: SEMEN SPECIMEN COLLECTION AND ANALYSIS

- TASKS
- a. Explain/answer patient's questions regarding the examination
  - b. Explain/answer patient's questions regarding proper techniques for collection of semen specimen in and out of clinic
  - c. Explain/answer patient's questions regarding delivery of semen specimen to site of examination
  - d. Prepare specimen for examination
  - e. Perform gross and microscopic semen analysis
  - f. Record test results

PERFORMANCE OBJECTIVE.

- (Stimulus) Upon receipt of a seminal specimen or when requested to instruct a patient concerning an examination
- (Behavior) The URA will instruct the patient, prepare the semen for analysis, make a preliminary determination of glucose, pH, viscosity, sperm count, sperm motility, and morphology of the specimen being examined, and record the test results
- (Conditions) With indirect supervision
- (Criteria) An accurate determination of gross and microscopic values of the semen specimen; performed according to standard procedures for semen analysis
- (Consequence) This action will result in the determination of gross and microscopic values of the semen specimen
- (Next Action) Inform physician or responsible support personnel of preliminary results, taking care to preserve the test specimen

KNOWLEDGES AND SKILLS

- Basic anatomy and physiology of the male genital tract
- Basic concept of spermatogenesis and ejaculatory system
- Indications for semen analysis, e.g., infertility, post-vasectomy
- Standard laboratory procedures for semen analysis
- Standard values for semen analysis, clinico-pathologic
- Verbal communication skills
- Operation of microscope, hemacytometer, counting chambers, etc.
- Preparation and use of necessary reagents, e.g., stains, etc.
- Techniques for specimen collection in and out of clinic
- Standard clinical procedures for preserving specimen

Competency: UROLOGY ASSISTANT (URA)

COMPETENCY UNIT IV: ENDOSCOPIC PROCEDURES

This unit includes the following modules:

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2	Standard Procedures for Storing, Dispersing and Maintaining Endoscopic Suite Armamentaria . . . . .	19
3	Standard Procedures for Collecting, Labeling and/or Forwarding Armamentaria/ Specimen . . . . .	21
4	Maintenance of the Endoscopy Room/ Examining Room . . . . .	22
5	Setting Up the Endoscopic Suite Instrument Table . . . . .	23
6	Preparation of the Patient for Endoscopic Suite Procedure . . . . .	24
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Competency: UROLOGY ASSISTANT (URA)

Unit IV: Endoscopic Procedures

MODULE 1: STANDARD PROCEDURES FOR RECORDS/REQUISITION FORMS

TASKS                    a. Complete records/requisition forms pertinent to endoscopic suite, e.g., laboratory, endoscopic, central stores-supply, radiologic

PERFORMANCE OBJECTIVE

(Stimulus)                When assigned duties in the endoscopic suite  
(Behavior)                The URA will obtain and complete the appropriate records/requisition forms  
(Conditions)              With supervision  
(Criteria)                 Records/requisitions completed accurately, according to standard procedures and using accepted nomenclature  
(Consequence)            This action will result in the orderly progression of endoscopic suite duties and recording of data pertinent to those duties  
(Next Action)             Progress to next step of particular duty

KNOWLEDGES AND SKILLS

Basic medical clerical receptionist duties  
Records/requisition forms pertinent to endoscopic suite duties and their use  
Standard nomenclature pertinent to endoscopic suite duties  
Areas and function of hospital outside endoscopic suite

Competency: UROLOGY ASSISTANT (URA)

Unit IV: Endoscopic Procedures

MODULE 2: STANDARD PROCEDURES FOR STORING, DISPERSING AND  
MAINTAINING ENDOSCOPIC SUITE ARMAMENTARIA

- TASKS
- a. Classify and store urethral catheters
  - b. Clean non-disposable catheters, e.g., filiform, Malecot, Johnson basket, Ellick loop
  - c. Clean instruments
  - d. Wrap/package/label clean armamentaria for sterilization
  - e. Sterilize re-usable armamentaria
  - f. Classify and store/disperse re-usable sterilized armamentaria
  - g. Make minor repairs/alterations

