Appendix O

HEALTH SCIENCE YOUTH APPRENTICESHIP

AMBULATORY/SUPPORT SERVICES PATHWAY AMBULATORY/SUPPORT SERVICES (UNIT 7)

Competency

1. Maintain department documents

Performance Standard Condition

Competence will be demonstrated

at the worksite

Performance Standard Criteria

Performance will be successful when learners:

Route written, electronic, and oral requests for information, purchase orders, checks, and other business documents to appropriate parties

Sort and distribute correspondence accurately

Update documents manually and/or electronically as required

Verify authorizations and/or other required prior to filing/storage

Follow up to obtain missing information

Use filing and indexing guidelines to add and retrieve information to the client record Store information (client records/reports/forms) promptly and accurately

File manual client records

Store, retain, and/or destroy manual records as directed

Adhere to the legal storage, retention, and destruction requirements for client records Collect and enter data for special programs such as staff credentialing, utilization management, risk management, and/or infection control programs

Learning Objectives

Compare indexing and filing methods used for filing in health care organizations

Explain how client records are cross referenced manually and electronically

Explain the reasons for cross referencing and cross indexing

Outline the procedures for finding specific client records/information manually and electronically

List the legal guidelines governing storage and retention of documents

Compare retention requirements for manual and electronic documentation

List the legal guidelines for record destruction

Summarize attributes of proper information storage (accessibility, quality, security, flexibility, connectivity, efficiency, etc.)

Identify storage options (imaging, CDs, portable devices, etc)

Compare and contrast the different methods of mailing: certified, registered, inter-office, first class

Discuss accounts receivable and accounts payable processes (order invoices, shipping, receiving) as they apply to your department/facility for products and services

Competency

2. Create and/or maintain the client record

Performance Standard Condition

Competence will be demonstrated

at the worksite

Performance Standard Criteria

Performance will be successful when learners:

Obtain/update client information

Verify data/information

Ensure client identification appears on each record or form used

Enter/update required information in the client record

Confirm accuracy of entered/updated information

Use only approved abbreviations

Client record is accurate and complete

Learning Objectives

Explain the legal purposes and ownership of the client record

Describe the content within a typical client record

Compare and contrast the different types and functions of the client record

Define the electronic medical record (EMR)

Discuss the impact of the EMR on healthcare consumers and professionals

Describe how to convert time to military time AND why military time is used

Outline the procedure used in a typical health service facility for creating the client record

Explain how manual documents are linked to electronic records

Explain how to handle duplicate client records

Competency

3. Complete client identification labels

Performance Standard Condition

Competence will be demonstrated

at the worksite

Performance Standard Criteria

Performance will be successful when learners:

Obtain/update client information

Enter required information on labels

Print out applicable labels

Confirm accuracy of information

Apply labels onto client records, materials, and forms as applicable

Client Identification Labels are accurate and complete

Learning Objectives

Explain the use of bar codes used in client identification

List the ways in which identification of clients and client documents is confirmed

Explain reasoning for cross referencing and cross indexing of medical records

Competency

4. Manage orders and/or appointments

Performance Standard Condition

Competence will be demonstrated
at the worksite

Performance Standard Criteria

Performance will be successful when learners:

Verify the required elements of the medical order, if applicable for services Ascertain the time required for the health service(s) required by the client Refer client to worksite professional or guidelines for priority scheduling to address emergencies and/or urgent care

Identify conflicts in schedule and those of the client's schedule

Assist in recommending resolution to scheduling conflicts

Confirm client and the department/facility have the identical appointment information

Accurately enter appointment times and other required information

Prepare an appointment card if client is present

Document any scheduling changes in the correct locations

After appointment time, documents status of the appointment: late, no show, rescheduled, cancelled, etc.

Learning Objectives

Explain the elements of medical orders required for some types of appointments as defined by Medicare and Joint Commission standards

List the elements about an appointment schedule that are most important to the client

List the scheduling elements of greatest concern to the department/facility

Describe the appointment procedures used in your department/facility

Detail the client information required for most scheduling procedures

Describe the importance of reminder calls for appointments

List the types of calls that indicate a need for immediate service in your department/facility

Explain how departments/facilities handle "no show" appointments

Competency

5. Use computer systems to process information

Performance Standard Condition

Competence will be demonstrated

at the worksite OR in the classroom in a simulated setting. Simulation should ONLY be used IF there is no possibility of skill performance at the worksite.

Performance Standard Criteria

Performance will be successful when learners:

Select source of information and database software system needed for task completion

Use software commands and menus appropriately

Demonstrate appropriate file naming conventions

Perform basic file commands in the software

Enter, save, edit, and delete information as required

Print using a printer

Learning Objectives

Define health care informatics

Compare and contrast various forms of health information media (paper, computer, web based)

Describe how databases are used at your worksite to manage worksite operations

Discuss the necessity and use of data standards

Competency

6. Prepare reports

Performance Standard Condition

Competence will be demonstrated

at the worksite

Performance Standard Criteria

Performance will be successful when learners:

Access correct Health Information applications and/or databases

Query the correct applications and/or databases

Validate the query parameters prior to execution

Generate required reports from the applications

Verify report content for accuracy and completeness with a worksite professional

Assist the worksite professional with analysis of health information reports Report meets requirements

Report is professionally presented with an explanation of the report parameters

Learning Objectives

Discuss health information systems and the connectivity to administrative information systems

Define query, data warehouse, data mining, and SQL

Competency

7. Order and receive supplies and/or equipment

Performance Standard Condition

Competence will be demonstrated

at the worksite

Performance Standard Criteria

Performance will be successful when learners:

Follow procedures for procuring supplies, equipment, and/or medications when items are not in stock, outdated, in need, and/or as scheduled

Obtains appropriate supervisory approvals to place orders

Refer to the preferred provider literature to locate supplies for purchase

Order supplies, equipment, and/or medications

Verify the receipt of a shipment with the order against the packing slip and/or original purchase order after the order arrives

Identify supply items and/or medications requiring special handling or storage

Store and stock items appropriately

Report any items received that are expired and/or damaged immediately to worksite professional

