Once you complete this section, you should be able to:

1. List the use and function of the equipment listed below
2. Discuss safety and maintenance of the equipment listed below:
   a. Oxygen delivery systems
   b. Humidifier
   c. Pulse oximeter
   d. Apnea monitor
   e. Suction machine
   f. Nebulizer
   g. CPAP and BiPAP (VPAP)
   h. Therapy vest/percussor
   i. Metered dose inhaler (MDI)
   j. Feeding pumps
   k. Coughalator/in-exsuffalator/cough assist
   l. Intrapulmonary percussive ventilation (IPPV)
   m. Hand ventilator

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Oxygen delivery systems

Oxygen is supplied in one of three ways: (1) compressed oxygen in a tank or cylinder, (2) liquid oxygen in a tank, or (3) with an oxygen concentrator.

Compressed oxygen

Compressed oxygen in a tank is the most common source of oxygen. The large cylinders are used as a stationary source and the small cylinders are available for transporting the client. Pure oxygen can be delivered at a wide range of flow rates.

Aluminum Cylinder Specifications*

<table>
<thead>
<tr>
<th>Name</th>
<th>Diameter (in)</th>
<th>Height (in)</th>
<th>Capacity (liters)</th>
<th>Weight (lb)**</th>
</tr>
</thead>
<tbody>
<tr>
<td>M-2</td>
<td>3.21</td>
<td>5.37</td>
<td>34</td>
<td>0.7</td>
</tr>
<tr>
<td>A or M-4</td>
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<td>8.4</td>
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<td>1.6</td>
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<tr>
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<tr>
<td>ML-6</td>
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<td>7.68</td>
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<td>425</td>
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<td>E or M-24</td>
<td>4.38</td>
<td>24.9</td>
<td>680</td>
<td>7.9</td>
</tr>
</tbody>
</table>

*Specifications vary slightly among manufacturers.
**Empty weight–without valve or oxygen.
**Liquid oxygen** is liquefied by cooling to –300 degrees F, making a concentrated amount available in a lightweight and easy-to-carry container similar to a thermos bottle. This type of oxygen lasts longer than oxygen in a conventional tank of the same size. However, it is expensive and evaporates if not used continuously. The tanks are about the same size as the large compressed gas tank and the smaller tanks can be filled from it. There is condensation on the outside of the tank because of the temperature of the gas. Thermal injuries are a concern and you should not touch any metal part on the liquid oxygen tank when refilling the smaller tank. You also need to avoid the mist that comes off the tank when refilling.

**Oxygen concentrator** is an electric machine that removes oxygen, nitrogen, water vapor, and hydrocarbons from room air. The oxygen it delivers varies from 91 percent to 98 percent. The concentrator is the most inexpensive source but it requires electricity, is not portable, and is often noisy. The concentrator is not an immediate source of oxygen, so it should not be used in an emergency and another source of oxygen should be available in the home.

Physicians order the administration of oxygen by liter flow or in a percentage that is FiO2 (fraction of inspired oxygen). It may be given continuously or PRN, per the parameters of the physician’s orders.

<table>
<thead>
<tr>
<th>Liter Flow</th>
<th>FiO2 percentage</th>
<th>Liter Flow</th>
<th>FiO2 percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>0.5 LPM</td>
<td>25</td>
<td>3 LPM</td>
<td>43</td>
</tr>
<tr>
<td>1 LPM</td>
<td>28</td>
<td>3.5 LPM</td>
<td>49</td>
</tr>
<tr>
<td>1.5 LPM</td>
<td>32</td>
<td>4 LPM</td>
<td>55</td>
</tr>
<tr>
<td>2 LPM</td>
<td>35</td>
<td>4.5 LPM</td>
<td>60</td>
</tr>
<tr>
<td>2.5 LPM</td>
<td>40</td>
<td>5 LPM</td>
<td>65</td>
</tr>
</tbody>
</table>

**Safety**
A sign stating “OXYGEN IN USE, NO SMOKING” should be posted at the entrance of the home and over the client’s bed. Oxygen must be checked and levels documented at the beginning and at the end of your shift. The large cylinder should be reordered when the tank reads 400 to 500 PSI. There should be 3 to 5 smaller portable cylinders in the home and reordered when you first open the last tank.
**Storage**
Mark the storage area with a precautionary sign, such as, “NO SMOKING” or “OXYGEN.” Store oxygen laying flat or standing upright in a secured stand provided by the durable medical equipment (DME) company in a cool, dry, well-ventilated place. It is not appropriate to store oxygen in a cupboard, a closet, the trunk of a car, under a bed (possibly obstructed by a mattress or bed linens), or stacked one on top of the other.

**Humidification**
When oxygen is ordered, the physician may order humidification. A humidification bottle attaches to the oxygen flow meter gauge. This will deliver cool mist humidity. The humidification bottle has a maximum and a minimum fill line. It is recommended to use sterile or distilled water to fill the canister. If heated humidity is ordered, it must be ordered with temperature parameters.

Oxygen can be delivered via nasal cannula, mask, or blow by. The method of delivery will be ordered by the physician. The nasal cannula is made up of oxygen tubing with two soft nasal prongs. The prongs are inserted into the nares and tubing may be secured to the face, usually with an attachment at back of the neck or looped over the ears and secured under the chin. The concentration of oxygen varies with the client’s inspiratory flow. The use of a nasal cannula is contraindicated if there is nasal obstruction.

The mask, which is a plastic reservoir, fits over the nose and mouth and is secured with an elastic strap around the head. There are holes on both sides of the mask for expiratory air. Oxygen concentration varies depending on respiratory rate, inspiratory flow, and the fit of the mask.

Blow by is the least accurate method of oxygen delivery. The oxygen tubing is placed by the client’s nose and/or mouth.

**Pulse oximeter**
The pulse oximeter is a noninvasive device for monitoring the client’s arterial oxygen. Continuous pulse oximetry will enable detection of hypoxemia and any other response to treatments or interventions that need to be documented in the Nurse’s Note. The pulse oximeter uses a wave of infrared light and a sensor via a probe that is placed on the client's finger, toe, foot, nose, or earlobe to measure oxygen saturations that are displayed on a monitor in percentages. A physician should order alarm limits for the high and low oxygen saturation level and high
equipment and low heart rate. Alarms showing absent or low pulse signals may be caused by the child moving or there may be problem with the placement of the probe (such as the photodiode sensor is not aligned across from the light-emitting diodes). The validity of the pulse oximeter data must be confirmed by evaluating the child’s clinical appearance and apical pulse in comparison to the displayed data.

Apnea monitor

The apnea monitor is used to detect episodes of apnea, bradycardia, and tachycardia. Proper use of the apnea monitor requires electrodes (leads) and a belt. The leads are positioned on the chest wall, one on each side, usually under the axilla, to detect the presence of respirations. When the infant stops breathing for more than the set apnea delay—usually 20 seconds—an alarm will sound. Alarms will also sound for low heart rate or rapid heart rate at limits ordered by the physician and set by the equipment company.

