VARDHMAN MAHAVIR MEDICAL COLLEGE & SAFDARJUNG HOSPITAL, ANSARI NAGAR, RING ROAD, NEW DELHI-110029

Document Name:	**NURSING PROCEDURE MANUAL**		
Document No.:	E / NABH / SJH / / 01 -05		
No. of Pages:	178		
Date Created:	28.12.2021		
Date of Implementation:			
Prepared By:	Name	Designation	Signature
	Mrs. Jisha Sreekumaran	CNE Coordinator & Member quality cell	
	Mrs. Preethy Dinesan		
	Miss. Shanu		
	Mrs. Bharti Chauhan		
Reviewed by	Dr. K. C. Tamaria	OIC, NABH	
	Mrs. Rekha Rani	Officiating NS	
Approved By:	Dr. S. V. Arya	Medical Superintendent	30/12/2021
Responsibility of Updating:	Nursing Superintendent office		

AMENDMENT SHEET

S.No.	Section no. & page no.	Details of the amendment	Reasons	Signature of the preparatory authority	Signature of the approval authority

CONTROL OF THE MANUAL

The holder of the copy of this manual is responsible for maintaining it in good and safe condition and in a readily identifiable and retrievable.

The holder of the copy of this Manual shall maintain it in current status by inserting latest amendments as and when the amended versions are received.

Nursing Superintendent – Nursing Department is responsible for issuing the amended copies to the copyholders, the copyholder should `acknowledge the same and he /she should return the obsolete copies to the Nursing Superintendent.

The amendment sheet, to be updated (as and when amendments received) and referred for details of amendments issued.

The manual is reviewed once a year and is updated as relevant to the hospital policies and procedures. Review and amendment can happen also as corrective actions to the non-conformities raised during the self-assessment or assessment audits by NABH.

The authority over control of this manual is as follows:

Preparation	Approval	Issue
Nursing Superintendent	Medical Superintendent	NABH Nodal Officer

The procedure manual with original signatures of the above on the title page is considered as 'Master Copy', and the photocopies of the master copy for the distribution are considered as 'ControlledCopy'.

Distribution List of the Manual:

S.No.	Designation
1	Medical Superintendent
2	Human Resources and Development Department
3	NABH Nodal officer

CONTENTS

1. APICAL PULSE MONITORING

PURPOSE

- To assess the rate and character of cardiac function.

SCOPE OF SERVICES

- To all patient who require apical pulse monitoring.

EQUIPMENT

- Stethoscope
- Clock/timer with second hand

PROCEDURE

- Adhere to Standard Precautions.
- Explain the procedure to the patient.
- Help the patient into a supine position.
- Warm the diaphragm or bell of the stethoscope in your hand. Placing a cold stethoscope against the skin may startle the patient and increase the heart rate.
- Place the diaphragm or bell of the stethoscope over the apex of the heart (normally located at the fifth intercostal space left of the mid clavicular line).
- Using the stethoscope, listen and count the apical pulse for 30 seconds and multiply by 2 or for 60 seconds if the rhythm is irregular. If the heart rate is irregular, upon completion of auscultation immediately palpate radial pulse.
- If there is a difference between the apical and radial pulse rates, subtract the radial pulse from the apical pulse rate to obtain the pulse deficit.
- Document the procedure.

2. RADIAL PULSE MONITORING

PURPOSE

- To assess rate and character of cardiac function.

SCOPE OF SERVICES

- To all patients
  - On admission.
  - Pre and Postoperatively.
  - Patient on cardiac medications.
  - As per the routine of the ward/department

EQUIPMENTS

- Watch with a second hand.

PROCEDURE

- Adhere to Standard Precautions.
- Explain procedure to patient.
- Place the patient in a sitting or supine position.
- Using forefinger and middle finger pads of dominant hand, apply light pressure to inner aspect of patient's wrist to locate pulse beat.
- Count the beats for 1 minute or for 30 seconds and multiply by 2. If irregularities are noted, count for 1 minute.
- While counting the rate, assess pulse rhythm and volume by noting the pattern and strength of the beats. If you detect an irregularity, repeat the count and note whether it occurs in a pattern or randomly. If you are still in doubt, take an apical pulse.
- Volume: Full or bounding describes a pulse of increased volume; weak or thready describes a pulse of decreased volume. When the peripheral pulse is irregular, take an apical pulse to measure the heartbeat more directly.
- Document the procedure.

3. PULSE: FEMORAL, POPLITEAL, POSTERIOR TIBIALIS AND DORSALIS PEDIS MONITORING

PURPOSE

- To assess peripheral circulation in the lower extremities.

SCOPE OF SERVICES

- As per advised.

EQUIPMENT

- Clock/timer with second hand

PROCEDURE

- Adhere to Standard Precautions.
- Explain procedure to patient.
- Choose Pulse location.
    - Femoral Pulse
        - Position patient flat on back.
        - Palpate at juncture of thigh and torso (inguinal crease) midway between anterior superior iliac spine and symphysis pubis.
        - Use two hands, one on top of the other. This may facilitate palpating the femoral pulse, especially in obese patients.
        - Count the beats for 1 minute.
    - Popliteal Pulse:
        - Position patient with knee slightly flexed, the leg relaxed.
        - Press the fingertips of both hands deeply into popliteal regions, slightly lateral to the midline.
        - If the popliteal pulse is not palpable with this approach, position patient on the abdomen, flex the leg 45 degrees at the knee and palpate deeply for the pulse.
        - Count the beats for 1 minute.
    - Posterior Tibial Pulse:
        - Palpate at inner aspect of posterior malleolus (in the groove between the malleolus and the Achilles tendon).

- If the pulse is difficult to palpate, try passive dorsiflexion of the foot to make th pulse more accessible.
- Count the beats for 1 minute.

❖ Dorsalis Pedis Pulse:

- Palpate top of foot, lateral to the extensor tendon of the big toe.
- Palpate this pulse very gently; too much pressure will obliterate it.
- Count the beats for 1 minute.
- Document the procedure.

4. MEASUREMENT OF OXYGEN SATURATION USING PULSE OXIMETRY

PURPOSE

- To monitor arterial oxygen saturation non-invasively.

SCOPE OF SERVICES

- To all patient who have breathing problems.

EQUIPMENT

- Oximeter Finger or ear probe
- Alcohol wipe
- Nail polish remover (if needed).

PROCEDURE

- Adhere to Standard Precautions.
- Verify physician's order for procedure.
- Explain procedure to patient.
- Prepare equipment according to manufacturer's instructions.
- Ensure patient has been on correct dose of oxygen for at least 15 minutes prior to obtaining reading.
- Select probe site appropriate for age and condition of patient.
- Place probe so sensors are opposite of each other. For ear lobe, gently massage site for about 10 seconds prior to probe application.
- Turn on pulse oximeter. The unit will perform a self-check, then the pulse indicator should flash synchronously with the patient's pulse. The pulse rate displayed by the oximeter must be equal to the patient's apical/radial pulse. If the pulse is not sensed accurately, the SpO2 value will be inaccurate.
- Read SpO2 value after several minutes when reading stabilized.
- Remove probe, turn off and unplug unit. Clean the probe gently with alcohol wipe.
- Document the procedure.

- If the pulse is difficult to palpate, try passive dorsiflexion of the foot to make th pulse more accessible.
- Count the beats for 1 minute.

❖ Dorsalis Pedis Pulse:

- Palpate top of foot, lateral to the extensor tendon of the big toe.
- Palpate this pulse very gently; too much pressure will obliterate it.
- Count the beats for 1 minute.
- Document the procedure.

5. RESPIRATION MONITORING

PURPOSE

- To provide an accurate count of the number of times a patient breathes in 1 minute and to determine type of breathing.

SCOPE OF SERVICES

- To all patients admitted in hospital.

EQUIPMENT

- Watch with second hand.

PROCEDURE

- Adhere to Standard Precautions.
- Explain procedure to patient. [Note: DO NOT inform the patient of exact time when you assess their respirations.] You may count respiratory rate while checking patient's pulse.
- Allow the patient to rest for about 5 minutes before assessing their respirations. Ask the patient to relax and refrain from talking and moving.
- Hold patient's wrist as if you are taking his/her pulse.
- If the patient is a child who has been crying or is restless, wait until he/she is quiet before counting respirations. If a child is asleep, count his/her respirations before he/she wakes up. Always count a child's pulse and respirations before you measure the temperature. (Most children get upset when you measure their temperature.)
- One rise and fall of the patient's chest counts as one respiration.
- Check the position of the second hand on the watch. Count "one" when you see or feel the patient's chest rise. The next time the chest raises count "two." Do this for 1 minute. [Note: Respirations may be counted for 30 seconds and multiplied by 2, If a patient's respirations are irregular, you must always count 1 full minute.]
- Observe the depth and type of breathing while you are counting. Note whether the respirations were noisy or labored.
- Return patient to position of comfort.
- Document the procedure.

6. TEMPERATURE MONITORING

PURPOSES

- To measure body temperature.

SCOPE OF SERVICES

- Oral temperature to all patients except:
  - Unconscious.
  - Person unable to breath.
  - Person with oral inflammation or have had oral surgery.
  - Children under six years of age.
- Axillary temperature to all patients

ARTICLES REQUIRED

- Digital thermometer
- Tissues or cotton balls
- Gloves
- Wrist watch
- Alcohol or antiseptic wipes

PROCEDURE

ORAL

- Adhere to Standard Precautions.
- Explain procedure to patient.
- Take thermometer and see the working conditions.
- Place the thermometer after wiping it with alcohol.
- Ask the patient to lift up tongue. Insert the thermometer gently into the patient's mouth, positioning the bulb end of the thermometer under the tongue and to the side of the mouth.
- Instruct the patient to hold or place his/her lips gently around the thermometer without biting it. If patient is unable to do this, another method should be used.
- Leave the thermometer in place until digital thermometer beeps. Stay with the patient if you feel that he/she cannot keep his/her mouth closed.
- Remove the thermometer from the patient's mouth.
- Read the thermometer.

- Clean the thermometer, return to case.
- Position patient for comfort and safety.
- Discard soiled supplies in appropriate containers.

AXILLARY

- Adhere to Standard Precautions.
- Explain procedure to patient.
- Take thermometer and see the working conditions.
- Remove the patient's arm from clothing. If the axillary region is moist with perspiration, pat dry with a towel.
- Place the bulb of the oral thermometer in the center of the armpit in an upright position.
- Place the patient's arm across the chest or abdomen to hold the thermometer in place. If the patient is unconscious or too weak to help, you may have to hold the arm in place.
- Leave the thermometer in place until it beeps. Remain with the patient as long as the thermometer is in place.
- Remove the thermometer from under patient's arm.
- Read the thermometer
- Clean the thermometer, return to case.
- Position patient for comfort and safety.
- Discard soiled supplies in appropriate containers
- Document the procedure.

7. WEIGHING THE PATIENT

PURPOSE

- To maintain a record of weight.

SCOPE OF SERVICES

- To all patient receiving therapeutic interventions and as per advised by the physician.

EQUIPMENT

- Weight scale.

PROCEDURE

- Adhere to Standard Precautions.
- Explain procedure to patient.
- Balance scale needle is on "0". If digital scale turn on and wait for digital display to show "0".
- Assist patient to stand on scale.
- Have patient stand still and note weight.
- Return scale to usual place.
- Document the procedure

8. CENTRAL VENOUS PRESSURE MONITORING

PURPOSE

- To evaluate hemodynamic status
- To assess patient response to the fluid therapy.

SCOPE OF SERVICES

- To patients who are hemodynamically unstable and as per advised by doctor.

EQUIPMENTS

- Hemodynamic monitoring system
- Bedside monitor
- Gloves

PROCEDURE

- Adhere to Standard Precautions
- Make the patient in supine position
- Ensure accuracy of measurements
- Make sure the line is patent or flush with 5ml of heparinized saline.
- Keep transducer at the zero level (making the transducer exposed to atmospheric pressure)
- Autoing (opening and connecting to the monitor)
- Measure the CVP reading
- Prevent clotting of catheter and reestablish IV flow
- Document the procedure.

9. BLOOD PRESSURE MONITORING

PURPOSE

- To monitor baseline and fluctuation in blood pressure.
- To aid in assessment of the cardiovascular system.
- To monitor medication e.g. anti-hypertensive drugs.

SCOPE OF SERVICES

- To all patient needed to monitor blood pressure both in-patient and out-patient.

EQUIPMENT

- Sphygmomanometer.
- Stethoscope.

PROCEDURE

- Adhere to Standard Precautions.
- Explain procedure to patient.
- Choose an appropriate-sized cuff for the patient, should encircle at least 80% of the upper arm.

— The cuff should be wide enough to reach from just below the armpit to the inside of the elbow. The cuff size is based on the distance from the shoulder to the elbow. If the distance is less than 13 inches the cuff size is 5 by 9 inches (small), 13 to 16 inches the cuff size is 6 by 13 inches (medium) and greater than 16 inches the cuff size is 7 by 14 inches.

- A falsely high reading may result when a cuff is too narrow or short. A falsely low reading may result when a cuff is too wide or long
- Keep patient in a stable, relaxed position for 5 to 10 minutes. Make sure that he has not had caffeine or smoked for at least 30 minutes.
- Avoid taking blood pressure in the arm on the affected side of a mastectomy, an arteriovenous fistula, hemodialysis shunt or IV
- The patient may lie supine or sit erect during blood pressure measurement. If the patient is sitting erect, make sure that he has both feet flat on the floor because crossing the legs may elevate blood pressure.
- Place arm at heart level and keep well supported. If the artery is below heart level, you may get a false high reading.
- Expel any air from cuff.

- Place center of cuff over the brachial artery and wrap cuff evenly. The lower border of the cuff should be about 2.5 cm above the antecubital crease.
- Apply the cuff snugly. A falsely high reading can result if the cuff is too loose.
- Avoid constriction of the arm by a rolled sleeve above the cuff.
- Palpate radial artery. Palpating the radial pulse while inflating the cuff helps prevent the under estimation of the blood pressure if an auscultatory gap is present.
- Inflate cuff as rapidly as possible until pulse is gone, and then inflate an extra 20-30 mm Hg.
- Place diaphragm of stethoscope over the brachial artery, listen carefully and release cuff at even rate, no faster than 2-3 mm Hg per /second. The systolic pressure is the reading at the first return of the pulse sound.
- The diastolic pressure is the reading at which sounds stop (if there is a "muffling" or damping of the sound prior to loss of sound, record both readings). After you hear the last sound, deflate the cuff slowly for at least another 10 mm Hg to ensure that no further sounds are audible.
- Occasionally, blood pressure must be measured in both arms or with the patient in two different positions (such as lying and standing or sitting and standing). In such cases, observe and record significant differences between the two readings.
- Deflate and remove cuff.
- Document the procedure.

10. ADMISSION PROCEDURE

PURPOSE

- To ensure the safe admission of patients in all departments.

SCOPE OF SERVICES

- To all patients who are ready for admission and with the order by the doctor.

PROCEDURE

- When patient arrives in the ward, the registered nurses collects the documents from the patient and take consent from patient or relatives.
- The nurse assigned the bed to the patient.
- Enter the patient name in admission register
- Inform the unit doctor about the patient admission.
- Nurses assess the patient condition on admission by using the nursing assessment form.
- Carry out all doctors' order as per priority.
- Orient the patient and family to the ward and surrounding, ward routines, infection control practices and waste management practices.
- Answer all patient queries.
- Prepare patient case files.
- Document the procedure in patient record.

11. PREPARING PATIENT FOR DISCHARGE

PURPOSE

- To educates patients on their treatment plan, and expected course of illness.
- To provide continuity and coordination of care after the patient's discharge.
- To facilitate transition of care from one environment to another.

SCOPE OF SERVICES

- To all patients who are ready for discharge by the doctor without any complications.

PROCEDURE

- Any patient leaving Safdarjung Hospital before treatment is completed and without the advised of the doctor will be treated as LAMA and is treated as per policy.
- The discharge summary has to be prepared and signed by the doctor treating the patient.
- After duly prepared and signed discharge summary, explain the medication ordered by the doctor with proper dose, time and duration.
- Instruct about the diet, exercise, personal hygiene and follow-up as per advised.
- Answer any queries by the patient and relatives.
- Collect all hospital articles from the patient.
- Take signature from the patient or relatives in the patient file and discharge register.
- Complete all formalities and hand over the discharge paper, investigation reports etc. to the patient/ relatives.
- Document the procedure.

12. PREPARING PATIENT FOR TRANSFER

PURPOSE:

To ensure the safe transfer of patients between departments and wards

SCOPE:

- All departments involved in the transfer of patients.
- It applies to all planned and unplanned admissions and all specialties

PROCEDURE:

- Adhere to Standard Precautions.
- Up to date assessment of the patient should be completed.
- The method of transfer, including any requirement for escort, is appropriate to the clinical circumstances of the patient.
- The patient has been clinically assessed and declared safe for transfer prior to transfer taking place.
- Transfer of the patient is with the agreement of the Consultant under whom the patient has been admitted, or his/her nominated deputy, or member of the Multidisciplinary Team with delegated responsibility.
- The identity of the patient is clearly and accurately designated.
- The receiving department has been provided sufficient information about the patient
- All transfers must be discussed where possible with the patient and/or his/her family, and this discussion documented in the patient's record.
- The patient's healthcare record including the medical notes, nursing notes, and the results of investigations and treatment summary should accompany the patient on transfer. It is the responsibility of the sending department/clinical area to ensure that this takes place, and that due consideration is given to maintenance of patient confidentiality.
- In all cases of transfer the following information must be provided to the receiving site as a minimum, and, prior to transfer. This information must be provided by a Registered Nurse with direct responsibility for the patient and given to a Registered Nurse. The Registered Nurse who provides this information should ensure that a record of the information given to the receiving site is recorded in the patient's healthcare record.
- The Registered nurse who receives the information is responsible for ensuring the communication of information provided to the multidisciplinary team and the deficits in patient information must be clearly identified by the receiving nurse.

- In all cases the mode of patient transport must be appropriate to the patient's clinical need and required level of care during transfer.
- Patient must be appropriately dressed/covered to maximize their personal dignity
- Document the transfer.

Transfer Checklist

S.No	Item	Yes	No	Remarks
1	Healthcare Records with all reports and test results are being sent with the patient			
2	Patient/relatives aware of transfer and reason			
3	Proper communication/ information given to receiving department			
4	Personal belongings and valuables handed over (If applicable)			
5	Patient's own medicines handed over (If applicable)			
6	Appropriate mode of transport arranged			
7	Appropriate escort arranged			
8	Patient on oxygen therapy should be shifted along with portable oxygen cylinder			
9	Privacy and dignity of the patient is maintained during transfer			
Name & signature of nursing personnel who complete the checklist				
Name & signature of nursing personnel who receive the patient.				

13. CARE OF DEAD

PURPOSE

- To ensure that the deceased person is handled with dignity and care.

SCOPE OF SERVICES

- To all patients who are declared death by the medical doctor.

PROCEDURE

- Whenever possible, the patient attendants must be informed about the patient's critical condition and a regular update given by the doctor on duty. The assigned nurse will facilitate this.
- The doctor informs death of the patient to his/her kin.
- Give/ Offer the attendant the opportunity to see the dead body.
- Once the relatives have seen, explain to them in detail the formalities of clearance and release of the body. Listen to them, giving preference to their religious beliefs.
- Do not hurt or refuse their request and respect the dignity of the deceased.
- All death summary and forms are to be prepared and signed by the Doctor on duty.The assigned nurse will facilitate this.
- Assigned nurse will make sure that the patient is not wearing any jewelry. Otherwise, request the relatives to remove it.
- Death care should be given with the help of nursing attendant.
- Provide general hygiene and plug the oral, nasal and oozing cavities.
- Remove all cannula, surgical drains, electrodes and drain the bladder by pressing on the lower abdomen and then remove the urinary catheter.
- Aspirate before removing ryles tube.
- Suction orally and nasally before removing the E.T. Tube and other drains.
- Sponge the patient.
- Redress or secure dressing with tape to prevent oozing/staining of clothes and linen.
- Remove/Place dentures if requested by the relatives.
- Put identification label on the chest of the body with the following information – name, age, sex, MRD and UID no., date and time of death and ward.
- Secure the great toes together with bandage.

- Wrap the body with the hospital disposable sheet, bearing in mind that the face needs to be shown to the family if requested without unwrapping the whole sheet.
- Make sure the feet are covered and all limbs are held securely in position.
- Before handing over the body to relatives, check if all nursing records and patient chart are complete.
- Then handover the body and death certificate slip to the relatives after obtaining signature in the patients file and death register.
- In case of MLC, send call (Written or telephonic) to the mortuary and inform about the body of the deceased to be brought to the mortuary.
- The body is handed to staff from mortuary with two copies of death summary and death notification form.
- Signature is taken from mortuary staff in patient file and death register.
- The patient's room/ bed is thoroughly cleaned, and all waste disposed off as per hospital protocol.
- Document the procedure.

14. PRE & POST OPERATIVE CARE

PURPOSES

- To teach patient about the surgery when he/ she is able to communicate and reduce anxiety.
- To obtain baseline line health assessment before and after the surgery.
- To protect the patient.

SCOPE OF SERVICES

- To all patients undergoing operation.

ARTICLES REQUIRED

- B.P apparatus, thermometer, Height and Weight scale.
- Pre- operative checklist.
- All investigation reports.
- Pre-medication if ordered.
- OT dress.
- ID band.

PROCEDURE

Pre- Operative care:

- Identify the patient. Check the ID band/tag and patient file to protect the patient from wrong surgery.
- Assess patient knowledge of the proposed operation and plan of care and educate patient as required.
- Check that all jewelry, cosmetics, nail paints etc. have been removed and handed over to patient and relatives for keeping it safe.
- Any prosthesis, dentures and contact lens should be removed, documented in the nurses' notes and handed over to relatives. Hearing aid will be retained in theatre if required.
- Obtained the baseline blood pressure, TPR, height and weight.
- Ensure that part preparation is completed.
- Instruct the patient to have a bath with soap and water on the night before surgery.
- Check the pre-operative checklist
- Ensure that patient is put nil orally as per ordered.
- Check that the consent form is correctly completed, signed and dated by the patient and doctor.

- Assist the patient to change into theatre gown on the morning of surgery.
- Check whether patient wants to go to the toilet.
- Give pre-medication as prescribed.
- Advice the patient to stay in bed once the pre-medication has been given. Raised the side rails.
- Ensure that all relevant documents are attached with files and go with the patient to the operation theatre.
- Ensure that the patient is shifted and all reports are handover to the OT nurse.

Post – Operative care:

- Receive the patient from OT and shift to the bed.
- Provide comfortable position.
- Check all the drains and lines are attached.
- Check vital signs and record.
- Assess the operative site for any bleeding.
- Administer oxygen if required.
- Encourage early ambulation.
- Maintain respirator function by encouraging diaphragmatic exercise.(if applicable)
- Promote normal elimination and adequate hydration and nutrition.
- Administered medication and IV infusion as per orders.
- Maintain intake and output chart.
- Provide adequate rest and comfortable environment to the patient.
- Document the procedure.

15. OPEN BED

PURPOSE

- To prevent bed sores.
- To give to the unit or ward a neat appearance.
- To provide comfort and security.
- To establish an effective nurse patient relationship.

SCOPE OF SERVICES

- All patients as per general condition.

PROCEDURE

- Wash hands and collect required linen.
- Explain procedure to the patient and relatives.
- Assess the patient's general condition
- Offer assistance to get patient out of the bed (if not contraindicated)
- Make the patient sit comfortably on a stool/ chair near the bed
- If the bed is adjustable, keep in flat position. Put down side rails
- Strip linen from all four sides
- Remove blanket from the foot end, fold and place on the stool.
- Fan fold the top sheet, fold reverse from side in to 8 folds and place over the stool.
- Change the pillow cover if soiled.
- Place bottom sheet at the centre of the bed, with open end facing the foot end
- Unfold the bottom sheet. Tuck the head end and make a mitered corner.
- Tuck the foot end and make a mitered corner. Tuck in the sides
- Return to the other side, fold and tuck in top bedding as on the first side.
- Tighten without wrinkles and tuck together on same side
- Discard soiled linen in laundry bag.
- Make the patient comfortable.
- Wash hands.
- Document the procedure.

16. OCCUPIED BED

PURPOSE

- To provide active and passive exercises to the client.
- To promote cleanliness.
- To establish effective nurse client relationship.
- To prevent bed sores.
- To provide the clients with safe and comfortable bed to take rest and sleep.

SCOPE OF SERVICE

- As per patient general conditions.

PROCEDURE

- Assemble and arrange the linen within the easy reach.
- Adhere to standard precaution
- Explain the procedure to patient and relatives
- Loosen the bedding on all sides and remove the spread and the blanket leaving the top sheet over the client.
- Turn the patient to opposite side.
- Place the clean bottom sheet over the mattress making sure that the middle fold is in the middle of the bed.
- Turn the client back over the folded linen and then towards you. Go to the opposite side of the bed.
- Remove the soiled linen and put them in the laundry bag.
- Turn the client back to the middle of the bed. Place a clean top sheet over the client and remove the soiled top sheet.
- Replace the blanket and spread over the top sheet and make the bed as in an open bed.
- Tuck the foot end giving enough freedom for movement.
- Place a foot board or cradle at the foot of the bed. (if applicable)
- Put the clean pillow cases and place the pillows in position and leave the client comfortable.
- Wash hand
- Document the procedure.

17. CLOSED BED

PURPOSE

- To provide the patient with a comfortable and safe bed to take rest and sleep.
- To give the unit or ward a neat appearance.
- To prevent bed sores.
- To create an effective nurse-patient relationship.

SCOPE OF SERVICES

- As per patient general conditions.

PROCEDURE

- Wash hands and wear disposable gloves.
- Assemble and arrange equipment on bed side table.
- Fold and keep reversible linens such as blanket or bedspread on bedside table.
- Bundle all soiled linen in bottom sheet and directly place into the laundry bag.
- Place the bottom sheet with its center fold in the center of bed and towards the top to have sufficient sheet to tuck under the head of the mattress.
- Unfold the bottom sheet, spread it over the mattress and tuck in with mitered corner.
- Move the opposite side and tuck the sheets.
- Place the blanket over the top sheet about 6 inches below the top of the sheet.
- If the bed spread is used place it over the blanket.
- Tuck the top sheet, blanket and bed spread under the foot of the bed on the side close to you and miter the corners.
- Fold the upper 6 inches of the top sheet down over the spread and make a cuff.
- Move to other side and follow the same procedure for screening top sheets.
- Put the pillow case and place the pillow at the head end.
- Adjust the bed to a comfortable height.
- Dispose off soiled linen and wash hands.

18. BLANKET BED

PURPOSE

- To promote elimination through the skin.
- To provide absorption of patients perspiration.
- To carry the weight of the bed clothes off the painful joints.
- To provide extra warmth to the body.