Update inventory record

File or route warranty and service agreements for equipment to the worksite professional File or route the Packing Slip and/or any Materials Safety Data Sheets (MSDS) received to the appropriate places

Learning Objectives

Compare and contrast ordering procedures for routine and for emergency orders

Explain any special procedures required to order equipment

Discuss the issue of cost containment in health care and how that impacts ordering

List items in your department/facility that require any special handling and/or storage

Explain how to store items received so as to prevent loss and damage

Compare and contrast ordering paperwork: Original Order (Manual or Electronic), Purchase Order, Packing Slip

Describe the purpose of tracking Purchase Orders for goods and services

Competency

1. Assist to plan menus based on nutritional needs

Performance Standard Condition

Competence will be demonstrated

at the worksite

while assisting a worksite professional

Performance Standard Criteria

Performance will be successful when learners:

In consultation with the facility dietician, plan or review menus for various therapeutic diets

Research nutrition requirements for each type of diet

Research the recipes used for diet selections

Research the foods used to meet the nutritional requirements

Plan/verify menus offer a variety of choices which meet the nutritional requirements of the diet

Learning Objectives

Describe the role of the dietician

Differentiate between the processes of digestion, absorption, and metabolism

Define terms related to nutrition, diets, and foods

List the benefits of good nutrition

List the essential nutrients

Identify food sources of essential nutrients

Describe how nutritional guidelines and values are involved in menu decisions

List the nutrition guidelines of the Nutrition Plate Guidance System

Interpret a Nutrition Facts Label

Identify cultural habits and traditions related to food that may impact menus

Competency

2. Assist to prepare food

Performance Standard Condition

Competence will be demonstrated

at the worksite

while assisting a worksite professional

Performance Standard Criteria

Performance will be successful when learners:

Consult the dietary plan for the client

Follow safe food handling and sanitation procedures

Operate food service equipment safely

- Use measuring devices
- Use thermometers to monitor food temperature
- o Cut, mix, cook food safely

Verify food content matches dietary restrictions

Ensure meal is processed as appropriate for client ability to consume (chopped, cut, pureed, etc)

Plate meal items ordered by client or by dietary plan

Maintain appropriate serving temperatures

Learning Objectives

Explain common practices of safe food handling and preparation

Describe the basic elements of kitchen layout

Define basic cooking terms and recipe elements

Describe healthy cooking techniques

Explain common methods of preparing therapeutic diets, such as mechanical ground, pureed, house diet, general diet, etc.

Detail operating procedures for food plating

Explain how to store and retrieve foods in various settings (cold, hot, dry, etc.) as they are being readied for service

Describe common food allergens and their impact on food preparation and storage

Define the Hazard Analysis and Critical Control Point (HACCP) principles

Competency

3. Verify food content matches dietary restrictions

Performance Standard Condition

Competence will be demonstrated

at the worksite

Performance Standard Criteria

Performance will be successful when learners:

Check that meal plated matches client's order

Check that content of meal plated matches client's ability to consume

Check that content of meal plated matches the specific therapeutic diet for the client

Check that meal plated has appropriate portion sizes as indicated by specific diet

Record meal amounts if required for measuring/monitoring intake and output

Learning Objectives

Compare the characteristics of basic types of therapeutic diets

List foods appropriate for basic types of therapeutic diets

Explain the purpose of dietary supplements, such as Ensure™

Identify foods that are high in carbohydrates, protein, saturated and unsaturated fats, fiber, calcium, sodium, and other essential vitamins and minerals

Define abbreviations used in therapeutic dietary environments, such as, NPO, NAS, etc.

Discuss dietary concerns in the geriatric population

Competency

4. Take food orders

Performance Standard Condition

Competence will be demonstrated

at the worksite

Performance Standard Criteria

Performance will be successful when learners:

Identify client

Take food order accurately including fluids

Answer questions about food items

Verify meal ordered matches dietary restrictions for client

Place order for meal with the kitchen

Learning Objectives

Discuss different ordering systems in healthcare facilities

Explain how clients are matched with their diet restrictions and menu choices

Compare dining and meal etiquette in other cultures

Identify cultures and traditions related to food

Competency

5. Serve food

Performance Standard Condition

Competence will be demonstrated

at the worksite

Performance Standard Criteria

Performance will be successful when learners:

Take food orders

Assist to prepare food if needed

Deliver meal to client ensuring hot food remains hot and cold food remains cold

Determine if assistance is needed for eating

Report/record meal delivery times

Measure/monitor food intake/output if required

Document service

Learning Objectives

Compare nutritional needs of children, adults, and elderly

Describe the legal requirements for meeting nutritional needs of clients

Explain methods to prevent food contamination

Outline the dangers of food-borne illness in a healthcare setting

Explain how time and temperature guidelines reduce growth of microbes causing food-borne illness

Competency

6. Measure/monitor food and fluid intake

Performance Standard Condition

Competence will be demonstrated

at the worksite

Performance Standard Criteria

Performance will be successful when learners:

Estimate amount of food and fluids consumed (ounces, grams)

Measure input and output specimens as required

SOLID

- Collect solid specimens
- o Tare scale and weigh solids

LIQUID

- Pour contents into measuring container without splashing
- Measure at eye level on flat surface

Calculate liquid measurements in cubic centimeters

Report/record intake and output

Clean/disinfect equipment and dispose of contaminated articles as required

Intake is accurately measured

Output is accurately measured

Learning Objectives

Define terms related to intake and output of fluid and solids

Identify basic principles of hydration

List client conditions which can cause malnutrition and dehydration

Cite client conditions that usually require a record of intake and output

Identify which fluids/foods are to be measured as liquid or solid intake

Identify which fluids/specimens are to be measured as liquid output

Identify which solids/specimens are to be measured as solid output

Describe ways to involve clients in recording or reporting oral intake

Explain how to estimate intake and output

Describe how to convert various liquid measurements to cubic centimeters

Describe how to convert solid (mass) measures to grams

Explain how to document intake and output

Competency

7. Aid client with eating and hydration

Performance Standard Condition

Competence will be demonstrated

at the worksite OR in the classroom in a simulated setting.