- Avoid use of powders and lotions because they interfere with the pick-up of the signal
- Monitor the skin under the belt and the electrodes and if redness occurs, move the electrodes over (but remember they must be opposite each other)
Suction machine

Portable and stationary suction machines are used to manage airway secretions. Both have collection reservoirs and motors. The vacuum pressure for infants and children is recommended at –80 to –120 mm Hg. The lower range of negative pressure is recommended unless secretions are thick and tenacious. The portable suction machine runs on a rechargeable battery and requires charging when not in use.

The suction machine reservoir must be emptied before the contents reach the full line. It is best to empty the container at the end of each shift. Wash it out with warm soapy water and rinse well. You can use a capful of mouthwash to help diminish the odor. The cleansing of the suction canister must be part of the infection control program in the home.

Nebulizer

The nebulizer converts liquid medication into a vapor for inhalation. It can be administered via mask or blow by. Blow by is the least effective method of delivery. Nebulizer treatments are ordered by the physician and include medication, frequency, and delivery method. The nebulizer cup and cap set should be cleansed after each use by rinsing in warm water. Disinfection of the nebulizer cup should be at the direction of the DME company. The nebulizer cup should always be inspected before use for cracks.

CPAP and BiPAP (VPAP)

Continuous positive airway pressure (CPAP) is a method of ventilation for clients who can breathe spontaneously. The CPAP machine delivers a constant stream of compressed air via a face mask or nasal cannula, maintaining a patent airway under constant air pressure. The machine blows air at a set pressure ordered by
the physician. BiPAP is bilevel positive airway pressure. This method is also called VPAP, variable positive airway pressure. Unlike CPAP, Bi-PAP (VPAP) uses an electronic circuit to monitor the client's breathing and provides two different pressures, a higher pressure during inhalation (IPAP) and a lower pressure during exhalation (EPAP). This system is used for clients who have difficulty breathing against a constant increased pressure and those who are unable to regulate their own breathing.

Care and maintenance
Check the power connections for worn or frayed cables. Reusable filters should be checked for wear and tear and replaced as needed. Each week, filters should be washed with mild soap solution, rinsed well with a water and vinegar solution, and thoroughly dried. For disposable filters, check the need for replacement. Continually inspect hoses for wear and tear. Replace connection points as needed. Wash tubing with mild soap solution by sloshing solution through tubing, rinse well with water/vinegar, dry thoroughly (can place the tubing over a shower curtain rod to air dry), and then reconnect. The mask and nasal prongs can be broken down and each piece washed with warm soap and water, allowed to air dry, and then re-assembled.

Therapy vest
The therapy vest is an airway clearance system that creates air flow patterns that rapidly inflate and deflate the vest. These air flow patterns help to loosen mucus in the lungs so it can be cleared by coughing or suctioning. The parts of the vest system are the air pulse generator, the inflatable vest, two air tubes that connect the vest to the generator, and the power cord. Some units have a remote control. On the front panel of the air pulse generator is the on/off switch. This display will also show the total number of hours the machine has been in use, the frequency, the pressure, and the length of treatment time. There may be a full vest, chest vest, or chest wrap made of a durable, nonstretch material. The vest must fit properly to get the optimal result. The use of the airway clearance vest, the frequency, pressure, and treatment time are all part of physician's orders.
Care and maintenance
All parts of the vest system can be cleaned with a soft cloth and mild detergent or a disinfectant. Do not immerse any part of the vest system in water. Cleaning should be limited to the exterior surfaces.

Percussor
The percussor is used to perform chest physiotherapy (CPT). It can be electric or manual and may be made from items such as an oxygen face mask or be electric. Hold the percussor firmly and tap vigorously over the lung fields. A percussor is used when the nurse’s hands are too large to perform CPT on an infant or child (the child should have a thin layer of clothing on for this CPT). With the electric percussor, turn the machine on and let the vibrations do the percussing over the lung fields. The frequency of CPT should be ordered by a physician.
Metered dose inhaler (MDI)

Many medicines are available as inhaled treatments. Inhaled methods deliver medicine directly to the airway, which is helpful in lung diseases. The patient and healthcare provider can choose from a variety of delivery systems for inhaling medication. A metered dose inhaler (MDI) is a self-contained, hand-held device that allows for intermittent delivery of an inhaled medication and dose. Bronchodilators are often successfully used in this form by children with asthma. In children younger than age 5 or 6, a spacer device, which allows the aerosolized particles to remain in suspension for a longer time, is attached to the MDI to help coordinate breathing and aerosol delivery.

The metered dose inhaler (MDI) consists of a pressurized canister of medicine in a plastic case with a mouthpiece. The chamber is composed of a plastic tube with a rubber-sealed end, a mouthpiece, and a valve to control mist delivery. The holding chamber assists delivery of medicine to the small airways of the lungs, which increases the medicine’s effectiveness. Its portable size, efficiency, and convenience make the MDI a desirable method for inhalation treatment.

The following steps outline the best method to use the chamber with a mask:

**How to assemble the chamber with mask:**

1. Remove the cap from the mouthpiece on the inhaler.
2. Put the inhaler mouthpiece into the rubber-sealed end of the chamber.
3. Mix the medication properly by shaking the inhaler and chamber.

**Taking an inhaled treatment:**

1. Hold the mask to the face so that both the nose and mouth are covered. It is important to create a good seal between the face and mask so that all medication will be delivered to the airways.
2. Press the inhaler once. The medication will be delivered into the chamber.
3. Breathe in and out at least 6 times (your diaphragm should move with each breath).
4. Remove the mask from the face.
5. Repeat steps 1 to 4 when more than one puff is prescribed.

**Cleaning and care for the chamber**

1. Clean the chamber once a week or sooner if needed. Regular cleaning will prevent powder accumulation inside the chamber.
2. Remove the back rubber piece for the chamber.
3. Soak both parts for 15 minutes in warm water with liquid detergent, moving the parts gently in the water (the chamber is not dishwasher safe).
4. Rinse in clean water.
5. Shake off excess water and do not rub dry.
6. Air dry in a vertical position.
7. Replace the back rubber piece when the unit is completely dry and ready for use.

**Feeding pumps**

Feeding pumps are mechanical devices used to deliver enteral feedings. These machines can be programmed to give a set volume of a feeding over a predetermined time. Each pump has a specific bag particular to that pump. The manufacturers recommend that the bags be discarded after each use. However, in home health care the feeding bag is often rinsed out well to remove all residue after use and then it is reused. To keep the machine clean, wipe it off weekly with warm soapy water.

**Coughalator/in-exsufflator/Cough Assist**

The coughalator or in-exsufflator is commonly known by its brand name, Cough Assist. It is used to treat areas of atelectasis while mobilizing and clearing secretions. The device works by gradually applying a positive pressure to the airway and then rapidly shifting to a negative pressure, which simulates a cough and mobilizes the secretions upward.

Pressure settings are usually determined by the respiratory therapist but must be ordered by the physician along with the frequency of the use and circuitry changes. The coughalator may be set on automatic or manual. The manual setting requires the caregiver to change the pressures between positive and
negative for the number of cycles ordered. The treatment should always start with an inhalation.

**Maintenance**

Circuits should be changed weekly. The corrugated tubing and mask should be cleaned between uses with running warm water to remove secretions and dried with a paper towel. Change filter when soiled.

**Safety**

Clients with susceptibility to pneumothorax should be carefully considered for use of a Cough Assist. Check the pressures against the physician’s orders before beginning the treatment. Assess the child continually during the treatment. Stop the treatment if suction is needed, then after suctioning, resume the treatment.

