

conservatively; it is used for pH less than 7.0, severe hyperkalemia, or cardiac instability. Because sodium bicarbonate has been associated with an increased risk for cerebral edema, children receiving this substance must be carefully monitored for changes in level of consciousness.

When the critical period is over, the task of regulating the insulin dosage in relation to diet and activity is started. Children should be actively involved in their own care and are given responsibility according to their ability and the guidance of the nurse.

Nursing Alert

Because insulin can chemically bind to plastic tubing and in-line filters, thereby reducing the amount of medication reaching the systemic circulation, an insulin mixture is run through the tubing to saturate the insulin-binding sites before the infusion is started.

Nursing Care Management

Children with DM may be admitted to the hospital at the time of their initial diagnosis; during illness or surgery; or for episodes of ketoacidosis, which may be precipitated by any of a variety of factors (see the [Translating Evidence into Practice](#) box evaluating hospitalization compared with outpatient care for children newly diagnosed with type 1 DM). Many children are able to keep the disease under control with periodic assessment and adjustment of insulin, diet, and activity as needed under the supervision of a practitioner. Under most circumstances, these children can be managed well at home and require hospitalization only for serious illnesses or upsets.

Translating Evidence into Practice

Outpatient Treatment of Type I Diabetes

A *Cochrane Systematic Review* of seven studies evaluating whether children newly diagnosed with type 1 diabetes should be admitted to a hospital or treated in the outpatient setting found no disadvantages to allowing the child to remain as an outpatient. Studies evaluated metabolic control, acute diabetic complications