*Only YA students that earn a Certified Nursing Assistant (C.N.A.) credential may assist. Students without C.N.A. credential must complete an approved Wisconsin Department of Health Services training that is at least 8 hours in length. (See WI Feeding Assistant Training requirements at https://www.dhs.wisconsin.gov/caregiver/feeding-assistant/training-regs.htm.)

Performance Standard Criteria

Performance will be successful when learners:

Identify client

Identify potential problems the client may experience in eating or drinking liquids Promote client independence using adaptive devices

Safely assist client with eating as needed

- Face client
- List food items to client
- Let client choose food
- Use spoon to feed client one bite at a time
- Tell client content of food each spoonful
- Make sure client's mouth is empty before next bite
- Offer beverage sip periodically throughout meal

Assist with and/or clean client as needed

Report/record client eating patterns and fluid intake as required

Learning Objectives

Demonstrate appropriate techniques to use in assisting client during feeding

Discuss common health conditions that impact the ability to swallow

Discuss common geriatric conditions that eating and drinking (Dysphasia, Stroke,

Alzheimer's, Parkinson's, etc.)

Detail procedures for assuring adequate fluid intake

Explain alternatives to oral nutrition

Indicate the observations which should be made regarding client eating patterns and fluid intake

Competency

8. Perform choking maneuver

Performance Standard Condition

Competence will be demonstrated

at the worksite OR in the classroom in a simulated setting. Simulation should ONLY be used IF there is no possibility of skill performance at the worksite.

Performance Standard Criteria

Performance will be successful when learners:

Successfully complete an approved course on choking maneuvers

Accurately assess the choking situation based on simulated description of the person's symptoms OR on role play of choking by a peer

Identify the obstruction as partial or complete, matching symptoms to the simulated situation

Contact emergency care specialist or designates someone to get help

Perform choking maneuver for a simulated conscious person and an unconscious person according to course guidelines noting client safety, proper body mechanics, and Standard Precautions

Learning Objectives

Define terms related to airway obstruction

Explain how the tongue and foreign objects can cause airway obstruction

List the signs of someone with a partial airway obstruction

List the signs of someone with a complete airway obstruction

Outline the steps of the choking maneuver for a conscious person

Outline the steps of the choking maneuver for an unconscious person

Describe the variations in the maneuver for an infant and a child

Competency

1. Assist to prepare diagnostic agents

Performance Standard Condition

Competence will be demonstrated

at the worksite

while assisting a worksite professional

Performance Standard Criteria

Performance will be successful when learners:

Confirm order for the specific diagnostic agent(s)

Review checklist for the preparation of the agent(s)

Research information on the agent(s): trade/generic name, diagnostic uses, solution strength, side effects, potential allergic reactions, and storage requirements

Identify test for which the diagnostic agent is used

Selects appropriate product(s), equipment, and supplies from inventory using the "Three Checks"

Performs calculation(s)

Verify calculation(s) with worksite professional

Assist the worksite professional to mix an accurate solution for the preparation of diagnostic agents

Perform all required QC checks while processing the agent

Assist worksite professional to label mixture with ingredients and solution strength and/or bar code

Properly store and/or deliver the agent

Clean preparation area

Learning Objectives

List typical diagnostic procedures that use contrast agents

List some agents frequently used in performing diagnostic tests

Outline the steps ("Three Checks") for assuring identity of the correct medication (at storage removal, at container removal, at storage return)

Identify the diagnostic agents which are typically pre-mixed and ready for use

List frequently used metric/apothecary/household measurement equivalents

Convert volume and weight measurements to the metric system

Explain how to calculate agent dilution and mixing

Explain how measurement and calculation errors are prevented during the preparation of diagnostic agents

Indicate storage requirements for typical diagnostic agents

Competency

2. Set up diagnostic area

Performance Standard Condition

Competence will be demonstrated

at the worksite

Performance Standard Criteria

Performance will be successful when learners:

Verify procedure to be performed

Consult procedure for setup requirements

Gather the equipment and supplies that will be used for the procedure

Ensure the cleanliness of the procedure equipment and area/room

Check the equipment for malfunction or damage

Confirm solutions and supplies are correct and not expired

Arrange the equipment and supplies in the order in which they will be used

Report the status of supplies and equipment to the worksite professional

Document procedure set up, if applicable

Learning Objectives

Identify the diagnostic procedures most commonly administered in an imaging department Describe the major purpose for each of the procedures identified

List the types of equipment and supplies that are required for each of the procedures identified

Define the medical terms and abbreviations related to each of the procedures identified Explain the equipment and supplies sterilization requirements for each of the procedures identified

Competency

3. Assist to explain diagnostic procedure to client

Performance Standard Condition

Competence will be demonstrated

at the worksite while assisting a worksite professional

Performance Standard Criteria

Performance will be successful when learners:

Review the purpose and the steps of the procedure with the worksite professional before assisting with client instruction

Discuss with the worksite professional the role of this procedure in the client's total therapeutic and/or diagnostic plan

Identify the client

Provide privacy for the client

Observe the worksite professional in outlining the procedural protocol for the client Assist the worksite professional in outlining any preparatory steps that must be taken by the client before the test

Assist the worksite professional in describing to the client the equipment and/or supplies that will be used during the procedure

Observe worksite professional checks for client comprehension during the instructions/explanation

Assist worksite professional to obtain consent for procedure

Learning Objectives

Explain any pretest steps that must be taken by the client in preparation for common therapeutic and diagnostic procedures

Discuss the legal responsibility of the worksite professional to explain procedures Explain how to document Informed Consent

Discuss the legal and liability issues of Informed Consent in regards to procedures Explain why it is critical that the client understands the purpose of the procedure and the steps that will be followed

Outline the importance of using words and terms that the client can understand when explaining the procedure

Competency

4. Assist client with dressing and undressing

Performance Standard Condition

Competence will be demonstrated

at the worksite

Performance Standard Criteria

Performance will be successful when learners:

Identify client

Provide privacy for client

Explain procedure to client

Assess client's ability to dress/undress

Determine whether covers/gowns/robes should be worn

Safeguard the clothing and other belongings of the client Safely

dress/undress a client needing partial or total assistance

Assure that the clothing worn by the client does not interfere with the imaging procedure

Learning Objectives

Explain how to dress/undress a client requiring partial or total assistance

Determine on which side of client's body the dressing or undressing process should start, when client has limited mobility

List the measures to be taken to safeguard client's clothing and other belongings Identify those situations when a client should wear hospital gowns/robes rather than own clothing

Competency

5. Position client

Performance Standard Condition

Competence will be demonstrated

at the worksite

Performance Standard Criteria

Performance will be successful when learners:

Identify client

Provide privacy for the client

Explain procedure to the client

Secure assistance, if needed, before beginning to move and turn client

Change position as needed for a procedure noting client safety and proper body mechanics.