**Intrapulmonary percussive ventilation (IPPV)**

Intrapulmonary percussive ventilation (IPPV) involves the use of a pneumatic device to deliver mini-bursts of positive pressure along with aerosolized medications to the airways. The device is designed to treat areas of atelectasis while mobilizing and clearing secretions. High frequency puffs of air open collapsed alveoli and deliver air behind mucus plugs. Percussive oscillatory vibrations help dislodge the mucus plugs. The upward flow of secretions is accomplished by alternating pressures and the delivery of aerosolized medications is enhanced.

**Maintenance**

The machine itself has no required cleaning. The tubing and face mask or mouth piece should be cleaned after each use with warm soapy water, rinsed well, and allowed to air dry.
Hand ventilator

The hand ventilator is used for manual ventilation when a client cannot breathe for him or herself or to aid a client with respiration. This device is often referred to as the bag, a self-inflation bag, or by a brand name Ambu-Bag. If there is a hand ventilator in the home, the mask should be attached and kept with the client at all times. The mask should be fitted to the child to cover the area from the bridge of the nose to the chin. The bag and mask will need to be replaced as the child grows. Some masks have an inflatable cushion that might require re-inflation.

The mask must fit properly and be positioned appropriately for effective ventilation.

Best practice

If there is oxygen in the home, the bag should be attached to the oxygen source at all times in the event of an emergency.

Use of the hand ventilator

Squeeze the bag briskly using your thumb on one side of the bag and your fingers on the other side. Observe the client’s chest for the rise and fall of breathing. When using a hand ventilator, take caution not to overinflate the lungs. Squeeze the bag hard enough to see the chest rise as if the child were taking an easy breath.
Before continuing on to the next section, answer the following questions by circling the appropriate letter. Check your responses with the answers below.

1. The parameters on an apnea monitor are determined by?
   (A) Diagnosis.
   (B) Respiratory therapist
   (C) Physician.
   (D) DME.

2. The apnea monitor detects episodes of all of the following EXCEPT:
   (A) Bradycardia.
   (B) Apnea.
   (C) Tachycardia.
   (D) O₂ desaturations.

3. To prevent skin breakdown, the site used for the adhesive pulse oximetry probe should be changed:
   (A) Every shift.
   (B) Every other day.
   (C) At least every 24 hours.
   (D) Once a month.

4. The validity of the pulse oximetry data must be confirmed by:
   (A) Evaluating the child’s appearance and apical pulse in comparison to the displayed data.
   (B) Comparison of O₂ saturations to the physician’s order.
   (C) Comparison of current O₂ saturations to previous data.
   (D) The client’s respiratory rate and the O₂ saturation level.

5. All of the following are safe and appropriate ways to store oxygen EXCEPT:
   (A) In a secure upright stand.
   (B) Laying flat under a crib, unobstructed by linens.
   (C) In a cool, dry, well-ventilated area.
   (D) In a closet with tanks stacked one on top of the other.
6. How should oxygen equipment be cleaned and sanitized?
   (A) Cleaned daily, sanitized weekly.
   (B) Cleaned weekly, sanitized monthly.
   (C) Cleaned after use, sanitized daily.
   (D) There is no need to clean or sanitize equipment.

7. Which picture shows the proper fit of the hand ventilator mask?
   (Circle A, B, or C)
   ![Hand ventilator mask pictures]

8. When squeezing the hand ventilator:
   (A) Use all the force you can.
   (B) Squeeze hard enough to see the chest rise as if the child were taking an easy breath.
   (C) Depress the bag only one inch.
   (D) Squeeze only once every 10–15 seconds.

9. The intrapulmonary percussive ventilation:
   (A) Treats areas of atelectasis while mobilizing and clearing secretions.
   (B) Provides mechanical ventilation.
   (C) Cannot be used with aerosolized medications.
   (D) Uses negative pressure.

10. The coughalator:
    (A) Treats pneumothorax.
    (B) Treatment always starts with exhalation.
    (C) Applies a positive pressure to the airway and then rapidly shifts to a negative pressure, which stimulates a cough.
    (D) Is used only on a PRN basis.

11. Which of the following is true about the therapy vest?
    (A) The physician’s order will include frequency, pressure, and time.
    (B) Helps to loosen mucous in the lungs.
    (C) Must fit properly to get the optimal results.
    (D) All of the above.

References

*Care of the Pediatric Client with a Tracheotomy.* BAYADA University

http://www.vitalaire.com/en/homecare/Home%20Oxygen/Products%20And%20Services


http://smartmonitor2.respironics.com/

http://www.coughassist.com/coughassist.htm


http://www.bmj.com/cgi/content/full/317/7161/798

http://www14.inetba.com/percussionaire/therapy.htm

http://www2.sph.unc.edu/ocene/phneco/babyguide/ambu.pdf
Once you complete this section, you should be able to:
1. Discuss types and assessment of pain
2. Identify pain medications and comfort measures
3. Identify responses to interventions
4. List integrative comfort measures
5. Define palliative care
6. Discuss the requirements related to a DNR
7. Identify the needs of a dying client
8. Identify the signs of approaching death
9. Discuss documentation of the dying process and pronouncement

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Introduction

Pain is described as a sensation of discomfort, distress, or agony that can be in conjunction with or without actual tissue damage. It is considered a protective mechanism. Pain is a part of life and it can sometimes be useful and a warning of danger, injury, or illness. Margo McCaffery defines pain as “whatever the experiencing person says it is, existing whenever he says it does.” (McCaffery and Beebe, 1989). This definition is useful for adults, adolescents, and verbal children. It becomes difficult with very young children and nonverbal clients. Regardless of the cause of the pain, all clients deserve to have their pain managed effectively. Untreated pain causes anxiety, depression, irritability, and exhaustion. Pain can also cause problems with eating and sleeping and may cause children to act in “baby-ish” ways. Pain that is not controlled can make a child afraid. Acute pain is characterized by abrupt onset and is of short duration. It can be moderate to severe. Chronic pain is pain lasting 6 months or longer that interferes with routine activity. Chronic pain can be devastating to a child’s morale and should be treated the same way any other disease symptom is addressed. Chronic pain can also be moderate to severe. Some physicians once thought that infants and very young children did not feel pain. Now it is known that even premature babies feel pain. Young babies may in fact be more sensitive to pain because the nerves that control pain are not fully developed. When assessing for pain, you must take into consideration that everyone experiences pain differently. Our goal is for the child to have no pain.

The body responds to the insult of injury or disease by releasing enzymes that attach to the pain receptors and start the inflammatory process. The body mounts a physiologic response to moderate and severe pain. The physiologic response to moderate pain includes an increased respiratory rate, decreased heart rate with decreased blood pressure, pallor, nausea, vomiting, weakness, fatigue, exhaustion, and fainting.