SCOPE OF SERVICE

- As per patient general conditions.

PROCEDURE

- The bed is prepared as usual.
- Cover the bed with blanket instead the bottom sheet.
- Place second bath blanket over the patient.
- Cradle is used to take off the weight of the top linen off the painful joints.
- Sand bags are used to immobilize the painful joints.
- Document the procedure.

19. CARDIAC BED

PURPOSE

- To relieve dyspnea caused by cardiac diseases.
- To provide comfort
- To prevent complications.

SCOPE OF SERVICE

- As per patient general conditions.

PROCEDURE

- Prepare the bed as open bed, with foot rest at foot of the bed.
- Place back rest at patients back/ raise the head end of the bed and arrange pillows in comfortable position.
- Keep the patient in bed and cover properly.
- Place the knee pillow under the knees to prevent slipping of the patient.
- Place cardiac table in front of the patient with the pillow on it. So that the patient may lean forward to rest his head and arms on it.
- Make the patient comfortable.
- Wash hands.
- Document the procedure.

20. FRACTURE BED

PURPOSE

- To give firm, even support to the fracture limbs and back.
- To maintain position.
- To immobilize the fractured so that the pain is less.
- To make the patient comfortable.

SCOPE OF SERVICE

- As per patient general conditions.

PROCEDURE

- Place the fracture board directly over the bed mattress
- Place a thin firm mattress or pad over the fracture board.
- The bed is prepared as simple open.

  Document the procedure.

21. AMPUTATION BED

PURPOSE

- To keep the stump in good position.
- To be able to watch the stump for hemorrhage and apply tourniquet instantly if necessary.
- To allow the nurse to do repeated procedures such as bladder irrigation, without exposing the patient.
- To allow the nurse to make frequent observations. I.e. after amputation of the leg without disturbing the patient.

SCOPE OF SERVICE

- As per patient condition.

PROCEDURE

- Prepare the bed as simple open bed.
- Make bottom half of the bed.
- Fold sheet crosswise at the center of the bed at bottom tuck in and make corners. Make upper half of the bed.
- The other set of the top linen starts from the stump; but overlapping the first one and the excess is tucked under the mattress at the foot.
- When the patient is brought back from the operation theatre, fan fold the two sets of linen one side of the bed and receive the patient on the bed.
- Bed cradle is used to take off the weight of the top linen.
- Cover the patient and keep him warm and comfortable.
- The two sections of the top linen should overlap each other at least by 8 to 10 inches. So that it can easily lifted to observe the stump and also to prevent unnecessary exposure of the patient.
- Document the procedure.

22. BED BATH

PURPOSE

- To remove waste products from the skin, stimulate the skin and improve circulation.
- Provide socialization and promote sense of well-being.

SCOPE OF SERVICES

- To all patient who are unable to perform self care.

EQUIPMENT

- Mild Soap in soap dish
- Washcloth
- Bath towels
- Washbasin
- Powder or deodorant (of patient's choosing)
- Clean clothing as appropriate
- Bath blanket or large towel
- Lotion, if patient desires
- Gloves.

PROCEDURE

- Adhere to Standard Precautions.
- Explain procedure to patient.
- Provide privacy for the patient. Raise the bed to waist height or comfortable working position.
- Take the bedspread and regular blanket off the bed. Fold them loosely over the back of the chair, leaving the patient covered with the top sheet.
- Remove the top sheet from underneath without uncovering (exposing) the patient. Fold the sheet loosely over the back of the chair, if it is to be used again. If not, place in the laundry bag.
- Using good body mechanics assist the patient to move if needed to allow for good body mechanics during the bath. The patient should be in a flat position, as flat as is comfortable for him/her and as is permitted.
- Remove the patient's clothing and jewelry. Keep the patient covered with the bath blanket.

- Ask the patient how he/she prefers water temperature - hot, warm and/or cool. Request tha he patient check the water temperature and adjust, if necessary.
- Place a towel across the patient's chest and make a mitten with the washcloth. Without the use of soap on the washcloth, wash the patient's eyes from the nose to the outside of the face. Ask the patient if he/she wants soap used on his/her face. Wash the face. Be careful not to get soap in the eyes. Rinse the face with clean water twice and dry by patting gently with a bath towel.
- Place a towel lengthwise under the patient's arm farthest from you. This will keep the bed from getting wet. Support the arm with the palm of your hand under his/her elbow. Then wash his/her shoulder, armpit (axilla) and arm. Use long firm strokes. Rinse and dry the area well. Repeat this step for the side of the body closest to you. Place the basin of water on the towel. Put the patient's hand into the water and let it soak. Be sure and support the arm and the basin. Wash, rinse, and dry the hand well. Place it under the bath blanket. Repeat this step for the side of the body closest to you.
- Apply lotion as directed by the patient to both arms and deodorant to both axilla.
- Place a towel across the patient's chest. Fold the bath blanket down the patient's abdomen. Lift the towel only enough to wash the chest, rinse it and pat dry. Wash the patient's ear, neck, and chest. Take note of the condition of the skin under the female breasts. Dry the area thoroughly. Apply lotion as directed by the patient.
- Cover the patient's entire chest with the towel. Fold the bath blanket down to the pubic area. Wash the patient's abdomen. Be sure to wash the umbilicus (navel) and in any creases of the skin. Dry the patient's abdomen. Then pull the bath blanket up over the abdomen and chest and remove the towels. Apply lotion as ordered or directed by the patient.
- Empty the dirty water. Rinse the basin and refill the basin with warm water
- Fold the bath blanket back from the patient's leg farthest from you.
- Expose one leg at a time and place a towel lengthwise under that leg and foot.
- Begin with the thigh and use long downward strokes towards the knee. Rinse and pat dry. Bend the knee by supporting the leg and foot. Wash from the knee to the ankle, rinse, and dry the leg and foot. If the patient can easily bend his/her knee, put the washbasin on the towel, and then put the patient's foot directly into the basin to wash it. DO NOT place the foot directly in the basin if the patient has circulatory problems of the lower extremities. Support his/her leg and the basin. Protect the ankle from too much pressure on the basin.
- Observe the toenails and the skin between the toes for general appearance and condition. Look especially for redness and cracking of the skin. Take the basin away. Dry the patient's leg and foot and between the toes. Cover the leg and foot with the bath blanket and remove the towel.
- Repeat the entire procedure for the other leg and foot closest to you. Apply lotion as directed by the patient. Empty the basin, rinse and refill it with clean water.
- Assist the patient to move towards the center of the bed and ask the patient to turn on his/her side with his/her back toward you.
- Put the towel lengthwise on the bottom sheet near the patient's back. With long downward strokes wash the neck and back moving towards the bottom. Rinse and dry the back of the neck, behind the ears, neck and back.
- Wash the buttocks and anus area moving from the front to the back. Rinse and pat dry.

- Perform hand hygiene and adhere to Standard Precautions if there are wounds or broken skin. Provide skin care to the patient's neck and back. Give the patient a back rub. Give special attention to bony areas, e.g., shoulder blades, hips and elbows. Look for red areas. Dry the patient's back; remove the towel and reposition to him/her back.
- Assist the patient to turn onto his/her back. Ask the patient if they are able to wash their own perineal area. Empty water and obtain clean, warm water. If the patient can provide the care independently, provide a clean washcloth and towel. Also, provide privacy for the patient.
- If the patient is unable to provide the perineal care, adhere to Standard Precautions.
- Male patient: Uncircumcised males require the foreskin to be retracted. Next, hold the penis by the shaft and wash in a circular motion from the tip down toward the base. Note: Use a clean area of the washcloth or clean washcloth for each stroke. Rinse in the same manner and dry thoroughly. Uncircumcised male patients will require foreskin to be un-retracted and over the tip of the penis.
- Female patient: Wash the perineum with soap and water from front to back. Place hand and hold labia majora open to expose urinary meatus and vaginal opening. Using single strokes, begin with the center of the perineum and then moving to each side. Use a new side of the washcloth with each stroke. DO NOT wipe from back to front as this can cause infection. Rinse the perineal area in the same manner from front to back, single strokes and using new side of the washcloth with each stroke. Pat dry.
- As needed, assist the patient with applying clothing. Note: Usually the patient's hair is combed and the bed is changed, however, this depends on the needs of your patient.
- Change bed linen if the linen is wet or soiled. Discard soiled towels, blankets and washcloths in laundry.
- Position the patient and lower the bed to the lowest position for patient safety.
- Perform hand hygiene, clean equipment and place used equipment in the proper place as directed by the patient or caregiver.
- Document the procedure in patient's record.

23. BACK CARE

PURPOSE

- To prevent bed sore.
- To stimulate blood circulation.
- To relieve pressure from pressure points and to change positions.
- To refresh the patient and relieve fatigue.

SCOPE OF SERVICES

- To all patients with altered physical mobility and who are at risk for developing bed sore.

PROCEDURE

- Assess the need for back care in the patient.
- Explain the procedure to the patient.
- Provide privacy by placing a screen.
- Bring all necessary articles to the bed side.
- Put the patient in lateral position.
- Expose the back, shoulders, upper arm and buttocks. Cover the reminder of the body with a bath blanket.
- Wash hands.
- Wash the patient back with mild soap and water from the cervical to the coccyx, wash off the soap and dry.
- Take the lotion or oil and Apply to back to reduce friction. In rubbing the back use firm long strokes and kneading motions. The amount of pressure to exert depends upon the patient's condition. Begin from neck and shoulders then proceed over the entire back.
- Massage with both hands working with a strong stroke.
- Put the patient's clothes and make him comfortable.
- Wash hands.
- Document the procedure in patient record.

24. HAIR CARE

PURPOSE

To promote cleanliness, prevent scalp and hair breakdown and to stimulate circulation

- To improve appearance and well-being of patient.

SCOPE OF SERVICES

- To all patient who are bedridden and who are unable to perform self care.

PROCEDURE

- Adhere to Standard Precautions.
- Explain procedure to patient.
- Assemble equipment.
- Protect floor with newspaper or paper bags.
- Raise the bed to the highest horizontal position. Lower the headrest and the side rails on the side you are working.
- Place the chair or small table at the side of the bed near the patient's head. Protect with paper. The chair/table should be lower than the mattress. The back of the chair should be touching the mattress.
- Inspect the patient's hair for knots and lice. If the patient has knots, carefully comb them out. If the client has lice, stop the procedure and report this to your supervisor.
- Place the large basin on the chair/table. Place container with warm water on table within easy reach.
- Remove the pillow from under the patient's head.
- Use shampoo tray or ring, if available; if not, roll sides of plastic sheet to form a trough. This makes a channel for the water to run into the pail. Three sides must be rolled to make a channel. The top edge should be rolled around a rolled bath towel. Place the edge with the rolled bath towel under the patient's neck and head. Have the open edge hanging into the basin.
- Position patient so that head is at edge of bed, and roll pillow under neck for support.
- Fasten towel around patient's neck. Cover pillow and bed with plastic.
- Put small cotton swabs in the patient's ears for protection.
- Loosen clothing, so the patient is comfortable.
- Ask patient to hold washcloth over his/her eyes.

- Fill container with warm water. Check the water temperature and have the patient test to comfort level. Using a pitcher or cup, pour some water over the patient's hair. Repeat until the hair is completely wet.
- Apply shampoo. Using both hands, wash the hair and massage the scalp with your fingertips. Avoid using your fingernails, as they could scratch the patient's scalp. [Note: You may want to use gloves if you see lesions, sores or lice in the patient's scalp].
- Rinse hair thoroughly to remove all soap. Repeat lather and rinse thoroughly again.
- Apply conditioner or rinse if patient requests.
- Dry the patient's forehead and ears.
- Remove the cotton from the patient's ears.
- Raise the patient's head and wrap it in a bath towel.
- Remove plastic sheet from pillow and bed. Dry hair by rubbing with towels. If an electric blow dryer is available, use it on low setting. Keep patient well covered to prevent chilling.
- Comb or brush, and style hair.
- Lower the bed to its lowest horizontal position and raise the side rails.
- Make the patient comfortable.
- Clean equipment and put it in its proper place.
- Discard soiled supplies in appropriate containers.
- Document procedure in patient's record and patient tolerance.

25. SITZ BATH

PURPOSE

- To cleanse, relax and increase circulation to the area; to assist in healing; and to provide relief from discomfort.

SCOPE OF SERVICES

-Patients with hemorrhoids, genital or rectal surgeries, Perineal tears or as advised by the treating doctor.

PROCEDURE

- Adhere to Standard Precautions.
- Explain procedure to patient.
- Allow for privacy.
- Clean portable sitz bath basin.
- Fill the portable sitz bath basin with warm water to approximately 2/3 (two-thirds) full of warm water.
- Water temperature should be approximately 100- 104^{0}F for cleansing the perineal area. Water temperature should be approximately 105-110^{0}F for pain and circulation stimulation. Check the water temperature and have the patient test to comfort level.
- Remove any dressings patient may have in place, unless otherwise indicated.
- Remain with the patient during the procedure if they are weak or unsteady. Check with patient every 5 minutes for feelings of dizziness or weakness. The sitz bath should take approximately 20 minutes.
- A valve on the tubing connected to the bag will allow more hot water to be placed in the bag.
- Dry the patient.
- Reapply any dressings if required.
- Assist the patient to dress and return to a position of comfort.
- Clean tub or portable sitz bath tub according to the manufacturer's directions.
- Discard soiled supplies in appropriate containers.
- Perform hand hygiene.
- Document the procedures in patient's record.

26. ORAL CARE

PURPOSE

- To Keep the teeth, gums and mouth in good condition
- To freshen the mouth and relieve it of offensive odors; prevent sores and infection
- To provide a sense of well -being and comfort.

SCOPE OF SERVICES

- To all bed-ridden, unconscious and who are unable to perform self-care.

PROCEDURE

- Adhere to Standard Precautions.
- Explain the procedure to patient.
- Have the patient sit up or assist patient to the sink.
- Spread towel across patient's chest.
- Inspect mouth and gums for redness or skin breakdown. Offer the patient some water to rinse mouth.
- Hold curved basin under the patient's chin, so patient can spit out the water.
- Offer toothbrush to patient, if able to brush own teeth. Put toothpaste on wet toothbrush. If patient is unable to brush own teeth, use a gentle motion, starting above the gum line and going down the teeth. Repeat this until you have brushed all the teeth. If the patient CANNOT swallow or is at risk for aspiration, may need to cleanse mouth with swabs.
- If no teeth, cleanse mouth with swabs and brush tongue gently, if needed.
- If there are oral sores present, consult for direction in providing oral care. Some patients may need to use prescription toothpaste, mouth rinse or have specific instructions to provide oral care.
- Give patient water to rinse mouth.
- Offer mouthwash (optional).
- Clean and put equipment away.
- Discard soiled supplies in appropriate containers.
- Document in patient's record:

27. FEEDING PATIENT

PURPOSE

- To provide adequate nutrition to the patient.

SCOPE OF SERVICES

- To all patient who are unable to feed self.

PROCEDURE

- Adhere to Standard Precautions.
- Wash patient's hands.
- Explain procedure to patient. Tell patient what food has been prepared.
- Place patient in upright position unless contraindicated.
- Place napkin or towel on front of patient. Place the food in the patient's field of vision. May need to use modified utensils to promote self-feeding.
- Adhere to food items on the diet and texture to promote safe swallowing and reducing risk of choking.
- Offer small portions of food (approximately a teaspoon full). Feed the foods separately rather than mixed. Make sure the food is swallowed before offering more bites.
- Offer fluid as required.
- DO NOT rush patient.
- After patient has finished eating, wash patient's hands and face.
- Return patient to position of comfort.
- Remove tray from room and dispose of uneaten food.
- Replace the articles.
- Straighten work area, wash and put away cooking and eating utensils.
- Document the procedure in patient's record.

28. LOCAL APPLICATION- COLD & TEPID SPONGING

PURPOSE

- To reduce body temperature

SCOPE OF SERVICES

- To patient who have fever more than 104^0F
- As per advised

PROCEDURE

- Inform the proceeding to the patient.
- Put bed side screen.
- Collect all materials at bed side table.
- Take patient's temperature before starting the procedure and note it.
- Place rubber sheet and draw sheet under patient to cover entire mattress.
- Remove patient's clothing from body.
- Bath the face first and dry with towel.
- Expose upper half of the body.
- Place a cool moist cloth over axilla and groin so as to cover the large superficial vessels. This will further help in lowering the body temperature.
- Change the cloth when it is warm.
- Change the water when it is warm by discarding in bucket.
- Use a downward motion. Sponge arm and neck for 3-5 minutes. The back, front and buttock should be sponged.
- Do not wipe and dry with towel. Let the water stick and evaporate by itself. Evaporation causes cooling. This is required to cool the body temperature.
- Likewise sponge lower extremity for 3-5 minutes.
- While sponging one half cover other half of the Do not expose the whole body at a time.
- After whole body sponging is completed, dry the patient by putting the towel and not by rubbing it.
- Put on dress or gown to the patient.
- Remove draw sheet, mackintosh, replace top cover, remove bath blanket.
- Leave ice cap for half an hour.

- Take patient's temperature by clinical thermometer one hourly or two hours.
- The entire sponging should take 15 to 20 minutes depending on temperature of body cooling and patient's tolerance or comfort.
- Record the procedure in chart.
- Intimate if any abnormality in body temperature to the attending physician.
- Document the procedure in patient record.

29. ORAL MEDICATION

PURPOSE

- To provide safe and accurate medication administration.
- To instruct patient/caregiver about oral medication administration and medication regime.

SCOPE OF SERVICE

- To all patients who are advised oral medication admitted in hospital.

PROCEDURE

- Obtain a physician's prescription for the patient's medications. It should include:
  - Name of the patient.
  - Name of the medicine.
  - Medication dose, route and frequency.
- Use at least 2 patient identifiers prior to administering medications.
- Check the patient's known allergies.
- Assess what oral medications the patient is taking and what oral medications are ordered.
- Be sure to include over– the-counter medications the patient may be using. Inform the physician of any over–the-counter medications that are not written on the patient's medication record and that may have been prescribed by another physician.
- Instruct the patient/caregiver on the schedule of the medication, the dosage, purpose and side effects.
- Report to the physician therapeutic effects of the medications, any adverse side effects.
- Document the procedure

30. EYE DROP/OINTMENT INSTILLATION

PURPOSE

- To instill drops into eye for cleansing/antiseptic purposes;
- To dilate or contract pupil
- To relieve pain or pressure, treat diseases and infections, anesthetize, stain and lubricate.

SCOPE OF SERVICES

- As advised by the doctor.

PROCEDURE

- Adhere to Standard Precautions.
- Verify medication, dosage, frequency, and site to which it is to be instilled, as ordered by physician.
- Explain procedure to patient
- Instruct patient to tilt head back or lie down.
- If there is any exudate in or around eye, clean eye before instilling eye drops. Clean eye, from the inner corner out, with gauze sponge soaked in tepid water. Use fresh gauze sponge pad for each stroke.
- Recheck physician order for medication, dosage and site of administration (o.s. = left eye; o.d. = right eye; o.u. = both eyes). Clarify orders, if unapproved abbreviations are used.
- Using thumb or index finger, gently pull down the lower lid so that conjunctival sac is exposed. Avoid putting pressure on the eyeball.
- Instruct patient to tilt head back and look up and away, to prevent drop from falling directly onto cornea. Instill eyedrop(s). Follow special instructions if any.
- Let drop fall into conjunctival sac. DO NOT let dropper touch eye. Release lower lid and instruct patient to close eye gently without squeezing lid shut.
- When administering drugs that cause systemic effects: Gently press one thumb on the inner canthus for 1 to 2 minutes while the patient closes his/her eye. (This helps prevent medication from flowing into the tear duct.) Patient may blot excess fluid with tissue. A separate tissue should be used for second eye, if necessary.
- Discard soiled supplies in appropriate container.
- Document the procedure

31. EYE IRRIGATION

PURPOSE

- To treat infection or inflammation; to flush away foreign particles, secretions and chemicals.

SCOPE OF SERVICES

- To all patients who are advised eye irrigation.

PROCEDURE

- Adhere to Standard Precautions.
- Explain procedure to patient. If contact lenses are worn, instruct patient to remove them.
- Instruct patient to lie supine with head turned toward affected eye, place protective cover or towel under patient's head. Position emesis basin under the eye. Follow special instructions if any.
- Wet 4x4 sterile gauze sponge with irrigation solution. Gently clean any secretions from eye, wiping from inner to outer canthus.
- Draw up irrigation solution into irrigation applicator/syringe.
- With one hand, hold open eyelid, using thumb and index finger. Avoid pressure on eyeball. With other hand, hold irrigation syringe/applicator near inner canthus. Instruct patient to look away from tip of irrigation applicator.
- Gently flush eye from inner to outer canthus. DO NOT touch eye or eyelid with applicator/syringe tip.
- Check lower and upper eyelid for retained foreign particles.
- Remove any foreign particles by gently touching conjunctiva with sterile, moist cotton tipped applicator. DO NOT touch cornea.
- Resume eye irrigation until clear of all visible foreign particles.
- When the irrigation is complete, pat the patient's eyelid and face dry with cotton ball or facial tissue.
- Discard soiled supplies in appropriate container.
- Document the procedure

32. VAGINAL MEDICATIONS ADMINISTRATION

PURPOSE

- To apply a medication to the vagina.

SCOPE OF SERVICES

- To all patients who are advised vaginal medication administration.

PROCEDURE

- Adhere to Standard Precautions.
- Identify patient and explain procedure.
- Ask patient to empty bladder.
- Assist to lie down.
- Drape bed linen over legs, leaving only perineum exposed. With knees flexed and legs spread apart, place bed protector under buttocks.
- Assemble equipment. Unwrap suppository and lubricate with lubricant or fill applicator with cream and lubricate tip of applicator.
- If any vaginal discharge is observed, cleanse area with warm soapy water. Cleanse the right and left side of the perineum and finally the center, wiping from front to back, using a clean part of the washcloth for each stroke.
- With one hand gently separate the labia and inspect the perineum for any irritation. Gently insert the lubricated suppository or applicator and insert cream.
- Instruct the patient to remain lying down for about 30 minutes. Cleanse perineum as necessary.
- Discard soiled supplies in appropriate containers.
- If applicator is reusable, wash according to manufacturer's guidelines and return it to container.
- Document the procedure

33. TOPICAL MEDICATION ADMINISTRATION

PURPOSE

- To introduce topical medications through the skin, by absorption.

SCOPE OF SERVICES

- As per advised by the doctor.

PROCEDURE

- Adhere to Standard Precautions.
- Identify patient and explain procedure.
- Verify medication usage and instructions.
- Wash off old topical medication with soap and water and dry area thoroughly
- Expose skin area where topical ointment or patch is to be applied.
- Provide patient privacy.
- Wash with soap and water, dry area thoroughly.
- Apply topical medication using gloves, if necessary per manufacturer's directions.
- Apply plastic film or transparent dressing, if indicated by medication manufacturer's instructions.
- Discard soiled supplies in appropriate containers.
- Document the procedure

34. INTRADERMAL INJECTIONS

PURPOSE

- To introduce medication through epidermis into dermis.

SCOPE OF SERVICES

- To all patients who are advised intradermal injections or any skin test.

PROCEDURE

- Adhere to Standard Precautions.
- Identify patient and explain procedure.
- Verify medication to be given and assemble equipment.
- Find antecubital space, then measure 3-4 finger widths distal from antecubital space toward hand for injection site on ventral aspect of the forearm.
- Cleanse site with alcohol prep pad by starting at the center and moving outward in a circular motion. DO NOT rub area too hard; rubbing may cause irritation that could hinder reading of the test. Allow alcohol to dry.
- Stretch skin slightly with thumb, hold patient's forearm in one hand and with other hand hold syringe between thumb and forefinger.
- Place the syringe so the needle is almost flat against the skin, making sure the bevel of the needle is up.
- Insert the needle (at a 15-degree angle) to 1/8 inch below the skin surface and point of needle is still visible through skin.
- Inject medication slowly. If using PPD tuberculin, use 0.1 ml. Expect resistance, which means needle is properly placed. If needle moves freely, the needle has been inserted too deeply. Withdraw needle slightly and try again. While medication is being injected a small white blister, should be forming (about 6 mm to 10 mm in diameter).
- Withdraw needle and apply gentle pressure to site. Mark the area with date and time (do not use red colour). DO NOT massage site as it may interfere with test result.
- Discard soiled supplies in appropriate containers.
- Document the procedure

AFTER CARE:

- Read test at appropriate time according to medication instructions.

35. SUBCUTANEOUS INJECTION

PURPOSE

- To introduce medication into subcutaneous fat.

SCOPE OF SERVICES

- To all patient who are advised subcutaneous injections.

PROCEDURE

- Adhere to Standard Precautions.
- Check doctor's prescription for dosage, frequency and route of administration.
- Adhere to Standard Precautions.
- Identify patient and explain procedure.
- Draw up medication after having injected equal amount of air into container. Recheck medication dosage.
- Select injection site.
- Clean site with alcohol wipe/antiseptic wipe by starting at the center and moving outward in circular motion; allow to air dry.
- Pinch up skin to elevate subcutaneous tissue.
- Insert needle at 45 degree angle, depending on amount of fatty tissue and needle size.
- Once needle is inserted, skin can be released.
- If agency policy requires, pull back on plunger to aspirate. If there is no blood aspirated, medication may be injected slowly.
- If there is blood aspirated, withdraw needle, discard medication and syringe properly and repeat procedure. For insulin and heparin injections, it is not recommended to aspirate to check for blood.
- Hold gauze over site and withdraw needle. Press site for a few seconds. DO NOT rub the injection site after SQ heparin administration because it may cause bruising or bleeding.
- Discard soiled supplies in appropriate containers.
- Document the procedure

36. INTRAMASCULAR INJECTION ADMINISTRATION

PURPOSE

- To introduce medication into muscle, bypassing subcutaneous tissue and fat.

SCOPE OF SERVICES

- To all patients who are receiving intramuscular injections.