PERFORMANCE OBJECTIVE

- (Stimulus) When assigned to the endoscopic suite instrument room
- (Behavior) The URA will properly classify, store, and/or clean, wrap, sterilize, examine and repair endoscopic suite armamentaria
- (Conditions) Without supervision
- (Criteria) All necessary functions relating to endoscopic suite armamentaria performed according to established procedures
- (Consequence) This action will result in efficient maintenance of endoscopic suite armamentaria
- (Next Action) Assist the endoscopic suite supervisor in re-ordering/replacing or requisitioning endoscopic suite armamentaria

KNOWLEDGES AND SKILLS

- Basic function and use of urethral and miscellaneous catheters, e.g., Foley, Pezzer, Malecot, Dunbar, Robinson, whistle-tip, bulb-tip, acorn, Ellick loop Johnson basket
- Basic function and use of urologic instruments, e.g., cystoscopes, resectoscopes, sounds, bougie à boule, Coleman dilator, Bigelow lithotrite, Silverman needle

MODULE 2 (Continued)

Basic function and use of all other endoscopic  
suite equipment, e.g., gloves, gowns, syringes,  
needles, antiseptic solutions, instrument wrappers  
Procedure for classifying/storing endoscopic suite  
armamentaria  
Sterilization procedures, e.g., autoclaving, steam  
sterilization, gas sterilization, soak pan, and  
various agents used, e.g., cidex, other  
commercial germicidals  
Minor adjustment or repair which can be done on  
various armamentaria  
Identification of armamentaria

Competency: UROLOGY ASSISTANT (URA)

Unit IV: Endoscopic Procedures

MODULE 3: STANDARD PROCEDURES FOR COLLECTING, LABELING AND/OR FORWARDING ARMAMENTARIA/SPECIMEN

- TASKS
- a. Collect/gather armamentaria when procedure initiated/completed
  - b. Collect/gather specimen at proper time for further disposal/handling
  - c. Label and/or forward armamentaria/specimen

PERFORMANCE OBJECTIVE

- (Stimulus) Routinely, when appropriate  
(Behavior) The URA will collect/gather proper armamentaria/specimen, label and/or forward materials  
(Conditions) With limited supervision  
(Criteria) Proper dispersal/disposal of armamentaria/specimen will be exercised  
(Consequence) This action will result in the efficient progression of endoscopic suite duties  
(Next Action) Completion of duties and/or orderly progression to next phase of duties

KNOWLEDGES AND SKILLS

- Proper dispersal/disposal procedures for armamentaria/specimen  
Proper procedure for labeling or identifying armamentaria/specimen

Competency: UROLOGY ASSISTANT (URA)

Unit IV: Endoscopic Procedures

MODULE 4: MAINTENANCE OF THE ENDOSCOPY ROOM/EXAMINING ROOM

- TASKS
- a. Maintain and clean articles for endoscopy room/examining room
  - b. Obtain/supply necessary articles for endoscopy room/examining room
  - c. Restock germicidal/antiseptic solutions, etc.

PERFORMANCE OBJECTIVE

- (Stimulus) When assigned to maintain a endoscopy room/examination room
- (Behavior) The URA will clean and maintain the room, restocking and/or supplying necessary articles
- (Conditions) Without supervision
- (Consequence) This action will make the room available for endoscopic suite procedures
- (Next Action) Move sterile instrument table, patient and/or other necessary equipment into room

KNOWLEDGES AND SKILLS

General cleaning techniques  
Identification of necessary articles for endoscopic room and procedure for use and supply

Competency: UROLOGY ASSISTANT (URA)

Unit IV: Endoscopic Procedures

MODULE 5: SETTING UP THE ENDOSCOPIC SUITE INSTRUMENT TABLE

- TASKS
- a. Set up routine endoscopic suite instrument tables
  - b. Obtain proper instruments/endoscopy set for the procedure
  - c. Do surgical scrub/gown/glove

PERFORMANCE OBJECTIVE

- (Stimulus) When assigned the duty of setting up the endoscopic suite instrument table
- (Behavior) The URA will assemble all necessary instruments/sets and set up the endoscopy suite instrument table
- (Conditions) Without supervision
- (Criteria) Using aseptic (operating room) technique
- (Consequence) This action will result in an efficient and routine procedure for endoscopic suite instrument table set up
- (Next Action) Aseptically cover and/or initiate procedures for receiving patient