Many factors impact an individual’s response to pain such as:

- Anxiety
- Emotions
- Fatigue
- Past experiences with pain
- Culture
- Developmental level
- Parent or caregiver anxiety
- Pain threshold
There are also many behavioral responses to pain, which include:

- Pulling back from painful stimuli
- Contracting muscles
- Crying and moaning
- Grimacing
- Anger
- Depression
- Withdrawal
- Holding knees to chest

**Pain assessment**

To manage pain effectively, the nurse must ascertain the type, location, duration and severity, and aggravating factors and alleviating factors of the pain. There are three ways to find out how much pain a child has: (1) what a child says, (2) what a child is doing, and (3) how the child’s body is reacting. Whenever possible, the existence and intensity of pain are measured by the client’s self-report. It is important to assess the client’s previous pain management program and note both nonpharmacologic and pharmacologic interventions. You will need to know the client’s current medications.

Assess for risk factors such as airway stability and disease process. Determine if there are contributing factors that may be affecting the client’s perception of pain, including the course of the disease, anxiety or fear, developmental age, and temperament of the child. Be alert to allergies and sensitivities. If the client is able to demonstrate pain level with the use of developmentally appropriate tools, that would provide the most accurate method to determine the pain level. Below are some samples of rating scales for use in the pediatric population.

**Numeric pain rating scale**

Numeric pain rating scales are an effective measure of pain for a child who can express him or herself verbally, has cognitive developmental abilities of approximately 8 years old, and can count and sort by order to the number 10.

There should be consistent use of one numeric scale. BAYADA professionals use a standard 0 to 10 scale for pain rating, with 0 being indicative of no pain and 10 being the worst pain ever. When evaluating pain in a child, it may be useful to refer to the acronym PQRST, standing for the following:

1. Presence of pain: Are you in pain now?
2. Quality of pain: Is it sharp, burning or dull?
3. Radiation/location of pain: Where is the pain?
4. **Severity**: How bad is the pain?
5. **Timing**: When does the pain come?

Remember to keep all questions clear, concise, consistent, and age-appropriate.

The Wong-Baker Faces Scale is most effective with children who have a development cognition that is older than age 3.
Behavioral pain rating scales

Verbal pain rating scales are not effective for many pediatric clients, because of either developmental abilities or neurologic issues. Other methods of assessing the level of pain may be employed to accurately provide care for these clients. Use of a behavioral pain assessment tool may assist in recognition of pain in these challenging clients. Numerous nonverbal pain rating scales are available. Keys to the use of behavioral pain scales are to focus on the individual’s behavioral presentation of potential pain and observe for changes in those behaviors with effective treatment. Be familiar with the guidelines for the use of the pain rating scale being utilized, because the client must be able to be rated in each area of the assessment for valid results. For instance, a scale that rates “activity” and “leg positioning” would not be appropriate for either a spastic or a flaccid client.

Some clients cannot be adequately assessed using either a verbal pain rating scale or a behavioral rating scale. In these clients, a systematic approach is required to accurately capture and evaluate pain. This may begin by identifying pathologic conditions or procedures that may cause pain, then attempt to list client behaviors that may indicate pain. It may also be helpful to ascertain behaviors that caregivers and others familiar with the client think may indicate pain. Finally, attempt an analgesic trial. In cases where neither a verbal nor a behavioral pain rating scale is effective, the notes in the client’s chart must, in clear language, define how this client exhibits mild, moderate, and severe pain, along with recommended treatment methods. Every client must be assessed effectively for the presence of pain on every shift.

Some commonly used behavioral pain rating scales are displayed below:

**Neonatal/infant pain scale (NIPS)** – This is recommended for children with a developmental level younger than age 1. A score greater than 3 indicates pain.

<table>
<thead>
<tr>
<th>Pain assessment</th>
<th>Score</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Facial expression</strong></td>
<td></td>
</tr>
<tr>
<td>0 – Relaxed muscles</td>
<td>Restful face, neutral expression</td>
</tr>
<tr>
<td>1 – Grimace</td>
<td>Tight facial muscles; furrowed brow, chin, jaw, (negative facial expression as seen in nose, mouth, and brow)</td>
</tr>
<tr>
<td><strong>Cry</strong></td>
<td></td>
</tr>
<tr>
<td>0 – No Cry</td>
<td>Quiet, not crying</td>
</tr>
<tr>
<td>1 – Whimper</td>
<td>Mild moaning, intermittent</td>
</tr>
<tr>
<td>2 – Vigorous cry</td>
<td>Loud scream; rising, shrill, continuous crying (Note: silent cry may be scored if baby is intubated as evidenced by obvious mouth and facial movement)</td>
</tr>
</tbody>
</table>
### Breathing patterns

<table>
<thead>
<tr>
<th>0 – Relaxed</th>
<th>Usual pattern for this infant</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 – Change in breathing</td>
<td>In-drawing, irregular, faster than usual; gagging; breath-holding</td>
</tr>
</tbody>
</table>

### Arms

<table>
<thead>
<tr>
<th>0 – Relaxed or restrained</th>
<th>No muscular rigidity; occasional random movements of arms</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 – Flexed or extended</td>
<td>Tense, straight legs; rigid and/or rapid extension and flexion</td>
</tr>
</tbody>
</table>

### Legs

<table>
<thead>
<tr>
<th>0 – Relaxed or restrained</th>
<th>No muscular rigidity; occasional random leg movement</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 – Flexed or extended</td>
<td>Tense, straight legs; rigid and/or rapid extension and flexion</td>
</tr>
</tbody>
</table>

### State of arousal

<table>
<thead>
<tr>
<th>0 – Sleeping or awake</th>
<th>Quiet, peaceful sleeping or alert random leg movement</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 – Fussy</td>
<td>Alert, restless, and thrashing</td>
</tr>
</tbody>
</table>

#### FLACC Scale – Faces, Legs, Activity, Cry, and Consolability

<table>
<thead>
<tr>
<th>Item</th>
<th>0</th>
<th>1</th>
<th>2</th>
</tr>
</thead>
<tbody>
<tr>
<td>Face</td>
<td>No particular expression or smile</td>
<td>Occasional grimace or frown, withdrawn, disinterested</td>
<td>Frequent to constant frown, clenched jaw, quivering chin</td>
</tr>
<tr>
<td>Legs</td>
<td>Normal position or relaxed</td>
<td>Uneasy, restless, tense</td>
<td>Kicking or legs drawn up</td>
</tr>
<tr>
<td>Activity</td>
<td>Lying quietly, normal position, moves easily</td>
<td>Squirming, shifting back &amp; forth, tense</td>
<td>Arched, rigid, or jerking</td>
</tr>
<tr>
<td>Cry</td>
<td>No cry (awake or asleep)</td>
<td>Moans and whimper, occasional complaint</td>
<td>Crying steadily, screams or sobs, frequent complaints</td>
</tr>
<tr>
<td>Consolability</td>
<td>Content, relaxed</td>
<td>Reassured by occasional touching, hugging, or “talking to,” distractible</td>
<td>Difficult to console or comfort</td>
</tr>
</tbody>
</table>

Pain, palliative care, and hospice
Types of pain

Pain can be defined as one of two types, nociceptive or neuropathic. Nociceptive pain is typically the result of a musculoskeletal or visceral injury disease and includes somatic and visceral mechanisms. Somatic pain is often described as aching, throbbing, stabbing, and/or a sensation of pressure. Its source is skin, muscle, or bone. Visceral pain is often described as a gnawing, cramping, aching, sharp, or stabbing sensation; its source is the internal organs. Nociceptive pain is usually acute with a discernible cause. It resolves when the initial tissue damage heals and tends to respond well to treatment with anti-inflammatory agents and opioids. In contrast, neuropathic pain is caused by lesions or physiologic changes in the nervous system and it is characterized by hypersensitivity either in the damaged area or in the surrounding normal tissue. The pain is frequently described as burning, numbness, tingling, touch sensitivity, sharp and shooting sensations, or electric shocks. Pain resulting from a nonpainful stimulus such as a light touch is a common characteristic of neuropathic pain. Neuropathic pain tends to be more chronic in nature and is less responsive to anti-inflammatory agents and opioids.