PROCEDURE

- Check doctor's order for medication, dosage and route of administration.
- Adhere to Standard Precautions.
- Identify patient and explain procedure.
- Draw up medication after having injected equal amount of air into vial. If using an ampule, no air is to be injected. Recheck medication dosage.
- Body size, nutritional status and the medication's character (thick or irritating) shall determine the amount of medication injected into one site (2 mL is maximum limit).
- Select appropriate injection needle: 1-1 1/2 inch needle (22- to 27-gauge for aqueous solution or 18- to 25- gauge for viscous or oil-based solution) for adults; 5/8- to 1-inch needle for children.
- Select injection site (deltoid, vastuslateralis or gluteal) with no bruises, induration, atrophy or signs of infection.
- Assist patient to comfortable position: lying on side or back with flexed knee and hip (ventrogluteal site), lying supine with knee slightly flexed (vastuslateralis site), or seated or supine with hand on hip or lower arm flexed across abdomen or lap (deltoid site).
- Drape for privacy, as needed.
- Clean site with alcohol prep pad by starting at the center and moving outward in circular motion.
- For Z-track administration, pull skin 2.5 to 3.5 cm down or laterally just below site with nondominant hand. Hold this position until medication is injected. Otherwise, insert needle at 90-degree angle through the skin and into the muscle.
- Inject at rate of 1 mL/10 seconds. [Note: Aspiration of IM is not indicated for immunizations and vaccinations. Aspiration may be indicated for injections that include large molecule injections i.e. Penicillin. If there is no blood aspirated, medication may be injected. If there is blood aspirated, withdraw needle, discard medication and syringe properly and repeat procedure, choosing another injection site.]

- Withdraw needle smoothly, release skin, and place gauze gently on site. Apply gentle pressur DO NOT massage site.
- For ventrogluteal and vastuslateralis sites, encourage leg exercises. For deltoid site, encourage arm exercises.
- Dispose of used supplies, remove gloves and perform hand hygiene.
- Document the procedure

37. INTRAVENOUS THERAPY ADMINISTRATION

PURPOSE

To provide a peripheral venous route for the administration of fluids and/or medications that will maintain or replace body stores of fluids, provide nutrition and treat illness, dehydration, electrolyte imbalances, intolerance to oral feeds, nil per oral status, hypotension , drug infusion.

SCOPE OF SERVICES

- To all patient who are on IV therapy.

Common Intravenous solutions

1. Isotonic solutions – Normal saline (0.9% solution), Ringer lactate, 5% Dextrose.
2. Hypotonic solutions – 0.45% sodium chloride , 0.3% sodium chloride
3. Hypertonic solutions – 10% Dextrose solution, 3% -5% NaCl.

Calculation of flow rate (drops/ minute)

$$\frac{\text{Volume of fluid to be infused (mL)}}{\text{Time(Minutes)}} \times \text{Drop factor (drops/ mL)} = \text{Flow rate in drops/minutes}$$

eg:- calculate the IV w rate for 1200mL of NS to be infused in 6 hours. The infusion set is calibrated for a drop factor of 15 drops/ mL.

Ans:-

$$\frac{1200\text{mL}}{} \times 15 \text{ drops/ mt} = \frac{1200 \text{ mL}}{} \times 15 = 50 \text{ drops/ min.}$$

PROCEDURE

- Adhere to Standard Precautions.
- Explain procedure and purpose to patient/caregiver.

- Assemble the equipment on a clean surface close to the patient.
- Question patient regarding allergies to adhesive tape and iodine.
- Place patient in a comfortable position, ensuring that site is accessible and stable.
- Ensure adequate lighting.
- Prepare equipment.
  - Check patient's name and expiration date on fluid container.
  - Check fluid container for prescribed solution, leakage, particulate matter and discoloration.
  - Add medication, if necessary. Label the container with name of additive, date, time and nurse's initials.
  - Connect IV tubing with filter to the fluid container and flush air from tubing. Fill drip chamber halfway. Maintain sterility of free end of tubing.
  - Hang solution container a minimum of 3 feet above insertion site.
- Assess hand or arm for appropriate venipuncture sites.
- Apply tourniquet.
- Clean the skin.
  - If the site is excessively hairy, clipping is recommended
  - Clean skin with an alcohol applicator. Apply in a circular motion starting at the intended site and working outward using friction. Allow to air dry. If using a 2% chlorhexidine solution, use a back and forth scrubbing motion. Allow to air dry. Only one application is necessary. No alcohol prep is required.
  - Repeat with antimicrobial applicator. Allow to air dry. DO NOT retouch cleansed area due to contamination of site.
- Anchor the vein by holding the skin taut below the selected site.
- Insert the cannula at a 30-45 degree angle beside the vein.
- When skin is pierced, lower the angle of the cannula almost parallel to the skin. Gently apply pressure and enter the vein.
- When backflow of blood is evident, advance the cannula forward keeping the inner needle (stylet) stationary until the hub is flush against the insertion site.
- Release the tourniquet. Apply pressure above site to occlude blood flow. Remove stylet and connect extension set. Flush line with 3-5 mL of normal saline. Observe site for swelling or discomfort.
- Connect IV tubing, securing to extension set. Secure tubing connections with tape.
- Start infusion slowly while observing site.
- Secure the cannula hub to the patient with tape. DO NOT cover the insertion site and the hub/tubing connection.
- Cover with transparent dressing.
- If using an infusion pump to regulate the drip rate, refer to the manufacturer's instructions on the package.
- Regulate the drip rate if infusing by gravity and apply time tape to solution container.
- If a micro drip set is used, the number of drops/minute equals the amount of solution/hour.
- Discard soiled supplies in appropriate containers.

REMOVAL:

- Adhere to Standard Precautions.
- Stop IV flow by closing clamp or turning off pump.
- Remove dressing from insertion site and inspect skin.
- Place sterile gauze over needle at insertion site. Withdraw cannula slowly. Apply pressure to puncture site with gauze for 2 to 3 minutes. Observe to see if catheter is intact. If catheter is not intact:
  - Notify physician immediately. Physician may request that patient be transported to nearest emergency department for evaluation.
  - Place patient on strict bed rest.
  - Monitor patient closely for signs and symptoms of embolism.
- Apply gauze sponge or self-adhesive bandage and elevate extremity.
- Discard soiled supplies in appropriate containers.
- Document the procedure.

38. ADMINISTRATION OF INTRAVENOUS MEDICATION

PURPOSE

- To assure the safe administration of intermittent central line or peripheral intravenous (IV) medications supplied in a syringe.

SCOPE OF SERVICES

- To all patients who are receiving intravenous injections.

PROCEDURE

- Adhere to Standard Precautions.
- Obtain a detailed physician's order for IV push medication.
- Identify patient and explain procedure.
- Prepare a clean working area.
- Gather and organize all of the supplies.
- Follow rights of medication
- Wash hands using agency-approved hand hygiene.
- Open clamp, if one is present, on line or extension.
- Clean the needle less connector with an alcohol prep and allow to dry.
- Attach saline flush to cap and flush.
- Clean the cap with an alcohol prep.
- Attach prepared medication in syringe to cap. Slowly inject the medication at the prescribed rate
- After the medication syringe is empty, remove it.
- Wipe cap with alcohol, allow to dry and flush IV with normal saline.
- Wipe cap with alcohol, allow to dry and flush IV with heparin (if required). Remove syringe.
- Close clamp or IV extension and secure.
- Discard ALL used supplies per hospital policy
- Document the procedure.

39. INTRAVENOUS CHEMOTHERAPEUTIC AGENTS ADMINISTRATION

PURPOSE:

- To provide safe administration of IV chemotherapy.
  - — All chemotherapy solutions should be premixed in a controlled setting
  - — Medications should not be mixed. Separate syringes are to be used for each medication.
  - — Chemotherapy protocols to be followed
  - — Specific orders for each chemotherapeutic dose to be given must be obtained from the physician prior to administration.
  - — Prior to administration of each new antineoplastic drug, instruct patient about the drug, type, method of administration and possible side effects.
  - — Some medications are potent vesicants that may cause severe tissue damage if extravasation occurs. Be prepared to administer prompt treatment
  - — Use at least 2 patient identifiers prior to administering medications.

SCOPE:

- Patients those who are getting chemotherapy

PROCEDURE:

- Adhere to Standard Precautions.
- Explain procedure to patient.
- Don protective garments, disposable gown, gloves, etc.
- Assemble supplies and equipment.
- IV push administration of chemotherapeutic agent through peripheral venous access:
  - — Cleanse skin with antimicrobial wipe and allow to air dry completely.
  - — Perform venipuncture. (See Intravenous Therapy Administration.)
  - — Check IV site for patency.
  - — Administer IV push as ordered, checking for blood return after each 1-2 mL of agent infused to validate placement of needle. For multiple medications, flush between each drug with 3-10 mL normal saline.
  - — After complete dosage is given, flush line with 3-10 mL normal saline.
  - — Remove needle and cover site with small dressing or self-adhesive bandage.
- IV infusion of a chemotherapeutic agent through peripheral venous access:

- Prepare IV administration set, attach to solution container with medication as ordered by physician.
- Cleanse skin and perform venipuncture
- Check IV site for patency and adequate blood return.
- Attach primed tubing to IV needle hub; administer at rate prescribed. When unable tostay with patient during entire infusion, a control device must be used for patient safety.
- Instruct patient/caregiver to observe for signs and symptoms of infiltration, infection, phlebitis and when to notify the nurse.

- IV administration of a chemotherapeutic agent through a central venous catheter:
  - Cleanse injection port with antimicrobial wipe.
  - Attach syringe and open tubing clamp, if used.
  - Flush catheter tubing with 5 mL normal saline.
  - Infuse chemotherapeutic agents either IV push or IV infusion, as prescribed. Flush tubing with 3-10 mL normal saline after administration of each drug.
  - After all chemotherapy has been given, flush central venous catheter with 3-10 mL normal saline and heparinize catheter as ordered by physician
- Discard soiled supplies in appropriate containers.
- Document in patient's record:
  - Medication administered, dose, time, rate and route.
  - Type and appearance of venous access site.
  - Type of blood return and frequency of assessing blood return.
  - Instructions given to patient/caregiver.
  - Communication with physician.

40. BLOOD TRANSFUSION REACTION MANAGEMENT

PURPOSE

- To provide prompt attention to any suspected transfusion reaction.

SCOPE OF SERVICES

- To all patient receiving blood transfusion.

PROCEDURE

- Adhere to Standard Precautions.
- Stop transfusion immediately and maintain IV at keep vein open (KVO) with normal saline.
- Consequences are in direct proportion to amount of incompatible blood administered. In minor reactions, blood transfusion may be resumed.
- Notify physician at once.
- Administer emergency medications, as ordered by physician.
- Anticipate and be prepared for possible emergency backup, i.e. CPR, critical unit transfer.
- Support patient emotionally and physically.
- Obtain vital signs, urine specimen and any lab specimens per physician orders.
- Notify transfusion product supplier.
- After patient is stabilized, transport to blood bank: remainder of unit of blood tubing, copies of the transfusion reaction form and copies of blood bank transfusion request.
- Discard soiled supplies in appropriate containers.
- Document the procedure

41. CENTRAL VENOUS CATHETER: FLUSHING/HEPARINIZATION

A central venous catheter (CVC) is a venous access device with the tip located in the superior vena cava. It provides access to the patient's circulation for the administration of any type of intravenous therapy and for drawing blood for laboratory analysis.

PURPOSE

- To maintain patency of a central venous catheter and prevent thrombosis.

SCOPE OF SERVICES

- To all patient who have central venous catheter in situ.

PROCEDURE

- Adhere to Standard Precautions.
- Perform hand hygiene.
- Explain the procedure and purpose to patient/caregiver.
- Assemble the equipment on a clean surface close to the patient.
- Place patient in comfortable position, making sure site is accessible.
- Ensure adequate lighting.
- Draw up heparin and normal saline as ordered.
- Unclamp catheter. Clean needle less adaptor with alcohol using friction. Allow to air dry.
- If heparin flush is being administered following a medication dose, flush line with 3-5 mL normal saline prior to flushing with heparin.
- Inject heparin solution using steady pressure.
- Before syringe is completely empty, clamp tubing and apply pressure on plunger while withdrawing syringe.
- Discard soiled supplies in appropriate containers.
- Document the procedure.

42. CENTRAL VENOUS CATHETER DRESSING CHANGE

PURPOSE

- To provide a protective barrier over the catheter exit site allowing visibility of the site and reducing frequency of dressing change.

SCOPE OF SERVICES

- To all patient who have central venous catheter in-situ.

PROCEDURE

- Adhere to Standard Precautions.
- Explain the procedure and its purpose to the patient/caregiver.
- Ask if patient is allergic to any creams, ointments or solutions that are put on the skin (especially iodine).
- Assemble the equipment on a clean surface close to the patient.
- Place patient in comfortable position, making sure that site is accessible.
- Ensure adequate lighting.
- Don non-sterile gloves and mask. Have patient turn head away from site or also wear a mask.
- Remove old dressing being careful not to dislodge the catheter. [Note: To remove, gently grasp the edge and slowly pull the dressing from the bottom up towards the insertion site.]
- Inspect the insertion site for signs of infection, i.e., redness, swelling, pain, heat or drainage. Also inspect the staying sutures, if applicable, to be sure they are intact. Inform the physician of any signs of infection and problems with the sutures.
- Remove gloves.
- Open all packages and place on the clean surface.
- Don sterile gloves. [NOTE: It is important to loosen all blood, scabs and debris from the exit site and catheter. Use care with patients with compromised clotting factors.]
- Clean the exit site with 3 alcohol applicators in a circular fashion moving from the exit site out at least 2-3 inches in diameter, if needed for excessive drainage. Allow to air dry.
- Repeat using 3 antimicrobial applicators. Allow to air dry. DO NOT blot.
- Gently clean the outside of the catheter with the inside surface of an alcohol wipe, repeat twice starting from the exit site to the catheter hub. DO NOT pull on catheter.
- Apply ointment to the exit site, if ordered.

- Apply transparent dressing according to manufacturer's instructions or Cover with split 2x2 gauze followed by plain 2x2 gauze and secure with tape. To ensure that the dressing is closed and intact, adhesive material should be applied over the entire gauze surface securing all edges.
- DO NOT allow catheter to hang down the chest. Loop the catheter and secure with tape to the chest wall to prevent accidental dislodgment.
- Discard soiled supplies in appropriate containers
- Document the procedure.

43. INTRAVENOUS CANNULATION

PURPOSE

- To collect blood sample
- For IV administration- fluid, medications, chemotherapy, nutritional support, blood or blood products or radiologic contrast agents.

SCOPE OF SERVICES

- To all patients who are on IV medication and on intravenous therapy.

PROCEDURE

- Adhere to Standard Precautions.
- Introduce yourself to the patient and clarify the patient's identity.
- Explain the procedure to the patient and gain informed consent to continue.
- Place a tourniquet over the patient's nondominant arm, and select a site for IV catheter insertion.

In cases of difficult access following may help

  - Opening and closing the fist
  - Holding the arm down to allow the blood pool by gravity
  - Gentle tapping or stroking of the site

- Release tourniquet.
- Wash hands.
- Position the arm so that it is comfortable for the patient and identify a vein.
- Put on gloves, clean the patient's skin with the alcohol swab and let it dry.
- Remove the cannula from its packaging and remove the needle cover ensuring not to touch the needle.
- Stretch the skin distally and inform the patient that they should expect a sharp scratch.
- Insert the needle, bevel upwards at about 30 degrees. Advance the needle until a flashback of blood is seen in the hub at the back of the cannula.
- Once the flashback of blood is seen, progress the entire cannula a further 2mm, then fix the needle, advancing only the cannula into the vein.
- Release the tourniquet, apply pressure to the vein at the tip of the cannula and remove the needle fully. Remove the cap from the needle and put this on the end of the cannula.
- Carefully dispose of the needle into the sharps bin.

- Apply the dressing to the cannula to fix it in place and ensure that the date sticker has been completed and applied.
- Flush it with Normal saline through the cannula to check for patency.
- If there is any resistance, or if it causes any pain, or you notice any localized tissue swelling: immediately stop flushing, remove the cannula and start again.
- Dispose of your gloves and equipment as per hospital infection control policy.
- Document the procedure

44. NASOGASTRIC TUBE INSERTION

PURPOSE

- To introduce a tube through the nose and into the stomach to administer medications and feedings when oral route is contraindicated.
- To facilitate stomach decompression, gastric lavage, medication/ nutrient administration, aspiration of gastric secretions for analysis and other diagnostic/ therapeutic applications.

SCOPE OF SERVICES

- To all adults who require nasogastric management.

EQUIPMENTS

- Nasogastric tube, of specified size
- Clamp
- Water-soluble lubricant
- Glass of water or ice chips
- Tape
- Stethoscope
- Irrigating syringe
- Gloves
- Towel or disposable pads
- Flashlight

PROCEDURE

INSERTION

- Adhere to Standard Precautions.
- Explain procedure to patient.
- Assemble equipment and examine tube for defects (rough edges or partially closed lumens).
- Position patient, preferably in High-Fowler's, if not contraindicated. Drape patient with towel or disposable pads.
- Use a flashlight and occlude one nostril at a time to assess patency of nostrils before choosing site for insertion. Ascertain from patient any history of nasal surgery, injury or deviated septum.
- Measure tube for placement from tip of nose to ear lobe to bottom of xiphoid process; mark tube with tape. Note location on tube; you may mark tube with tape or nontoxic marker.

- Provide patient with glass of water or ice chips. Lubricate tip of tube with water-soluble lubricant and begin insertion. Rotating tube 180 degrees after it reaches the nasopharynx may help to prevent tube from entering patient's mouth.
- Instruct patient to take a swallow of water or suck on ice chips once tube passes nasopharynx. It is helpful to have the patient, unless contradicted, keep his/her chin tucked toward chest so that the tube passes into the stomach and not lungs.
- Continue insertion in rhythm with swallowing until desired length of tube is passed.
- Determine that tube is in stomach:
    a. Place stethoscope over stomach, inject 10 mL of air into tube and listen for air passage.
    b. Gently aspirate stomach content with irrigating syringe. Fluid from stomach or small bowel may be green, tan, brown, clear, yellow, bloody or bile-colored. Pulmonary fluid may be tan, off white, clear or pale yellow. Ph from stomach is 1.0 to 6.5, from small intestine 7.5 to 8.0, from the lungs over 6.0; however, none of these is fail-safe. If any doubt exists, placement should be checked with X-rays. It should be noted that chest X-ray is the only way to confirm correct placement.
- Anchor tube with tape or securement device. Discomfort from weight of tube may be relieved by using a rubber band and safety pin to secure tube to patient's clothing. Remove safety pin from clothing before changing clothing.
- Cap end of tube or proceed to Digestive – Nasogastric Tube Feeding.
- Discard soiled supplies in appropriately.

- Document in patient's record:

44 A. NASOGASTRIC TUBE REMOVAL

PURPOSE

- To remove a nasogastric tube with minimal trauma.

SCOPE OF SERVICES

- To all adults who require nasogastric management.

EQUIPMENTS

- Disposable gloves.
- Gauze swabs or paper towel.
- Disposable emesis bowl.

PROCEDURE

- Explain the procedure to the patient and ensure privacy.
- Turn off the suction if in use. Disconnect the tube from the suction apparatus.
- Wash hands and apply gloves.
- Remove adhesive tape from the patient's nose and cheek.
- Instruct the patient to take and hold a deep breath.
- Pinch the tube and withdraw with a steady motion to prevent drainage from the tube in the oro-pharynx and potential aspiration.

- Hold a gauze swab or paper towel around the tube just below the nostril.
- Withdraw the tube gently and steadily into the dish.
- Attend nasal and oral hygiene, if required.
- Discard equipment.
- Wash hands.
- Document the procedure.

45. GASTROSTOMY OR JEJUNOSTOMY TUBE FEEDING

PURPOSE

- To provide hydration, nutrition or medication via surgical opening into the stomach or jejunum when oral route is contraindicated.

SCOPE OF SERVICES

- To all patients who is gastrostomy or jejunostomy feeding.

EQUIPMENT

- 50mL syringe
- Container
- Glass of water
- Prepared formula
- Clamp
- Gloves
- Protective sheet
- Enteral feeding bag and tubing

PROCEDURE

- Adhere to Standard Precautions.
- Explain procedure to patient.
- Prepare measured amount of formula or medication in appropriate container.
- Elevate the patient's bed to a high- or semi-Fowler's position to prevent aspiration and to facilitate digestion.
- Place protective sheet under tubing to protect bedding and clothes.
- Remove cap or plug from the feeding tube.
- Aspirate stomach contents with syringe. Note amount of residual withdrawn and inject gastric fluid back into tube. DO NOT discard this fluid.
- If the residual is greater than 100 mL or twice the hourly rate of feeding, call the physician. DO NOT administer feeding.
- Connect enteral bag tubing, pump tubing or syringe to gastrostomy or jejunostomy tube.
- If using a bulb or catheter-tip syringe, remove the bulb or plunger and attach the syringe to feeding tube to prevent excess air from entering. Jejunostomy should not be bolus fed. DO NOT use this option for jejunostomy.

- If using the infuser controller, follow manufacturer's directions. Purge the tubing of air and attach it to the feeding tube.
- Open the regulator clamp of enteral tube or pump and adjust flow rate. When using syringe, fill syringe with formula and release the feeding tube to allow formula to flow through. When syringe is three quarters empty, add more solution. Recommended rate is 200-350 mL over 10 to 15 minutes depending on the patient's tolerance and the doctor's orders.
- Flush tube with 20-30 mL of water after each feeding to ensure patency.
- Pinch tubing and remove enteral bag, controller tubing or syringe and then clamp or cap feeding tube.
- Leave patient in semi-Fowler's position for at least 30 minutes.
- Discard soiled supplies in appropriate containers.
- Cleanse reusable equipment and rinse.
- Allow equipment to air-dry and wrap in clean towel to be used at next feeding.

- Document in patient's record.

46. DRAIN MANAGEMENT

PURPOSE

- To provide guidelines for correct management of drains.

SCOPE OF SERVICES

- To all patient having any surgical drainage.

PROCEDURE

- Ensure there is a vacuum or suction as required.
- Check tubing for patency.
- Check the bellows or bulb for drainage and either empty and mark or measure and mark as required. This depends on the drain used.
- For continuous drainage i.e. chest drainage, mark date and level of drainage on container.
- Measure and document the volume in the drainage bag on the fluid balance.
- Chart on returns to wards/ ICU and then every 12 hours at shift change and P.R.N.
- If the bellows or bulb is more than half full, empty or change as required.
- Document the procedure.

47. COLOSTOMY/ILEOSTOMY APPLIANCE APPLICATION

PURPOSE

- To collect effluent and protect skin from effluent and adhesives.

SCOPE OF SERVICES

- To all patient with colostomy/ileostomy.

EQUIPMENT

- Gloves
- Ostomy appliance - one or two pieces
- Adhesive remover pads (optional)
- Skin barrier gel (optional)
- Skin barrier film wipes (optional)
- Stoma paste/barrier rings and/or strips (optional)
- Mild soap without moisturizers (optional)
- Warm water
- Washcloth/towel
- Scissors
- Pouch clamp (if applicable)
- Appliance belt (optional)
- Toilet tissue
- Disposable apron (optional)

PROCEDURE

- Adhere to Standard Precautions.
- Explain procedure to patient.
- Position patient in comfortable position, generally lying or standing.
- Gently remove existing appliance using push/pull method and adhesive removers as indicated. Remove and save clip, if applicable. Discard disposable pouch in impervious bag.
- Wipe drainage from stoma and skin with toilet tissue. Cleanse skin with warm water. Avoid using soap or skin wipes with moisturizers as moisturizers may interfere with obtaining a good seal on the barrier. Dry peristomal skin; shave, if necessary.
- Using a pattern or measuring guide, measure stoma.

- Draw pattern on paper backing of skin barrier, approximately 1/8 inch larger than stoma.
- Cut opening. Remove paper backing.
- Apply skin barrier gel or film, if needed, and let dry. Skin protectant and/or barrier wipes are not usually recommended by many manufacturers, as it may interfere with adhesion.
- If stoma paste is used to create a better seal, apply around stoma or directly to skin barrier wafer at the cut edge. There are now skin barrier rings/strips that may replace the use of paste. [Note: These products are to act as a barrier to protect skin and/or a "caulking" to decrease leakage. It does not help the wafer to stick to skin. If it is spread around on skin or wafer, it will interfere with adhesion to the skin.]
- Apply wafer and gently press over entire area, especially around stoma. Hold in place for 1 minute.
- If using two-piece appliance, snap pouch onto wafer rim like Tupperware. Start at the bottom and apply pressure around the entire rim. Test by tugging in all directions.
- Many new appliances have a different connection of pouch and wafer, follow specific manufactures' instructions.
- Place clamp on end of drainable pouch: Many new appliances have "Velcro-like" closing, follow specific manufactures' instructions.
- Secure pouch with belt if necessary. Encourage patient to stay in one position for about 10 to 15 minutes, with his/her hand over the newly placed wafer to improve adherence.
- Discard soiled supplies in appropriate containers.
- Document the procedure in the patient's record.

48. COLOSTOMY IRRIGATION: BEDRIDDEN PATIENT

PURPOSE

- To cleanse and empty the sigmoid colon of flatus, mucus and feces.
- To stimulate peristalsis.
- To help establish regular evacuation of the bowels.

SCOPE OF SERVICES

- To all bedridden patient with colostomy.

EQUIPMENT

- Gloves
- Colostomy irrigation set (sleeve, belt, clamp, bag, cone, tubing) or irrigation sleeve to fit two-piece appliance
- Water-soluble lubricant
- Bedpan or other large receptacle
- Lukewarm water
- Fresh colostomy pouch or security pad (small dressing)
- Soft washcloth or paper towel
- Plastic line underpads/ disposable drawsheet
- Disposable apron

PROCEDURE

- Adhere to Standard Precautions.
- Explain procedure to patient.
- Protect the bed with plastic-backed under-pads or disposable drawsheet.
- Remove or turn down top bedding and cover patient with bath blanket.
- Place 500-1000 mL of lukewarm water into irrigating bag with clamp. Open clamp to let water flow through, expelling any air in system, then re-clamp.
- Hang irrigating bag on hook approximately 12-18 inches above level of stoma.
- Remove pouch and if necessary, clean exposed area with a damp paper towel or washcloth.
- Apply irrigating sleeve over stoma and attach belt. Tighten belt so that it fits snugly. If patient uses a two-piece ostomy appliance, the appropriate irrigation sleeve can be attached to the existing flange.
- Position patient on side where stoma is placed or on their back.
- Place the bottom of sleeve into bedpan at patient's side.

- Lubricate cone.
- Insert gloved, lubricated finger into stoma to determine angle at which cone can be inserted safely. Release the clamp slightly so the cone can be inserted into the stoma while there is a small flow of water.
- Insert cone. To ensure that there is no escape of water, press cone firmly against stoma. When a cone is used, it can be inserted as far as possible without causing any discomfort.
- The initial irrigation should be 250-500 mL warm water. Patient may experience a vagal response if water volume is too large. For ongoing irrigations, instill 500-1000 mL over a period of 10 minutes. Be sure that the cone or dam is held firmly against stoma to prevent water from escaping.
- If patient complains of cramps or discomfort, shut flow off and resume flow when cramps have ceased. Check water temperature and rate of flow.
- When all water is in, remove tubing. If using sleeve with opening in top, fold sleeve over and clamp.
- Massage abdomen in circular motion toward stoma and let drain. Encourage patient to take slow deep breaths, move abdominal musculature in and out, and move about in bed, if possible. Stool may return for up to one hour.
- Remove sleeve, wash peristomal skin and stoma with warm water. Dry.
- Apply clean pouch or dressing.
- Reposition patient and replace bedding.
- Discard soiled supplies in appropriate containers.
- Cleanse irrigation equipment and rinse. The equipment must be drained and allowed to dry before storing.
- Document the procedure in patient's record.

a. COLOSTOMY IRRIGATION: DESCENDING/SIGMOID COLON

PURPOSE

- To cleanse and empty the sigmoid colon of flatus, mucus and feces.
- To stimulate peristalsis and help establish regular evacuation of the bowels.