KNOWLEDGES AND SKILLS

- Aseptic (operating room) technique including scrubbing and gowning
- Position and location on the table for instruments and equipment
- Standard procedural requirements for basic/routine endoscopy set-up

Competency: UROLOGY ASSISTANT (URA)

Unit IV: Endoscopic Procedures

MODULE 6: PREPARATION OF THE PATIENT FOR ENDOSCOPIC SUITE PROCEDURE

- TASKS
- a. Transport patient
  - b. Position patient for particular procedure
  - c. Prep patient as needed
  - d. Assist anesthesiologist

PERFORMANCE OBJECTIVE

- (Stimulus) When assigned a patient scheduled for endoscopic suite procedure
- (Behavior) The URA will transport and position the patient for the particular procedure, perform the necessary prep (e.g., shaving, scrubbing, painting) and/or assist the anesthesiologist as needed (e.g., lumbar puncture, saddle block, etc.)
- (Conditions) Without supervision
- (Criteria) According to particular endoscopy procedure
- (Consequence) This action will result in a patient prepared for endoscopic suite procedure

KNOWLEDGES AND SKILLS

Proper position of patient for particular endoscopic procedure  
Procedure for surgical skin prep and scrub technique  
Positioning of patient for spinal anesthesia  
Basic knowledge of spinal/general anesthesia

Competency: UROLOGY ASSISTANT (URA)

Unit IV: Endoscopic Procedures

MODULE 7: CIRCULATING IN THE ENDOSCOPY ROOM

TASKS

- a. Verify that the room is in order
- b. Verify that the instruments/equipment for the particular procedure are complete/in the room
- c. Request/attend to transportation of the patient to the endoscopy room
- d. Request/attend to completion of preoperative orders, e.g., medications were given, I.V.'s started, etc.
- e. Request/attend to positioning of patient
- f. Assist with induction of anesthesia
- g. Request/attend to surgical prep
- h. Request/attend to draping of patient
- i. Assist with gowning
- j. Request/attend to hook-up of involved instruments/equipment, e.g., Bovie, irrigation, suction, etc.
- k. Attend to instrument/equipment needs of physician incidental to anticipated/unexpected events during the procedure (e.g., bulb-tip catheter for retrogradography when unable to pass straight urethral catheter)
- l. Attend to needs of anesthesia personnel during procedure
- m. Handle and properly assign specimen resulting from the procedure
- n. Monitor vital signs in emergency situation
- o. Assist in completing procedure, e.g., insert catheter, apply dressings
- p. Complete and maintain required records/requisition forms
- q. Assist in post-operative transport of patient to proper recovery area
- r. Request/attend to preparing the room for future use (e.g., returning used equipment, etc. to proper location, cleaning, resupplying room)
- s. Report to supervisor

PERFORMANCE OBJECTIVE

(Stimulus) When assigned to circulating duties in the endoscopy room

(Behavior) The URA will attend to or assist with all matters required for the particular procedure/patient

(Conditions) Without supervision

MODULE 7 (Continued)

- (Criteria) In an orderly, progressive manner, fulfilling the established responsibilities of the endoscopy room circulator
- (Consequence) This action will result in efficient participation in endoscopic procedures

KNOWLEDGES AND SKILLS

Basics of patient records, pre-op orders  
Basics of I.V. therapy, pre-op medications  
Fundamentals of endoscopic suite procedures as to instrument needs  
Fundamentals of life support/emergency care (e.g., in the event of cardiac arrest, resuscitation, etc.)