Pain management

Once assessed, every client has the right to adequate pain management. There are two basic types of intervention to manage pain, nonpharmacologic and pharmacologic. Ideally these two types of treatment will be used in a complementary fashion to produce the best pain management with the least side effects.

Nonpharmacologic interventions

Nonpharmacologic approaches to pain control should be an important aspect of every pain management plan. Nonpharmacologic interventions often comfort the client while involving and empowering the family and other caregivers. Parents know more about comforting their own children than anyone else. They can teach their child to relax or can cause distraction for them. Having a parent or loved one present may be the best nonpharmacologic treatment for pain. Below is a list of the most common interventions.

1. **Accurate information** – A child with normal receptive and expressive language skills requires simple and accurate information about what is going on and why they are having pain. The information needs to be explained on their developmental level and may need repeated. A child should be encouraged to ask questions, express their feelings, and know that it is okay to be afraid. Allow them to use dolls, puppets, or drawings to express how they are feeling.

2. **Rehabilitation and physical therapy** – In appropriately selected clients, rehab and physical therapy may add to quality of life of the client while strengthening and supporting damaged joints, resulting in decreased pain. Mobility may be improved by strengthening, stretching, and use of assistive devices.
3. **Deep and steady breathing** – Breathing can help reduce pain and help the client gain self control. Teach the child this by asking him or her to breathe out and let go of the tension or the scary feeling with each breath. For the developmentally delayed child, provide any comforting technique that helps the child relax and breathe normally.

4. **Distraction** – This is a good way to keep a child’s mind off the pain. Talking, video games, breathing exercises, television, music, pop-up books, reading and being read to are all good distractions.

5. **Imagination** – Children can use their imagination to change from being anxious and frightened to being relaxed and calm. Absorbing and focusing the child’s attention on a familiar past activity or telling or reading a favorite story can help. Children can also use suggestions such as “Let the pain drain away from your body and roll onto the floor” and other visual images. You can use the child’s own terms and favorite activities and experiences.

6. **Relaxation** – Relaxation can reduce anxiety, nausea and vomiting, and pain, and is especially useful in adolescents. Use techniques that the child is comfortable with and likes doing or talking about.

7. **Play** – Even the most ill child with pain can play in some way. Playing allows children to understand their world. They tend to relax and forget about their worries when they play. Just remember, a child who is playing may still be in pain.

8. **Touch** – Touch is important for all children, especially those who understand through touching and seeing. It includes stroking, swaddling, holding, rocking, caressing, cuddling, and massaging.

9. **Heat, cold, and vibration** – Ice wrapped in a cloth eases some disease pain. Heat is useful for muscle pain. Vibration, either by gentle tapping or some other mechanical method, can block pain.

10. Knowing the best method to use for your client can be discussed with the parents and the clinical manager.

**Pharmacologic interventions**
If comfort measures alone are ineffective, pharmacologic interventions must be administered. Communicating clearly about pharmacologic pain control with clients, families, and other members of the home health care team is essential to providing effective pain management. It is important to be specific about the types of medications that are available, how they are likely to affect the client, how they are to be administered and how they may interact with existing medications. Despite the importance of pain management, substantial roadblocks may still exist in getting clients the treatment they need. Professional healthcare workers may have unsubstantiated but strong beliefs about analgesic
use, especially opioid use, that lead to underprescribing and underdosing. (Lasch K et al. J Palliat Med. 2002;5:57–71).

There are several surveys that show that physicians, nurses, and pharmacists express concerns about addiction, tolerance, and side effects of morphine and related compounds. These fears are pervasive among clients and family members as well. Studies have suggested that these fears lead to undermedication and increased pain intensity. Pharmacologic interventions include nonnarcotic analgesics, nonsteroidal anti-inflammatories (NSAIDs), narcotics (opioids), analgesics, and adjuvant therapies. The term “adjuvant analgesics” is often used synonymously with “co-analgesics” or “pain-modifying drugs.” These drugs are administered for the treatment of neuropathic pain.

<table>
<thead>
<tr>
<th>Mild pain (1-3)</th>
<th>Moderate pain (4-7)</th>
<th>Severe pain (8-10)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Acetaminophen</td>
<td>Ketorolac (&gt;1 year of age)</td>
<td>Morphine</td>
</tr>
<tr>
<td>Ibuprofen</td>
<td>Codeine</td>
<td>Fentanyl</td>
</tr>
<tr>
<td></td>
<td>Oxycodone</td>
<td>Anesthesia pain</td>
</tr>
<tr>
<td></td>
<td>Hydrocodone+acetaminophen (Vicodin)</td>
<td>consult</td>
</tr>
<tr>
<td></td>
<td>Morphine</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Hydromorphone (Dilaudid)</td>
<td></td>
</tr>
</tbody>
</table>

The World Health Organization has developed a three step “ladder” for pain relief. If pain occurs, there should be prompt oral administration of medications in the following order: (1) nonopioids (acetaminophen or ibuprofen); then if the pain does not subside, as necessary, (2) mild opioids (codeine); then if necessary (3) strong opioids such as morphine, until the client is free of pain. To calm fears and anxiety, adjuvant medications should be used. To maintain freedom from pain, medications should be given “by the clock” on a regular schedule every 3 to 6 hours, rather than “on demand.” This three-step approach of administering the right medication in the right dose at the right time is inexpensive and 80 to 90 percent effective. If there is no pain relief from the interventions ordered, you must notify the physician and your clinical manager (World Health Organization; 2007).

**Documentation of pain**

During your shift with the client, pain will be an ongoing assessment process. Any pain assessed greater than “0” must be addressed in the narrative note. A complete, concise description of the pain including location, severity, aggravating factors, and alleviating factors must be documented. Whenever an intervention is administered, a reassessment must be completed using the same pain scale.

For clients who are experiencing pain, use of a pain log may help identify situations that are resulting in pain and the most effective pain-relief
interventions. By analysis of this information, we may be able to develop a proactive approach to effective pain management for the client.

If a PRN medication is administered, it must be documented in the medication record as well as in the Nurse’s Note. Documentation must include the reason for the use of the PRN medication, the client’s response to the medication, and the tolerance of the medication.

**Palliative care**

The end stages of chronic, progressive, life-limiting disease present nurses with a vast array of challenges. Disease-induced symptoms such as fatigue, pain, dyspnea, immobility, and anorexia are often accompanied by untoward emotional states such as depression, anxiety, and a sense of despair. These states and symptoms intertwine and interact in a complex nature. Each requires attention and intervention.

Palliative care specializes in the relief of the pain, symptoms, and stress of serious illness with the goal to improve quality of life for clients and their families. Palliative care is appropriate at any point during the illness and can be provided at the same time as curative treatments. Many pediatric home health care clients will benefit from a palliative care team perspective.