SCOPE OF SERVICES

- To all patient with colostomy.

EQUIPMENT

- Gloves
- Colostomy irrigation set (sleeve, belt, clamp, bag, cone, tubing) or irrigation sleeve to fit two-piece appliance
- Water-soluble lubricant
- Lukewarm water
- Fresh colostomy pouch or security pad (small dressing)
- Soft washcloth or paper towel
- Disposable apron

PROCEDURE

- Adhere to Standard Precautions.
- Explain procedure to patient.
- Place 500-1000mL of lukewarm water into irrigating bag with clamp. Open clamp to let water flow through, expelling any air in system, then re-clamp.
- Hang irrigating bag on hook so that the bottom of the bag is at the patient's shoulder level when seated.
- Remove pouch and, if necessary, clean exposed area with a damp towel or washcloth.
- Apply irrigating sleeve over stoma and attach belt. Tighten belt so that it fits snugly. If patient is using a two-piece ostomy appliance, attach irrigation sleeve to the existing flange.
- Have patient sit on chair in front of the toilet.
- Place irrigation sleeve in the toilet.
- Lubricate cone.

- Insert gloved, lubricated finger into stoma to determine angle at which cone can be inserted safely. Release the clamp slightly so the cone can be inserted into the stoma while there is a small flow of water.
- Insert cone. To ensure that there is no escape of water press cone firmly against stoma. When a cone is used, it can be inserted as far as possible without causing any discomfort.
- Initial irrigation should be 250-500 mL warm water. Patient may experience a vagal response if water volume is too large.
- For ongoing irrigations, instill 500-1000 mL water over a period of 10 minutes. If patient complains of cramps or discomfort, shut flow off and resume flow when cramps have ceased. Check water temperature and rate of flow.
- Remove tubing or cone, fold down top of sleeve and clamp. For the next 15 minutes, have patient remain in bathroom while colostomy drains.
- Have patient take slow deep breaths, move the abdominal musculature in and out, bend forward and gently massage the lower abdomen to enhance evacuation of bowel contents.
- Rinse sleeve by pouring warm water through sleeve and over stoma.
- Wipe off bottom of sleeve with a paper towel. Clamp the bottom of the sleeve to the top of the sleeve.
- Advise the patient that return may continue for the next 30 to 45 minutes.
- Remove sleeve, wash skin and stoma, and apply a new pouch or security pad.
- Discard soiled supplies in appropriately.
- Cleanse the irrigation equipment, rinse. The equipment must be drained and allowed to dry before storing.
- Document the procedure in patient's record.

49. NON RETENTION ENEMA

PURPOSE

- To relieve constipation, flatulence, or when in labour.
- To aid in evacuation of bowel.

SCOPE OF SERVICES

- As per ordered by the physician.

EQUIPMENTS

- Enema set Solution, as prescribed by physician
- Bedpan
- Plastic-lined under pads/disposable drawsheet.
- Water-soluble lubricant
- Gloves
- Disposable apron

PROCEDURE

- Adhere to Standard Precautions.
- Explain procedure to patient.
- Protect the bed and position the patient on his left side, if possible, with right knee flexed.
- Fill enema container with prescribed solution. Unless otherwise specified, temperature of solution should be slightly warmer than body temperature. Prime the tubing.
- With a lubricated, gloved finger, gently examine the rectal area for impaction and to rule out obstruction.
- Lubricate tip of tubing and gently insert into rectum 2-4 inches for an adult, 2-3 inches for a child and 1 to 1-1/2 (one and one-half) inches for an infant.
- Raise enema container no higher than 18 inches above the rectum for an adult, 12 inches for a child and 6 to 8 inches for an infant.
- Open the clamp and allow the solution to run slowly into the rectum.
- Encourage the patient to relax by taking deep breaths through the mouth. If mild cramping occurs, it may be necessary to clamp the tubing at intervals to enable patient to retain entire quantity of solution. If patient experiences pain or severe abdominal cramping, discontinue procedure and notify physician.
- Have patient retain solution for 15 minutes, if possible.
- Place patient on toilet or bedpan to expel solution.

- Cleanse patient as indicated and make comfortable.
- Discard soiled supplies in appropriate containers.
- Document the procedure in patient's record.

50. BOWEL WASH

PURPOSE

- Cleanse bowel before surgery.

SCOPE OF SERVICES

- As per ordered by the physician.

EQUIPMENT

- Rectal tube of appropriate length.
- Funnel/ Jar with water.
- Lubricating jelly.
- Gloves, mask and protective apron.
- Mackintosh or water proof pads.
- Gauze pieces, tissue papers.
- Bed pan and receptacle.
- Artery clamp.
- Bowel wash solution.

PROCEDURE

- Explain the procedure to patient.
- Provide privacy.
- Adjust bed to appropriate height.
- Have patient assume side-lying position.
- Place waterproof pad/ mackintosh under buttocks and bed pan if required.
- Place receptacle under the bed.
- Wear gloves and lubricate tube with petroleum or water soluble lubricant.
- Expose anus and clean it.
- Clamp the tube and insert 4-6 inches (10 – 15Cm) gently to prevent mucosa injury.
- Open the clamp and allow the solution to run slowly into the rectum.
- Encourage the patient to relax by taking deep breaths through the mouth. If mild cramping occurs, it may be necessary to clamp the tubing at intervals to enable patient to retain entire quantity of solution. If patient experiences pain or severe abdominal cramping, discontinue procedure and notify physician.
- Have patient retain solution for 15 minutes, if possible.

- Place patient on toilet or bedpan to expel solution.
- Cleanse patient as indicated and make comfortable.
- Discard soiled supplies in appropriate containers.
- Document the procedure in patient record.

51. RECTAL MEDICATION INSERTION

PURPOSE

- To insert medication into the rectum.

SCOPE OF SERVICE

- To all patients who are advised rectal medication insertion.

EQUIPMENTS

- Written patient medication order.
- Suppository medication
- Water-soluble lubricant
- Personal protective equipment, as indicated
- Tissues, washcloth/towel, as needed

PROCEDURE

- Obtain a physician's order for the patient's medications.
- Adhere to Standard Precautions.
- Identify patient and explain procedure.
- Assemble equipment.
- Provide privacy for patient.
- Position the patient in a left lateral position to decrease likelihood of suppository being expelled and expose anus.
- Perform perineal care as needed. Drape patient for privacy.
- Remove suppository wrapper.
- Lubricate suppository and gloved finger with water soluble lubricant.
- Separate the patient's buttocks to expose anus.
- Ask patient to breathe deeply to relax anal sphincter. Gently insert the suppository into rectum, tapered end first. Using forefinger, direct suppository along the rectal wall toward the umbilicus, advancing it 3 inches or about the length of forefinger until it has passed the internal anal sphincter.
- Gently hold patient's buttocks together until the urge to defecate subsides.
- Clean excess lubricant from anus.
- Urge patient to retain suppository at least 20 minutes.
- Discard soiled supplies in appropriate containers.
- Document in patient's record.

52. URINARY CATHETER- INSERTION

PURPOSE

Intermittent catheterization

- To relieve bladder distension
- To assess for residual urine after voiding
- To obtain sterile specimen
- To empty bladder prior to delivery or abdominal surgery

Indwelling catheterization

- To facilitate urinary elimination in incontinent patients.
- To facilitate continuous bladder drainage after injury/surgery on urinary tract or other major surgeries.
- To promote healing after urological surgery
- To relieve acute or chronic urinary retention
- To facilitate accurate measurement of urinary output
- To prevent urine from contacting an incision after perineal surgery

TYPES:

1. Intermittent catheterization
2. Indwelling catheterization

SCOPE OF SERVICES

- To all patients who required urinary catheterization.

EQUIPMENTS

- Catheter insertion tray
- Sterile gloves
- Antimicrobial solution

- Waterproof, absorbent underpad/ draw sheet.
- Fenestrated drape
- Sterile lubricating jelly
- Pre-filled 10 to 20 mL syringe of sterile water
- 1 artery forceps and 1 thumb forceps
- Basin
- Sterile catheter of prescribed size
- Drainage bag
- Catheter strap/or other securing device
- Gloves

PROCEDURE

- Adhere to Standard Precautions.
- Explain procedure to patient.

FEMALE

- Position patient on back with knees flexed.
- Wash the perineal area with soap and water.
- Open the catheterization tray and place the waterproof, absorbent underpad/ drawsheet under the buttocks extending forward between the legs.
- Place drainage receptacles on towel between patient's thighs
- Open all sterile packets.
- Put on sterile gloves using sterile technique.
- Place the fenestrated drape over the patient, exposing only the urethral meatus.
- Pretesting the catheter balloon is not recommended any longer, especially with silicone catheters, because the balloon does not return to original shape and may traumatize the urethra during catheter insertion.
- Squeeze liberal amount of sterile lubricating jelly on the catheter.
- Separate the labia so that the meatus is exposed, and using cotton balls/gauze pieces and antimicrobial solution swab each side of the labia with a downward stroke from pubic area to the anus. Use a fresh cotton ball/ gauze for each stroke.
- With the third cotton ball/gauze pieces, cleanse the meatus with a single stroke. Once the meatus is cleaned, the labia must not be allowed to close over the meatus.
- Gently insert catheter tip into meatus, being careful not to touch the surrounding areas with the catheter.

MALE:

- Position patient on back and wash the perineal area and penis thoroughly with soap and water, being careful to retract the foreskin and cleanse the area underneath.
- Open the catheterization tray and place the waterproof, absorbent underpad under the buttocks extending forward between legs.
- Place drainage receptacles on towel between patient's thighs.
- Open all sterile packets.
- Put on sterile gloves, using sterile technique.

- Place the fenestrated drape from the sterile catheter pack over the patient's penis.
- Adequate lubrication of catheter is necessary to prevent urethral trauma and pain and to aid in passage of catheter.
- Use a water-based lubricant along the entire length of catheter, or very large mound of lubricant to the tip of penis, or inject 10ml of water-soluble lubricant directly into the male urethra. (Some insert kits have this premade in the insertion kit.)
- Lidocaine jelly 2% injected directly into the urethra is used to reduce discomfort and prevent urethral spasm, inject syringe tip into the urethra and inject jelly. Then place your finger tip over the urethral opening for 2 to 5 minutes so that the jelly will not come out and to allow time from the lidocaine jelly to work.
- Expose the tip of penis. If the patient is uncircumcised then gently retract the foreskin before cleansing the tip of penis and urethra opening. Using prepping balls and antimicrobial solution, swab in outward circle from urethra opening the entire tip of penis. Do this 3 times using a different prepping ball.
- Grasp the penis with a slight tension, elevating it at a right angle to the patient's abdomen.
- Insert the tip of the catheter into the urethral opening, being careful to keep the distal end on the sterile field. If inserting a coude-tipped catheter insert with the tip of coude catheter up at the 12 o'clock position throughout the insertion.
- Continue to insert the catheter. Have the patient breathe deeply or bear down, if resistance is felt, DO NOT force against resistance. Continue to insert catheter until the bifurcation of catheter, even if you have urine return.
- Lower penis and place the distal end of the catheter in the collection basin.
- When urine starts to flow, insert catheter about 1 inch further into the bladder.
- Inflate balloon with indicated amount of sterile water. [Note: Check manufacturer recommendations for amount of fluid to be inserted in the balloon. Generally, a 5 mL balloon will need 10 mL of sterile water to make sure the balloon is symmetrical.
- Cleanse perineal area of lubricant.
- Connect catheter to extension tubing and/or drainage bag.
- Secure catheter to thigh with catheter strap and/or other securing device. Be sure that there is enough slack to avoid traction to the bladder neck.
- Hang bag for gravity drainage.
- Discard soiled supplies in appropriate container.
- Document in patient's record.

53. APPLICATION OF CONDOM/ EXTERNAL CATHETER – MALE

PURPOSE

- To allow for urinary drainage externally while maintaining skin integrity and prevention of urinary tract infection.

SCOPE OF SERVICES

- As advised by the physician.

EQUIPMENT

- Condom/External catheter Drainage bag and tubing
- Extension catheter (optional) Velcro or elastic sheath holder (optional, depends on type of catheter)
- Scissors
- Hypoallergenic tape
- Non-sterile gloves
- Soap, water and basin
- Washcloth/towel
- Skin barrier (optional)

PROCEDURE

- Adhere to Standard Precautions.
- Explain procedure to patient.
- Prepare equipment at bedside.
- Assist patient to a supine position. Place towel or waterproof pad underneath buttocks.
- Cleanse penis using mild soap (avoid soaps with moisturizes as may affect adhesion of device) and water, dry. If patient is not circumcised, retract the foreskin and cleanse meatus. Rinse and dry. It is imperative that the foreskin is returned into position and not left retracted, as this will impair circulation to penis. Drape the patient for privacy.
- Apply skin barrier wipe to the penis, if used, and allow to air dry. Be sure that all hair has been clipped or shaved from the area as this will interfere with adherence.
- Follow manufacturer's direction about specific application, but generally the external/condom catheter is rolled onto the penis. The head of the penis should fit in the cone of the sheath but not rub against the bulb.

- As the external catheter is unrolled, gently squeeze the sheath all around the penis to seal adhesive to the skin. This will secure the catheter in place. [Note: A few air bubbles may remain. This is normal.]
- If there is extra loose material in the sheath, pinch it together so that it sticks to itself. If there are too many wrinkles on the sheath, try a smaller size.
- Connect the drainage system to the external catheter. Be careful that it is connect tightly. An extension tubing attached to a leg or drainage bag is an option. Secure with leg strap as appropriate.
- Assess color of penis to insure good circulation.
- Be sure that the system is connected so there is no "tugging" as this will decrease wear time by causing leaking.
- Discard soiled supplies in appropriate containers.
- Document in patient's record.

54. CATHETERIZED SPECIMEN COLLECTION OF URINE

PURPOSE

- To obtain a urine specimen from a patient with a Foley catheter for laboratory analysis.

SCOPE OF SERVICES

- To all patient who have indwelling urinary catheter and advised urine sample collection.

EQUIPMENTS

- Sterile syringe 30mL
- Sterile needle 23- or 25-gauge
- Antimicrobial swabs
- Sterile specimen container
- Catheter clamp (optional)
- Gloves

PROCEDURE

- Adhere to Standard Precautions.
- Explain procedure to patient.
- Assemble equipment and attach needle to syringe.
- Clamp off drainage tubing distal to, or just below, the connection junction of the catheter and drainage bag tubing for 20-30 minutes. This will provide an accumulation of urine from which a specimen can be drawn.
- Thoroughly cleanse the Foley catheter at port, if available, or close to point of connection to drainage tubing with antimicrobial swabs.
- Insert the needle gently into Foley catheter (if the catheter is a self-sealing type) at a 45-degree angle, or if Luer-lock connection, twist on a sterile syringe to the port and slowly withdraw 20-30 mL of urine.
- Remove needle from Foley catheter and push urine into sterile specimen container. Cover container.
- Swab needle entrance site with antimicrobial swab.
- If clamp is used, it is IMPERATIVE that the clamp be removed
- Write patient's name, date and time of collection on label; place on container.

- Discard soiled supplies in appropriate containers.
- Deliver specimen to designated laboratory immediately or instruct caregiver to deliver specimen.
- Document in patient's record.

55. EMPTYING URINARY BAG

PURPOSE

- To measure urine output.

SCOPE OF SERVICES

- To all patient who have indwelling urinary catheter.

PROCEDURE

- Explain the procedure to the patient.
- Provide privacy by placing a screen.
- Put on gloves.
- Release the bag clamp and empty into the jar/jug.
- Clean the outlet with alcohol swab.
- Clamp or close the outlet to the pouch.
- Observe the urine for colour and characteristics.
- Wash hands.
- Record the amount and character in intake & output chart.

56. IRRIGATION OF INDWELLING FOLEY CATHETER:

PURPOSE:

- To flush mineral deposits and mucous shreds preventing constant drainage of urine from the catheter tube.

SCOPE:

- To all admitted patients with urinary catheter who are advised catheter irrigation.

EQUIPMENT:

- Irrigation solution and sterile container
- Asepto/Bulb syringe
- Gauze pads
- Antimicrobial solution (such as Betadine or alcohol swabs/pads)
- Drape
- Drainage tube protective sheath
- Drainage basin
- Gloves
- Waterproof, absorbent underpad
- Sterile gloves

PROCEDURE:

- Adhere to Standard Precautions.
- Explain procedure to patient.
- Assemble equipment.
- Pour sterile irrigant (100-200 mL) into solution sterile container.
- Place patient in semi-reclining position with a waterproof, absorbent pad under buttocks and a drape over pubic area to avoid exposure.
- Put on clean gloves.
- Cleanse junction of catheter and drainage tube thoroughly with antimicrobial-soaked pad.
- Carefully disconnect tubing from catheter, holding the catheter upright, cap the drainage tube with sterile protective sheath. Secure drainage tubing close to patient on the bed.
- Draw up approximately 30-50 mL of irrigant in syringe and gently instill into the catheter.
- Remove syringe, position catheter over drainage basin, allow draining by gravity, collecting irrigation return in basin. Note appearance and amount.

- Repeat irrigation procedure until the debris is cleaned from lumen of catheter. [Note: If fluid fails to return, stop irrigation. An obstruction or air pocket may be present. Try gently rotating the catheter or turn the patient from side to side to clear the catheter.]
- Cleanse the end of the catheter and the end of the tubing with antimicrobial solution after removing the protective cap.
- Reconnect the catheter and tubing.
- Discard irrigation returns in toilet.
- Discard any unused irrigation solution that was poured into the container.
- Discard soiled supplies in appropriate containers.
- Document in patient's record.

57. URINARY – BLADDER IRRIGATION: 3-LUMEN CATHETER

PURPOSE

- To keep catheter patent and to irrigate bladder with continuous antibacterial fluid to prevent infection or an obstruction.

SCOPE OF SERVICES

- As per advised by the physician.

EQUIPMENT

- Irrigation solution
- Irrigation tubing 3-way (lumen)
- Foley catheter
- Sterile catheter plug

PROCEDURE

- Adhere to Standard Precautions.
- Explain procedure to patient.
- Assemble equipment.
- Insert 3-way catheter, if it is not already in place, and plug smallest lumen with sterile catheter plug.
- Connect irrigation tubing to container of irrigation solution. Hang container for gravity flow and let irrigation solution fill tubing. Clamp off tubing.
- Take catheter plug out of smallest lumen; take irrigation tubing cover off and insert tubing into smallest lumen. Open clamp and set rate of infusion.
- To replace irrigation solution container:
- Clamp tubing.
- Remove tubing spike from old container.
- Remove cover from new container.
- Insert spike into new container.
- Hang new container and set rate of infusion.
- Container should be marked with date and time hung.
- If continuous irrigation is discontinued, the lumen can be plugged with sterile catheter plug.
- Discard soiled supplies in appropriate containers.
- Document in patient's record.

58. URINARY – NEPHROSTOMY CATHETER CARE

PURPOSE:

- To maintain a patient catheter providing drainage of urine from the kidney when flow of urine through a ureter is not possible or desirable and to prevent infection.

SCOPE:

- All admitted patients with Urinary – Nephrostomy Catheter

EQUIPMENT:

- Sterile irrigation set if needed
- 10 mL sterile syringe
- Gauze pads
- Antimicrobial solution
- Drainage basin
- Gloves
- Sterile irrigation solution (normal saline or prescribed solution)
- Waterproof, absorbent underpad
- Sterile gauze dressing as appropriate
- Catheter leg straps (as necessary)
- Stabilizing device (if nephrostomy not sutured in place)
- Adhesive remover pads
- Sterile water
- Sterile cotton applicators
- Transparent dressing (optional)
- Paper tape/cloth tape
- Gloves – sterile and clean

PROCEDURE:

- Adhere to Standard Precautions.
- Explain procedure to patient.
- Place patient in a position of comfort that allows observation and access to the nephrostomy catheter. Protect the area beneath the patient with a waterproof, absorbent underpad and cover the patient's lower body with a drape (towel, sheet) to prevent exposure.

- General care to be performed as ordered. (Depending on the type of dressing used, it may not be needed to be done as often.)
  - — Remove old dressing carefully. Care must be taken not to pull on the tube. Use adhesive remover if necessary.
  - — Anchor the catheter to skin with one hand while removing tape with the other hand to ensure catheter is not pulled out.
  - — If there is residual adhesive on the skin, it can be removed with adhesive remover pads. Clean adhesive remover thoroughly with normal saline.
  - — Cleanse around nephrostomy tube with antiseptic wipes. Cleanse thoroughly, beginning at the catheter site and moving outward. Repeat cleansing. Allow to thoroughly dry. [Note: Some of the new securement devices do not allow cleansing the site until changed. Check with the manufacturer or physician.] (See Urinary - Irrigation of Indwelling Foley Catheter.)
  - — Inspect catheter for kinks, check for leakage of urine or (bile only if it is a biliary tube) from catheter.
  - — Examine catheter exit site. Report signs of redness or infection to physician as needed.
  - — Place appropriate dressing over or around catheter and secure in place. A transparent dressing may be applied to provide a waterproof barrier
- For an occluded or plugged catheter, irrigate if ordered by physician:
  - — Most tubes are connected to a stop cock system. Be sure to turn the stop cock off to drainage bag (closed) when instilling solution and turn stop cock on to syringe to allow flow of urine into syringe or bag.
  - — Using sterile technique, gently irrigate catheter with 5 mL normal saline or ordered irrigation
  - — solution a luer lock or luer tip syringe without the needle, never forcing the irrigant. (See Urinary - Irrigation of Indwelling Foley Catheter.)
  - — Gently allow irrigant to flow back per gravity drainage. Only aspirate with physician's order. Never re-instill used irrigant into tube.
  - — If unable to get a return of irrigant, assess catheter for kinks; if none found, notify the physician.
  - — Discard any unused irrigating solution and collected irrigation solution from drainage basin in toilet.
  - — Cleanse and dry drainage basin.
  - — Instruct patient/caregivers regarding preparation of sterile equipment and container, if disposable equipment is not used.
- Instruct patient to:
  - — Apply catheter strap and use a leg bag to prevent pulling on the catheter.
  - — Use continuous gravity drainage bag at nighttime.
- Discard soiled supplies in appropriate containers.
- Document in patient's record.

59. ILEAL CONDUIT: (UROSTOMY) APPLICATION OF DISPOSABLE APPLIANCE

PURPOSE

- To protect the skin and contain the drainage and odor.

SCOPE OF SERVICES

- To all patient who have an ileal conduit.

EQUIPMENT

- Correct size of urostomy pouch
- Skin barrier
- Paper tape
- Bedside drainage system
- Gloves

PROCEDURE

- Adhere to Standard Precautions.
- Explain procedure to patient.
- Prepare equipment at bedside.
- Pattern urostomy pouch to 1/8 inch larger than stoma.
- Remove paper backing and set aside. [Note: If durahesive is used, it should be cut to fit snugly against stoma.]
- Drain and remove existing appliance from the patient, saving the valve adaptor, if one is used. Be careful not to pull on tubes.
- Cleanse stoma and peristomal skin with warm water. Rinse and pat dry.
- Apply skin barrier to base of stoma, moistening gloved finger when applying paste.
- Apply wafer, ensuring that the skin is dry and no urine has dripped onto the skin.
- Apply urostomy pouch. Position of pouch is dependent on ambulatory status. If the patient is remaining in bed the majority of the day, position appliance to side of bed, allowing for easier flow of urine. If ambulatory, position the appliance in a perpendicular position.
- Apply paper tape to all edges of pouch overlapping 1/4 inch onto skin surface (picture-frame).
- Cap bottom of bag or connect to continuous drainage system.
- Discard soiled supplies in appropriate containers
- Document in patient's record

60. URINARY CATHETER CARE

PURPOSE

- To prevent bladder infection.

SCOPE OF SERVICES

- To all patient who are on indwelling urinary catheter.

EQUIPMENT

- Gloves
- Basin of water
- soap and water
- Towels/wash clothes
- Tape (optional)
- Catheter strap/securement device.

PROCEDURE

- Adhere to Standard Precautions.
- Explain procedure and purpose to patient.
- Inspect the catheter for any problems. Inspect the urinary drainage for mucous shreds, clots, sediment and turbidity.
- Inspect catheter where it enters the meatus for encrusted material and suppurative drainage.
- Remove any tape or catheter strap securing catheter in place. Inspect area for signs of adhesive burns, redness, tenderness or blisters.
- Cleaning the perineum:
  - Cleanse perineal area with warm water and soap, rinse and pat dry.
  - For female patient, separate labia and gently wash around urethral opening. Remember to wash from front to back.
  - For male patient, retract foreskin to wash, then return foreskin over head of penis.
    - Secure catheter with catheter strap or retape catheter.
    - Provide enough slack before securing the catheter to prevent tension on the tubing that could injure the urethral lumen or bladder wall.
    - It is recommended that the catheter be secured to the thigh of women and to the upper thigh or lower abdomen on men.
  - Discard soiled supplies in appropriate containers.
    - Emptying the drainage bag:

- Empty the bag at least every 8-12 hours or when the bag is 1/2–2/3 full.
- Remove the drainage spout from the protective sleeve of the drainage bag. Be sure not to touch the tip of the spout or allow contact with the inside of collection container or floor.
- Drain the urine into a toilet (seat up) or other clean container after unclamping the drainage spout.
- Reclamp the drainage spout.
- Replace the end of the drainage spout into the protective sleeve. Again, avoid the tip of drainage spout being touched. If it is, cleanse with antimicrobial wipe.
- Clean and disinfect the collection container, if used.

- Changing from one drainage system to another (bedside leg bedside):
  - Empty the drainage bag.
  - Clamp the catheter.
  - Clean connection between catheter and drainage system with an antimicrobial pad.
  - Remove the end of the drainage tube from the catheter. Be sure not to touch the tips of the catheter or the drainage tube.
  - Attach the catheter to the drainage tube of the desired drainage bag, ensuring that the emptying (drainage) spout on the bag is clamped. Again, be sure not to touch the tips of the catheter or drainage tube.
  - Unclamp the catheter.
  - Document in patient's record

61. URINARY CATHETER- REMOVAL

PURPOSE

- To remove a Foley catheter from the urinary bladder.