Competency: UROLOGY ASSISTANT (URA)

Unit IV: Endoscopic Procedures

MODULE 8: SCRUBBING ON ENDOSCOPIC PROCEDURES

- TASKS
- a. Scrub for endoscopic procedures
  - b. Assist physician as required/requested

PERFORMANCE OBJECTIVE

- (Stimulus) When assigned  
(Behavior) The URA will scrub and assist the physician with endoscopic procedures, e.g., electrosurgical resection, retrograde pyelography, etc.  
(Conditions) With supervision  
(Criteria) According to direct orders of the physician and/or anticipating his needs, and following standard surgical scrub technique  
(Consequence) This action will expedite the particular endoscopic procedure

KNOWLEDGES AND SKILLS

- Fundamentals of endoscopic procedures (e.g., electrosurgical resection, retrograde pyelography, etc.)
- Manual dexterity

Competency: UROLOGY ASSISTANT (URA)

Unit IV: Endoscopic Procedures

MODULE 9: CYSTOMETROGRAMS

- TASKS
- a. Assemble necessary instruments/equipment/records
  - b. Review patient's history
  - c. Explain/answer patient's questions about procedure
  - d. Insert catheter
  - e. Empty the patient's bladder
  - f. Adjust and attach necessary equipment/solutions
  - g. Instill sterile water into bladder
  - h. Monitor/record patient's discomfort levels
  - i. Instruct patient in voluntary acts of voiding

PERFORMANCE OBJECTIVE

- (Stimulus) When assigned to perform a cystometric study  
(Behavior) The URA will assemble/obtain the necessary equipment/records, explain the procedure to the patient, catheterize the patient and perform a cystometrogram, recording patient response to gradual instillation of aliquots of sterile water into bladder
- (Conditions) Without supervision; using patient history  
(Criteria) According to established standard procedure  
(Consequence) This action will result in a completed cystometric study  
(Next Action) Record/report test results

KNOWLEDGES AND SKILLS

Basic instrumentation for performing a cystometrogram  
Catheterization principles and techniques  
Normal bladder capacity  
Basic physiology of micturition, normal/abnormal values  
Indications for cystometric studies  
Fundamentals of operation of cystometrograph, monometer, etc.  
Standard procedures for performing cystometrography

Competency: UROLOGY ASSISTANT (URA)

Unit IV: Endoscopic Procedures

MODULE 10: URETHRAL CALIBRATION, DILATION

TASKS

- a. Assemble urethral calibrators, dilators
- b. Verify instructions for the procedure
- c. Perform routine calibration of the urethra
- d. Perform routine dilation of the urethra

PERFORMANCE OBJECTIVE

(Stimulus) When assigned a patient who is to have urethral dilation

(Behavior) The URA will assemble the necessary equipment and, having checked instructions for the procedure, will calibrate and/or dilate the patient's urethra

(Conditions) Without supervision

(Criteria) According to standard procedures, using a progressively sized and properly lubricated instrument, and maintaining aseptic technique

(Consequence) The desired degree of urethral dilation is established

(Next Action) Report/record procedure in proper manner

KNOWLEDGES AND SKILLS

Indications for urethral calibration, dilation  
Method of progressively increasing dilator size  
Dexterity in manipulating bougie à boule  
Dexterity in manipulating urethral sounds

Competency: UROLOGY ASSISTANT (URA)

Unit IV: Endoscopic Procedures

MODULE 11: VOIDING/STATIC/CINE-CYSTOGRAMS, CYSTOURETHROGRAMS

- TASKS
- a. Determine from patient history or requisition radiologic procedure to be performed
  - b. Determine and obtain necessary equipment/solutions
  - c. Intubate bladder
  - d. Inject radiopaque substances
  - e. Request/attend to proper radiologic study

PERFORMANCE OBJECTIVE

- (Stimulus) When assigned a patient for lower urinary tract radiographs
- (Behavior) The URA will assemble the proper equipment/supplies to carry out specific procedure; intubate bladder when indicated and/or inject radiopaque substances into required area, and request or attend to the specified radiographic study
- (Conditions) Without supervision
- (Criteria) Following prescribed techniques
- (Consequence) This action will identify lower urinary tract pathology when present
- (Next Action) Request/perform follow-up studies, if necessary

KNOWLEDGES AND SKILLS

Standard procedures for lower urinary tract radiographic studies  
Radiographic pathology of lower urinary tract

Competency: UROLOGY ASSISTANT (URA)

Unit IV: Endoscopic Procedures

MODULE 12: LOOPOGRAMS, NEPHROSTOGRAMS, ETC.

