



GOAL	INTERVENTION	RATIONALE	EXPECTED OUTCOME
1. Risk for Altered Peripheral Tissue Perfusion related to affinity of hemoglobin for oxygen			
	NIC Priority Intervention: Circulatory Care: Promotion of arterial and venous circulation		NOC Outcome: Tissue Perfusion, Peripheral: Extent to which blood flows through the small vessels of the extremities and maintains tissue function.
The child will show few signs and symptoms of tissue hypoxia. Repeated cerebrovascular accidents will be avoided.	<ul style="list-style-type: none"> ■ Instruct child to avoid physical exertion, emotional stress, low oxygen environments (e.g., airplanes, high altitudes), and known sources of infection. ■ Administer blood transfusions as ordered. ■ Perform several caregiving activities together when possible. ■ Give oxygen as ordered. ■ Administer and teach the family to administer prophylactic transfusions for the child who has had a cerebrovascular accident. 	<ul style="list-style-type: none"> ■ Decreased activity and exposure reduce body's need for oxygen. ■ Packed cells increase number of red blood cells available to carry oxygen to tissue cells. Transfusions promote circulation. ■ Grouping activities allows for optimum rest. ■ High concentration of oxygen in alveoli increases diffusion of gas across membranes. ■ Lowers potential for a future cerebrovascular accident. 	The child has no shortness of breath and shows no signs of hypoxia. The child does not suffer a cerebrovascular accident.
2. Risk for Fluid Volume Deficit related to inadequate fluid intake			
	NIC Priority Intervention: Fluid Management: Promotion of electrolyte balance and prevention of complications resulting from abnormal or undesired fluid levels.		NOC Suggested Outcome: Hydration: Amount of water in the intracellular and extracellular compartments of the body.
The child will maintain or be restored to adequate hydration.	<ul style="list-style-type: none"> ■ Calculate the child's daily fluid requirements. Monitor the child's usual fluid consumption and make necessary adjustments. Encourage the child to take fluids. Observe for signs dehydration. ■ Record intake and output. 	<ul style="list-style-type: none"> ■ Optimizing fluid intake ensures that the child gets needed fluid. Dehydration exacerbates crises. ■ Recording enables you to monitor daily fluid intake and spacing throughout the day. 	The child shows signs of adequate hydration.



GOAL	INTERVENTION	RATIONALE	EXPECTED OUTCOME
3. Pain related to chronic physical disability			
	NIC Priority Intervention: Pain Management: Alleviation of pain or a reduction in pain to a level of comfort acceptable to the patient.		NOC Suggested Outcome: Comfort Level: Feelings of physical and psychological ease.
The child will verbalize that pain is controlled.	<ul style="list-style-type: none"> ■ Administer analgesics, such as morphine or hydromorphone (Dilaudid), as ordered. Continuous intravenous infusion is used for the duration of a painful crisis. ■ Position carefully. 	<ul style="list-style-type: none"> ■ Pain of sickle-cell crises is excruciating. ■ Joints and extremities can be extremely painful. 	The child is pain-free or pain control is significantly improved.
4. Risk for Infection related to chronic disease and splenic malfunction			
	NIC Intervention: Infection Control: Minimizing the acquisition and transmission of infections agents		NOC Suggested Outcome: Risk Control: Actions to eliminate or reduce actual, personal, and modifiable health threats.
The child will not develop infection.	<ul style="list-style-type: none"> ■ Ensure adequate nutrition by providing high-calorie high-protein diet. Ensure that the child's immunizations are up to date. Report any signs of infection to physician immediately. ■ Isolate the child from possible sources of infection. Instruct parents about signs of infection and encourage them to seek prompt health care. 	<ul style="list-style-type: none"> ■ Chronically ill children are at greater risk of infection. ■ Restriction of persons with infection decreases the child's contact with infectious agents. Prompt care for infection reduces the chance of sickle-cell crisis. 	The child is free of infection.
5. Knowledge Deficit (Child and Parents) related to lack of exposure about cause and treatment of sickle-cell anemia			
	NIC Intervention: Teaching Disease Process: Assisting the patient to understand information related to a specific disease process.		NOC Suggested Outcome: Knowledge: Extent of understanding conveyed about sickle-cell disease.
The child and family will verbalize understanding of risk factors for sickle-cell crises and how to minimize them.	<ul style="list-style-type: none"> ■ Review basics of sickle-cell disease. Teach the child and family about signs and symptoms of crises. ■ Arrange for genetic counseling and testing for sickle-cell trait for family members if desired. 	<ul style="list-style-type: none"> ■ Knowledge of disease helps ensure compliance with treatment regimen and adherence to preventive measures. ■ Questions and concerns regarding future pregnancies can be allayed through knowledge of disease and transmission. 	The child and parent can verbalize precipitating events of crises.