SCOPE OF SERVICES

- To all patients who have urinary catheter and are advised catheter removal.

EQUIPMENTS

- 10 mL syringe,
- Luer-lock or Luer tip
- Waterproof, absorbent underpad/ Drawsheet
- Gloves

PROCEDURE

- Adhere to Standard Precautions.
- Explain procedure to patient.
- Place the patient in semi-reclining position with waterproof, absorbent pad under the buttocks.
- Loosen the plunger of the syringe by moving it up and down in the syringe barrel.
- Withdraw the plunger of the syringe 0.5 mL from the end of the syringe.
- Attach the syringe to the valve of the catheter balloon. [Note: Luer-lock syringes insert and twist into valve, whereas Luer tip syringes seat firmly into the valve but do not twist or force.]
- Allow water to come back by gravity from the balloon. It may take up to 30 seconds for the balloon to deflate. [Note: DO NOT aspirate on the plunger as this may damage the valve and not allow full deflation of the balloon. Also, DO NOT cut off balloon port.]
- If water will not return gently, instill 3-5 mL of sterile water into the balloon port, this will generally clear any debris lying against the valve and/or open a stuck valve.
- After the fluid has been injected, the empty syringe should be reattached to the port with the plunger positioned 0.5 mL from the end of the syringe. [Note: It may take up to 30 minutes for the fluid to return.]
- If the above maneuvers do not allow the balloon to empty, then the balloon port valve can be cut off. If the problem was a defective valve, the water will run out and the balloon will deflate.
- If these measures are ineffective and the balloon is still inflated, the physician should be called.

- After the balloon is empty, have patient take a deep breath to enhance relaxation. With an even pressure, gently pull out the catheter. If the catheter resists removal, the physician should be called. NEVER forcibly remove a catheter.
- Inspect the balloon area of the catheter to assure it is intact and no part has been left in bladder.
- Discard soiled supplies in appropriate containers.
- Document in patient's record.

62. CAST CARE

PURPOSE

- To ensure that the cast is properly immobilizing the designated body part.

SCOPE OF SERVICES

- To all patient who are on cast admitted in hospital.

EQUIPMENT

- Tape

PROCEDURE

- Adhere to Standard Precautions.
- Explain procedure to patient.
- Assess cast and injured part for:
  - — Neurovascular status of extremity by checking for:
    - Numbness.
    - Tingling.
    - Pain.
    - Relative temperature.
    - Mobility of digits.
    - Skin color and pulses.
  - — Swelling of the limb at the edge of the cast (tight cast causing pressure).
  - — Unusual odor coming from the cast.
  - — Rough or cracked edges.
  - — Loose fitting cast.
  - — Discolorations on the cast that might indicate bleeding or drainage from underneath.
- If there is edema present, it can be minimized with the use of ice and by elevating the extremity, with the distal joint positioned above the more proximal joint.
- If the cast has rough edges or is wet around the edges, tape may be applied around the rim (petal).
  - — Cut out circles of tape.
  - — Overlap tape circles on edges of cast pressing down as applied.
- Document in patient's record

63. CARE OF PATIENT WITH TRACTION

PURPOSE

- Used primarily as a short term intervention until other modalities suchas external or internal fixator are possible reducing the risk of disusesyndrome
- To relieve pain
- Reduce, align and immobilize fractures, to reduce deformities and toincrease space between opposing surfaces
- To maintain proper alignment until bone develops

SCOPE OF SERVICES

- To all patient who have musculoskeletal traction.

PROCEDURE

Care for patients with pelvic traction:

- Ensure that the pelvic girdle is properly size for patient
- Ensure that pelvic girdle fits snugly over iliac crests and pelvis
- Inspect skin areas over iliac crests for pressure points q4h
- Provide perineal area hygiene after bedpan use
- Ensure integrity by providing back care q4h
- Maintain sling placement beneath lower back with buttocks elevated frommattress.
- Replace soiled sling.
- Lift and turn patient's use of trapeze if it alters compressive forces on pelvis
- Maintain bed in flat position
- Change bed linen from head to foot rather than from side to side

Care of patients with Buck's Traction:

- Ensure skin integrity by avoiding pressure on heel, dorsum or foot, fibularhead, or malleolus
- Maintain counteraction by elevating foot of bed or keeping head of bed flat
- Encourage independence with use of trapeze

Care of patients with Russell's Traction:

- Assure skin integrity by avoiding pressure on heel, dorsum of foot, fibularhead, or malleolus
- Maintain counteraction by elevating foot of bed or keeping head of bed flat
- Encourage independence with use of trapeze

- Ensure sling is smooth and does not apply undue pressure on popliteal spaceor lateral aspect of knee

Care for patients with Bryant's Traction:

- Raise buttocks slightly from mattress
- Observe bandages carefully for slippage and bunching over heel cords
- Observe for skin sloughing on both legs
- Check feet for color, pulses, warmth, and sensation q2h to q4h
- Use harness restraint to prevent turning over
- Avoid thick, wide diapers between legs
- Used in children younger than 3 years, weighing less than 30lb
- Apply bilaterally with hips with hips flexed 45 degrees and legs inextension
- Ensure skin integrity with non-adhesive straps and wraps that do notimpair neurovascular status
- Ensure buttocks are elevated 1 to 2inch from mattress
- Ensure parents' understanding of the purpose and use of traction
- Utilize jacket or vest restraint to prevent child from rotating in the bed

Care for patients with Cervical traction:

- Apply manual traction if pin loosens or penetration occurs.
- Notify physicianimmediately.
- May use turning frames or special beds for positioning
- Provide pin care according to physician's order and institutional policy
- Position without pillows
- Take care that weight and pulley are free of wall
- Observe for pressure areas
  - Jaws and ears
  - Side of head
  - Back of head
- Pad as necessary for comfort
- Record the observation and care provided in thepatient's record.

64. EXTERNAL FIXATOR/STEINMAN PIN CARE

PURPOSE

- Skin around pin sites remains free of signs and symptoms of infection.

SCOPE OF SERVICES

- To all patients who have external fixator/Steinman pin.

EQUIPMENTS

- 1-Bottle of hydrogen peroxide
- 1-Bottle sterile normal saline
- Sterile container with lid
- Sterile cotton tipped applicators
- Unsterile gloves
- Sterile specimen cup
- Protective barrier

PROCEDURE

- Adhere to Standard Precautions.
- Explain procedure to patient/caregiver.
- Gather equipment and supplies.
- Don non-sterile gloves.
- Mix hydrogen peroxide (H2O2) and Normal Saline solution in equal amounts to achieve 1/2 strength (or as ordered by physician).
- Solution may be saved for up to 24 hours. Label container with name of solution and date.
- Place protective barrier under extremity that requires pin care.
- Wet cotton tip applicator with solution.
- Place the applicator where the pin enters the skin and gently clean skin surrounding pin, making outward strokes away from pin.
- Use a new applicator for each stroke until a complete circle has been made.
- Pull the skin away from the pin using the cotton applicator to keep skin free from pin, using the applicator to remove any crust from pin site.
- Assess for signs of infection at the pin site, to include redness, increased pain, swelling, pus-like drainage or black tissue. Report presence of signs to physician.

- Clean the pin itself with cotton tip applicator and the solution making strokes along the pin using a new applicator with each stroke.
- Continue until all pin sites are free of drainage or crusting. Use a new applicator for each full circular motion then discad.
- Discard soiled materials per agency procedure.
- Wash hands.
- Instruct patient and/or caregiver in pin care.
- Instruct patient and/or caregiver to report any of the following signs of infection immediately:
  - Redness at the pin site.
  - Increased pain at the pin site.
  - Swelling at the pin site.
  - Pus-like drainage at the pin site.
  - Black tissue around the pin site.
  - Fever of 101 degrees Fahrenheit (38.3 Celsius) or above. g. Chills.
- Document in patient's record.

65. AMBULATION WITH A WALKER

PURPOSE

- To ensure safe ambulation with a walker and with a cane.
- To increase endurance postural stability, control during transitional movements, and dynamic balance.

SCOPE OF SERVICES

- To all patient who need assistive devices for walking.

PROCEDURE

- Adhere to Standard Precautions.
- Explain procedure to patient.
- Assist the patient to put on socks and nonskid shoes.
- Apply gait belt.

Coming to Stand

- Position the walker in front of the patient.
- Assist the patient to a standing position by straightening your legs as you lift with the gait belt and the patient pushes down with his hands on the mattress.
- Patient leans forward and pushes up with arms from the chair arm rest or bed to come to stand.
- The person assisting should use an underhand grasp on the belt and assist the patient to a standing position.
- Instruct the patient to position his/her body within the frame of the walker and ask the patient to grasp the hand rests securely.
- Check height of walker to ensure hand rests are at the level of the top of the femur and that elbows are flexed at a 250 – 300-degree angle.

Walking Instructions

- Instruct the patient to move the walker forward by lifting it up, moving it forward and setting it down.
- Instruct the patient to position the walker so the back legs of the walker are even with the patient's toes. The patient should avoid sliding the walker.
- Instruct the patient to take a step forward with the weak leg.

- Instruct the patient to move his/her strong leg forward.
- Instruct the patient to take short steps and keep his/her head up and eyes looking forward.
- Walk the patient the distance instructed by supervisor/nurse as indicated in the plan of care.
- Repeat steps while walking to the side and slightly behind the patient, alert at all times.

Returning to Sit

- As the patient approaches the chair (or bed), the patient turns in small circles toward the stronger side.
- Assist the patient back up to the chair after ambulating until the chair can be felt against the patient's legs.
- The patient reaches for one arm rest at a time.
- The patient lowers to the chair in a controlled manner.

- Document in patient's record

66. AMBULATION WITH A CRUTCHES

PURPOSE

- To ensure safe ambulation with crutches, and to increase endurance, postural stability and dynamic balance.

SCOPE OF SERVICES

- To all patient who need assistive devices for walking.

PROCEDURE

- Adhere to Standard Precautions.
- Explain procedure to patient.
- If using a hospital bed, lower the bed to lowest level.
- Assist the patient to sit on the edge of the bed.
- Pause and allow the patient to sit on the edge of the bed a few moments to regain his/her balance.
- Assist the patient to put on socks and nonskid shoes.
- Apply gait belt.

Coming to stand

- Patient leans forward and pushes up with arms from the chair arm rest or bed to come to stand.
- The person assisting should use an underhand grasp on the belt and assist the patient to a standing position.
- Instruct the patient to bear his/her weight on the unaffected leg and position the crutches on either side of the patient.
- Check the fit of the crutches:
    - Position the crutches 4-6 inches in front of the patient's feet.
    - Move the crutches 4-6 inches to the sides of the feet.
    - Ensure that there is a 2-inch gap between the axilla and the axillary bar.
    - Ensure that each elbow is flexed at a 250 to 300 degree angle.
    - If any adjustments are needed, notify therapist or nurse who will make the necessary adjustments.

Walking Instructions Four-Point Gait

- Instruct the patient to move the right crutch forward.
- Instruct the patient to move the left foot forward.
- Instruct the patient to move the left crutch forward.
- Instruct the patient to move the right foot forward.
- Instruct the patient to take short steps and keep his head up and eyes looking forward.
- Walk the patient the distance instructed by supervisor/nurse as indicated in the plan of care.
- Repeat steps while walking to the side and slightly behind the patient, alert at all times.

Three-Point Gait

- Instruct the patient to advance both crutches and the weak or affected foot.
- Instruct the patient to transfer his/her body weight forward to the crutches.
- Instruct the patient to advance the unaffected or good foot forward.
- Instruct the patient to take short steps and keep his/her head up and eyes looking forward.
- Walk the patient the distance instructed by supervisor/nurse as indicated in the plan of care.
- Repeat steps while walking to the side and slightly behind the patient, alert at all times.

Two-Point Gait

- Instruct the patient to move the right foot and left crutch forward at the same time.
- Instruct the patient to move the left foot and right crutch forward at the same time.
- Walk the patient the distance instructed by supervisor/nurse as indicated in the plan of care.
- Repeat steps while walking to the side and slightly behind the patient, alert at all times.

Returning to sit

- As the patient approaches the chair (or bed), the patient turns in small circles toward the stronger side.
- Assist the patient back up to the chair after ambulating until the chair can be felt against the patient's legs.
- The patient reaches for one arm rest at a time.
- The patient lowers to the chair in a controlled manner.

Afrer care

- Remove gait belt and replace equipment.
- Make sure the patient is comfortable.
- Use alcohol-based hand rub for hand hygiene.
- Document in patient's record.

67. PRESSURE ULCER AND WOUND ASSESSMENT

PURPOSE

- To provide recommendations for assessing patient wounds.
- Adequate assessment throughout the healing process is critical to proper management and healing.

SCOPE OF SERVICES

- To all patients who are at risk for developing bedsores and already having bedsores.

PROCEDURE

- Adhere to Standard Precautions.
- Explain the procedure to the patient.
- After completing the assessment, discard soiled supplies in appropriate containers.

Assessing the wound

1. Initial assessment:
   - Position the patient exposing the wound site.
   - Assess the wound(s) for:
     - Location.
     - Etiology: Identifying the type of tissue damage and underlying causes will help in planning the interventions (i.e., compression for venous ulcers, offloading for pressure ulcers, glucose management for diabetic ulcers, etc.)
     - Classification of Type of Wound Base Tissue
   - Necrotic, nonviable, or devitalized: Tissue that has died and has therefore lost its physical properties and biologic activity.
   - Eschar: Black or brown necrotic, devitalized tissue: tissue can be loose or firmly adherent; hard, soft, or boggy.
   - Slough: Soft, moist, avascular (necrotic/devitalized) tissue; may be white, yellow, tan, or green; may be loose or firmly adherent.
   - Granulation tissue: Pink/red moist tissue comprised of new blood vessels, connective tissue, fibroblasts, and inflammatory cells, fills an open wound when it starts to heal; typically appears deep pink or red; surface is granular, berry-like or cobblestone appearing.
   - Clean, non-granulating: Absence of granulation wound surface appears smooth and red but not granular, and berry-like or cobblestone appearing.

- Epithelial: Regenerated epidermis across the wound surface; pink and dry in color.
- Newly epithelialized: The process of regeneration of the epidermis across a wound surface or regeneration of the epidermis across a wound surface
- Non-epithelialized: The absence of regenerated epidermis across a wound surface.
- Unhealed: The absence of the skin's original integrity.
    - Staging (Only pressure wounds can be staged).
        - **Suspected Deep Tissue Injury (DTI):** A purple or maroon localized area ofdiscolored intact skin or blood-filled blister due to damage of underlined soft tissue from pressure and/or shear. The areas may be preceded by tissue that is painful, firm, mushy, boggy, warmer or cooler as compared to adjacent tissue. DTI maybe difficult to detect in individuals with dark skin tones. Evolution may include a thin blister over a dark wound bed. The wound may further evolve and become covered with thin eschar. Evolution may be rapid, exposing additional layers of tissue destruction, even with optimal treatment.
        - **Stage I:** Intact skin with non-blanchable redness of a localized area usually over a bony prominence. Darkly pigmented skin may not have visible blanching; its color may differ from the surrounding area. The area may be painful, firm, soft, warmer or cooler as compared to adjacent tissue. Stage 1 may be difficult to detect in individuals with dark skin tones (a herald of risk).
        - **Stage II:** Partial thickness loss of dermis presenting as a shallow open ulcer with a red pink wound bed, without slough. May also present as an intact or open/ruptured serum-filled blister. Presents as a shiny or dry shallowulcer without slough or bruising. This stage should not be used to describe skin tears, tape, burns, perineal dermatitis, maceration or excoriation. Bruising indicates suspected deep tissue injury.
        - **Stage III:** Full thickness skin loss. Subcutaneousfat may be visible but bone, tendon or muscle are not exposed. Slough may be present but does not obscure the depth of tissue loss. May include undermining and tunneling. The depth of a Stage III Further pressure ulcer varies by anatomical location. The bridges of the nose, ear, occiput and malleleous do not have subcutaneous tissue and Stage III ulcers can be shallow. In contrast, areas of significant adiposity can develop extremely deep Stage III pressure ulcers. Bone/tendon is not visible or directly palpable.
        - **Stage IV:** Full thickness skin loss with exposed bone tendon or muscle. Slough or eschar may be present on some parts of the wound bed. Often include undermining and tunneling. Further Description: The depth of a Stage IV pressure ulcer varies by anatomical location. The bridge of the nose, ear, occiput and malleous do not have subcutaneous tissue and these ulcers can be shallow. Stage IV ulcers can extend into muscle and/or supporting structures (e.g., fascia tendon or joint capsule) making osteomyelitis possible. Exposed bone/tendon is visible or directly palpable.

- **Unstageable**: Full thickness tissue loss in which the base of the ulcer is covered by slough (yellow, tan, gray, green or brown)and/or eschar (tan, brown or black) in the wound bed. Further description: Until enough slough and/or eschar is removed to expose the base of the wound, the true depth, and stage, cannot be determined. Stable (dry, adherent, intact without erythema or fluctuance) eschar on the heels serves as the body's natural (biological) cover" and should not be removed.

- Thickness: Wounds can be classified as either partial thickness or full thickness to describe the level of tissue damage:
  - Partial Thickness: Tissue damage extends through the first layer of skin (epidermis) and into, but not through, the second layer of skin (dermis); heal by epithelialization.
  - Full Thickness: Tissue damage extends through both the epidermis and dermis and may involve subcutaneous tissue, muscle and, possibly, bone.
- Size:
  - Length and Width: Length and width are measured as linear distances from wound edge to wound edge. Wound length and width can also be documented by making a tracing of the wound on transparent paper with a permanent marker, tracing on an acetate guide, or photographic documentation. [Note: For the Assessment, the length is measured by measuring the longest head-to-toe linear measurement of the wound bed. The width is obtained by measuring the greatest width, perpendicular to the length (i.e., at a 90-degree angle).]
  - Depth: Depth is the distance from the visiblesurface to the deepest point in the wound. To measure wound depth, gently insert a sterile, flexible, cottontipped applicator into the deepest part of the wound. Then measure the length of the sterile cotton-tipped applicator that was in the wound.
- Undermining: Tissue destruction to underlying intact skin along wound margin.
- Tunneling/Sinus Tracts: Course or pathway that can extend in any direction from the wound surface; results in dead space with potential for abscess (direction and depth of tunneling).
- Undermining and tunneling can be measured using a sterile cotton-tipped applicator. Measure dead space and note location using the face of the clock as a guide. Using the clock method, the top of the wound (12 o'clock) would point towards the patient's head and the bottom of the wound (6 o'clock) would point towards the feet.
- Exudate/drainage (amount and type).
- Presence of odor.
- Tissue type (granulation, necrotic, slough, eschar, epithelialization).
- Round Margins (epithelial, macerated, irregular, attached).
- Periwound: Assess the surrounding skin for:
  - Erythema.
  - Maceration.

        - Induration.
    - Signs and symptoms of infection.
    - Assess for pain/tenderness.

2. Reassessment:
    - Reassess the wound weekly, according to the initial assessment guidelines
    - It is not appropriate to reverse stage a pressure wound. A Stage III cannot become a Stage II or a Stage 1. Chart the progress by noting an improvement in the characteristics (size, depth, etc.) or identify the wound as a healing Stage III or a healed Stage III wound. The same applies for a Stage IV pressure ulcer.
    - Reevaluate the treatment plan as soon as any evidence of deterioration is noted.
3. Monitoring progress:
    - A clean wound with adequate innervation and blood supply should show evidence of some healing within two to four weeks.
    - If progress is not demonstrated within two to four weeks, reevaluate the overall treatment plan, adherence to the treatment plan and make appropriate changes and referrals.

Assessing the Individual

- Physical health and complications.
    - Complete history and physical examination.
    - Complications (e.g., decreased mobility, incontinence).
- Nutritional assessment and management.
    - Evaluate for adequate dietary intake, including calories, protein, vitamins and minerals.
    - Nutritional assessment for individuals at risk for malnutrition:
        - At least every 3 months for individuals at risk for malnutrition.
        - Laboratory tests, as ordered (e.g., albumin, total protein, hematocrit).
        - Height, weight, history of weight loss
    - Nutritional support requirements (e.g., tube feeding, nutritional supplements). d. Vitamin and mineral supplement requirements (e.g., vitamins A, C, Zinc).
    - Hydration status.
- Pain assessment and management.
- Psychosocial assessment and management.
    - Assessment of the individual to include:
        - Mental status.
        - Learning abilities.
        - Signs of depression.
        - Social support.
        - Lifestyle.
        - Stressors.
    - Assessment of resources (e.g., availability and skill of caregivers, finances, equipment).
    - Assessment of mechanical and environmental factors.

- Document in patient's record:

68. PRESSURE ULCER STAGE: MANAGEMENT

PURPOSE

- To identify dressing and treatment modality options for different stage of pressure ulcers.

SCOPE OF SERVICES

- To all patient who have develop pressure ulcer.

EQUIPMENT

- Gloves
- Soap, mild/non-oily or commercial skin cleanser
- Lubricating spray or moisturizing lotion
- Skin protectant
- Moisture barrier.

PROCEDURE

Wound Type	Stage I Pressure Ulcer	Stage 2 Pressure Ulcer Or Partial Thickness Wound	Stage 3 Or 4 Pressure Ulcer or Full Thickness Wound		Deep Tissue Injury
Definitions	STAGE 1- An area where the epidermis is intact and the erythema (reddened skin) does notresolve within 30 minutes of pressure relief.	STAGE 2- An area of partial thickness loss of skin layers involving the epidermis and possibly penetrating into but not through the dermis	STAGE 3- Full thickness skin loss extending through the dermis to involve subcutaneous tissue	STAGE 4- Deep tissue destruction extending through subcutaneous tissue to fascia and may include muscle, tendon, joints or bone	The base of the wound cannot be visualized- ie. Obscured by necrosis or yellow stuff.
Exudate	No exudate	Dry to light Exudate / Moderate Exudate	Dry to light Exudate	Heavy exudates	Wound with necrosis

Dressing and change frequency	➢ Pressure relief to area ➢ Turn or reposition 2 hourly ➢ Pillow under calf to float heels, cushion if needed ➢ Monitor skin every shift. ➢ Protective skin barrier ➢ Hydrocolloid dressing if friction involved	**Cleanse:-** with Normal Saline **If Dry:-** Apply wound gel to hydrate **Cover:-** Hydro colloid dressing **Change:-** Every three days or S.O.S.	**Cleanse:-** with Normal Saline **If Dry:-** Apply Wound Gel to hydrate **Fill if needed:-** absorbant material **Cover:-** Hydrocolloid dressing **Change:-** Every three days or S.O.S.	**Cleanse:-** with Normal Saline	

- Document in patient's record.

69. DEEP TISSUE INJURY

PURPOSEs

- To identify dressing and treatment modality options for suspected deep tissue injury pressure ulcers.

SCOPE OF SERVICES

- To all patient who have develop deep tissue injury

EQUIPMENT

- Gloves
- Soap, mild/non-oily or commercial skin cleanser
- Lubricating spray or moisturizing lotion
- Skin protectant
- Moisture barrier

PROCEDURE

- Adhere to Standard Precautions.
- Explain procedure to patient.
- Wash affected area with wound cleanser agent, as ordered, or soap and water.
- Gently apply moisturizer to skin, if needed.
- Substitute a moisture barrier or skin protectant if patient is incontinent of urine or feces or has excessive sweating.
- Lotions and moisture barriers need to be reapplied as directed by manufacturer. Usage is product type specific.
- Discard soiled supplies in appropriate containers.
- Document the Procedure with Patient's response to procedure.
- Instruct the patient/caregiver in:
  - Care of the pressure ulcer.
  - Pressure reduction
  - Reporting signs and symptoms of infection and other areas of breakdown.
  - Diet to promote healing.
  - Medications/disease processes that may be impeding healing.
  - Activities permitted
  - Document in patient's record.

70. PREVENTION OF PRESSURE ULCER

PURPOSE

- To identify patients at risk for the development of pressure ulcers and define early interventions.

SCOPE OF SERVICES

- To all patients who are at risk for developing pressure sore.

EQUIPMENT

- Integrated Bed System: A bed frame and support surface that are combined into a single unit whereby the surface is unable to function separately.
- Non-powered: Any support surface not requiring or using external sources of energy.
- Powered: Any support surface requiring or using external sources of energy to operate.
- Overlay: An additional support surface designed to be placed directly on top of an existing surface.
- A support surface designed to be placed on the existing bed frame
- Skin Protectants/Emollients and Sprays:
  - Lotion
  - Ointment
  - Moisture-barrier creams
  - Transparent film
- Comfort Aids (does not reduce pressure but aids in comfort):
  - Pillows
  - Heel and elbow protectors

PROCEDURE

- Adhere to Standard Precautions.
- Explain procedure to patient.

Risk Assessment Tools and Risk Factors

- Assess all patients on admission to homecare and reassess every visit for risk factors related to pressure ulcers, using a validated risk assessment tool, i.e., Braden, Grosnell or Norton Scale.
- Assess bed- and chair-bound patients for additional risk factors such as, incontinence, altered level of consciousness and impaired nutritional status.
- Document assessment of all risk factors.

Skin Care and Early Treatment

- Inspect the skin at each visit and instruct patient/caregiver to do so on a daily basis, paying particular attention to bony prominences.
- Individualize and teach frequency of skin cleansing according to need and/or patient preference. During the cleansing process, use minimal force and friction on the skin.
- Avoid hot water and use a mild cleansing agent that minimizes irritation and dryness of the skin, then apply moisturizers and a barrier cream.
- Minimize environmental factors leading to dry skin, such as low humidity (less than 40%) and exposure to the cold. Treat dry skin with moisturizers.
- Avoid massaging over bony prominences.
- Minimize skin exposure to moisture due to incontinence, perspiration or wound drainage. When sources of moisture cannot be controlled, be sure to use a Moisture Barrier to protect the skin and use linen-saver pads or briefs made of materials that absorb moisture and present a quickdrying surface to the skin.
- Use proper positioning,transferring and turning techniques to lessen skin injury due to friction and shearing. To reduce additional friction injuries, use lubricants, protective dressings, and protective padding.
- Ensure adequate nutrition and hydration that includes adequate intake of protein, calories, vitamins, minerals and fluids. A plan of nutritional support and/or supplementation may need to be implemented for those patients who are nutritionally compromised. Dietitian referral may be indicated.
- Keep the patient as active as possible. Use active and passive exercise including range of motion. Physical therapy referral may be indicated.