- TASKS
- a. Perform intubation
  - b. Inject radiopaque substance
  - c. Request/attend to radiographic studies, e.g., loopograms, nephrostograms

PERFORMANCE OBJECTIVE

- (Stimulus) When assigned for specific radiographic study, e.g., loopogram, nephrostogram
- (Behavior) The URA will obtain/assemble all necessary equipment to carry out the procedure, establish intubation of area as needed and/or inject radiopaque substance for radiologic study, and request/attend to the specified radiographic procedure
- (Conditions) Without supervision
- (Criteria) Following standard procedures
- (Consequence) This will provide a radiograph of the desired area
- (Next Action) Determine need for follow-up studies

KNOWLEDGES AND SKILLS

Indications for specific procedure  
Standard radiologic procedures for loopograms, nephrostograms, etc.  
Safeguards

Competency: UROLOGY ASSISTANT (URA)

Unit IV: Endoscopic Procedures

MODULE 13: EXCRETORY UROGRAPHY

- TASKS
- a. Determine from patient history or requisition radiologic procedure to be performed
  - b. Determine and obtain necessary equipment/solutions
  - c. Question patient as to allergic manifestations
  - d. Inject I.V. dye
  - e. Request/attend to radiographic procedure, e.g., IVP, hypertensive study

PERFORMANCE OBJECTIVE

- (Stimulus) When assigned a patient for excretory urography  
(Behavior) The URA will obtain/assemble the necessary equipment/solutions, inject radiopaque media when appropriate, and request/perform specified excretory urogram  
(Conditions) With indirect supervision  
(Criteria) According to established procedures and using standard techniques  
(Consequence) This action will identify urinary tract pathology  
(Next Action) Arrange for follow-up studies, if necessary

KNOWLEDGES AND SKILLS

Indications for various excretory urographic studies  
Procedures for various excretory urographic studies, e.g., IVP, hypertensive study  
Contraindications for procedure, e.g., allergies

Competency: UROLOGY ASSISTANT (URA)

COMPETENCY UNIT V: UROLOGIC RADIOLOGY PERFORMED IN ENDOSCOPIC SUITE  
AND/OR UROLOGY OUTPATIENT DEPARTMENT

This unit includes the following modules:

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2	Radiation Exposure Surveillance . . . . .	35
3	X-Ray Unit Calibration . . . . .	36
4	Technical Evaluation of Radiograph Quality . . .	37
5	Performing Radiologic Examination with Assistance . . . . .	38
6	Independently Performing Radiography . . . . .	39
7	Contrast-Induced Emergencies . . . . .	40
8	Maintaining Radiographic Records . . . . .	41

Competency: UROLOGY ASSISTANT (URA)

Unit V: Urologic Radiology

MODULE 1: RADIATION EXPOSURE PROTECTION

- TASKS
- a. Inspect for use of protective clothing in occupationally hazardous areas
  - b. Remind personnel in occupationally hazardous areas to get required lab tests/physicals
  - c. Provide adequate shielding from radiation to gonads of pediatric patients
  - d. Provide adequate shielding from radiation to abdominal area in pregnant women

PERFORMANCE OBJECTIVE

- (Stimulus) When assigned radiation protection responsibilities in the x-ray room
- (Behavior) The URA will inform patients/personnel of the need for protection, supply necessary protective clothing, and indicate the hazardous radiation areas to be avoided
- (Conditions) Without supervision; using lead gloves and/or apron
- (Criteria) All personnel must be protected, patients shielded as much as possible, especially pediatric and pregnant patients
- (Consequence) All personnel are protected from exposure to radiation
- (Next Action) Proceed with radiographic study

KNOWLEDGES AND SKILLS

Determination from patient history and/or written orders of the specific reason for radiologic study and the total area that must be exposed to radiation, e.g., if only kidney function is needed that is the only area in pediatric or pregnant patients which needs to be exposed to radiation

Reasons for shielding gonadal area in pediatric patient/abdominal region in the pregnant patient

Radiation protective clothing

Radiation spread

Consequence of overexposure to radiation

Location of protective clothing and shields, e.g., lead walls, doors

Competency: UROLOGY ASSISTANT (URA)

