PURPOSE:
To provide care to the patient with a cast, to promote skin integrity and comfort, and facilitate caregivers to provide safe, effective care.

CONSIDERATIONS:
1. A cast may be made of plaster of paris or fiberglass.
2. To prevent soiling of the cast when using bedpan, slant downward from coccyx area.
3. Use of back scratchers or sharp objects under the cast may cause skin damage. A small child may be unable to understand these precautions and may put food or toys under the cast.
4. When the child is in a hip spica cast, having the child wear a large T-shirt over the cast helps keep the cast clean and free of foreign bodies.
5. Oils, lotions and powders used under the cast may cake or irritate the skin.
6. The child is especially troubled by immobilization. A homecare approach includes a plan for recreation and movement of the unaffected joints.

EQUIPMENT:
Plastic wrap or water-repellent material
Tape
Pillows or towel rolls
Bedpan or urinal
Wide belt, long sturdy sheeting, or sturdy sash
Hair dryer (optional for drying cast and providing itching relief)
Scissors
Gloves

PROCEDURE:
1. Adhere to Standard Precautions.
2. Identify the patient and explain procedure to caregiver and patient, in age appropriate manner.
3. Inspect exposed skin area. Body pressure areas that need close observation due to child's inactivity are back of head, ears, elbows, iliac crests, hip bones, if exposed, sacrum and heels.
4. Inspect the cast for:
   a. Dampness.
   b. Odor.
   c. Mold.
   d. Breaks, cracks or crumbling.
5. Observe for:
   a. Foreign objects under the edges of the cast, including paper, oils, lotion and powder.
   b. Circulation impairment: edema, absent pulses distal to cast, "blueness" of extremities or digits distal to cast, or differences in temperature.
   c. Increased irritability or complaints of pain.
   d. Respiratory impairment.
   e. Signs of infection: redness, swelling, foul odor, pain, fever or lethargy.
6. If cast edges appear rough, "petal" cast edges with tape.
7. Assess need for pain medication. Obtain orders from physician, if indicated.

AFTER CARE:
1. Instruct caregiver:
   a. To observe for signs and symptoms, or complications such as:
      (1) Crack or break in cast.
      (2) Reddened areas not relieved by improved skin care.
      (3) Increased swelling.
      (4) Bluiness of distal extremities or digits.
      (5) Numbness and tingling.
      (6) Difficulty in wiggling toes or fingers.
      (7) Continuous complaints, fussiness in infant or small child.
      (8) Fever.
      (9) Foul odor.
   b. Turn patient a minimum of every 2 hours during the first 48 hours, then every 4 hours during the day.
   c. Position for comfort using pillows or towel rolls for support. When prone, toes should not touch bed. When supine, heels should be off bed.
   d. To prevent the child from falling, use sash or sheeting and secure to bedside frame or bedsprings. A Posey belt for a larger patient can be used. For infants and toddlers, put crib rails up.
   e. Cover cast for eating. Slant positions facilitate digestion and comfort.
   f. To prevent constipation, increase fluids, fresh fruit, raw vegetables and whole grain cereals in diet.

2. Document in patient's record:
   a. Condition of cast.
   b. Condition of skin including swelling or circulation impairments.
   c. Complaints of pain or irritability of child.
   d. Bowel and bladder function.
   e. Instructions given to caregiver.