Seek client input to determine their comfort with the position

Learning Objectives

Describe proper positioning for typical imaging procedures

Describe turning and moving a client using correct body mechanics

Describe the use of devices for various imaging positions

Describe some of the observations about the client that should be noted during positioning

Competency

6. Assist with diagnostic imaging

Performance Standard Condition

Competence will be demonstrated

Simulate only at worksite

Performance Standard Criteria

Performance will be successful when learners:

Review the purpose and the steps of the procedure with the worksite professional Discuss the role of this procedure in the client's total therapeutic and/or diagnostic plan Identify the client

Provide privacy for the client as needed

Observe the worksite professional in outlining the procedural protocol for the client Assist the worksite professional in describing to the client the equipment and/or supplies that will be used during the procedure

Observe worksite professional checks for client comprehension during the instructions/explanation

Select the correct equipment and supplies

Position the client

Assist with the imaging procedure

Discuss client response(s) with the worksite professional after the procedure

Assist with procuring the image required

Clean/disinfect equipment and supplies

Dispose of contaminated items as required

Screen imaging results with a worksite professional for follow up

Learning Objectives

Compare methods, materials and purposes of the different diagnostic imaging technologies such as XRay, Sonography, CT Scans, MRI, nuclear medicine, bone denisometry Identify common types of diagnostic imaging

Name imaging equipment used

Identify the positions in which clients are placed for common types of imaging examinations such as mammography, MRI, CT, UGI, and Barium enema

List the preparatory steps the client must take prior to the common types of imaging procedures such as mammography, MRI, CT, UGI, and Barium enema

Identify the variety of health service settings where imaging is used for diagnostic purposes Investigate department/facility policy stating who has access to and who may view, remove, and copy images

Describe how images are stored

Describe how images of various parts of the body are to be viewed

Competency

7. Clean and restock after procedure

Performance Standard Condition

Competence will be demonstrated

at the worksite

Performance Standard Criteria

Performance will be successful when learners:

Consult procedure protocol for clean up and disposal requirements

Gather the equipment and supplies that were used for the procedure

Clean equipment and area/room according to protocol

Dispose of contaminated materials as required

Return re-usable supplies to proper locations

Check the equipment for malfunction or damage if applicable

Restock supplies as indicated

Document clean up

Learning Objectives

Compare cleaning, disinfecting and sterilizing

Explain the importance of reprocessing methods (cleaning, disinfection, and sterilization) to ensure the safety and integrity of patient-care equipment

Identify the therapeutic and diagnostic procedures most commonly administered in your department/facility and their cleaning and disposal requirements

Explain the equipment and supplies sterilization requirements for each of the procedures identified

Explain the importance of a clean environment and clean equipment in the procedure room or area

Explain how to handle contaminated materials

Competency

1. Use aseptic technique

Performance Standard Condition

Competence will be demonstrated

at the worksite

Performance Standard Criteria

Performance will be successful when learners:

Wear the appropriate Personal Protective Equipment (PPE) as required

Disinfect surfaces before and after use as required

Gather all materials prior to beginning procedure

Prevent unwanted air current flow from doors and windows

Sterilize or use sterilized equipment, reagents and/or supplies

Hold caps or tops when removing them

Hold open plates, tubes, lids, etc. at an angle in a manner to prevent unwanted exposure to uncontrolled environment

Keep lids on as much as possible

Avoid talking, sneezing, coughing when working with exposed analytes

Discard contaminated materials properly

Learning Objectives

Define asepsis

Compare sterilization to disinfecting

Compare different sterilization procedures for equipment, reagents and supplies

Compare disinfecting products

Compare equipment or lab lay-out, such as laminar flow hoods and clean rooms, used in maintaining asepsis

Describe basic aseptic techniques in the bioscience laboratory

Explain the purpose of reducing air currents and holding open items at an angle

Demonstrate proper removal and holding of lids when removed

Competency

2. Clean and prepare glassware and/or instruments

Performance Standard Condition

Competence will be demonstrated

at the worksite

Performance Standard Criteria

Performance will be successful when learners:

Rinse items thoroughly, as required, with the appropriate solvent

Soak glassware and other items in warm aqueous solution of detergent

Clean items to remove all residual matter

Consults worksite professional for more aggressive cleaning protocols if required
 After cleaning, rinse thoroughly with water

Dry items in required manner

Place cleaned and dried items in sterilization pouches or wraps if required

- Perform following steps as applicable to lab setting
- Label and seals items properly
- o Place items in sterilization equipment
- o Ensure items remain apart during the sterilization cycle
- o Place empty canisters upside-down in order to prevent accumulation of water
- Does not overload sterilizer trays
- o Allow a distance between trays to permit steam circulation

Document cleaning procedure if required

Return clean supplies, glassware, and instruments to their proper storage locations

Learning Objectives

Identify common glassware, instruments, and reusable testing supplies used in the laboratory

Describe the use of common lab glassware and instruments

Explain the sensitivity and care of glassware

Describe proper dish washing technique for chemical glassware

Describe other aggressive cleaning procedures to be used with residual materials

Describe clean-up procedures used for flammable, corrosive and organic materials

List the glassware and items requiring sterilization in your lab

Describe the sterilization procedures required for glassware, instruments, or testing supplies in your lab