Of the symptoms experienced at the end of life, pain is the one most common and most feared. It is often undertreated, despite the availability of excellent treatment modalities. Comprehensive assessment and treatment of pain in the pediatric population has previously been discussed in this chapter. Effective pain management is essential to the well-being of our clients and their families. Untreated pain results in sleep disturbance, decreased social interaction and recreational activities, loss of appetite, depression, anxiety, despair, and altered cognition. Nonpharmacologic interventions often comfort the client while involving and empowering the family. The necessity of feeling effective for caregivers should not be overlooked because it may have a direct impact on the emotional survival of the caregivers.

Members who may be included on a palliative care team include physicians, nurses, advanced practice nurses, rehabilitation specialists, clinical pharmacists, nutritionists, psychologists, social workers, and spiritual counselors. Communication between team members is essential for effective care to be provided.

**Do not resuscitate (DNR)**

Do Not Resuscitate, commonly known as DNR, is a type of advance directive. Unlike other advance directives that are written and signed by the client, such as a Living Will or a Durable Power of Attorney for Health Care; a DNR order must
be completed and signed by a physician. These orders do not apply for emergency medical services responding to a 911 call. Some states have started out-of-hospital DNR programs that allow emergency personnel to honor DNR orders in people’s homes. These orders may include a special DNR form that is posted in the client’s home and/or a special DNR bracelet worn by the client.

Similar to the in-hospital DNR orders, the DNR out-of-hospital orders must be signed by the client’s physician. In some states, out-of-hospital DNR orders are also called “comfort care” DNR orders, because they allow emergency personnel to provide palliative care to make the client as comfortable as possible and to help relieve the symptoms and side effects that result from the illness. Be aware of and comply with all state regulations regarding DNR in the state where you practice before providing care to a client with a DNR order.

BAYADA obtains documents and carries out DNR orders in accordance with our policy and state regulations when the client requests limited emergency care. The nurse and physician are responsible for ensuring that the client and the family understand the meaning of the DNR order. The DNR becomes effective only after the registered nurse obtains a verbal order directly from the physician. A written DNR order presented by the client, such as a hospital discharge order, must also be confirmed by obtaining a verbal order from the physician. The client and family should be informed that we cannot honor the DNR until we have obtained a verbal order directly from the physician. DNR orders are documented on either the client’s 485 or their Addendum to the Plan of Care. They must be renewed every 60 days on all skilled nursing cases.

Dying process and pronouncement

When a child is dying, they have problems that underlie the physical and psychological problems and that in many ways are more difficult to address. The family of the client is experiencing these issues as well. The list below has been compiled by hospice physicians, nurses, social workers, and aides with more than 25 years of speaking directly to the dying. (The Dying Process: A Guide for Caregivers; 2005) The following is a list of those needs that pertain to a child. Even though this list does not deal with individual variation, it will keep you focused on what should be the central point of caregiving: in addressing the dying client’s needs.

Needs of dying persons

- Assurance that they will be cared for and will not be abandoned
- Communication that is honest and open
- People who will listen
- Opportunity to discuss their impending death, if able, with selected family and caregivers
• Excellence in the delivery of physical care, comfort, privacy, intimacy, sleep, and rest
• Management of pain and other symptoms that are responsive to changing conditions
• Permission to express feelings, both positive and negative including dissatisfaction, anger, and resentment

The body goes through many changes in the dying process. Knowing the common symptoms of impending death may help families and children be prepared for them when they occur. In some cases, the dying process can be very long. Understanding the physical and mental changes the body goes through as death occurs may help alleviate fears and misconceptions about death. Always discuss any concerns or questions with the clinical manager or physician. The following is a list of common symptoms that death is approaching. However, each child may experience symptoms differently.

Symptoms may include:
• Changes in respiration, including slow or fast respirations, long periods without a breath, or respirations that are noisy (from secretions the child is unable to clear from the throat or lungs)
• Moaning may occur with breathing and does not necessarily mean the client is in pain
• Fall in blood pressure and capillary refill may be sluggish
• Lowered body temperature, by a degree or more
• Irregular heart rate (increase or decrease from baseline and become irregular)
• Skin color change to pale, bluish, mottled, or blotchy due to a decrease in oxygen and the body’s circulation slowing down
• Incontinence
• Decreased urine output
• Mental confusion or decreased alertness just prior to death

When the client dies, it is necessary to confirm death and properly document this information. Only registered nurses can pronounce death in the home when permitted by local and state regulations. We list the following as relevant signs of death:
• Absence of pulse
• Absence of heart beat
• Absence of blood pressure
• Fixed, dilated pupils with no reaction to light for 5 minutes
• Absent carotid pulse and respirations for 5 minutes
• Nonresponsive to verbal stimuli
• Nonresponsive to painful stimuli by means of sternal pressure

Documentation in the Nurse’s Note should include the time of death, findings of physical examination, and who was notified regarding the death. If there is any question even vaguely indicating unusual circumstances such as signs of physical injury, disrupted environment, or missing or unaccounted-for medication surrounding the cause or time of death, the registered nurse must:

• Call the attending physician and clinical manager
• Notify the police
• Notify family member and caregiver
• Not sign the death certificate

Once death has been determined, the registered nurse will notify the physician and clinical manager (if not already done), sign the death certificate if one is available, call the funeral director and inform him the death certificate has been signed, provide the funeral director with the name and phone number of the attending physician; leave the death certificate with the family; record the details of the death and pronouncement in the client record; and return the entire chart to your local office.

Postmortem care may include bathing the client and placing them in a clean diaper. If diapers are not available, placing a protective pad of some variety under the buttocks will suffice. Prepare the client with the most natural appearance possible. Gently close the eyes. If the mouth will not remain closed, position a small towel roll to facilitate closure. Continue to provide support to the client’s family and assist them as needed to complete any religious rites or practices important to them. Do not impose your own convictions or practices onto the client’s family. Be available as needed but do not hover.

After removal of the body to the funeral home, the nurse should stay to dispose of opened medications and syringes. A witness must be present to observe the disposal of controlled substances. Be sure to document the disposal and presence of a witness in the client chart. Call the medical supply company to arrange for pickup of the medical equipment. Based on your assessment of the client’s family’s readiness for these activities, you may choose to defer them to your clinical manager. Document this clearly in your Nurse’s Note and notify the clinical manager.
Before continuing on to the next section, answer the following questions by circling the appropriate letter. Check your responses with the answers below.

1. Which statement about pain is FALSE?
   (A) Chronic pain lasts longer than 6 months and interferes with routine activity.
   (B) Acute pain has rapid onset, is always severe, and is difficult to manage.
   (C) Everybody has experienced some degree of pain.
   (D) Pain is described as sensation of discomfort, distress, or agony.

2. A pain assessment includes:
   (A) A description of location, duration, severity, aggravating, and alleviating factors.
   (B) Documentation of pain level with the appropriate assessment tool.
   (C) Information on the client’s previous pain management programs.
   (D) All of the above.

3. Comfort measures include all of the following EXCEPT:
   (A) Rocking, cuddling, swaddling.
   (B) Reduction of stimuli.
   (C) Hypnosis.
   (D) Distraction.