Mechanical Loading and Pressure Redistribution Support Surfaces Patient confined to bed:

- Initiate a written, systematic turning and repositioning schedule that repositions the patient at least every 2 hours.
- Protect bony prominences, such as ankles and knees, from contact with each other with pillows or foam wedges. For a completely immobile patient, use devices that totally relieve pressure on the heels. DO NOT use donut-type devices.
- Avoid positioning the patient directly on the trochanter, when the side-lying position is used.
- Maintain the head of the bed at the lowest degree of elevation possible < 30 degrees. Limit the amount of time it is elevated.
- Use lifting devices during transfers and position changes.
- Place at-risk patients on a pressure-reducing device, such as foam, static air, alternating gel or water mattress.

Patient confined to chair:

- Initiate a systematic schedule for repositioning that shifts the points under pressure at least every hour. If able, have patient shift weight every 15 minutes. A written plan may be helpful.
- Use a pressure-reducing device, such as those made of foam, gel, air or a combination, as indicated. DO NOT use donut-type devices.

- Consider postural alignment, distribution of weight, balance and stability and pressure relief when positioning patient.

Education

- The keystones to prevention are educational programs that are structured, organized and comprehensive. These programs must be directed at all levels of healthcare providers, patients, families and caregivers.
- Educational programs should include information on the following items:
    - Etiology of and risk factors for pressure ulcers.
    - Risk assessment tools and their application.
    - Skin assessment.
    - Selection and/or use of support surfaces.
    - Development and implementation of an individualized program of skin care.
    - Demonstration of positioning to decrease risk of tissue breakdown.
    - Instruction of accurate documentation of pertinent data.

- Document in patient's record:

71. WOUND CARE AND DRESSING

PURPOSE

- To maintain physiologic integrity of the wound by keeping the wound bed moist and normothermic, and the surrounding skin dry.

SCOPE OF SERVICES

- To all patients needing wound dressing.

EQUIPMENT

- Sterilized instrument pack (optional)
- Dressings (as needed)
- tape
- Gloves
- Skin protectant
- Basin (optional)
- Cleansing solution, normal saline or other
- Scissors
- Personal protective equipment (as needed)
- Sterile Cotton tipped applicator

PROCEDURE

- Adhere to Standard Precautions.
- Review physician's orders.
- Explain procedure to patient/caregiver.
- Establish a clean field (sterile, if necessary) with all the supplies and equipment that will be necessary.
- Remove tape by pushing skin from tape. Remove soiled dressing. Discard dressing and gloves in appropriate containers. Decontaminate hands and don clean gloves.
- Observe for:
  - Wound size including length, width and depth. Document weekly and when needed.
  - Wound bed tissue type/color including necrotic, slough, eschar, granulating, clean, non-granulating and epithelial.
  - Evidence of wound healing or deterioration.

- Drainage characteristics including type, amount, color and odor.
- Symptoms of infection including redness, swelling, pain, discharge or increased temperature.
- Development of undermining or sinus tract that may require packing.

- Cleanse wound with normal saline or wound cleanser per wound care orders.
- Dress wound with appropriate dressings following manufacturer's guidelines and physician orders.
- Write date of application and initials of applier directly on the dressing (optional).
- To apply wet-to-moist dressings follow these steps:
  - Moisten the gauze with solution, such as normal saline, and wring it out until it is slightly moist.
  - Fluff the gauze completely and place it over the wound bed.
  - Cover the wound with gauze and a semi occlusive dressing. Allow enough layers of gauze to absorb drainage until the next dressing change. Secure dressing with tape.
  - Moisten dressing for removal.
- To apply a wet-to-dry dressing follow these steps:
  - Moisten the gauze with solution, such as normal saline, and wring it out until it is slightly moist.
  - Fluff the gauze completely and place it over the wound bed.
  - Cover the wound with dry gauze, allowing enough layers to absorb drainage until the next dressing change. Secure dressing with tape.
  - Remove the dressing when it is almost dry.
- Discard soiled supplies in appropriate containers.
- Clean reusable supplies according to hospital policy.
- Instruct patient/caregiver in care of the wound including:
  - Reporting any changes in pain, drainage, temperature or other signs and symptoms of infection.
  - Diet to promote healing.
  - Medications/disease processes that may be impeding healing.
  - Activities permitted.
- Document the procedures in patient's record.

72. OXYGEN THERAPY

PURPOSE

- To prevent or reverse hypoxemia and provide oxygen to the tissues.

SCOPE OF SERVICES

- To all patients who experience respiratory distress and oxygen saturation is less than 90%.

EQUIPMENT

- Stethoscope
- Oxygen source (cylinder, concentrator or liquid oxygen system)
- Oxygen delivery device (cannula, mask, trach collar),
- 2 sets Humidity bottles and adapters, if needed
- Sterile distilled water
- Cleansing solution Gloves.

PROCEDURE

- Verify Adhere to Standard Precautions.
- Explain procedure to patient.
- Review order from physician for oxygen therapy.
- Evaluate the patient's respiratory status. Assure a patent airway before commencing oxygen administration.
- Post "Oxygen in Use" warning sign. Evaluate environment for hazards related to combustion.
- Evaluate patency of nostrils if nasal cannula is to be used.
- Prepare oxygen source:
  - Crack (break seal) on cylinder, plug in concentrator, check liquid contents of liquid system.
  - Screw humidifier onto tank outlet or concentrator oxygen outlet, if humidifier is to be used.
  - Connect oxygen tubing to oxygen source.
  - Set flow on flow dial, flow tube, oxygen flow control, or flow meter at prescribed liter flow.
  - If concentrator is used, turn power switch on and adjust flow rate.
- Apply oxygen delivery device:

Nasal Cannula

- Set flow rate as ordered (humidity not required for < 4L/minute)
  - 1-2 L/minute provides 23-30% O2
  - 3-5 L/minute provides 30-40% O2

- 6 L/minute provides 42% O2

- Place prongs in nostrils with flat surface against skin.
- If prongs are curved, direct curve downward toward floor of nostrils.
- Secure cannula tubing over each ear and slide adjuster under chin to secure tubing taking care to adjust to patient comfort.
- Clean nasal cannula daily and PRN.
- Provide frequent mouth and nasal care, lubricate nose with water-soluble lubricant if dry.

Oxygen Mask

- Select a mask that will afford patient the best fit.
- Set flow rate as ordered by physician. Rate must exceed 5 liters/minute to flush mask of carbon dioxide. In high humidity masks, oxygen should be turned up until mist flows from mask.

For low flow systems:

- Simple mask: 6-8 L/minute provides 40-60% oxygen.
- Partial rebreather mask: 6-11 L/minute provides 50-75% oxygen.
- Non-rebreather: 12 L/minute provides 80-100% oxygen.

- Position mask over the patient's face covering the nose, mouth and chin to obtain a tight seal.
- Slip loosened elastic strap over patient's head, positioning it above or below the ears.
- Tighten elastic strap so that mask is snug but not uncomfortably tight. Make sure that oxygen is not leaking into patient's eyes.
- If rebreathing mask is used, check to see that one-way valves are functioning properly. This mask excludes room air and a valve malfunction could lead to a build-up of carbon dioxide in the mask.
- If a non-rebreathing or partial rebreathing mask is used:
  - Flush the mask and bag with oxygen before applying.
  - Observe bag and make sure that there is only slight deflation when the patient breathes. If marked deflation occurs, increase the flow rate of oxygen bag.
  - Keep the reservoir bag from kinking or twisting and free to expand at all times.
- Clean mask daily and PRN.

Trach Collar or Trach Mask

- Attach the large-bore tubing coming from the oxygen source to the swivel adapter on the collar.
- Set oxygen flow rate and concentration as ordered. 8-10 L/minute provides 30-100% oxygen in this high flow system.
- Place elastic strap in one flange of trach collar.
- Place collar's opening directly over the patient's tracheostomy tube.
- Slip the unattached end of the elastic strap behind the patient's neck while stabilizing trach collar with free hand. Attach elastic to free flange. Tighten gently.
- Position wide bore tubing.
- DO NOT block exhalation port.

- Assure that nebulizer delivers constant mist.
- Empty any build-up of condensation every 2 hours.
- Clean tracheostomy collar as needed.

- Discard soiled supplies in appropriate containers
- Clean oxygen therapy equipment as instructed by respiratory equipment company using cleaning solution. Two sets should be used alternately with one being cleaned while the other in us
- Document the entire procedurein patient's record.

73. TRACHEOSTOMY CARE

PURPOSE:

- To minimize infection and maintain airway.

SCOPE:

- All patients with tracheostomy tube

PROCEDURE:

- Adhere to Standard Precautions.
- Explain procedure to patient and caregiver.
- Prepare new tracheostomy tube for insertion:
  - Test - inflate the cuff on cuffed tubes.
  - Fold one end of twill tape up 1/2 (one-half) inch and make a 1/4-inch slit; prepare two pieces, one larger than the other, in this manner.
  - Slip slit end through side of outer cannula and pull twill tape through slit. Repeat on other side with second piece of twill tape.
  - If client has a Velcro tracheostomy tube holder, place narrow ends of ties under and through the faceplate slits. Pull ends even and secure with Velcro holders.
  - Remove inner cannula.
  - Insert obturator in outer cannula.
  - Apply a thin film of water-soluble lubricant to the surface of the outer cannula and the tip of the obturator.
- Suction patient via tracheostomy tube. If cuffed tube is in place, suction orally.
- Check to see if patient has cuffed tracheostomy tube in place. If he/she does, deflate by attaching a 5-10 mL syringe into the cuff balloon and slowly withdrawing all air from the cuff. Note amount of air withdrawn.
- Prepare to remove the old tube (allow patient to use mirror if he/she is learning to perform this procedure). Use scissors to cut the twill ties on the old tube. If patient has Velcro tracheostomy tube holder, undo the tabs attached to the Velcro fastener.
- Remove the old tube by the neck flange using an outward and downward motion. Removal of the tube may trigger a coughing spasm. If coughing produces secretions, cleanse stoma with gauze soaked with normal saline before inserting new tube.

- Tell patient to take a deep breath and insert new outer cannula with obturator while pushing back and then down. The tube will slide into place as gentle, inward pressure is applied.
- Once the cannula is properly inserted, immediately remove the obturator and hold tube in place until the patient's urge to cough subsides.
- Ensure that there is air exchange through the tube
- Instruct the patient to flex his/her neck and bring twill ties around to the side of the neck to tie them together in a square knot. Closure on the side will allow easy access and prevent necrosis at the back of the neck when patient is supine. Check ties to make sure they are tight enough to avoid slippage but loose enough to avoid jugular vein constriction or choking. If the patient has a Velcro tracheostomy tube holder, maintain secure hold on tracheostomy tube. Align strap under patient's neck and secure with Velcro fastener. You should be able to slip only one or two fingers between the collar and neck.
- If tube is cuffed, reinflate:
  - — Attach 5 mL syringe filled with air to the cuff pilot balloon.
  - — Slowly inject amount of air (usually 2-5 mL) necessary to achieve an adequate seal.
  - — Use a stethoscope during cuff inflation to gauge the proper inflation point. During inspiration, place the stethoscope on one side of patient's trachea. Use either minimal leak technique (small air leak or rush of air heard over larynx during peak inspiration) OR minimal occlusive cuff inflation technique (no air leak) for adequate cuff inflation.
  - — No air should be coming from mouth, nose or around tube.
  - — If the tubing does not have a one-way valve at the end, clamp the inflation line with a hemostat.
  - — Remove syringe.
  - — Check for air leaks from cuff. Air leaks may be present if you cannot inject the same amount of air withdrawn, if the patient can speak, and/or if the ventilator fails to maintain adequate tidal volumes.
- Insert inner cannula and lock in place.
- Check air exchange by holding hand over cannula.
- If patient is ventilator dependent, connect to ventilator and observe for chest excursion.
- Apply tracheostomy dressing around tracheostomy tube, if desired.
- Discard soiled supplies in appropriate containers.
- Clean reusable equipment. (See Cleaning and Disinfection of Respiratory Equipment)
- If tracheostomy tube is disposable, discard per agency policy.
- Document the entire procedurein patient's record.

74. TRACHEAL SUCTIONING

PURPOSE:

- To maintain oxygenation by removing the secretions from the trachea to prevent occlusion of the airway.

SCOPE:

- All patients with tracheostomy tube

EQUIPMENT:

- Oxygen source, if patient has oxygen ordered
- Suction machine and suction catheter
- Distilled water
- Gloves
- Suction catheter
- Clean solution container

PROCEDURE:

- Verify physician's order for suctioning.
- Adhere to Standard Precautions.
- Explain procedure to patient.
- Set suction pressure between 100-120 mm Hg.
- Place patient in semi-Fowler's position to promote lung expansion.
- Hyper oxygenate the patient before and after the procedure
- Place catheter tip in distilled water, occlude catheter port with thumb and suction a small amount of water through the catheter.
- Encourage patient to take several deep breaths prior to start of suctioning.
- Check tracheostomy tube to make sure it is tied securely.
- Dip catheter tip into sterile, normal saline to lubricate outside and facilitate insertion. Insert catheter into tracheostomy or trach tube.
- DO NOT force catheter beyond point of resistance.
- Cover suction catheter port intermittently.
- Slowly withdraw and rotate catheter to clear secretions.
- DO NOT exceed 10 seconds.

- Before reinserting catheter allow patient to rest and encourage taking 2 or 3 deep breaths. Reoxygenate patient, if needed.
- Rinse the suction catheter with distilled water between insertions.
- Monitor patient's respiratory status during procedure. If patient becomes short of breath, agitated, or hypoxic, discontinue suctioning and oxygenate the patient.
- At completion of procedure, instruct patient to take several deep breaths. Hyperoxygenate for several minutes if a patient has oxygen ordered.
- Assess pulmonary status, skin color, and vital signs. Monitor the patient for adverse reactions.
- Clear catheter and connecting tubing by aspirating remaining water solution.
- Turn off suction. Disconnect catheter.
- Discard soiled supplies in appropriate containers.
- Document the entire procedure.

75. CHEST PHYSIOTHERAPY

PURPOSE

- To mobilize and eliminate pulmonary secretions, re-expand lung tissue and promote efficient use of respiratory muscles.

SCOPE OF SERVICES

- To all post operative patients and as per advised by the patients.

EQUIPMENT

- Stethoscope
- Tissues/paper towels
- Pillows
- Vibrator (optional)
- Nebulizer (optional)
- Gloves
- Personal protective equipment (mask, eye wear) as needed.

PROCEDURE

- Adhere to Standard Precautions.
- Review physician's orders for location of affected lung segment(s), prescribed treatment and sequence of procedure, e.g., if orders include use of nebulizer prior to treatment, percussion/clapping and vibration in each position:
  - Apical segment of the upper lobes (posterior): Percuss over the right and left scapula from midscapula up.
  - Apical segment of the upper lobes (anterior): Percuss over the area of the right and left clavicles.
  - Posterior segment of upper lobes: Percuss over the area above the midscapula line in the right and left sides.
  - Anterior segment of upper lobes: Percuss in the area above the breast to the clavicle.
  - Right middle lobe and lingula of left upper lobe: Percuss above or below breast on the respective side.
  - Lower lobes (anterior): Percuss from the breast to the base of the last rib.

- Lower lobes (lateral): Percuss from the base of the axilla to the base of the last rib.
- Lower lobes (posterior): Percuss from the midscapula area to the base of the last rib.

- Auscultate lungs to determine baseline respiratory status, count the respiratory and pulse rate before and after procedure.
- Explain procedure to patient.
  - Postural drainage:
    - Nebulizer treatment (if ordered) should precede postural drainage for maximal effectiveness.
    - Review diaphragmatic pursed lip breathing with patient prior to positioning.
    - Loosen or remove patient's tight clothing.
    - Position patient in appropriate positions.
    - Patient should remain in each position 5 to 15 minutes, depending on the patient's tolerance.
    - Remind patient to use the controlled cough after each position.
  - Percussion/Clapping and Vibration is performed in each position for 2 to 3 minutes.
    - Percussion/Clapping is a technique of cupping the hand to allow a cushion of air to come between the hand and the patient. The fingers should be relaxed and straight, with the thumb placed beside the index finger. Properly performed, a popping (hollow) sound will be heard when the patient is percussed/clapped. The hands should be raised alternately 3-4 inches from the patient's body.
    - Vibration: Following percussion/clapping, vibrate the chest wall during exhalation:
      - Remind patient to purse lip breathe.
      - During exhalation, press hands flat against patient's chest wall.
      - The percussor vibrates the thoracic cage by isometrically contracting or tensing the muscles of their arms and shoulders. [Note: The percussor vibrates "into" the patient.]
      - Repeat 3 to 5 times during exhalation in each position.
    - Airway Clearance: Removing the secretions for the airways by:
      - Request for the patient to cough.
      - If unable to cough, patient can use the huffing technique to clear secretions. A huff cough is performed by taking a deep breath and holding it for 1-3 seconds. Then force the air out of the lungs with the mouth open.
- Discard soiled supplies in appropriate containers.
- Document the procedure in patient's record.

76. INCENTIVE SPIROMETRY

PURPOSE

- To optimize lung function and prevent respiratory complications.

SCOPE OF SERVICE

- To all patients who had undergone surgery, have lung disease, airway problems and as per advised.

EQUIPMENT

- Incentive spirometry.

PROCEDURE

- Adhere to Standard Precautions.
- Instruct the patient to perform the following;
  - Sit up with head and neck centered.
  - Hold incentive spirometer in an upright position.
  - Place the target pointer to the level that is needed to reach the desired level.
  - Exhale normally.
  - Place the mouthpiece in mouth with lips tightly sealed around it.
  - Inhale slowly and deeply through the mouthpiece to raise the indicator, attempting to make the indicator rise up to the level of the target pointer.
  - When unable to inhale any longer, remove mouthpiece and hold breath for approximately 2 to 6 seconds.
  - Exhale normally. Encourage patient to cough after each repetition, if secretions are present.
- Repeat these steps 5 to 10 times every hour when awake, or as often as healthcare provider has advised.
- After each use, clean the mouthpiece with water and shake it to dry.
- Keep track of progress by writing down the highest level able to reach.
- Document the entire procedure.

77. PEAK FLOW METER

PURPOSE

- To assess patient's lung capacity and ability to push air out of the lungs.

SCOPE OF SERVICES

- As per advised by the physician.

EQUIPMENT

- Peak flow meter
- Peak flow meter daily log book

PROCEDURE

- Have peak flow meter set at the bottom of the scale.
- Have patient remove any food from his/her mouth.
- Patient should stand up straight; instruct him/her to take a deep breath in.
- Creating a complete seal around the mouth piece of the flow meter and keeping the tongue away from the mouthpiece, instruct patient to blow one breath out as fast and hard as possible. The force of the breath will push the marker up the meter giving a measurement of their lung capacity.
- Document this number.
- Instruct the patient to perform the measurement 3 more times. The patient has performed the test properly when all the measurements are close together.
- Once you have documented the measurements, record the highest reading in the patient's log book and in the patient record. The highest measurement, not the average, shows patient's lungcapacity.
- Be sure to include the time and date that the measurement was taken.
- Document the measurements in patient's record.

78. METERED DOSE INHALER

PURPOSE

- To instruct the patient/caregiver in the correct usage of a metered dose inhaler (MDI) for the effective delivery of inhaled medications.

SCOPE OF SERVICES

- As per advised by the physician.

EQUIPMENT

- Inhaler
- Spacer

PROCEDURE

- Adhere to Standard Precautions.
- Instruct the patient to perform the following;
  - Shake the inhaler 5 or 6 times.
  - Remove the mouthpiece cover.
  - By using a spacer, place it over the mouthpiece at the end of the inhaler.
  - Put your lips and teeth over the mouthpiece/spacer being careful not to block the mouthpiece with your tongue.
  - Breathe in slowly. As you do so, squeeze the top of the canister once. (If using a spacer, squeeze the top of the canister first, and then breathe in slowly.)
  - Keep inhaling even after you finish the squeeze.
  - Continue inhaling slowly and deeply.
  - After inhaling, remove the mouthpiece/spacer from your mouth and hold your breath for up to 10 seconds.
  - If you need another dose of medication, repeat the previous steps.
  - Replace the mouthpiece cover and store equipment.
  - Rinse your mouth and gargle with water, spit out, DO NOT swallow.
- Clean Equipment
- Document the entire procedure.

79. STEAM INHALATION

PURPOSE

- To loosen secretions.
- To reduce chest congestions.

SCOPE OF SERVICES

- To all patient who had undergone operation.
- To all patient who have respiratory infections.

EQUIPMENTS

- Nelson inhaler in a big bowl/Electric inhaler
- A container with cotton swabs and gauze.
- Bath towel.
- boiling water.
- Sputum mug/ Kidney tray.

PROCEDURE

- Explain the procedure to the patient.
- Wash hands.
- Plug the spout of the inhaler with a cotton ball.
- Place the inhaler on the overhead table in front of the patient, keeping the spout away from the face of the patient.
- Cover the patient with a bath towel or a blanket extending the cover over the head and inhaler.
- Close the doors and windows.
- Remover the cotton plug from the spout of the inhaler.
- Instruct the patient to put his/her mouth on the mouth piece and breathe through mouth and exhale through nose.
- Continue the procedure for 15-20 minute and stay with the patient until the procedure is complete.
- On completion of procedure, keep the patient comfortable.
- Wash hands.
- Replace the articles and record the procedure.

Electrical Inhaler:

- Fill plain water up to the mark.
- Plug in to the switch board.
- Cover the patient.
- Stay with the patient until procedure is over.
- Record procedure in nurses' notes.

80. CHEST TUBE MANAGEMENT

PURPOSE

- To evacuate air or fluid from the pleural space to allow full expansion of the lungs.

SCOPE

- To all patient undergoing chest tube insertion.

EQUIPMENT

- Personal protective equipment
- Antimicrobial wipes
- Gloves Sterile
- gauze, 3x3, 4x4 and split gauze pads
- Petrolatum-impregnated gauze dressing
- Liquid skin barrier (optional)
- Tape (adhesive, silk or transparent - NOT paper)
- Chest tube drainage collection system
- Chest tube clamps;
- 2 clamps for each chest tube
- Sterile normal saline and/or sterile water

PROCEDURE

- Adhere to Standard Precautions.
- Explain the procedure to the patient.
- Assemble equipment in a clean and conveniently located work area.
- Perform patient assessment as per standard policy and procedure with particular attention to cardiopulmonary status and patient tolerance of the chest tube.
- Notify the physician regarding abnormal findings or deviations from the patient baseline status and concerns or problems with patient tolerance of the chest tube.
- Place the patient in a supine position and uncover the chest to expose the catheter.
- Aseptically open 1 or 2 packages of sterile split gauze.
- Cut 3 or 4 (6 inches long x 2 inches wide) pieces of tape.
- Wash hands and don gloves.
- Remove and dispose of old dressing and tape from tube and site.
- Wash hands and change gloves.

- Cleanse site with antimicrobial wipe, moving from the center outward in circular area. Allow the area to air dry.
- Apply a liquid skin barrier to prevent skin breakdown and to secure the dressing, if needed.
- Apply new petrolatum gauze firmly around the chest tube insertion site to prevent air from entering the chest.
- Apply dry gauze dressing over the tube site.
- Apply tape, overlapping the edges slightly, to form an occlusive dressing. Be sure to completely encase the chest tube dressing and the chest tube with tape. Make sure there is no tunneling where the chest tube exits the dressing. A separate piece of tape may be needed to seal the tunnel from below.
- Secure the connection between the chest tube and connecting tubing to the drainage system tightly, using SPIRAL TAPING at all connections, so that the site is not obscured by tape. The 5-in-1 connectors should remain accessible.
- Tape the chest tube to the patient's chest or abdomen to prevent pulling as the patient moves. (Use the hinge-tape method; pinch the tape together under the chest tube before taping it to the patient. This prevents the chest tube from slipping through the tape and allows much stronger resistance to applied forces.)
- Assess the water seal for bubbling. If bubbling present, locate the source of the air leak:
  - Clamp chest tube close to patient.
  - If bubbling stops, source of air leak is above clamp, (i.e. at the tube insertion site or inside patient's pleural space).
  - Remove clamp and apply pressure to skin around chest tube. If bubbling stops, leak is at insertion site around tube.
  - Apply petroleum gauze to insertion site and occlusive dressing to stop leak.
  - If bubbling continues with pressure to skin or petroleum gauze around insertion site, leak is most likely inside patient's chest.
  - If bubbling persists when clamped close to patient, move clamp down tube at intervals above and below connections toward the drainage collection system.
  - When bubbling stops, the leak is at the connection just above the clamp. Tighten and tape leaky connections.
  - If bubbling persists when clamped just above the chest drainage container, the container is cracked or broken. Replace the drainage collection system.
- Evaluate the need to change the drainage bottle or collection system and perform set-up procedure per manufacturer's instructions.
- Use aseptic technique and adhere to Standard Precautions to change the drainage system according to manufacturer's recommendations when it is near capacity as follows:
  - Don gloves and PPE (as necessary).
  - Open the new system and fill the water seal chamber to the recommended level per manufacturer's instructions. If suction is being used, fill the suction chamber to the level ordered by the physician; usually 20 mL H20.
  - Remove the tape from the 5-in-1 connector.
  - Clamp The Chest Tube Close to the Patient and Just Proximal to the 5-In-1 Connector.

- Disconnect the chest tube from the 5-in-1 connector and connect the new chest tube drainage system tubing.
- Tighten the connection and secure it with spiral wrapped tape.
- Remove the clamps

- Provide patient comfort measures.
- Clean and replace equipment.
- Discard soiled supplies in appropriate containers.

DOCUMENTATION

- Document in the patient's record:
  - The procedure and patient's tolerance of the procedure.
  - Patency of the chest tube.
  - Presence and absence of bubbling in the water seal chamber or air evacuation from Heimlich valve patency (sounds like flatus or a duck quack).
  - Volume and characteristics of fluid drainage in the chest tube system or on the dressing.
  - Amount of suction in suction control chamber.
  - Presence/absence of fluctuation in water seal chamber with the patient's inspiration (tidaling).
  - Instructions given to patient/caregiver, compliance with procedures and ability to perform/repeat instructions accurately.

TIDALING

Tidaling is the rise and fall of fluid in the water seal tube chamber, which is a direct reflection of the degree of lung re-expansion. Tidaling decreases as the lung re-expands. In order to observe tidaling when suction is used, suction may be temporarily disconnected. Tidaling occurs with respiration and is a sign that all is well.

Water Seal Tube	Underwater Seal Bottle	Assessment and Management of Air Leak
Tidaling	Bubbling	
YES	YES	Indicates patient air leak exists and lungs are not re-expanded. The greater the degree of bubbling and tidaling, the greater the extent of air leak (pneumothorax) and the greater the degree of lung collapse.
NO	NO	Indicates resolution of air leak and lung re-expansion (slight tidaling may be seen). Be sure patient collection tubes are not kinked or obstructed; verify re-expansion.
NO	YES	Indicates a possible connection or system air leak. Momentarily pinch off the thoracic catheters. If bubbling continues, a connection leak exists. Secure and tape all connections.
YES	NO	Can be observed with partial or total pneumonectomy and disease states associated with decreased lung compliance (stiff lungs).