Competency

3. Weigh and measure accurately

Performance Standard Condition

Competence will be demonstrated

at the worksite

Performance Standard Criteria

Performance will be successful when learners:

Review the protocol for accurately using the measuring equipment including safety precautions

Ensure equipment is usable and current for calibration

MASS

SOLIDS

- Add pan or weighing paper
- o Tare scale
- Add solid to be weighed
- Note reading

LIQUIDS

- Add container to scale
- Tare scale
- Add liquid to be weighed
- Note reading

VOLUME

LIQUIDS-Cvlinder

- Choose smallest container available to hold desired volume
- Position at eye level to the device markings
- o Pour liquid into measuring device until it reaches the mark or measurement you need
- Add liquid drop by drop until bottom of curved surface matches desired line

LIQUIDS- Pipets

- Choose appropriate sized pipet for sample required
- Attach pump to pipet if needed
- Set pipet volume OR pull up required amount of liquid
 Drain/dispense liquid to desired amount in container

TEMPERATURE

- o Verify thermometer probe is operational OR that thermometer has no gaps in the
- o Place thermometer or probe in middle area of material or space
- Allow thermometer or probe time to reach equilibrium
- Note reading

Record measurements in appropriate units and amount of significant figures as required Clean up equipment

Learning Objectives

Explain how to properly carry and pour solid and liquid chemicals List common units used in clinical labs for mass, volume, and temperature Explain how to zero and use scales
Identify the proper glassware to deliver and contain specific volumes
Demonstrate reading volume in glassware
Explain how to pipette and micropipette different volumes of liquid correctly
Convert measurements from U.S. Standard to metric and vice versa
Correspond the correct number of significant figures in given values to the measuring device

Competency

4. Perform calculations and conversions

Performance Standard Condition

Competence will be demonstrated

at the worksite

Performance Standard Criteria

Performance will be successful when learners:

Review the appropriate chart or reference materials to make calculations or conversions Identify given values

Identify unknown values

Determine the calculations or conversions and formulas that need to be performed Perform calculations or conversions as required

EXAMPLES

- o Perform calculations on parts per million and similar concentrations
- o Calculate the concentration of solutions in percent composition by mass
- Calculate the concentration of solutions in percent composition by volume
- Calculate to prepare molar solutions
- Calculate to prepare dilutions from stock solutions using the law of conservation of mass

Calculations are accurate

Calculations show appropriate measurement unit labels

Verify calculations or conversions with worksite professional

Record calculations or conversions as required

Learning Objectives

Explain how to convert between U.S. standard measurements and metric measurements Explain the link between significant figures in calculations and the measuring devices used Describe the units involved in concentrations of mass, volume, molarity, molality, normality, ppm and ppb

Explain how to calculate Percent by mass, Percent by volume, Molarity, Molality, Normality, parts per million (ppm) and parts per billion (ppb)

Competency

5. Prepare reagents, solutions, and/or buffers

Performance Standard Condition

Competence will be demonstrated

at the worksite

Performance Standard Criteria

Performance will be successful when learners:

Review the appropriate protocol for safely preparing the item required including safety precautions

Determine the concentration and amount required

Perform calculations of solute and solvent needed to prepare the desired amount

Verify calculations with worksite professional

Weigh or measure the solute

Add solute to mixing flask

Measure the solvent if needed

Fill flask with about 2/3 solvent

Stopper and mix flask by inverting OR as required by protocol

Complete filling of remaining required solvent to mixing flask

Mix as required

Test and adjust pH if required by protocol Return

solute and solvent to proper storage area

Label and store prepared item as required per protocol

Clean up

Learning Objectives

Describe the proper storage and handling of various chemicals: Inorganic, Organic, acids, chlorinated chemicals, flammable, corrosive

Define the common uses of reagents, solutions, and buffers in bioscience testing labs

Explain how to avoid contaminating reagents during preparation

Compare and contrast the properties of reagents, solutions, and buffers used in your lab

Describe hazards associated with the reagents, solutions and/or buffers used in your lab

Define the uses of biological media

Define the pH scale

Competency

6. Operate lab equipment properly

Performance Standard Condition

Competence will be demonstrated

at the worksite

Performance Standard Criteria

Performance will be successful when learners:

Review the protocol for the procedure or lab equipment to be used including safety precautions

Operate only equipment that he/she is trained on

Choose correct equipment for the task

Follow and completes any equipment check list prior to use

Verify equipment is available for use and in working order

Verify equipment is current for preventative maintenance and/or calibration

Verify safety requirements and any Personal Protective Equipment (PPE) needed for equipment use

Inspect equipment and work area for safety considerations

Set up and prepare equipment for safe operation

- Check settings
- Check power
- Check lubrication and fluid levels

Monitor equipment for safe operation while operating

Follow protocol for clean up and shut down after use

Properly shut down and label any equipment that is not operating as expected, if applicable

- o Follow Lock Out/Tag Out procedures as applicable
- o Promptly report abnormal equipment conditions to worksite professional

Document use as required

Learning Objectives

Explain the function of common health science laboratory tools and equipment

Explain the safety precautions and routine care of common laboratory tools and equipment List common mechanical, chemical, electrical, compressed air, and other equipment safety hazards

Describe the basic procedure to be followed when a piece of equipment is not functioning properly in your lab

Discuss the need for quality control (QC) samples and/or equipment controls in some lab equipment

Explain how Lock Out/Tag Out procedures prevent accidents

Explain standard use of common heating equipment

Explain standard use of electrical current/power supply equipment

Explain proper use of magnetic stirrers and hot plates

Describe the safety and procedures involved in the use of flame

Explain how to use a pipet and micropipetter Describe use of simple centrifugation Describe use of simple filtration Explain standard use of a microscope

Competency

7. Conduct testing according to protocol

Performance Standard Condition

Competence will be demonstrated

at the worksite

Performance Standard Criteria

Performance will be successful when learners:

Review the testing protocol including safety precautions

Select and set-up the correct equipment and supplies

Prepare reagents, solutions, and/or buffers

Prepare any controls required

Locate and identify the sample(s) to be tested

Prepare samples for testing according to protocol

Test the sample(s) according to protocol *Using Aseptic* Lab *Technique* and Standard Precautions

o Include Quality Control (QC) samples, if applicable

Operate lab equipment properly

Records and analyze test results

Clean glassware and/or instruments

Dispose of chemical, biohazardous, or infectious waste according to department/facility guidelines using Standard/Universal Precautions

Learning Objectives

Discuss the need for quality control (QC) samples and/or equipment controls in health science testing

Define positive and negative control

Explain the procedures for safe Handling and Disposal of Chemical, Biological, and Radioactive Materials

Define the purpose of Standard Precautions

Explain the procedure for Standard Precautions in your lab

Discuss the purpose of fume hoods and biological safety cabinets/hoods

Explain how to handle and dispose of laboratory wastes safely

Competency

8. Record and analyze test results

Performance Standard Condition

Competence will be demonstrated

at the worksite

Performance Standard Criteria

Performance will be successful when learners:

Select appropriate forms/records

Report/record results, readings, measurements, calculations, times, etc. with appropriate scientific units carefully without transcription

Review readings compared to normal ranges

Report any discrepancies or unexpected results to worksite professional

Learning Objectives

List typical lab tests in health science

Describe ranges of normal results for typical health science lab tests

Explain what information is provided on health status of typical health science lab tests

Discuss methods for organizing and representing data

Competency

1. Obtain lens prescriptions

Performance Standard Condition

Competence will be demonstrated

at the worksite

Performance Standard Criteria

Performance will be successful when learners:

Screen the order for completeness

Highlight any special needs or ophthalmic disorders on the order

Create and/or maintain the client record

Enter/update order in the client profile for processing

Verify insurance coverage for order

Assist client to choose best payment options

Learning Objectives

List common components of a lens prescription

Discuss the meaning of visual acuity and how it is indicated, e.g., 20/40

Define abbreviations found on lens orders, such as DV, NV, OD, OS, OU

Explain the connection between optical power and diopters

Explain the legal requirements for lens prescriptions

Compare myopia, hyperopia, astigmatism, and presbyopia

Discuss other disorders of the eye that can be alleviated with corrective eyewear

Define deductible and co-payment as they pertain to health care services

Competency

2. Measure client eye lengths, centers, and distances

Performance Standard Condition

Competence will be demonstrated

at the worksite

Performance Standard Criteria

Performance will be successful when learners:

Identify client

Obtain millimeter ruler (PD Stick) or other applicable measuring tool Measure client eye length, center, pupillary distance, head/temple width Record measurements

Learning Objectives

Identify basic components and structures of the eye

Describe the visual pathway

Explain how to measure eye lengths, centers and distances

Explain the purpose for measuring eye lengths, centers, and distances

Define pupillary distance (PD)

Competency

3. Set up optometry area

Performance Standard Condition

Competence will be demonstrated

at the worksite

Performance Standard Criteria

Performance will be successful when learners:

Verify procedure to be performed

Consult the procedure for setup requirements

Gather the equipment and supplies that will be used for the procedure

Ensure the cleanliness of the procedure equipment and area/room

Check the equipment for malfunction or damage

Confirm solutions and supplies are correct and not expired

Arrange the equipment and supplies in the order in which they will be used

Report the status of supplies and equipment to the worksite professional

Document procedure set up, if applicable

Learning Objectives

Identify common optical procedures

Describe the major purpose for each of the procedures identified

List the types of equipment and supplies that are required for each of the procedures identified

Define the medical terms and abbreviations related to each of the procedures identified Explain the equipment and supplies sterilization requirements for each of the procedures identified

Competency

4. Assist to perform eye exam

Performance Standard Condition

Competence will be demonstrated

at the worksite

while assisting a worksite professional

Performance Standard Criteria

Performance will be successful when learners:

Review the purpose and the steps of the procedure with the worksite professional Identify the client

Provide privacy for the client as needed

Observe the worksite professional in outlining the procedural protocol for the client

Assist the worksite professional in describing to the client the equipment and/or supplies that will be used during the procedure

Observe worksite professional checks for client comprehension during the

instructions/explanation

Select the correct equipment and supplies

Position the client

Assist with the optical exam procedure

Assist with recording exam data

Discuss client response(s) with the worksite professional after the procedure

Clean/disinfect equipment and supplies

Dispose of contaminated items as required

Assist with analyzing the exam results

Learning Objectives

Compare opticians, ophthalmologists, and optometrists

Compare methods, materials and purposes of the different optical diagnostic exam procedures

Identify common types of optical exam equipment

Define common terms and abbreviations used in optometry

Describe conditions of the eye that are screened for in common eye exams

List common visual concerns in children

Competency

5. Instruct clients how to care for eyewear

Performance Standard Condition

Competence will be demonstrated

at the worksite

Performance Standard Criteria

Performance will be successful when learners:

Identify client

Determine the client's level of understanding about the care procedure, its purpose, and the process

Describe the equipment and/or supplies that will be needed for eyewear care

Check for client comprehension during the instructions/explanation

Demonstrate eyewear care to client

Have client perform eyewear care

Learning Objectives

Compare types of corrective eyewear- glasses, bifocals, reading glasses, contact lenses

Discuss the care required for each type of corrective eye wear

Describe how the different types of lenses are made to specific corrective parameters Define lens power, refractive error, sphere, cylinder, axis, and spherical equivalent refraction (SER) as they relate to corrective eye wear

Explain what is meant by near vision vs. distant vision

Discuss how the shape of lens corrects specific vision problems

Compare a spherical correction to cylindrical correction

Compare lens features and care for enhancements such as anti-scratch, ultra-violet, anti-reflective, hydrophobic, transitions, tinted, bifocals, progressives

Competency

6. Order and purchase frames and lenses

Performance Standard Condition

Competence will be demonstrated

at the worksite

Performance Standard Criteria

Performance will be successful when learners:

Verify brand, type, model number, sizes for frames desired by client

Verify lens prescription

Complete order form- online or paper

Verify order

Obtain approvals, if needed

Submit order

Verify insurance coverage, deductibles, and co-payments, if applicable

Compute charges

Document disbursements or deposits to the cash drawer in the appropriate record

Process client cash or credit payment and insurance coverage

Operate cash register if applicable

Make accurate change

Cash Drawer balances with the day's receipts and disbursements

Learning Objectives

Explain the need for finding the correct size frames for the type of lenses required Discuss how face shape (oval, round, etc.) influences frame design (rectangular, oval, round, etc.)