4. Nonpharmacologic and pharmacologic interventions are best utilized in combination for the most effective outcome in relieving pain.
   (A) True. (B) False.

5. Of the following, which is an appropriate intervention for moderate pain?
   (A) Oxycodone.
   (B) Vicodin.
   (C) Rocking, cuddling, swaddling.
   (D) All of the above.

6. Signs of pain relief include all of the following EXCEPT:
   (A) Showing interest in hobbies.
   (B) Elevated pulse and blood pressure.
   (C) The client verbalizes pain relief.
   (D) Sleeping soundly in a relaxed position.
7. Integrative therapies:
   (A) Are not appropriate in the home health care setting.
   (B) Are used along with medical intervention to manage pain.
   (C) Are not medically approved.
   (D) Are the simultaneous use of nonpharmacologic and pharmacologic interventions.

8. When documenting the use of a PRN pain medication, what information needs to be included in the Nurse’s Note?
   (A) Location, description, and aggravating/alleviating factors.
   (B) Pain level with use of the appropriate tool.
   (C) Time medication was given and response to medication.
   (D) All of the above.

9. If the intervention for pain relief you are providing is nonpharmacologic, there is no need to document an outcome.
   (A) True.  (B) False.

10. A DNR becomes effective after the registered nurse obtains a verbal order directly from the physician.
    (A) True.  (B) False.

11. Common symptoms that death is approaching include all of the following EXCEPT:
    (A) Long periods without a breath.
    (B) Heart rate may become irregular.
    (C) Urine output will increase.
    (D) The skin may become pale, bluish, or mottled.

12. All of the following are relevant signs of death EXCEPT:
    (A) Absence of pulse.
    (B) Absence of blood pressure.
    (C) Fixed dilated pupils with no reaction to light for 5 minutes.
    (D) Absence of urine output.
13. Once death has been determined, the registered nurse will complete all of the following tasks EXCEPT:

(A) Notify the clinical manager and physician.
(B) Ask the family to return the chart to the office.
(C) Sign the death certificate.
(D) Call the funeral director.

References

Care of the Pediatric Client with a Tracheotomy. BAYADA University McCaffery and Beebe. 1989.


World Health Organization. 2007.


[http://www.anes.ucla.edu/pain/FacesScale.jpg](http://www.anes.ucla.edu/pain/FacesScale.jpg)

[http://www.nyee.edu/guidetosurgeryesp.html?print=1](http://www.nyee.edu/guidetosurgeryesp.html?print=1)

[http://www.nhpco.org/i4a/pages/Index.cfm?pageID=4669](http://www.nhpco.org/i4a/pages/Index.cfm?pageID=4669)


*Identifying and Managing Pain in Children.* BAYADA University/Medcom.

[www.pediatric-pain.ca](http://www.pediatric-pain.ca)
Documentation

Once you complete this section, you should be able to:

1. List the steps of the nursing process
2. Discuss basic documentation rules
3. List who to notify when changes in client status occur
4. Demonstrate documentation related to assessment, interventions, outcomes, and emergencies

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Documentation

Accurate and complete documentation is a fundamental part of every nurse’s job and provides a critical link between the delivery and evaluation of care. The client’s clinical record facilitates care by enhancing continuity of care, coordinating the client’s treatment, and allowing accurate evaluation of the current Plan of Care. It is often the nurse’s documentation that justifies the level of care a client requires and it can impact the amount of care authorized by insurance companies and other payor sources. Proper documentation of the interventions required to maintain the client safely in the home is often the basis for reimbursement to the home health care agency. Without proper documentation regarding the seriousness of the client’s condition, the nursing interventions, and the outcomes of those interventions, an agency may be denied reimbursement and the client may lose their home health care coverage.

Your documentation needs to indicate, in a clear and objective format and style, that the client requires a skilled professional to provide home health care. In home health care, documentation is a high priority because this aspect of our care is so closely related to the client’s ability to retain home health care services.

As a company, BAYADA is required to comply with state and federal regulations to maintain our ability to provide home health care to our clients. Often these regulations impact our documentation standards. All nurses must take responsibility for their documentation. They must provide a concise and clear record of all assessments made, interventions rendered, and outcomes observed. Because of the nature of home health care, it is often the nurse’s documentation that allows the entire health care team to “observe” the client’s status remotely through the eyes of the nurse. Without accurate documentation, other team members may not be to make adjustments to the Plan of Care in a timely fashion. Remember, in home health care the skilled nursing professional is truly the eyes and ears of the entire health care team who may rarely see the client physically because of the client’s home-bound status.

The nursing process

The nursing process is a continuous, systematic, problem-solving approach to planning and providing individualized, organized nursing care in a scientific manner. The client must be the central focus. It is an ongoing process that can end at any time if the problem is solved. The nursing process consists of five steps – assessment, nursing diagnosis, planning, implementation, and evaluation.

1. **Assessment** – the data collection phase. The client’s status will be assessed both objectively (what you observe, signs) and subjectively (in the client’s own words, symptoms). Methods used to gather data include observation,
interview, and examination. During your examination, you will use the techniques learned in the chapter on physical assessment.

2. **Nursing diagnosis** – the data analysis phase. Based on the results of the assessment, a comprehensive problem list is developed for the client. These problems are prioritized and translated into a nursing diagnosis format. There will be a nursing diagnosis for each problem identified as well as nursing diagnoses for potential problems.

3. **Planning** – the home health care planning phase. During this phase of the nursing process we define interventions and establish goals designed to maximize the client’s quality of life. The interventions are physician-directed tasks and nursing responsibilities that are necessary to assist you and your client in meeting the goals established. Communication is essential during the planning phase because the client and family must be part of the planning process.

4. **Implementation** – the caregiving phase. During this phase, the interventions planned in the last phase are carried out. Assessment must be continuous throughout this phase to determine the effectiveness of your plan. Is it working? The nurse's documentation provides the clearest picture of this phase of the nursing process. Your documentation identifies the condition in which you assumed care for the client, the interventions you deemed appropriate at that time and why, and the client’s response to those interventions. This documentation provides a wealth of information for the entire health care team, the clinical manager, the physicians, the insurance case managers, therapists, and all others involved in the case.

5. **Evaluation** – the determination of efficacy phase. In this phase we determine the effectiveness of our plan, and if necessary, make adjustments. Do the client’s problems and our goals (diagnosis and planning) remain valid? Do we need to make adjustments to our plan? Is the client improving or minimally maintaining current status? We must determine whether to continue, change, or resolve the plan. The outcome for your shift should be documented at the end of the shift based on how the client responded to all interventions.

As you can clearly see, the nursing process is a fluid one, constantly moving from one phase into the next with a fair degree of overlap of phases. In order for the process to proceed smoothly, there must be clear, concise, and accurate communication among all caregivers.

