

Universal Competencies (Address all)	Required Areas of Care (Address all)
<p>* <u>Health Care Team Collaboration:</u> Respiratory Therapy: The lungs may become injured by circulating inflammatory mediators and result in extremely impaired gas exchange. Our patient has been diagnosed with pneumonia. Sepsis-induced ARDS can often result from pneumonia. Severely impaired gas exchange will usually result in the need for mechanical ventilation. Our patient will also require monitoring of arterial blood gas levels in order to keep a close eye on the progression of her condition. A buildup of fluid in the lungs causes a decrease in space need for O₂ and CO₂ exchange to take place. The patient's increased rate is an attempt to correct metabolic acidosis.</p> <p>Radiology: Chest x-rays may need to be obtained to monitor the pneumonia and watch for improvement once treatment has been initiated.</p> <p>Wound Care Team: Wounds such as the stage III pressure ulcer that the patient has are also a risk factor for sepsis. Daily assessments and cleanings should be initiated by the wound care team in order to aid healing to the source of infection.</p> <p>* <u>Human Caring:</u> Upon arrival to the MICU, it is important to maintain a professional attitude and engage with the patient to ensure that she is satisfied with the care that she is receiving. The patient is from a long-term facility, and will most likely be alone for her stay. I would do my best to comfort her and make sure that she knows I'm there to do my best in providing care for her. I would be sure to get her input about her primary concerns and do my best to explain and address them for her. If they patient is unable to communicate, I will do my best to advocate for her.</p> <p>* <u>Standard Precautions:</u> It will be extremely important to also wash my hands and apply gloves before interacting with the patient. I would be extra cautious about aseptic technique if required to come into contact with the patient's wound because I do not want to introduce any other harmful bacteria into the open area and worsen the situation. All equipment should be cleaned before using in order to protect the vulnerable patient.</p> <p>* <u>Safety & Security:</u></p>	<p>* <u>Assessment & Evaluation of Vital Signs:</u> WBC (MICU 17): The white blood cell count of the patient has progressively increased. The current count remains elevated at 17,000. This is an indicator of infection and meets the criteria for sepsis.</p> <p>HGB (MICU 9.0): The patient's hemoglobin is low. The production of RBCs may be reduced due to the systemic inflammatory response. Destruction may be increased because of hemolysis and bleeding in the patient. These low hemoglobin levels can worsen the tissue oxygenation problem due to decreased arterial oxygen concentration.</p> <p>HCT (MICU 42%): The hematocrit is within normal levels and has slightly increased since admission. The body may be trying to compensate and increase the oxygen carrying proportion of the blood.</p> <p>RBC (MICU 3.0): Low red blood cell production is common in sepsis because of the inflammatory response that is occurring in the body. Destruction of red blood cells is also taking place due to hemolysis and bleeding.</p> <p>PT (MICU 15): The increased prothrombin time could indicate that the patient is developing DIC and is at an increased risk of bleeding. The increase in time shows that blood is not clotting as effectively as it should be.</p> <p>INR (MICU 2.5): The INR has increased since the patient's admission which also increases the clotting time and puts her at a greater risk for bleeding.</p> <p>Lactic Acid (MICU 4.0): When our cells lack oxygen and cannot perform the usual aerobic metabolism (requiring oxygen), we begin using anaerobic metabolism (without oxygen) to break down glucose and produce ATP. Lactic acid is the biproduct of anaerobic metabolism. This acid builds up and causes the patient's pH to increase and become acidic.</p> <p>* <u>Fluid Management Evaluation with Recommendations:</u> Fluid resuscitation is vital to reverse hypotension and help improve cardiac output in our patient with such a low BP. We need to work quickly to improve tissue perfusion and prevent damage of vital organs that can be caused due to low perfusion. A crystalloid should</p>