Discuss other factors that influence eyewear look including hair color, eye color, eye brow level, frame color

Explain the process of handling cash from a cash register

List the requirements for client identification when presenting a check or credit card Indicate the importance of client verification procedures when accepting check or credit card payments

Describe components of an acceptable check

Competency

7. Fit glasses to clients

Performance Standard Condition

Competence will be demonstrated

at the worksite

Performance Standard Criteria

Performance will be successful when learners:

Contact client once the glasses are received

Arrange an appropriate time for fitting convenient for the client

Seat client

Adjust bridge pads and frame arm curve

Test fit on client

Make modifications as needed

Learning Objectives

Describe the names and location of the fundamental components of parts of spectacle frames

Discuss the importance of the bridge in choosing the right fit for glasses

Discuss the typical frame size measurements indicated for a good fit (bridge width, lens width, arm length)

Explain how to adjust bridge width

Discuss the indications for increasing or decreasing bridge width

Explain the process for adjusting frame sides

Competency

1. Set up treatment area

Performance Standard Condition

Competence will be demonstrated

at the worksite

Performance Standard Criteria

Performance will be successful when learners:

Verify procedure to be performed

Consult the procedure for setup requirements

Gather the equipment and supplies that will be used for the procedure

Ensure the cleanliness of the procedure equipment and area/room

Check the equipment for malfunction or damage

Confirm solutions and supplies are correct and not expired

Arrange the equipment and supplies in the order in which they will be used

Report the status of supplies and equipment to the worksite professional

Document procedure set up, if applicable

Learning Objectives

Identify common physical therapy procedures

Describe the major purpose for each of the procedures identified

List the types of equipment and supplies that are required for each of the procedures identified

Define the medical terms and abbreviations related to each of the procedures identified Explain the equipment and supplies sterilization requirements for each of the procedures identified

Competency

2. Assist to explain treatment to client

Performance Standard Condition

Competence will be demonstrated

at the worksite while assisting a worksite professional

Performance Standard Criteria

Performance will be successful when learners:

Review the purpose and the steps of the procedure with the worksite professional before assisting with client instruction

Discuss with the worksite professional the role of this procedure in the client's total therapeutic and/or diagnostic plan

Identify client

Provide for client privacy

Help the worksite professional determine the client's level of understanding about the procedure, its purpose, and the process

Observe the worksite professional in outlining the procedural protocol for the client Assist the worksite professional in outlining any preparatory steps that must be taken by the client before the test

Assist the worksite professional in describing to the client the equipment and/or supplies that will be used during the procedure

Observe worksite professional checks for client comprehension during the instructions/explanation

Assist worksite professional to obtain consent for procedure

Discuss client response(s) with the worksite professional after the procedure

Learning Objectives

Explain any pretest steps that must be taken by the client in preparation for each common therapeutic and diagnostic procedure performed in your department/facility

Discuss the legal responsibility of the worksite professional to explain procedures

Explain your role when the procedure is explained to the client by the worksite professional Explain how to document Informed Consent

Discuss the legal and liability issues of Informed Consent in regards to procedures Explain why it is critical that the client understands the purpose of the procedure and the steps that will be followed

Outline the importance of using words and terms that the client can understand when explaining the procedure

Detail any client follow up conducted after each common procedure identified in your department/facility

Competency

3. Position client on therapy equipment

Performance Standard Condition

Competence will be demonstrated

at the worksite

Performance Standard Criteria

Performance will be successful when learners:

Identify client

Provide privacy for the client

Explain procedure to the client

Secure assistance, if needed, before beginning to move and turn client

Change client position on schedule or as needed for a procedure/care noting client safety and proper body mechanics.

Seek client input to determine their comfort with the position

Report/record client condition, reactions, and position change if needed

Learning Objectives

Describe proper body alignment

Describe turning and moving a client using correct body mechanics

Describe the use of pillows or other comfort devices for various positions

List some of the devices used to maintain position of legs and feet and to help in hand and finger positioning

Describe some of the observations about the client that should be noted during positioning

Explain some of the procedures used to avoid skin-on-skin contact and pressure

Outline the problems that can be caused by immobility of the client

Competency

4. Measure vital signs

Performance Standard Condition

Competence will be demonstrated

at the worksite

Performance Standard Criteria

Performance will be successful when learners:

Identify client

Provide privacy for client prior to procedure

Prepare the equipment for the procedure

Explain the procedure to the client in words the client in plain language

Position client using proper body mechanics if necessary

Measure vital signs (height, weight, temperature, pulse, respirations, blood pressure, etc.) according to protocol

Report/record reading(s)

Vital sign readings are accurate

Care for equipment according to protocol

Report abnormal readings immediately to worksite professional

Learning Objectives

Identify the range of normal values for each of the vital signs

Explain the techniques for obtaining vital signs

Locate pulse sites

Calculate heart rate and target heart rate

List descriptive characteristics of the pulse and respiration

Describe the various methods for measuring body temperature

Compare different types of thermometers

Describe the care of thermometers

Describe factors that influence temperature, pulse and respiration readings

Describe the various methods for measuring client weight

Explain how to convert pounds to kilograms

Explain how to convert inches to centimeters

Identify different methods of measuring client weight

Explain how to document weight and height measurements

Define terms related to blood pressure

Describe how to use and care for the sphygmomanometer and stethoscope

Explain the technique for obtaining blood pressure

Discuss variations of equipment choice for different size clients

Identify the range of normal values for blood pressure Describe

factors that influence blood pressure readings Identify

the causes of inaccurate blood pressure readings

Identify the variations in blood pressure readings that should be reported immediately