**Basic documentation rules**

*“If it wasn’t documented, it wasn’t done.”*

Documentation is used to communicate all information that is client-centered. Your documentation is the only proof of the nature and quality of care you
provide during your shift. Your documentation is also presumed by law to be accurate and complete. This includes the assessment and interventions that you complete on your shift, the impact of those interventions on the client, and the progress towards your goals. Your documentation must contain:

- An assessment at the beginning of each shift, with each significant change in client status before and after administration of PRN medications or treatments, and at the end of your shift
- Information that was provided to other health care providers and, when necessary, their response
- Client and family teaching along with the response to the teaching
- Data collected while providing care
- Client advocacy by the nurse
- Changes in the client’s environment
- Who care was transferred to at the end of shift

“Do’s” of documentation

- Write in black or blue ink
- Write legibly
- Sign your complete name, title, and date. If your signature is illegible, print your name after your signature
- Document the client name and number
- Correct documentation errors by drawing a single line through the error and initialing it
- Only use approved abbreviations and symbols
- Chart as you go (do not save charting until the end of the shift) and indicate the time of events
- Use objective data
- Document the size and integrity of all tubes at the beginning and end of each shift
- Document all the details
- Document what someone else told you regarding the client by documenting their words exactly and using quotation marks
- Re-read your notes, medication records, flow sheets, and all other documentation to ensure it is complete
- Document late entries in the following manner:
  - Begin your entry on the next available line
- Start the entry with the date and time it is actually being written
- Label the entry with “late entry for date and time of shift/visit” followed by entry content
- Sign the entry with first initial, last name, and title

“Don'ts” of documentation

- Use white out or any other correction fluid, draw multiple lines through, or obliterate errors
- Document under any name other than as it appears on your nursing license
- Take your charting home with you
- Document a symptom without documenting what you did about it
- Document teaching without documenting the learner’s response to teaching
- Document care you did not provide or observe someone else provide
- Alter the record
- Document on the medication or treatment record until care is provided
- Add to someone else’s documentation without initialing the entry
- Use creative abbreviations
- Forget to document your full name with initials and title at the bottom of each medication and treatment record
- Document ahead of time – for example, don’t document the outcomes until the end of your shift
- Use vague statements
- Double document. If an intervention is documented adequately on a flowsheet or medication record, do not repeat it in the Nurse’s Note. You may need to document a response to a treatment or medication

Changes in client status

All changes in client condition are to be documented in the Nurse’s Note. Your response to these changes as well as all health care team members notified about the change should be documented. Finally, document the client’s response to the interventions provided. Any interventions provided by someone else, like a trained family member, physician, or emergency response personnel, should be documented along with their name and title. **Do not wait until the end of the shift to write your nursing notes.** During an event or crisis, make notations on scratch paper of the timeline of events. Then, in your Nurse’s Note, document your client assessment as it relates to the change in status, including the circumstances leading up to the event. Clearly describe any concerns relating to equipment problems and who was notified about these concerns. List the names
and the roles of all present during the event. Document the outcome of your interventions and actions including the ultimate disposition of the client.

Documentation for a client change in status must be completed in a timely and objective fashion. Leaving out significant information or documenting care that was not rendered is considered falsification of records.

**When verbal orders are necessary**

If the change in condition leads to a change in the client’s Plan of Care, an Addendum to the Plan of Care must be completed to document the physician’s verbal order. A nurse may not make changes or additions to the care of the client without an order from the physician. The Addendum to the Plan of Care can also be used for information purposes. Verbal orders may not be taken from family members. If a family member received orders verbally from a physician it is your responsibility to verify that order with the physician directly. If the time of your shift makes it difficult to reach the physician, then either the family must provide the new intervention, or it must be deferred until such time as confirmation of the order from the physician can be obtained.

**Change in client status notifications**

You must notify other key individuals in the event of a change in client status. These individuals should be notified after care has been provided and the client is stabilized:

1. Family member or primary caregiver, in case the client’s status worsens. Follow up with progress reports throughout the shift as needed.
2. Appropriate physician (eg, pediatrician, pulmonologist), who can provide further orders as needed or can decide if the client needs to be seen by a physician.
3. Clinical manager of the change in status and any new physician orders that should be passed on to the other nurses providing care for the client.
4. Other professional caregivers listed on the emergency plan.

Remember, the client charts are communication tools that the client, client’s family, clinical manager, risk manager, insurance company, attorneys, juries, and judges are all reading. It is your duty to maintain the integrity of the client chart by charting care completely, objectively, and accurately.
# Sample documentation

## NURSE’S SHIFT NOTE & TIME RECORD

**Client’s Name:**

**Client Services Manager:**

**Employee Signature/Title:**

**Date:**

---

**Temp:**

**Pulse:**

**Resp:**

**O2 Sat:**

**B/P:**

**Sitting / Lying / Standing**

**Nutrition/Diet:**

**Mental Status:**

- [ ] AAO
- [ ] Confused
- [ ] Disoriented
- [ ] Other

**Respiratory Status:**

- [ ] Trach
- [ ] Vent
- [ ] CPAP
- [ ] Alarms Set
- [ ] N/A

**Urinary Status:**

**Environment/Safety:**

**Cardiac Status:**

**Communication needs:**

**Edema:**

**Infection Control:**

- [ ] Standard Precautions
- [ ] Other

**Skin Integrity:**

**Other:**

---

**Neurological:**

- [ ] Seizures

**Pain Status:**

- [ ] Client reports pain as a problem:
  - [ ] Yes
  - [ ] No

**Intensity Level (Circle one):**

- [ ] 0
- [ ] 1
- [ ] 2
- [ ] 3
- [ ] 4
- [ ] 5
- [ ] 6
- [ ] 7
- [ ] 8
- [ ] 9
- [ ] 10

**Recurrent**

**New (location):**

**Exacerbating Factors:**

---

**Treatment:**

- [ ] Medication
- [ ] Rest
- [ ] Other

**Effective**

- [ ] Yes
- [ ] No

---

**SHIFT NOTES:**

---

**PROGRESS TOWARD GOALS/OUTCOMES OF THIS SHIFT:**

---

**HAS A CHANGE IN STATUS OCCURRED THAT REQUIRES REPORTING?**

(Review orders for reporting parameters)

- [ ] Yes
- [ ] No

**COORDINATED WITH/REPORTED TO:**

- [ ] N/A
- [ ] Clin Mgr
- [ ] RN/LPN
- [ ] Client Svc Mgr
- [ ] Physician (Addendum completed, if applicable)

**Other:**

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Before continuing on to the next section, answer the following questions by circling the appropriate letter. Check your responses with the answers below.

1. The nursing process consists of all of the following steps EXCEPT:
   (A) Assessment.
   (B) Planning.
   (C) Implementation.
   (D) Problem-solving.

2. The evaluation of your client’s progress toward goals can be documented at any time during the shift.
   (A) True                 (B) False

3. Documentation on your Nurse’s Note should include which of the following?
   (A) An initial assessment with updates for significant change in client status.
   (B) Your personal concerns regarding the care of the client.
   (C) Unapproved abbreviations.
   (D) Any care that has not been ordered by the physician.

4. Your documentation can be written in any color of ink.
   (A) True                 (B) False

5. When there is a change in client status, you should document all of the following EXCEPT:
   (A) Interventions provided and by whom.
   (B) Response to interventions.
   (C) Subjective information.
   (D) Timeline of events on scratch paper until the event is over.

6. A nurse may make changes to the Plan of Care with an order from a family member that they received from a physician.
   (A) True                 (B) False

7. All of the following are to be notified when there is a change in client status EXCEPT:
   (A) Primary caregiver.
   (B) The electric company.
   (C) Physician.
   (D) Clinical manager.