81. NEBULISATION THERAPY

PURPOSE

- To administer medication.
- To assist in the removal of accumulated bronchial secretions.
- To liquefy bronchial secretions.
- To relieve dyspnea.

SCOPE OF SERVICES

- As per advised by the physician

EQUIPMENT

- Sterile syringe 2 ml or 5ml
- Needle 18 G
- Medications as prescribed
- Ampoule of sodium chloride 0.9% or sterile water x 1
- Nebulizer machine
- Nebulizer kit (appropriate size of mask, mouth piece, nebulization chamber and tubing)
- Oxygen tubing if required
- Air or oxygen outlet if required
- Nipple adaptor if required
- Tray for carrying required equipment to the bedside of the patient

PROCEDURE

- Check Dr's written orders
- Explain procedure to the patient.
- Ensure privacy.
- Wash hands.
- Assemble all the equipment.
- Assist the patient to a sitting or semi-recumbent position.
- Attend the pre procedure peak flow measurement if ordered.
- Draw up the prescribed medications. Add sodium chloride 0.9% or sterile water to make the required dose.
- Attach the tubing to the nebulizer machine.
- Unsecure the nebulizer chamber and insert the solution. Reconnect the nebulizer.

- For an oxygen outlet adjust the flow rate to achieve a fine mist e.g. 6L/minute.
- Instruct the patient to breathe deeply and slowly.
- If using nebulizer with a mouth piece, instruct the patient to close the lips firmly around the mouth piece and to inhale through the mouth and exhale through the nose.
- Supervise the patient during nebulization.
- Stop the nebulization when medication is finished
- Observe for any adverse reactions to therapy.
- Wash the nebulizer with tap water and dry with a paper towel. Store in a patient's locker.
- If prescribed, attend post procedure peak flow measurement 15 – 30 minutes after inhalation.
- Record administration on the patient's medication chart
- Document the entire procedure in the patient record.

82. UMBILICAL STUMP CARE-NEW BORN

PURPOSE

- To prevent infection of the umbilical stump site.

SCOPE OF SERVICES

- To all newborn patients who are admitted in hospital.

EQUIPMENT

- Cotton swab or soft washcloth
- Mild/neutral soap
- Gloves

PROCEDURE

- Adhere to Standard Precautions.
- Wipe base of cord or stump site with soaked cotton swab/washcloth with warm water and mild/neutral soap at each diaper change to facilitate the drying process.
- Once the stump has fallen off, wash the umbilical area gently during a normal bath.
- Dry thoroughly
- Document the procedure in patient's record.

83. INFANT BLOOD PRESSURE MONITORING

PURPOSE

- To obtain mean blood pressure (BP) of an infant.

SCOPE OF SERVICES

- To all infant admitted in the hospital.

PROCEDURE

- Adhere to Standard Precautions.
- Identify patient and explain procedure to caregiver.
- Properly sized cuff is placed around the infant's upper arm, lower arm or calf.
- Expose extremity to be used for BP measurement while maintaining proper body temperature of infant.
- If using manual cuff, locate appropriate artery.
- Inflate cuff to 20-30 mm Hg above where pulse no longer palpable or above expected systolic pressure.
- The cuff pressure is decreased at a rate of 2-3 mm Hg while palpating for pulse.
- Continue to release pressure until pulse is palpable. This is the systolic pressure reading.
- The diastolic pressure is recorded as "P."
- Deflate cuff rapidly and completely; remove from arm.
- Wait 2 minutes before taking another blood pressure.
- If using electronic monitoring device, follow manufactures' instructions.
- Document the procedure in patient's record.

84. NEWBORN HEAD CIRCUMFERENCE MEASUREMENT

PURPOSE

- To determine if the infant's head size is within normal limits.

SCOPE OF SERVICES

- To all newborn baby in the hospital.

PROCEDURE

- Adhere to Standard Precautions.
- Position the tape measure slightly above the eyebrows and pinna of the ears and around the occipital prominence at the back of the skull.
- Note measurement.
- Remeasure head for accuracy.
- Document the procedure in patient's record.

85. WEIGHING THE NEWBORN

PURPOSE

- To obtain accurate weight of the infant and assess for weight gain or loss.

SCOPE OF SERVICES

- To all newborn babies in the hospital.

PROCEDURE

- Adhere to Standard Precautions.
- Place the scaleon a flat surface.
- Place the towelon a scale.
- Balance scale.
- Undress the infant completely.
- Place the infant on scale; maintain hand over scale to ensure infant's safety.
- Observe scale for weight.
- Redress infant.
- Clean scale after each use.
- Document the procedure in patient's record.

86. PEDIATRIC MEASUREMENTS

PURPOSE:

- To accurately measure height and weight of pediatric patients
  - For accurate measurements, use infant-measuring device for recumbent length and stadiometer for standing height.
  - Normally, height is less if measured in the afternoon than in the morning.

SCOPE:

- All paediatric patients

PROCEDURE:

Height:

- Children younger than 24-36 months:

. Place in supine with knees and legs fully extended.

Measure from top of head to heels of feet (toes pointing upward).

- Standing children older than 24-36 months:
  - Remove socks and shoes.
  - Have child stand as tall as possible, back straight, head in midline and eyes looking straight ahead.
  - Check for flexion of knees, slumping shoulders, raising of heels.
  - Measure from top of head to standing surface.
  - Measure to the nearest centimeters or 1/8 inch.

Weight:

- Weigh infants and young children nude on platform-type scale; Place hand above body to prevent falling off scale.
- Weigh older children in underwear (and gown if privacy is a concern) and no shoes on standing type upright scale.
- Check that scale is balanced before weighing.
- Cover scale with clean sheet of paper for each child.
- Measure to the nearest 10 grams or 1/2 ounce for infants and 100 grams or 1/4 pound for children
- Document the findings in patient record.

87. PEDIATRIC MEASUREMENTS: TEMPERATURE TAKING: AXILLARY OR ORAL

PURPOSE:

- The normal temperature for the child is approximately 98.6 degrees Fahrenheit (37 degrees Celcius) orally.
- Oral temperatures are not usually taken on children under 5 years of age. Axillary temperatures are usually recommended for the child under 1 year, when unable to cooperate with oral route.
- The time needed to achieve accurate temperature is generally reduced with an electronic thermometer.

SCOPE:

- All paediatric patients

PROCEDURE

- Adhere to Standard Precautions.
- Identify the patient and explain procedure to caregiver and patient, in age appropriate manner.
- Place the thermometer sheath over the thermometer.
- Turn digital thermometer on
  - Axillary Option:
    - Place bulb under arm, well up into armpit, with arm pressed close to body.
    - Leave in place for 3 to 5 minutes, or until electronic thermometer beeps.
    - If necessary, hold child's arm close to body.
  - Oral Option:
    - Place the bulb under the side of the child's tongue. Have child close mouth while instructing child not to bite the thermometer.
    - Leave the thermometer under the tongue for 3 to 5 minutes, or until electronic thermometer beeps.
- Remove and read thermometer.
- Discard soiled supplies in appropriately.
- Clean the thermometer
- Document in patient's record:

88. PEDIATRIC MEASUREMENTS: TEMPERATURE TAKING: RECTAL

PURPOSE:

- Temperature is taken to ascertain the presence of hypothermia, hyperthermia or normal temperature.
  - There is danger of perforation of the rectum in the young infant because it is quite short. Obtain rectal temperature only if no other route is available.
  - The normal temperature for the child is approximately 99.6 degrees Fahrenheit (37.5 degrees Celsius rectally.
  - It is difficult to determine febrile state in an infant by touch during the first year of life.
  - There is a natural tendency by the child to expel the thermometer. Babies usually have a bowel movement.
  - A safe restraint method should be used to prevent the child's moving which might push the thermometer further into the rectum.
  - A physician's order may be required for taking a rectal temperature, as it is an invasive procedure.
  - The use of mercury filled glass thermometers should be discouraged.

SCOPE:

- All paediatric patients

EQUIPMENT:

- Rectal thermometer
- Cleansing solution
- Alcohol
- Lubricant
- Disposable thermometer sheaths
- Gloves

PROCEDURE

- Adhere to Standard Precautions.
- Identify patient and explain procedure to caregiver and patient, if age appropriate.
- Place the thermometer sheath over the thermometer and turn thermometer on.

- Lubricate thermometer bulb if insufficient lubrication from the thermometer sheath. Place child on stomach, or on back with both legs up, or on one side with upper leg bent. The non-dominant forearm should be placed firmly across the child's hip area when child is on his/her stomach.
- Use the thumb and forefinger of the non-dominant hand to separate the buttocks, then the dominant hand is free to gently insert the lubricated thermometer.
- Insert rectal thermometer into the rectum approximately 1/4 inch or until bulb is covered.
- Hold thermometer in place until thermometer beeps. Sometimes it is helpful to hold buttocks closed.
- Remove and read.
- Wipe rectal area with tissues.Remove sheath or wash thermometer with soap and tepid water. Cleanse with alcohol and return to thermometer container.
- Discard soiled supplies in appropriate containers
- Document in patient's record:

89. PEDIATRIC MEASUREMENTS: BLOOD PRESSURE: CHILD

PURPOSE:

- To measure systolic and diastolic blood pressure in a child.

SCOPE:

- All paediatric patients

PROCEDURE:

Measurement in the arm:

- Securely place the cuff around the upper arm so that the bladder of the cuff is midline over the brachial artery.
- The pressure should be measured with the cubital fossa of the arm at heart level.
- Palpate the radial artery. Place the diaphragm or bell of the stethoscope over the brachial artery below the bottom edge of the cuff. Inflate the cuff to approximately 20 mm Hg above the point where the radial pulse disappears.
- Deflate cuff at 2-3 mm Hg/second.
- The systolic reading is the onset of the Korotkoff sounds or the point when the initial tapping sound is heard. At least two consecutive beats should be heard as the pressure falls.
- The onset of muffling is the best index of diastolic pressure in children up to 12 years of age. In children and adolescents, diastolic reading is the disappearance of the Korotkoff sounds.
- The cuff should be deflated rapidly and completely. One to two minutes should elapse before further determinations are made, to allow release of blood trapped in veins.

Measurement in the thigh (popliteal artery):

- The child should lie face down and the cuff applied with the bladder over the posterior aspect of the mid-thigh. If the child is unable to lie face down, obtain the pressure reading with the child supine, by flexing the knee just enough to permit application of the stethoscope over the popliteal space.
- Place the stethoscope over the popliteal fossa to obtain the reading.
- The larger bladder usually records systolic pressure in the thigh as 10-40 mm Hg higher than that in the arm, but the diastolic pressure is essentially the same for both.

Measurement in the calf (posterior tibial artery):

- Position the distal border of the cuff at the malleoli, bony prominence on each side of the ankle.
- Auscultate over the posterior tibial or dorsalis pedis artery.

Measurement in the lower arm (radial artery):

- Secure the cuff at mid lower arm above the wrist.
- Place the stethoscope over the radial artery to obtain the reading.
- Position limb at level of heart.
- Rapidly inflate the cuff to about 20 mm Hg above point at which radial pulse disappears.
- Release cuff at a rate of 2-3 mm per second.
- Record systolic - clear tapping sound (first Korotkoff sound).
- Record diastolic pressure as low pitched muffled sound (fourth Korotkoff sound)

Palpable pressure:

- Inflate the cuff to approximately 20-30 mm Hg above where pulse is no longer felt.
- Slowly release pressure until a pulse is felt. This is the systolic pressure.
- The diastolic pressure is recorded as "P" for palpation. The systolic pressure obtained by palpation is 5-10 mm Hg lower than obtained by auscultation

Electronic pressure:

- Use steps above for cuff selection and placement.
- Set up machine according to manufacture's instructions.
- Turn machine on and obtain reading.
- Remove cuff.
- Oscillometry has digital read-outs for systolic, diastolic and mean arterial pressures (MAP) and for pulse.
- Electronic readings are higher than measuring with auscultation by approximately 10 mm Hg.
- Document in patient's record:

90. PEDIATRICS – MEDICATION: ORAL MEDICATION ADMINISTRATION

PURPOSE:

- To provide safe and accurate medication administration.
- To instruct the parent/caregiver about oral medication administration and the medication regime.

SCOPE:

- All paediatric patients

EQUIPMENT:

- Written patient medication guides
- Medication cup
- Oral medication syringe
- Nipple Water (or other medication-compatible fluid)
- Spoon
- Pill crusher

PROCEDURE:

- Check the physician's order for the patient's medications. It should include:
  - Name of the patient.
  - Name of the medication.
  - Medication time, dose, route and frequency.
- Complete a medication history.
- Instruct the parent/caregiver on the purpose, side effects, dosage and schedule of the medication.
- Wash hands and gather supplies.
- Demonstrate preparation of the medication.
- Demonstrate age appropriate administration of medication as needed.
- Parent/caregiver does return demonstration of medication preparation/administration as needed.
- Provide the parent/caregiver with instructional medication handouts and teaching guides. Topics should include:

- Medication name, both trade and generic.
- Purpose of the medication.
- Dose, and scheduling of administration times.
- Side effects.
- Normal appearance of the medication.
- Special considerations for administration (with food or not).
- When to call the nurse or physician.
- Storage of the medication

  - Teach the parent/caregiver techniques to promote compliance:
    - Fit the medication into the patient's daily routine.
    - Use calendars or checklists with medication times marked and check off when it is given.
    - Use appropriate medication containers.
    - Request liquid preparations, if needed or preferred by the child.
  - Report to the physician therapeutic effects, side effects or compliance issues.

- Document in the patient's record:
  - SNDT
  - Medication administered, dose, time and route.

91. PEDIATRICS – MEDICATION: EYE DROP INSTILLATION

PURPOSE:

- To instill drops into the eye for cleansing/antiseptic purposes; to dilate or contract pupil; to relieve pain or pressure, treat diseases and infections, anesthetize, stain and lubricate.

SCOPE:

- All paediatric patients

PROCEDURE:

- Adhere to Standard Precautions.
- Check the physician order for the patient name, medication, dosage, frequency and site to be instilled.
  - O.S.= left eye
  - O.D. = right eye
  - O.U. = both eyes
- Explain the procedure to the parent/child.
- Wash hands, gather supplies.
- Wash hands and don gloves.
- Position infants and young children in a supine position with both arms extended over the head, on each side of the head to prevent movement. Secure assistance as needed.
- Older children that are cooperative may lie in a supine position or sitting position with the head extended back.
- Ask the patient to look up if they will cooperate.
- Wipe away any exudates or drainage with a gauze sponge soaked in tepid water, cleaning the eye from the inner canthus to the outer canthus. Use a clean gauze for each stroke and eye.
- Fill the dropper with slightly more than the desired amount of solution.
- The wrist of the hand being used to give the medication should be placed on the child's forehead to steady the hand.
- Gently pull down the lower eyelid with the other hand by placing gentle pressure downward below the eyelashes exposing the conjunctival sac.
- Position the dropper so that the drug will fall into the lower eyelid, never directly on the eye.
- Instill the prescribed number of drops. DO NOT touch the eye with the dropper.
- Keep the eye closed for 1-3 minutes.

- For infants that clench the lids tightly closed the drops can be placed in the nasal corner where the lids meet. The medication pools in this area, and when the child opens the eye the medication flows into the conjunctiva sac.
- Apply gentle pressure to the inner canthus to prevent drainage into the nasopharynx and back of the throat. This also prevents systemic absorption of the medication.
- To apply eye ointment follow the above and squeeze a ribbon of medication along the lower conjunctival sac.
- Praise the child for cooperation.
- Discard soiled supplies in appropriate container.
- Remove gloves and wash hands.
- Provide parent/caregiver with teaching tools including.
    - Medication, dose, time, frequency of administration.
    - Actions and side effects of the medication.
    - Age appropriate techniques of administration.
    - Reasons for notification to nurse or physician.
- Document in the patient's record.

92. PEDIATRICS – MEDICATIONS: PEDIATRIC EARDROP(S) ADMINISTRATION

PURPOSE:

- To introduce eardrops into the ear, usually to treat an ear infection or inflammation, to soften cerumen for later removal, and /or for local anesthesia.

SCOPE:

- All paediatric patients

PROCEDURE:

- Check the physician order for the:
  - Patient name.
  - Medication.
  - Dose.
  - Time.
  - Route.
- Wash hands and gather supplies.
- Explain the procedure to the parent and child.
- Wash hands and don gloves.
- Position child lying on the side opposite the ear to be instilled.
- Position the wrist of the hand administering the medicine on the patient's cheek or head to steady the hand.
- Position the dropper so the drops fall against the side of the canal.
- Instill the correct number of drops into the canal.
- After instilling, insert a wick if ordered.
- Attempt to keep the patient lying in the same position for 1 minute.
- Gently massage the front of the ear to facilitate the flow of the medication intoinside of the ear.
- Discard soiled supplies in appropriate container.
- Remove gloves and wash hands.
- Have parent/caregiver do return demonstrations as needed.
- Document the procedure in the patient's record.

93. PEDIATRICS – MEDICATION: INTRAMUSCULAR INJECTION: INFANT

PURPOSE:

- To administer a prescribed dose of medication into a large muscle.

SCOPE:

- All paediatric patients

EQUIPMENT:

- Disposable, sterile syringe with 22-25 gauge, 5/8 to 1 inch needle
- Medication
- Alcohol wipes
- Gauze or cotton balls
- Self-adhesive bandage
- Gloves
- Topical anesthetic
- Extra 22-25 gauge, 5/8 to 1 inch needle
- 19-gauge filter needle (optional)

PROCEDURE:

- Adhere to Standard Precautions.
- Identify the patient and explain the procedure to the caregiver.
- Have the medication at room temperature.
- Check doctor's order for time, dosage, frequency and route of administration.
- Locate the site:
  - Vastuslateralis: Palpate to find greater trochanter and knee joints, divide vertical distance between these two landmarks into thirds, inject into middle one third.
  - Ventrogluteal: Palpate to locate greater trochanter, anterior superior iliac tubercle (found by flexing thigh at hip and measuring up to 1-2 cm above crease formed in groin), and posterior iliac crest; place palm of hand over greater trochanter, index finger over anterior superior iliac tubercle, and middle finger along crest of ilium posteriorly as far as possible; inject into center of V formed by fingers.
  - Deltoid: Locate acromion process; inject only into upper third of muscle that begins about two finger-breadths below acromion but is above axilla.
- Administer medication:
  - Check that the needle is securely attached to syringe.
  - Cleanse top of vial with alcohol wipe or break ampule with gauze.

- Draw up the correct dosage of medication; expel any air in the syringe.
- Place the infant or child in a comfortable position. You may need a caregiver to hold infant.
- Prepare selected site with alcohol wipe; allow to air dry.

- Insert needle quickly with dart like motion. Use the Z track and/or air-bubble technique, as indicated.
- Avoid any depression of the plunger during insertion of the needle.

  [Note: Aspiration of IM is not indicated for immunizations and vaccinations. Aspiration may be indicated for injections that include large molecule injections i.e. Penicillin. If there is no blood aspirated, medication may be injected. If there is blood aspirated, withdraw needle, discard medication and syringe properly and repeat procedure, choosing another injection site.]
- Inject medication slowly at rate of 1 mL/10 seconds.
- Withdraw the needle quickly, keeping slight pressure over the area to avoid the tissue from pulling upward as the needle is withdrawn.
- Hold gauze firmly over injection site. Massage if not contraindicated. Apply self-adhesive bandage.
- Discard soiled supplies in appropriately container.
- Document the procedure inthe patient's record.

94. PEDIATRICS – MEDICATION: SUBCUTANEOUS INJECTION

PURPOSE:

- To inject a prescribed medication into subcutaneous tissue between the fat and the muscle.

SCOPE:

- All paediatric patients

EQUIPMENT:

- Medication
- Alcohol swabs/wipes
- Gauze
- Syringes with 24-30-gauge needles
- 19-gauge filter needle (optional)
- Gloves
- Puncture-proof container

PROCEDURE:

- Adhere to Standard Precautions.
- Check doctor's order for dosage, frequency and route of administration.
- Identify the patient and explain procedure to caregiver and patient, if age appropriate.
- Draw medication. Recheck medication dosage.
- Select injection site.
- Clean site with alcohol swabs, cleaning center first and moving outward in circular motion.
- Pinch up skin gently to elevate subcutaneous tissue.
- Insert needle at 45-degree angle for child with little subcutaneous tissue or 90-degree angle for child with more subcutaneous tissue.
- Once needle is inserted, skin can be released.
- Inject medication.
- Withdraw needle. Hold gauze over site and apply pressure for a few seconds.
- Discard soiled supplies in appropriate container.
- Document the procedure in patient's record.

95. PEDIATRICS – MEDICATION: ADMINISTRATION OF NEBULIZER TREATMENT

PURPOSE:

- To administer a nebulizer treatment to increase the efficacy of medication on the child's airway and lungs

SCOPE:

- All paediatric patients

PROCEDURE:

- Adhere to Standard Precautions.
- Gather all equipment.
- Identify the patient and explain procedure to caregiver and patient, if age appropriate.
- Auscultate lung sounds.
- Assemble the nebulizer medication chamber and tubing according to manufacturer instructions.
- Attach aerosol tubing to nebulizer outlet port.
- Following the prescribed amount of medication, fill nebulizer medication chamber with dose.
- Attach patient's appliance (mouthpiece or mask).
- Verify that all connections are secure.
- Instruct the patient to hold the mouthpiece between his/her lips with gentle pressure.
- Power on the nebulizer. A fine mist should appear in the mouthpiece/mask. This is a sign that the machine is working properly.
- Instruct the patient to sit in an upright position. It is helpful if the caregiver can hold the child if he/she is unable to sit upright or will not sit still. Most nebulizers work best when the chamber is kept upright. This ensures that the humidified air does not bypass the medication chamber.
- Gently tap the nebulizer cup frequently to allow for even distribution of medication.
- Instruct the patient to breath normally. Deep breathing is not necessary.
- Once the liquid medication is gone and mist no longer forms, power off the machine.
- Instruct the patient to gargle with warm water after the treatment.
- Auscultate lung sounds.
- Document in the patient's record

96. PEDIATRICS – RESPIRATORY: NASO/OROPHARYNGEAL SUCTIONING

PURPOSE:

- To remove secretions blocking the trachea and to maintain an open airway.

SCOPE:

- All pediatric patients

EQUIPMENT:

- Gloves
- Suction apparatus capable of producing negativepressure (standard is 80 mm of pressure, range is from 40-100 mm)
- Container for secretions
- Suction catheter (size 6, 8 or 10 French G.)
- Clean containers for rinsing catheters
- Normal saline solution
- Sterile water
- Supplemental oxygen

PROCEDURE:

- Adhere to Standard Precautions.
- Gather all equipment.
- Identify the patient and explain procedure to caregiver and patient.
- Turn on suction to check system and regulate pressure, if indicated.
- Set up saline cup and open catheter.
- Position the child facing straight ahead with his/her head slightly tilted back. The infant should be placed with chin up, head tipped slightly backward.
- Determine how far to insert the catheter. Measure the catheter using the distance between the tip of the nose and the ear lobe.
- Lubricate catheter tip with sterile water or saline.
- Leaving the vent in the catheter open, insert the catheter into the external nares, point the catheter upward to the septum, then downward.
- If obstruction is encountered, DO NOT force, but remove and insert at another angle or try the other nostril.
- For suctioning, intermittently occlude vent with the thumb. Slowly rotate the catheter between the thumb and finger of the other hand while removing the catheter. Never suction for more

than 5 seconds in an infant, 15 seconds in an older child, at one time. Allow 1 to 2 minutes to recover and/or reoxygenate with supplemental oxygen.

- Monitor the child's heart rate and SpO2 throughout the procedure.
- Repeat Steps in other nostril.
- Last, suction oral secretions.
- Remove the catheter slowly when suctioning is completed. Clean the catheter and connecting tubing by aspirating remaining sterile water or saline solution.
- Turn off suction. Disconnect catheter.
- Discard soiled supplies in appropriate containers.
- Document in patient's record.

97. PEDIATRICS – RESPIRATORY: TRACHEOSTOMY TIE CHANGE

PURPOSE:

- To prevent infection and skin breakdown of tracheostomy and surrounding area.

CONSIDERATIONS:

- Child should be restrained, as needed. Two adults are preferred for doing procedure. If only one person available, put new ties on before cutting old ties.
- Have all equipment assembled prior to beginning the procedure.
- Place a blanket roll under the patient's shoulders to provide access to the tracheostomy.
- Suction before changing ties.
- Placement of the knot should be alternated at each change. DO NOT place over the carotid artery or at the nape of neck.

SCOPE:

- All paediatric patients

EQUIPMENT:

- Twill tape (or alternate type of ties):
- Cut 2 pieces of twill tape, each 12 inches long
- Cut the end of the tape at a diagonal to make threading easier
- Check to see that the end will not unravel
- Make a slit in each twill tape 1/2 inch from one end Scissors
- Blanket roll
- Tracheostomy tube of the same size
- Gloves

PROCEDURE:

- Adhere to Standard Precautions.
- Identify and explain procedure to caregiver and patient, in age appropriate manner.
- Have assisting adult place fingers on each side of the flanges to hold the tracheostomy tube as close to the neck as possible.
- Carefully cut and remove tracheostomy ties without tugging on tracheostomy tube.
- Thread the slitted end of the tape up through the tab and pull through past the slit.
- Bring the free end of the tape through past the slit and pull securely.
- Repeat for other side.
- Tie the ends of the tape in a loop around the neck to secure the tracheostomy tube.
- Apply gentle tension until the ties are snug around the neck.
- Tie the ends into a bow-tie.

- Check the ties for tightness. One finger should just fit between the ties and neck. If possible, check the tension with child lying down and sitting up with neck bent toward the chest.
- Adjust the tightness as necessary.
- Pull ends of bow-tie through making a secure double knot. Tie one more loop making it a triple knot.
- Document in patient's record.

98. PEDIATRICS – RESPIRATORY: TRACHEOSTOMY SUCTIONING

PURPOSE:

- To clear the airway and remove secretions which cannot effectively be coughed up.