Explain how to document blood pressure results
Comments:

Competency

5. Assist with application/adjustment of orthotic and assistive devices

Performance Standard Condition

Competence will be demonstrated

at the worksite while assisting a worksite professional

Performance Standard Criteria

Performance will be successful when learners:

Identify client and adjustment to be made

Provide privacy for client

Assist worksite professional with explanation of adjustment to be made

Assist worksite professional for application/adjustment of orthotic and assistive devices noting client safety and proper body mechanics

Help worksite professional evaluate if device is properly adjusted

Assist worksite professional in instructing the client about making the necessary adjustments

Remain alert to client safety throughout the procedure

Report/record application/adjustment of device

Learning Objectives

List different types of assistive devices

Outline the process for adjusting crutches, canes and walkers

Identify safety issues for clients using crutches, canes and walkers

Describe different types of orthotic devices

Outline the functions of each type of brace

Explain how each of orthotic device is applied

Identify safety issues for clients using braces

List conditions that indicate proper fit

Identify safety issues for clients with splints and slings

Competency

6. Assist client with performing range of motion exercise

Performance Standard Condition

Competence will be demonstrated

at the worksite

Performance Standard Criteria

Performance will be successful when learners:

Identify client

Provide privacy for client

Explain each exercise to client

Instruct client to verbalize any pain while exercising

Follow guidelines for range of motion exercises noting client safety and proper body mechanics

Take each joint through the full available range of motion of client's ability

Do each exercise gently, slowly and smoothly

Do not force any joint to move

Encourage client to help with exercises as appropriate

Communicate appropriately with client during the range of motion exercises

Report/record observations of client reactions and exercises

Learning Objectives

Define the terms related to the movement and placement of joints

Explain the purposes for performing range-of-motion exercises

Describe the types of range-of-motion

Outline basic range-of-motion exercises

Explain the difference between passive and active range-of-motion exercises

Describe how to do range-of-motion on all extremities

Discuss the appropriate response when client experiences pain or discomfort during the exercises

Note special corrective exercises that are only performed by the physical therapist Indicate observations of clients abilities that should be noted during exercises

Competency

7. Assist client with prescribed exercise program

Performance Standard Condition

Competence will be demonstrated

at the worksite

Performance Standard Criteria

Performance will be successful when learners:

Review the purpose of and the protocol for the specific exercise program with the worksite professional before assisting with the process

Identify client

Provides privacy for client

Assist worksite professional with explanation of exercises to be performed

Verify that the area, equipment, and supplies are prepared for the exercise program

Assist worksite professional with performance of client exercise program according to noting client safety and proper body mechanics

Is attentive to client safety during the exercise program

Communicate appropriately with client during the exercise program

Report/record observations of client reactions to the therapist

Assist the therapist with client/family teaching if the exercise program is to be performed at home

Learning Objectives

Define the terms related to the rapeutic exercise programs

List the most common types of therapeutic exercises

Explain the difference between active and passive exercise programs

Compare aerobic, range of motion, stretching, strengthening, and balance/agility exercises Describe the following directions of movement: flexion, extension, rotation, abduction, adduction, inversion, eversion, pronation, supination, hyperextension, internal rotation,

external rotation

List the concerns for client safety that must be addressed during exercise

Discuss the appropriate response to a client's expression/evidence of pain or discomfort during exercise

Describe the responsibility of the therapist for administering the exercise program

Explain your role when assisting with the exercises

Detail how to protect yourself while assisting with the exercise program

Indicate client observations to be made during an exercise program

Competency

8. Assist client with gait training

Performance Standard Condition

Competence will be demonstrated

at the worksite

Performance Standard Criteria

Performance will be successful when learners:

Review the purpose of and the protocol for the gait training with the worksite professional before assisting with the process

Obtain information from the therapist about the specific gait to be taught to the client

Verify that the area, equipment, and supplies are prepared for the gait training

Build own proficiency with the particular gait before working with the client

Identify client

Provide privacy for client

Assist worksite professional with explanation of gait training to be performed

Assist worksite professional with performance of gait training noting client safety and proper body mechanics

Demonstrate gait to the client

Report to therapist when assistive device needs adjustment

Use gait/transfer belt to support client as required

Remain alert to client safety throughout the ambulation activity(s)

Report/record observations of client progress and response(s) to the therapist

Learning Objectives

Define terms related to ambulation and gait

List the types of aids clients may use to assist them with ambulation

Identify the criteria for fitting the client with crutches

Describe several crutch-walking gaits

Explain why body weight is never supported in the axillary area when using crutches

Describe different types of canes

Outline the criteria for fitting the client with a cane

Identify the side of the body on which the client uses the cane

Describe gaits that can be used with a cane

Describe how a client should use the walker when walking

Describe the safety precautions to be observed when using any of the assistive devices

Explain the use of a gait/transfer belt

Describe the proper fit and placement of a gait/transfer belt

List the criteria to use in determining if crutches, canes and walkers are properly adjusted Indicate client observations to be made during gait training

Competency

9. Administer active and passive treatments

Performance Standard Condition

Competence will be demonstrated

at the worksite

Performance Standard Criteria

Performance will be successful when learners:

Confirm treatment order

Identify client

Provide privacy for client

Explain procedure to client

Measure or verify temperature of any fluids

Assist worksite professional to administer treatment noting client safety and proper body mechanics

- Administer heat or cold applications
- o Administer active and passive manual therapeutic exercises, therapeutic massage, and light, sound, water, or electrical modality treatments, such as ultrasound.
- Administer traction to relieve neck and back pain, using intermittent and static traction equipment

Frequently check the area of application for discoloration, numbness or other symptoms Report/record application including time and client reaction

Learning Objectives

List common treatments in a physical therapy setting

Compare active and passive treatment techniques

Name methods of treatment with hot, cold, light, sound, electrical, massage

Discuss the client conditions indicated for which each application

Outline safety concerns for each application treatment

Identify the difference between sterile and non-sterile local applications