Unit V: Urologic Radiology

MODULE 2: RADIATION EXPOSURE SURVEILLANCE

- TASKS
- a. Issue personnel monitoring devices, e.g., pocket dosimeter, film badge
  - b. Collect personnel monitoring devices for processing

PERFORMANCE OBJECTIVE

- (Stimulus) Routinely and when a new technician/observer arrives in the department
- (Behavior) The URA will issue radiation-level monitoring devices to check the level of exposure the person receives, e.g., 50 rads, and will see that all personnel turn in individual monitoring devices within 30 days
- (Conditions) With technical supervision
- (Criteria) Each person in radiation-hazardous area must have a monitoring device
- (Consequence) Protection for each individual from cumulative radiation exposure
- (Next Action) Report results

KNOWLEDGES AND SKILLS

Amount of radiation exposure which is dangerous  
Symptoms of radiation sickness  
Identification of danger areas  
Identification and use of radiographic exposure devices

Competency: UROLOGY ASSISTANT (URA)

Unit V: Urologic Radiology

MODULE 3: X-RAY UNIT CALIBRATION

- TASKS
- a. Determine exposure technique for x-ray series
  - b. Determine and set kilovoltage-major/minor-peak meter on x-ray unit
  - c. Determine and set MA meter on x-ray unit
  - d. Determine and set impulse timer on x-ray unit
  - e. Select alternative techniques in setting x-ray unit

PERFORMANCE OBJECTIVE

- (Stimulus) When required to use a mobile or stationary x-ray unit
- (Behavior) The URA will determine the exposure technique to be used, and will determine the value for and set the kilovoltage meter, the MA meter and the impulse timer on the unit. When necessary the URA will determine alternative exposure techniques
- (Conditions) Using equipment manuals, x-ray machine, penetrometer, spinning top, cassettes with film and screen, darkroom
- (Criteria) Calibrations will be made in accordance with guidelines in the manuals
- (Consequence) X-ray machine will be calibrated correctly thereby producing higher quality x-rays and safeguarding the patient
- (Next Action) Take kidney, urinary, bladder (KUB) radiographs

KNOWLEDGES AND SKILLS

- X-ray exposure factors
- Calibration of x-ray unit
- Use of equipment necessary for calibration of x-ray unit
- Operation and function of parts of x-ray unit
- Use of penetrometer and spinning top
- Testing timer, kv and MA selectors

Competency: UROLOGY ASSISTANT (URA)

Unit V: Urologic Radiology

MODULE 4: TECHNICAL EVALUATION OF RADIOGRAPH QUALITY

- TASKS
- a. Read x-ray films for technical adequacy
  - b. Readjust/calibrate x-ray unit
  - c. Inform physician of unexpected x-ray findings
  - d. Point out possible abnormalities on x-ray film to physician
  - e. Reposition to improve on anatomic localization of abnormality
  - f. Repeat shooting of x-ray

PERFORMANCE OBJECTIVE

- (Stimulus) Routinely when performing a radiographic examination  
(Behavior) The URA will check radiographs for technical adequacy and retake, if necessary  
(Conditions) Without supervision or with minimal supervision; using an x-ray unit, illuminator, patient history and preliminary diagnosis  
(Criteria) X-ray unit correctly readjusted to produce a technically adequate radiograph  
(Consequence) Technically adequate diagnostic x-ray study  
(Next Action) Prepare for next examination

KNOWLEDGES AND SKILLS

- Radiographic technique  
Recognition of abnormalities or pathology on film taken  
Standards of technical radiographic adequacy

Competency: UROLOGY ASSISTANT (URA)

Unit V: Urologic Radiology

MODULE 5: PERFORMING RADIOLOGIC EXAMINATION WITH ASSISTANCE

- TASKS
- a. Verify specific study to be done
  - b. Take retrograde pyelograms
  - c. Take other operative-connected studies, e.g., cystogram, antegrade pyelograms, etc.
  - d. Determine that the technical quality is adequate

PERFORMANCE OBJECTIVE

- (Stimulus) When specific endoscopic radiologic procedures are requested
- (Behavior) The URA will determine and verify the technique to be performed and take the specified radiograph, e.g., retrograde pyelograms, antegrade pyelograms, cystograms
- (Conditions) With supervision by the physician
- (Criteria) Following standard radiologic procedures for the specified study
- (Consequence) Serial or standard radiographs obtained as requested
- (Next Action) Verify completion of study

KNOWLEDGES AND SKILLS

Endoscopic suite duties  
Principles and techniques for taking retrograde pyelograms, antegrade pyelograms, cystograms, etc.

