

PNM – Pneumonia

PNM-AP ANATOMY AND PHYSIOLOGY

OUTCOME: The patient/family will understand and identify the symptoms associated with pneumonia and the appropriate actions to prevent complications.

STANDARDS:

1. Discuss the possible complications, e.g., pleural effusion, pleurisy, lung abscess sustained hypotension and shock, other infections such as bacterium, and atelectasis due to mucus plugs.
2. Explain that complications may be prevented with prompt treatment with appropriate antibiotics and therapy.
3. Advise patient/family to return if cough, fever, or shortness of breath worsen or do worsen to contact the patient's physician.
4. Explain the common symptoms such as fever, cough, chest pain, shortness of breath.

PNM-C COMPLICATIONS

OUTCOME: The patient/family will understand the complications associated with pneumonia.

STANDARDS:

1. Discuss the complications, e.g., pleural effusion, pleurisy, lung abscess, sustained hypotension and shock, other infections such as bacterium, and atelectasis due to mucus plugs.
2. Explain that complications may be prevented with prompt treatment with appropriate antibiotics and therapy.
3. Advise patient/family to return if cough, fever, or shortness of breath worsen or do not improve.

PNM-CUL CULTURAL/SPIRITUAL ASPECTS OF HEALTH

OUTCOME: The patient/family will understand the impact and influences that cultural and spiritual traditions, practices, and beliefs have on health and wellness.

STANDARDS:

1. Discuss the potential role of cultural/spiritual traditions, practices and beliefs in achieving and maintaining health and wellness. Refer to clergy services, traditional healers, or other culturally appropriate resources.

2. Explain that traditional medicines/treatments should be reviewed with the healthcare provider to determine if there are positive or detrimental interactions with prescribed treatment. Explain that the medical treatment plan must be followed as prescribed to be effective.

PNM-DP DISEASE PROCESS

OUTCOME: The patient/family will understand pneumonia and its symptoms.

STANDARDS:

1. Explain that pneumonia is an inflammatory process, involving the terminal airways and alveoli of the lung and is caused by an infectious agent making it hard for lungs to get oxygen into the blood.
2. Explain that pneumonia may be contracted by aspiration of oropharyngeal contents, by inhalation of respiratory secretions from infected individuals, through the bloodstream, or directly during surgery or trauma.
3. Explain that patients with bacterial pneumonia may have had an underlying disease that impairs the defenses, such as a preceding viral illness.
4. Explain that weakness and fatigue may persist for weeks after the infection. Encourage a gradual return to normal activities.

PNM-EQ EQUIPMENT

OUTCOME: The patient/family will understand and demonstrate (when appropriate) the proper use and care of equipment.

STANDARDS:

1. Discuss the indications for and benefits of the prescribed medical equipment.
2. Discuss types and features of the medical equipment as appropriate.
3. Discuss and/or demonstrate the proper use, care, cleaning of medical equipment and proper disposal of associated medical supplies.
4. Discuss signs of equipment malfunction and proper action in case of malfunction as appropriate.
5. For inpatients, explain that the various alarms are to alert the medical personnel of the patient's status and/or the function of the equipment.
6. Emphasize the importance of not tampering with any medical device.

PNM-EX EXERCISE

OUTCOME: The patient will be able to demonstrate appropriate deep breathing and coughing exercises.

STANDARDS:

1. Instruct patient in deep breathing and coughing exercises.
2. Instruct patient in techniques to cough effectively.

PNM-FU FOLLOW-UP

OUTCOME: The patient/family will understand the importance of follow-up in the treatment of pneumonia.

STANDARDS:

1. Discuss the importance of follow-up care.
2. Discuss the procedure for obtaining follow-up appointments and that follow-up appointments should be kept.
3. Emphasize that full participation of the treatment plan is the responsibility of the patient/family.
4. Discuss the signs/symptoms that should prompt immediate follow-up.
5. Discuss the availability of community resources and support services and refer as appropriate.

PNM-IS INCENTIVE SPIROMETRY

OUTCOME: The patient/family will understand the use of the incentive spirometer.

STANDARDS:

1. Explain that regular and appropriate use of the incentive spirometer according to instructions reduces the risk of respiratory complications including pneumonia.
2. Explain that the optimal body position for incentive spirometry is semi-Fowler's position that allows for free movement of the diaphragm.
3. Instruct the patient to exhale normally and evenly inhale maximally through the spirometer mouthpiece.
4. Encourage the patient to hold the maximal inspiration for a minimum of three seconds to allow for redistribution of gas and opening of atelectatic areas.
5. Instruct the patient to exhale slowly and breathe normally between maneuvers.
6. Instruct the patient to repeat this maneuver as frequently as prescribed.

PNM-L LITERATURE

OUTCOME: The patient/family will receive literature about pneumonia.

STANDARDS:

1. Provide the patient/family with literature on pneumonia.

2. Discuss the content of the literature.

PNM-M MEDICATIONS

OUTCOME: The patient/family will understand the purpose, proper use, and expected outcomes of prescribed drug therapy.