<p>As with every patient, it is important to always verify name, date of birth, and allergies. I want to be sure that I'm treating the right patient and not giving her anything that could cause her more harm or create further problems. Medications will be initiated for treatment and it will be my duty to make sure that the patient has never had an adverse reaction to anything prescribed and to monitor her condition for the duration of the treatment provided while in the hospital. I will always address the seven rights or medication administration before giving Fannie Mae anything. I will spend the required time with the patient and be sure to address both psychological and emotional needs. Being in the hospital alone may be stressful for the patient, and I'd want to ensure that my patient is comfortable and informed.</p>	<p>be administered at 30ml/kg initially until a central venous pressure in the range of 8-12 is achieved. Intake and output should be closely monitored for the patient and daily weights should be recorded. Volume replacement can be evaluated by assessing vitals, capillary refill, temperature of the skin, and CVP. We want to be able to accurately determine the amount of fluid that has been given versus what the patient is letting off. A reduction in urine output could also be a sign that the kidneys are beginning to fail, which could lead to further fluid imbalances. Capillary refill and skin temperature can serve as a good indicator about the quality of perfusion that the patient is receiving. Central venous pressure is a significant tool used to assess systemic fluid status. Passive leg raising may also be performed by the provider to determine effectiveness of fluid resuscitation.</p>
<p>Choose Two Priority Assessments and Provide a Rationale for Each Choice</p>	<p><u>*Type of Vascular Access with Recommendations:</u></p>
<p><u>*Respiratory Assessment:</u> Fannie Mae has been diagnosed with pneumonia and sepsis, therefore frequent respiratory assessments should be performed. The lungs are often the first organ that is affected with sepsis and can lead to multiple organ dysfunction syndrome. Pneumonia will cause greater problems when it comes to the ability to exchange O2 and CO2. It will be important to monitor the respiratory status and perform assessments on the patient in order to keep track of improvement and watch for further deterioration. We should assess breath sounds every 1-2 hours in order to identify changes that may indicate fluid overload or accumulation of secretions.</p>	<p>The patient currently has a peripheral IV site, but a central line should be placed for the patient during the hospital stay. It should have multiple lumens in order to be able to monitor CVP because her blood pressure is so low and her respiratory status is unstable. It will be useful for the administration of antibiotics and continuous fluid infusion. Aseptic technique should be used when accessing the line and flushed per protocol to ensure proper function is maintained.</p>
<p><u>*Cardiac Assessment:</u> The cardiac status of the patient must also be an assessment of primary focus. We need to continue to monitor the blood pressure to ensure that it does not continue to decrease anymore as this indicates a greater loss of volume and decreased perfusion ability. MAP should be noted and >65 in order to be able to perfuse organs. Heart rate should also be monitored. Our patient is experiencing tachycardia so we need to be sure that the rate does not get dangerously high and create other cardiac issues or dysrhythmias.</p>	<p><u>*Type of Medications with Recommendations:</u> The patient will require antibiotics because the pneumonia or the wound is probably the source of infection. Broad spectrum antibiotics should be given within 1 hour. These are used to treat the source of infection. Commonly used antibiotics include: Ceftriaxone, Meropenem, Cefepime, and Piperacillin. The sooner the treatment is initiated, the better the chance of survival. The patient's blood pressure is also lower than optimal level. Vasopressors may be required if fluid resuscitation is not enough to maintain a MAP of >65. These medications are used to cause vasoconstriction or increase cardiac contractility. Some of these medications include: Norepinephrine, Vasopressin, Dopamine, Phenylephrine, and Epinephrine.</p> <p><u>*Oxygen Administration with Recommendations:</u> It is important that we are able to maximize oxygen delivery and minimize oxygen consumption. The patient is currently on 4L nasal canula, but her respiration rate remains high so she may need to be</p>

	<p>placed on a different form such as high flow nasal canula and may require mechanical ventilation. If the PaO2 is <60 this indicates hypoxemia and will require a higher concentration of O2 or different mode of O2 delivery.</p> <p><u>*Special Needs this Patient Might Have on Discharge:</u></p> <p>Fannie Mae will require continuing wound care once she is discharged to ensure that her wound does not become infected or further progress. She may have continuing physical and occupational therapy if able so she is able optimize the use of her left side. If she is unable to breath appropriately to maintain stable O2 levels she may need to be discharged with supplemental oxygen.</p>
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Nursing Management (Choose three areas to address)

<p>*Wound Management:</p> <p>The patient's wound needs be routinely treated so that she able to avoid infection from that site. Proper aseptic technique must be maintained when treating the site. We must re-position the patient to avoid further breakdown. A culture may be obtained from the wound to be sure that the infection is not from the site. If the site is infected the culture can help determine the proper antibiotics that must be given. The patient and nursing home staff should be provided instructions on proper wound care. I should make sure that the patient is aware of the risks associated the wound and proper teaching of precautions that should be taken to prevent infection.</p> <p>*Comfort Management:</p> <p>The patient is from a nursing home and probably does not have family around for support. During this time she may be extremely stressed and concerned. It is important that we are able to address the patient's fear, anxiety, and pain. All of these factors may contribute to further respiratory distress. The patient's mental status as well as level of pain should be assessed. Continuous benzodiazepines and opioids or sedatives should be considered, and we should educate the patient on the benefits of each of the drugs. The patient should be aware that she is able to express any fears/concerns that she has so that we can properly address them. We should educate the patient on appropriate fear/anxiety management.</p>	<p>*Respiratory Management:</p> <p>Respiratory status of the patient must be frequently assessed to ensure adequate oxygenation and to be able to recognize further complications. Assessment of breath sounds are important to watch for fluid accumulation in the lungs. An ear probe may need to be used if the patient has poor peripheral perfusion. The type and amount of supplemental oxygen will depend on the PaO2 of the patient. Education on the use of oxygen should be given to ensure safety and compliance of use. The patient can also be taught to TCDB to help prevent future occurrences of pneumonia.</p>
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