Competency: UROLOGY ASSISTANT (URA)

Unit V: Urologic Radiology

MODULE 6: INDEPENDENTLY PERFORMING RADIOGRAPHY

- TASKS
- a. Recheck patient's name and verify procedure to be performed
  - b. Take intravenous excretory pyelograms
  - c. Take voiding/static cystograms, cystourethrograms
  - d. Take loopograms, nephrostograms, etc.
  - e. Determine that the technical quality is adequate

PERFORMANCE OBJECTIVE

- (Stimulus) When assigned a patient for a specific radiologic study
- (Behavior) The URA will determine and verify the technique to be used and take the specified radiograph, e.g., intravenous excretory pyelogram; voiding/static cystogram and/or cystourethrogram; loopogram, nephrostogram
- (Conditions) Without supervision
- (Criteria) According to established standards for the specified procedure
- (Consequence) Serial or standard radiographs obtained, as requested
- (Next Action) Verify completion of study

KNOWLEDGES AND SKILLS

Endoscopic suite duties--radiologic aspects  
Principles and procedures for taking intravenous excretory pyelograms; voiding/static cystograms and/or cystourethrograms; loopograms and nephrostograms

Competency: UROLOGY ASSISTANT (URA)

Unit V: Urologic Radiology

MODULE 7: CONTRAST-INDUCED EMERGENCIES

- TASKS
- a. Observe for symptoms of untoward/adverse reaction to contrast media
  - b. Determine need for and type of medicine and/or emergency equipment indicated
  - c. Provide emergency treatment

PERFORMANCE OBJECTIVE

- (Stimulus) When patient having contrast radiographic study exhibits symptoms of adverse reaction
- (Behavior) The URA will identify the particular reaction, provide emergency care as needed and/or advise physician or supervisor of reaction on a stat basis
- (Conditions) Without supervision
- (Criteria) Proper immediate care exercised to aid patient experiencing adverse reaction
- (Consequence) This will result in early treatment of untoward effects of radiopaque media
- (Next Action) Assist physician/supervisor

KNOWLEDGES AND SKILLS

Side effects/signs of allergic/anaphylactic reactions  
Immediate/emergency care for reaction

Competency: UROLOGY ASSISTANT (URA)

Unit V: Urologic Radiology

MODULE 8: MAINTAINING RADIOGRAPHIC RECORDS

- TASKS
- a. Log standard 519-A radiographic report
  - b. Identify radiograph
  - c. Log number of x-ray exposures made on each patient
  - d. Log x-ray numbers or identification onto records
  - e. Maintain cardex file/system
  - f. Maintain x-ray film library/file
  - g. Prepare and maintain x-ray file envelopes
  - h. File radiographs
  - i. Loan x-ray films to physicians/other departments
  - j. Prepare x-ray films for mailing

PERFORMANCE OBJECTIVE

- (Stimulus) On a routine basis or when ordered  
(Behavior) The URA will set up and maintain a filing system for radiographs and will maintain logs of x-ray numbers and identifications. The URA will also loan films to other departments when requested and prepare films for mailing
- (Conditions) Using cardex file/system, file envelopes, x-rays, logbooks, film identification printer, filing cabinets and x-ray reports
- (Criteria) Files will be set up and maintained in accordance with hospital and departmental instructions
- (Consequence) This action will result in an efficient filing system that will permit rapid recovery of an x-ray and/or tracing of an x-ray that has been loaned or mailed
- (Next Action) Use filing system

KNOWLEDGES AND SKILLS

Institutional/departmental filing system  
Current instructions on loaning or disposing of x-rays  
How to complete x-ray forms

Competency: UROLOGY ASSISTANT (URA)