SCOPE:

- All paediatric patients

EQUIPMENT:

- Suction apparatus capable of producing negative pressure (standard is 80 mm of pressure, range is from 40-100 mm)
- Container for secretions
- Suction catheter (the diameter should be approximately half the diameter of the tracheostomy tube) No. 8-10
- Two cups
- Sterile saline
- Sterile water
- Gloves
- Supplemental oxygen

PROCEDURE:

- Adhere to Standard Precautions.
- Identify the patient and explain procedure to caregiver and patient, in age appropriate manner. Wash hands before procedure and apply gloves.
- Test suction apparatus.
- Check tracheostomy tube to be sure it is tied securely.
- Hyperventilate the child with 100% oxygen before and after suctioning (using a bag-valve-mask or increasing the Fio2 ventilator setting).
- Remove sterile catheter from wrapping and attach to plastic suction tubing.
- Aspirate secretions.
- Leaving thumb off air vent, gently insert catheter into tracheostomy to premeasured line.
- Gently aspirate secretions by covering the air vent and rotating catheter. Never exceed 3 to 4 seconds with each suctioning.
- In presence of tenacious secretions, 0.5 mL to 2 mL of sterile saline may be instilled into tracheostomy tube prior to suctioning.
- Each time you remove the catheter, allow the patient 3 to 5 breaths before repeating procedure or re-oxygenate with supplemental oxygen.

- The oral cavity can be suctioned after the tracheostomy tube is cleared. Never suction oral cavity first unless catheter is changed before inserting into tracheostomy tube.
- Rinse catheter tubing with sterile water to prevent clogging.
- Auscultate lungs to ascertain results.
- Discard soiled supplies and solutions appropriate container.
- Document in patient's record.

99. BREAST EXAMINATION

PURPOSE

- To provide instruction regarding how to perform a clinical breast exam.

SCOPE OF SERVICES

- As per advised

PROCEDURE

- Adhere to Standard Precautions.
- Identify the patient and explain procedure to patient.
- Have patient undress from the waist up. First, have the patient sit up with her hands on her hips. Inspect the breasts for size, shape, and symmetry. Then ask the patient to squeeze her arms inward as she continues to keep her hands on her hips. Inspect the breasts again, as above. Have the patient raise both arms above her head and inspect the breasts again. Finally, ask the patient to bend forward at the waist and inspect the breasts again.
- Visually observe the patient's breast for abnormalities in size or shape, or changes in the skin of the breasts or nipple.
- Ask the patient to lie down for the rest of the breast exam. Examine one breast at a time. Using the pads of your fingers, gently palpate the patient's breast. Use the finger pads of your 3 middle fingers. Use overlapping dime-sized circular motions of the finger pads to feel the breast tissue. Use 3 different levels of pressure to feel all the breast tissue. Light pressure is needed to feel the tissue closest to the skin, medium pressure to feel a little deeper, and firm pressure to feel the tissue closest to the chest and ribs.
- Special attention should be given to the shape and texture of the breasts, location of any lumps, and whether such lumps are attached to the skin or to deeper tissues. The area under both arms should also be examined.
- Move the breast around in an up and down pattern starting at an imaginary line drawn straight down the side from the underarm and moving across the breast to the middle of the sternum. Be sure to check the entire breast area going down until you feel only ribs and up to the neck or clavicle.
- Have patient sit up and get dressed.
- Document in patient's record.

100. PERINEAL CARE

PURPOSE

- To cleanse the perineal area, minimize irritation and infection and promote comfort.

SCOPE OF SERVICES

- To all female patients who are unable to perform self – care.

EQUIPMENT

- Small container with warm water
- Clean wash cloth(s)
- Towel
- Bedpan
- Disposable drawsheet/ Pad to protect bed (may be thick towel on a piece of plastic)
- Gloves
- Apron or gown (optional)

PROCEDURE

- Adhere to Standard Precautions.
- Explain procedure to patient.
- Place protective pad/disposable drawsheet under the patient's buttocks.
- Place patient on bedpan with legs bent and separated, feet flat on bed. Drape sheet over patient for privacy and warmth.
- Fill small container with warm water.
- Check the water temperature and have the patient test to comfort level. Pour warm solution slowly over the perineal area.
- Wash perineum with soap and water, wiping front to back. Use a clean area of the washcloth for each stroke. Starting on side closest to you, cleanse area using a downward stroke for right side, for center and for left side.
- Rinse by pouring warm water slowly over the perineal area.
- Remove patient from bedpan.
- Pat area dry with towel, being sure to turn patient on side. Dry back area.
- Position patient for comfort and safety.
- Empty and clean bedpan.
- Return equipment to designated area.

- Discard soiled supplies in appropriate containers.
- Document in patient's record.
- Report any change in condition to physician.

101. POST PARTUM MANUAL EXPRESSION OF MILK

PURPOSE

- To express breast milk when unable to nurse infant; to relieve engorgement; and to stimulate milk production.

SCOPE OF SERVICES

- To all post-partum patient admitted in hospital and who are unable to nurse infant.

EQUIPMENT

- Clean container (jar or glass that has been washed with hot, soapy water and airdried)
- Towel
- Plastic bottle
- Gloves

PROCEDURE

- Adhere to Standard Precautions.
- Identify patient and explain procedure to patient.
- Instruct patient in importance of washing her hands before expressing milk. 4. Seat patient comfortably.
- Apply warm compresses to her breast and instruct her in breast massage as follows:
  - Use flattened hands to exert gentle pressure in a circular motion on the breast starting at the chest wall and spiraling around the breast toward the areola. Use palms of hands, not fingers, for firm pressure. The warm compresses and breast massage should help stimulate "let down."
  - Position thumb pad 1 inch behind the nipple and finger pad 1 inch behind the nipple to form a "C." Avoid cupping the breast.
  - Push straight in toward chest wall without spreading fingers apart. Roll the thumb and fingers forward simultaneously to compress and empty milk reservoirs without hurting breast tissue.
  - Rhythmically repeat position, push, roll and rotate the thumb and finger position to empty other milk reservoirs.
  - DO NOT slide fingers on skin, keep them gently against skin.

- Switch to other breast after 3 to 5 minutes. Alternate using massage and expression until breasts are empty or engorgement relieved.

- Transfer expressed milk into clean plastic bottle or plastic bottle liner, which can be tied with rubber band and frozen.
- Expressed milk can be stored in the refrigerator (39 ^{0}F or -4^0 C) if used within 5 days or frozen for longer storage periods.
- Frozen milk may be stored in the freezer compartment of a refrigerator (5 ^{0}F or -15 ^{0}C) for 2 weeks or in the freezer compartment of refrigerator with separate doors (0 ^{0}F or -18 ^{0} C) for 3 months. Frozen milk may be stored in a deep freezer (-4 ^{0}F or -20 ^{0} C) for 6 months. Store it at the back of the freezer, never in the door section. Instruct patient to date each bottle or plastic liner. Use the oldest milk first.
- DO NOT re-freeze breast milk.
- DO NOT save milk from used bottle for use at another feeding.
- Instruct the patient in the procedure and proper storage of breast milk.
- Document in patient's record.

102. BREAST CARE FOR INITIATING BREAST FEEDING

PURPOSES

- To prepare the woman for breast feeding
- To correct the minor defects of the breasts

SCOPE OF SERVICES

- To all post-natal mothers.

EQUIPMENTS

A tray containing

- Bowl with cotton swabs
- Sponge clothes -2
- Soap in a soap dish
- Kidney tray
- Mackintosh lined with towel
- One basin
- Jug of hot water
- Screen

PROCEDURE

- Wash hands
- Assemble all articles
- Explain the procedure to the mother
- Take the articles to the bedside
- Screen the mother
- Make the mother sit.
- Expose one breast at a time
- Place the mackintosh under the breast / over the lap
- Pour hot water in the basin
- Wash the breasts with sponge clothe
- Clean the nipples and remove all the crust with cotton swab to prevent the blockage of the duct.
- Express little milk to ensure the patency of nipple
- Check for inversion of nipples or engorgement of breasts.

- Dry the breast with towel. Before putting the baby to breast, any discharge from the eyes or nose is to be cleaned and napkin must be changed.
- Put the baby on the breasts.
- Advise the mother to wear supporting bra.
- Make the mother and child comfortable.
- Remove all articles and screen from the bedside and replace properly
- Wash hands.
- Document the procedure.

103. CARE OF ENGORGED BREAST

PURPOSES

- To reduce discomfort of the mother by relieving pain and tenderness
- To maintain lactation
- To prevent further complications of the breasts.

SCOPE OF SERVICES

- To all patient who have breast engorgement postnatally.

EQUIPMENTS

A tray containing

- A medium sized basin with hot water
- Four sponge clothes
- Kidney tray with paper bag
- Mackintosh lined with towel
- A few pads of cotton
- A small towel to dry the mother after the procedure.
- Screen for privacy.

PROCEDURE

- Bring the tray to the bedside
- Explain the procedure to the mother
- Screen the mother
- Put the mother in a sitting or side lying position
- Expose mother's breast
- Place the mackintosh lined with treatment towel under the breasts.
- Soak two sponge clothes in hot water, wring the sponge clothes well, test their temperature and apply on breasts.
- Soak the other two sponge clothes in hot water.
- Change the sponges' clothes when cold.
- Continue fomentation of the breast for 10-15 minutes.
- Put baby to the breasts, after drying
- Express the rest of the milk from the breast manually in to the kidney tray.

- Clean the breast and wipe it dry.
- Ask the mother to wear fitting bra. She can use cotton pads in the bra for absorbing the milk secretion from the breast.
- Wash and replace the articles.
- Record condition of the breasts and nipples.
- Document in nurse's notes.

104. LABORATORY, SPECIMENS AND VENIPUNCTURE – NEEDLE AND SYRINGE

PURPOSE:

- To obtain blood specimen for diagnostic analysis using a needle and syringe.

SCOPE:

All patients who need blood specimen to be collected

PROCEDURE:

- Adhere to Standard Precautions.
- Explain the procedure and purpose to the patient/caregiver.
- Assemble the equipment on a clean surface close to the patient.
- Place patient in comfortable position, making sure that site is accessible.
- Prepare needle and syringe.
- Apply tourniquet above selected puncture site.
- Clean site with alcohol applicator. Allow to air dry.
- Anchor vein by holding skin taut.
- Remove needle cover, insert needle into vein at 15- 30 degree angle with bevel facing up.
- Gently pull back plunger or syringe so the blood enters the tube. (Important to hold needle and syringe still to prevent perforating the vein.)
- When blood fills the syringe, release tourniquet.
- When syringe is full, gently remove needle. Place 2x2 gauze over puncture site, withdraw needle slowly. Needle should be removed at an angle nearly flush with the skin to prevent injury to the wall of the vein. Activate safety device (cover needle with protective shield.).
- Apply firm pressure to area until bleeding stops.
- Transfer blood gently into appropriate tubes in order noted previously. It is best if a transfer device is used. Those tubes containing additives are gently inverted 5 to 6 times to mix the sample thoroughly. DO NOT shake the tube.
- Apply self-adhesive bandage to puncture site.
- Discard soiled supplies in appropriate containers.
- Label tube with patient's name, date, time drawn.
- Document in patient's record:

105. OBTAINING AND TRANSPORTING AND REQUISITION DOCUMENTATION (BLOOD SAMPLE)

PURPOSE:

- To provide guidance for obtaining and/or transporting lab specimens in order to minimize staff exposure to blood borne and other pathogens. To provide guidance for accurate completion of lab requisition forms.
  - — Follow appropriate procedures for specimen procurement.
  - — Specimen is obtained using caution to avoid accidental exposure through spills, spatters, sprays or needle sticks. Spills should be cleaned up promptly. (See Handling of Blood and Body Fluid Spill.)
  - — Attention should be paid to changes in temperature that may affect transportation of specimens and follow individual laboratory recommendations.
  - — Individual labs may have specific requirements for requisition requests

SCOPE:

- All areas of hospital where sample collection is applicable

PROCEDURE:

- Adhere to Standard Precautions.
- Blood and other specimens are:
  - — Labeled with patient's name, date of birth (DOB), and date and time of specimen collection.
  - — If the outside of the specimen container is visibly contaminated with blood or body fluids, clean with a disinfectant, i.e., 5.25% sodium hypochlorite (household bleach), diluted 1:10 water (1 part bleach with 9 parts water) or 70% to 90% isopropyl alcohol. Disinfectant is to be in contact with container at least two minutes or an outer bag should be used.
  - — Place in an impervious, leak-proof container, e.g., cooler. Use ice pack to maintain consistent temperature per laboratory recommendations.
  - — Container must be labeled with biohazard label or be red in color.
  - — If a specimen could puncture the primary container, it must be placed in a secondary puncture-proof, labeled or red container for transport.
  - — Delivered to the lab or left for courier for transport per agency policy
- Document in patient's record according to agency policy.

106. BLOOD GLUCOSE MONITORING WITH BLOOD GLUCOSE METER

PURPOSE

- To obtain blood glucose results in the home using a blood glucose meter/glucometer.

SCOPE OF SERVICES

- As per advised.

PROCEDURE

- Adhere to Standard Precautions.
- Explain procedure and its purpose to patient and/or caregiver.
- Assemble the equipment on a clean surface.
- Follow manufacturer's instructions on use of the meter for blood glucose testing.
- Obtain blood sample from finger.
- Discard soiled supplies in appropriate containers.
- Follow agency guidelines for quality control requirements for blood glucose meters, if applicable.

107. URINE TESTING FOR KETONES

PURPOSE

- To monitor diabetes control by measuring for urine acetone.

SCOPE OF SERVICES

- To all patients who require urine ketone testing.

PROCEDURE

- Adhere to Standard Precautions.
- Inspect bottle to ensure the reagent strips have not expired.
- Remove one reagent strip from container and replace cap. (One sealed strip may be opened.)
- Follow manufacturer's guidelines for specific steps in testing urine.
- Discard soiled supplies in appropriate containers.
- Document in patient's record:
- Report to physician if follow-up care is needed.

108. CATHETERIZED SPECIMEN COLLECTION OF URINE

PURPOSE

- To obtain a urine specimen from a patient with a Foley catheter for laboratory analysis.

SCOPE OF SERVICES

- To all patient who have indwelling urinary catheter and advised urine sample collection.

PROCEDURE

- Adhere to Standard Precautions.
- Explain procedure to patient.
- Assemble equipment and attach needle to syringe.
- Clamp off drainage tubing distal to, or just below, the connection junction of the catheter and drainage bag tubing for 20-30 minutes. This will provide an accumulation of urine from which a specimen can be drawn.
- Thoroughly cleanse the Foley catheter at port, if available, or close to point of connection to drainage tubing with antimicrobial swabs.
- Insert the needle gently into Foley catheter (if the catheter is a self-sealing type) at a 45 degree angle, or if Luer-lock connection, twist on a sterile syringe to the port and slowly withdraw 20-30 mL of urine.
- Remove needle from Foley catheter and push urine into sterile specimen container. Cover container.
- Swab needle entrance site with antimicrobial swab.
- If clamp is used, it is IMPERATIVE that the clamp be removed
- Write patient's name, date and time of collection on label; place on container.
- Discard soiled supplies in appropriate containers.
- Deliver specimen to designated laboratory immediately or instruct caregiver to deliver specimen.
- Document in patient's record:

109. SPUTUM SPECIMEN COLLECTION

PURPOSE

- To obtain specimen for the culture of respiratory pathogens by tracheal suctioning via nasopharyngeal route.

SCOPE OF SERVICES

- To all patient who are advised sputum collection for laboratory investigation.

PROCEDURE

1. Adhere to Standard Precautions.
2. Expectoration:
   - Explain procedure to patient.
   - Position patient in high-Fowler's position.
   - Have patient rinse mouth with water.
   - Instruct patient to breathe deeply, cough and expectorate into sterile container. Instruct patient to avoid touching the inside of the container
   - Cap and label container immediately. Note on label any antibiotic therapy patient is receiving or has recently completed.
   - Offer tissue to patient to wipe mouth.
3. Tracheal suction:
   - Explain procedure to patient.
   - Check suction machine to be sure that it is operating correctly.
   - Fill basin with normal saline.
   - Place patient in semi- to high-Fowler's position.
   - Connect in-line trap collection container to the suction tubing.
   - Put on gloves. Attach sterile suction catheter to tubing of specimen trap container.
   - Instruct patient to tilt head back. Lubricate catheter with normal saline and gently pass suction catheter through nostril.
   - If obstruction felt in nares, attempt other side.
   - As catheter reaches juncture of larynx, patient will cough. Immediately pass catheter into trachea. At this time, instruct patient to take several deep breaths to ease passage of catheter.
   - Apply suction for 5 to 10 seconds. Discontinue suction and remove catheter.

- Detach catheter from specimen trap. Holding the catheter in gloved hand, remove glo enclosing the catheter, and dispose in impervious bag.
- Disconnect specimen container from suction machine, leaving tubing attached to lid. Seal container by looping tubing to other opening on lid.
- Label container. Note on label any antibiotic therapy patient is receiving or has recently completed.

4. Discard soiled supplies in appropriate containers.
5. Transport specimen in an appropriate container.
6. Document in patient's record.

VARDHMAN MAHAVIR MEDICAL COLLEGE & SAFDARJANG HOSPITAL, NEW DELHI-29

Initial Nursing Assessment Form

Name: **UHID No.** **IP NO:** **Age/Sex:** **Ward/Unit:** **Bed. No:**

Father's/ Husband's Name:

Provisional Diagnosis: **Vulnerable: Y / N** **Date & Time of admission:** **MLC/ Non MLC**

(Initial Assessment should be done within 4hrs after admission)

1	Date: Day:	**2.**	Time:
3	Temp: Pulse/HR: /mt Resp: /mt BP: mm of Hg SpO2:	**4**	LOC: Conscious /Oriented / Semi Conscious / Unconscious

5 **Pain Score**

0 No Pain | 1 Little Bit | 2 Little More | 3 Mild | 4 Moderate | 5 Severe

Time	Score	Intervention

If pain score is more than 4 inform Doctor on duty and do periodic reassessment

6	Diet Advised: Normal /Oral Fluid /NGF /IV fluid /Special	**7**	
8	Any Special Procedure: Remarks:		
9	Any history of drug/food allergy: -Yes/No If yes, Name of drug /food:		
10	Any history of blood/blood products transfusion: - Yes/No If yes, Any history of transfusion reaction: - Yes/No	**11**	Restraints Required: - Yes/No Type of restraint in use: - Chemical/Physical Monitoring done: - Yes/No Describe if any complication due to restraint:

Insertion of tubing	Date	Remarks
I/V Cannula		
Central Line		
Foley's catheter		
Ryle's tube		
Other Drains		

12 Any Bed Sore: - Yes/No If yes: -mention stage

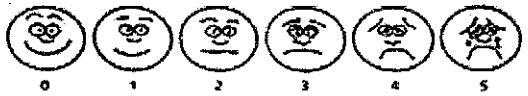
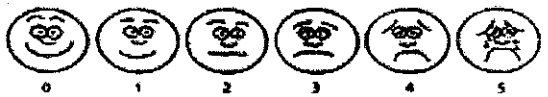
Skin intact, erythematous and does not blanch. Changes in skin temperature (warmth or coolness), / sensation (pain, itching)	Stage -1	Action Taken (CAPA)
skin loss involving epidermis (top layer of skin), dermis, or both. the ulcer is superficial and looks like as an abrasion, blister, or shallow crater.)	Stage -2	
involving damage to the subcutaneous tissue that may extend down but not underlying connective tissue (fascia).)	Stage -3	
Full-thickness skin and tissue loss with exposed or directly palpable fascia, muscle, tendon, ligament, cartilage or bone in the ulcer. Slough and/or eschar may be visible	Stage -4	

13	Name & Signature of Nursing Officer: Date& Time:	**14**	Name & Signature of Sr. Nursing Officer: Date & Time:

VARDHMAN MAHAVIR MEDICAL COLLEGE & SAFDARJANG HOSPITAL, NEW DELHI-29

Nursing Re-Assessment Form

Name: **UHID No.** **IP No:** **Age/Sex:** **Ward/Unit:** **Bed. No:** **MLC/ Non MLC**

1	Date: Time:		1	Date: Time:		1	Date: Time:	
2	LOC: Conscious /Oriented /Semi Conscious/ Unconscious Temp: Pulse/HR: /mt Resp: /mt BP: mm of Hg SpO2:		2	LOC: Conscious /Oriented /Semi Conscious/ Unconscious Temp: Pulse/HR: /mt Resp: /mt BP: mm of Hg SpO2:		2	LOC: Conscious /Oriented /Semi Conscious/ Unconscious Temp: Pulse/HR: /mt Resp: /mt BP: mm of Hg SpO2:	
3	**Pain Score**  0 1 2 3 4 5 No Little Bit Little More Mild Moderate Severe		3	**Pain Score**  0 1 2 3 4 5 No Little Bit Little More Mild Moderate Severe		3	**Pain Score**  0 1 2 3 4 5 No Little Bit Little More Mild Moderate Severe	
	Time / Score / Intervention / signature			Time / Score / Intervention / signature			Time / Score / Intervention / signature	
4	Insertion of tubing / Date / Remarks		4	Insertion of tubing / Date / Remarks		4	Insertion of tubing / Date / Remarks	
	I/V Cannula			I/V Cannula			I/V Cannula	
	Central Line			Central Line			Central Line	
	Foley's catheter			Foley's catheter			Foley's catheter	
	Ryle's tube			Ryle's tube			Ryle's tube	
	Other Drains			Other Drains			Other Drains	
5	Restraints Required: - Yes/No Type of restraint in use: - Chemical/Physical Monitoring done: - Yes/No Describe if any complication due to restraint		5	Restraints Required: - Yes/No Type of restraint in use: - Chemical/Physical Monitoring done: - Yes/No Describe if any complication due to restraint		5	Restraints Required: - Yes/No Type of restraint in use: - Chemical/Physical Monitoring done: - Yes/No Describe if any complication due to restraint	
6	Any Bed Sore: - Yes/No If yes: - stage & action taken		6	Any Bed Sore: - Yes/No If yes -stage & action taken		6	Any Bed Sore: -Yes/No If yes: - stage & action taken	
	Stage -1			Stage -1			Stage -1	
	Stage -2			Stage -2			Stage -2	
	Stage -3			Stage -3			Stage -3	
	Stage -4			Stage -4			Stage -4	
7	Signature of Nursing Officer Signature of Sr. Nursing Officer		7	Signature of Nursing Officer Signature of Sr. Nursing Officer:		7	Signature of Nursing Officer Signature of Sr. Nursing Officer	

VARDHMAN MAHAVIR MEDICAL COLLEGE & SAFDARJANG HOSPITAL, NEW DELHI-29
MEDICATION ORDER & ADMINISTRATION CHART

Name: **UHID NO:** **IP No.:** **Age/Sex:** **Ward/Unit:** **Bed. No.:**

Father's / Husband's Name: **Provisional Diagnosis:** **MLC/ Non MLC:**

SNo	Medication Order (To be filled by Doctor with Signature, Name, Date and Time)				Medication Administration (To be filled by Nursing Officers)																	
	Name of Drug with Dose & Frequency	Dose	Freq	Route	Day:			Date:			Day:			Date:			Day:			Date:		
					Time	Sign	Time	Sign	Time	Sign	Time	Sign	Time	Sign	Time	Sign	Time	Sign	Time	Sign	Time	Sign
1.																						
2.																						
3.																						
4.																						
5.																						
6.																						
7.																						
8.																						
9.																						
10																						
11																						
12																						

VARDHMAN MAHAVIR MEDICAL COLLEGE & SAFDARJANG HOSPITAL, NEW DELHI-29

NURSES PROGRESS NOTES

Name: **IP NO:** **UHID No.:** **Age/Sex:** **Ward/Unit:** **Bed. No.:**

Diagnosis: **MLC/ Non MLC:**

Nurses Notes (Morning)	Nurses Notes (Evening)	Nurses Notes (Night)
Day: **Date:** **Name &Sign:** **Time:**	**Name &Sign:** **Time:**	**Name &Sign:** **Time:**
Nurses Notes (Morning)	**Nurses Notes (Evening)**	**Nurses Notes (Night)**
Day: **Date:** **Name &Sign:** **Time:**	**Name &Sign:** **Time:**	**Name &Sign:** **Time:**
Nurses Notes (Morning)	**Nurses Notes (Evening)**	**Nurses Notes (Night)**
Day: **Date:**		

SAFDARJUNG HOSPITAL, NEW DELHI-110029

INTAKE OUTPUT CHART

NAME: _____ AGE: _____ SEX: _____ UHID No._____

IP NO: _____ WARD: _____ BED No. _____ UNIT: _____

All entries to be made in ml. (millilitres) DATE:

TIME	INTAKE				OUTPUT			SIGN
Day Total	ORAL/ RT feeding Type	Qty.	IV INFUSION Type	Qty.	URINE	SUCTION / RT Aspiration	DRAINAGE	
8 A.M								
9 A.M.								
10A.M.								
11 A.M.								
12 Noon								
1 P.M.								
2 P.M								
Total								
3 P.M								
4 P.M								
5 P.M								
6 P.M								
7 P.M								
8 P.M								
Total								
9 P.M.								
10 P.M.								
11 P.M.								
12 MN								
1 A.M.								
2 A.M.								
3 A.M.								
4 A.M.								
5 A.M.								
6 A.M.								
7 A.M.								
Total								
Total (24 Hrs)								
SIGN								

LIST OF CONTRIBUTORS

- Ms. Genevieve Chinir, Senior Nursing Officer
- Ms. Vineetha Nair, Senior Nursing Officer
- Ms. Bindu, Nursing Officer
- Ms. Anjali, Nursing Officer
- Ms. Soja Francis, Nursing Officer
- Mr. Ancil John, Nursing Officer
- Mr. Mrudul Mohan, Nursing Officer

This endeavor has been made possible by the contribution of large number of nursing professionals. The immense contribution of various experts in going over the manual minutely and repeatedly.

We would like to pay special gratitude to Mrs. Sunita Beniwal (Retired Officiating Nursing superintendent) who have been the backbone and constant source of support and encouragement in the preparation of this manual and Ms. H. Vungngaih Mawi Khiangte (Ex Sr. Nursing officer) for her professional knowledge and experience in making this manual a knowledge resource.

REFERENCES

1. Fundamentals of Nursing – A Procedure Manual, TNAI
2. Fundamentals of nursing, 6th edition, potter &perry
3. Lippincott Nursing Procedures 8Th Edition by LIPPINCOTT, Wolters Kluwer | Lippincott Williams & Wilkins.
4. Carol Taylor, Carol Lillis, Priscilla Le Mone: Fundamentals of Nursing , TheArt and Science of Nursing Care, 5th edition, Lippincott Williams & Wilkins, 2006
5. CTEVT, JICA: Nursing Procedure Manual(I), Fundamentals Nursing Procedure, 2004
6. AliceAugustine, Jebamani Sugustine,Accamma Chacko: Clinical Nursing Procedure Manual, B.I. Publications, 2004
7. Clinical Nursing Procedures: The Art of Nursing Practice 4th edition by Annamma Jacob
8. Basic Nursing Procedure Manual And Essentials (Pb 2016) by C.P. Thresyamma (Author)
9. Basic Concepts On Nursing Procedures, Jaypee, 2007
10. Caroline Bunker Rosdabl: Textbook of Basic Nursing, Seventh edition, Lippincott, 1999