STANDARDS:

1. Describe the name, strength, purpose, dosing directions, and storage of the medication.
 - a. Explain the importance of completing the full course of antibiotic therapy, as prescribed, to prevent antibiotic resistance and to facilitate complete recovery as appropriate.
2. Discuss the risks, benefits and common or important side effects of the medication and follow up as appropriate.
3. Discuss any significant drug/drug, drug/food, and alcohol interactions, as appropriate.
4. Discourage the use of cough suppressants for a productive cough.
5. Discuss the importance of keeping a list of all current prescriptions and over-the-counter medicines, vitamins, herbs, traditional remedies, and supplements. Encourage the patient to bring this list and pill bottles to appointments for medication reconciliation.

PNM-MNT MEDICAL NUTRITION THERAPY

OUTCOME: The patient/family will understand the specific nutritional intervention(s) needed for treatment or management of pneumonia.

STANDARDS:

1. Explain that Medical Nutrition Therapy (MNT) is a systematic nutrition care process provided by a Registered Dietitian (RD) that consists of the following:
 - a. Assessment of the nutrition related condition.
 - b. Identification of the patient's nutritional problem.
 - c. Identification of a specific nutrition intervention therapy plan.
 - d. Evaluation of the patient's nutritional care outcomes.
 - e. Reassessment as needed.
2. Review the basic nutrition recommendations for the treatment plan.
3. Discuss the benefits of nutrition and exercise to health and well-being.
4. Assist the patient/family in developing an appropriate nutrition care plan.
5. Refer to other providers or community resources as needed.

PNM-N NUTRITION

OUTCOME: The patient will understand how to modify the diet to conserve energy and promote healing.

STANDARDS:

1. Stress the importance of water intake.
2. Discuss that small frequent meals help to meet energy needs especially in acute state.

PNM-P PREVENTION

OUTCOME: The patient/family will understand the actions that may be taken to prevent pneumonia.

STANDARDS:

1. Instruct patient to avoid contact with respiratory infections.
2. Discuss the importance of tobacco cessation. **Refer to TO.**
3. Explain that balanced nutrition, rest, and exercise are important to optimal health.
4. Encourage patient (particularly if elderly or chronically ill) to obtain immunizations against influenza and pneumococcus. **Refer to IM.**

PNM-PM PAIN MANAGEMENT

OUTCOME: The patient/family will understand actions that may be taken to control chest discomfort.

STANDARDS:

1. Encourage the patient to take analgesics as prescribed for chest discomfort.
2. Demonstrate how to splint the chest while coughing.

PNM-SHS SECOND-HAND SMOKE

OUTCOME: The patient/family will understand the adverse health consequences associated with exposure to second-hand tobacco smoke.

STANDARDS:

1. Define “passive smoking” and ways in which exposure occurs, e.g., smoldering tobacco, exhaled smoke, residue in carpet.
2. Discuss harmful substances in smoke e.g., nicotine, benzene, CO, carcinogens.
3. Explain the increased risk of complications in children and adults when exposed to tobacco smoke.

4. Discuss that having household members smoke outside and removing smoke contaminated clothing may decrease exposure to second hand smoke.
5. Explain that cigarette smoke gets trapped in carpets, upholstery, and clothing and still increases the risk of illness.
6. Encourage smoking cessation or at least never smoking in the home or car. **Refer to TO-QT.**

PNM-TCB TURN, COUGH, DEEP BREATH

OUTCOME: The patient/family will understand why it is important to turn, cough, and deep breath.

STANDARDS:

1. Explain that it is important to frequently (every 1 to 2 hours) turn, cough, and breathe deeply. Explain that breathing deeply and coughing helps to mobilize and clear secretions and keep small airways open.
2. Describe appropriate deep breathing and coughing (take a large breath and hold it for 3–5 seconds, exhale, and cough shortly 2 to 3 times).
3. Demonstrate appropriate splinting techniques (e.g., using a pillow held tightly to the abdomen). Return demonstration as appropriate.

PNM-TE TESTS

OUTCOME: The patient/family will understand the test(s) to be performed, the potential risks, the expected benefits, and the risks of non-testing.

STANDARDS:

1. Explain test(s) that have been ordered (explain as appropriate):
 - a. method of testing
 - b. necessity, benefits, and risks of test(s) to be performed
 - c. any potential risk of refusal of recommended test(s)
 - d. any advance preparation and instructions required for the test(s)
 - e. how the results will be used for future medical decision-making
 - f. how to obtain the results of the test
2. Explain test results:
 - a. meaning of the test results
 - b. follow-up tests may be ordered based on the results
 - c. how results will impact or effect the treatment plan
 - d. recommendations based on the test results

PNM-TO TOBACCO (SMOKING)

OUTCOME: The patient/family will understand the dangers of smoking.

STANDARDS:

1. Explain the increased risk of complications and chronic lung disease in the patient with pneumonia when exposed to cigarette smoke.
2. Encourage smoking cessation. If the patient is unwilling to stop smoking, emphasize the importance of cutting back on the number of cigarettes smoked in an effort to quit. **Refer to TO.**

PNM-TX TREATMENT

OUTCOME: The patient/family will understand the appropriate treatment for pneumonia.

STANDARDS:

1. Explain that antibiotics are necessary to treat the pneumonia. **Refer to PNM-M.**
2. Explain that sometimes oxygen is required during the acute phase of infection to maintain adequate oxygenation.