COMPETENCY UNIT VI: CLINICAL CASE MANAGEMENT

This unit includes the following modules:

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2	Gathering Preliminary Data for Diagnosis . . .	44
3	Routine Outpatient Department Treatment . . .	45

Competency: UROLOGY ASSISTANT (URA)

Unit VI: Clinical Case Management

MODULE 1: PRELIMINARY SCREENING OF CLINIC PATIENT

- TASKS
- a. Evaluate patient's chief complaint
  - b. Obtain brief medical history--past/present
  - c. Determine priority for immediate attention by supervisor, e.g., acutely ill patient, non-emergency
  - d. Determine priority for assignment to examination area, e.g., post-operative follow-up, pre-admission exam

PERFORMANCE OBJECTIVE

(Stimulus)	When a patient is received in the urology clinic
(Behavior)	The URA will obtain the patient's chief complaint and preliminary history and determine the nature of examination required, the proper clinic area and the priorities for clinical assignment, and record present data on patient record
(Conditions)	With indirect supervision
(Consequence)	Proper clinic assignment will be made
(Next Action)	Preliminary diagnosis or treatment

KNOWLEDGES AND SKILLS

Procedures for evaluation of urology-related emergencies  
Use and location of patient records  
Ability to determine chief complaints/history  
Ability to communicate with/calm acutely ill patients

Competency: UROLOGY ASSISTANT (URA)

Unit VI: Clinical Case Management

MODULE 2: GATHERING PRELIMINARY DATA FOR DIAGNOSIS

- TASKS
- a. Determine what information is required to evaluate patient's chief complaint/medical history and record
  - b. Determine the location/degree/duration of pain
  - c. Determine the type/degree/duration of micturition
  - d. Determine the type/degree/duration of urethral, vaginal, wound, other urinary outlet discharges
  - e. Determine location/site and degree/duration of blood loss
  - f. Determine degree/duration of weight loss
  - g. Determine the status of patient's appetite
  - h. Determine the patient's bowel habits/changes/duration
  - i. Obtain patient's past medical history
  - j. Obtain patient's past surgical history
  - k. Determine if problem is kidney/ureter related
  - l. Determine if problem is bladder related
  - m. Observe and determine if problem is penis/urethra related
  - n. Determine if problem is prostate related
  - o. Determine if problem is vaginal/gynecologic
  - p. Determine if problem is scrotal related

PERFORMANCE OBJECTIVE

- (Stimulus) When assigned to interview a urology clinic patient  
(Behavior) The URA will obtain and record on proper form/record pertinent data concerning patient's past/present medical history
- (Conditions) With indirect supervision  
(Criteria) Using a standard set of questions concerning medical history, and using the patient's chief complaint and available medical record as guidelines, gathering adequate information to determine the precise urinary tract location of present problem
- (Consequence) Collection of pertinent data for evaluation by the physician
- (Next Action) Report to physician for possible diagnosis

KNOWLEDGES AND SKILLS

Use and location of patient records  
Basic symptomology--Merck Manual  
Medical nomenclature

Competency: UROLOGY ASSISTANT (URA)

Unit VI: Clinical Case Management

MODULE 3: ROUTINE OUTPATIENT DEPARTMENT TREATMENT

- TASKS
- a. Ask patient/check chart for contraindication for treatment/procedure/test
  - b. Perform specified treatment, test or x-ray

PERFORMANCE OBJECTIVE

- (Stimulus) Having a patient for routine examination, diagnostic test or treatment
- (Behavior) The URA will ask patient and/or check chart for contraindications for scheduled treatment/tests and perform specified procedures, e.g., bladder instillations, irrigations, contrast x-ray studies
- (Conditions) Without supervision; using a chart, catheters, irrigation solution, x-ray equipment
- (Criteria) Procedures performed in the same manner/technique which would be applied to inpatient duties
- (Consequence) Efficient initial/follow-up treatment of the clinic patient
- (Next Action) Consult physician as to contraindications/completion of assignment

KNOWLEDGES AND SKILLS

- Recognition of contraindications to specific exam or study
- Principles and techniques for performance of specified procedures, e.g., bladder irrigation, urethral irrigation

