#### **POSITION**

It is the position of the Colorado Diabetes Resource Nurses that the school nurse is the only school staff member who has the skills, knowledge base, and statutory authority to fully meet (individually or via delegation) the healthcare needs of students with diabetes in the school setting.

- Healthcare services must be provided in the school setting to students with diabetes to meet the requirements of federal laws and ensure the safety of the student with diabetes in the school setting.
- Effective and safe management of diabetes is complex and requires careful planning by a licensed professional school nurse. Individualized healthcare planning is a nursing responsibility that is regulated by the Colorado Nurse Practice Act and cannot be delegated to unlicensed individuals.
- The delegation of procedures/treatments may be used only in compliance with the Colorado Nurse Practice Act, state standards of practice, state regulations and guidelines provided by the Colorado Association of School Nurses.
- Appropriate ratios of school nurse to students with chronic health conditions should be maintained to ensure safety of the student, safe delegation and ongoing supervision.
- To ensure the safety of the student with diabetes in the school setting, routine diabetes
  care tasks of blood glucose monitoring, ketone monitoring, intervention for hypoglycemia
  and hyperglycemia, emergency administration of glucagon and insulin administration must
  be provided in the school setting. The provision of diabetes care tasks shall have as little
  impact on the academic day as practicable and be reasonably calculated to ensure that
  the student receives a Free Appropriate Public Education (FAPE).
- It is not the responsibility of, nor will it be the expectation of, schools (school nurses or school staff) to perform non-routine diabetes care tasks for students using Continuous Subcutaneous Insulin Infusion (CSII). This includes programming of basal rates, temporary basal rates, advanced bolus configurations (dual waves, extended bolus, etc), and/or infusion set changes.
- Maintenance of Continuous Glucose Monitoring Systems, and data collection for research purposes, has a negative impact on the student's access to FAPE and will not be provided or managed by school staff.
- The use of technology devices for the administration of insulin and monitoring of blood glucose levels is reliant upon the manufacturer's safeguarded processes and those safeguards should not be removed or altered for use in the school setting.

#### **PREMISE**

For youth under 20 years of age, diabetes is on the rise with an estimated 215,000 children and adolescents with type 1 or type 2, or approximately 0.26% of this age group. Annually, from 2002 to 2005, 15,600 youth were newly diagnosed with type 1 diabetes, and 3,600 youth were newly diagnosed with type 2 diabetes (Centers for Disease Control and Prevention, 2011). Poorly controlled diabetes can lead to long-term complications such as retinopathy, macrovascular and microvascular disease, and nephropathy as well as cause immediate concerns due to fluctuating blood glucose levels which can impact academic performance.

Advancing diabetes technology and management have changed the way students manage diabetes at school. Children are monitoring their blood glucose levels several times a day, calculating carbohydrate content of meals, and dosing insulin via syringe, pen and pump to achieve a blood glucose within a target range (Bobo, et al., 2011). This more intensive management will achieve the long-term health benefits of optimal diabetes control according to the landmark study from the Diabetes Control and Complications Trial Research Group (Diabetes Control and Complications Trial Research Group, 1996).

Section 504 of the Rehabilitation Act of 1973 and the Americans with Disabilities Act of 1990 prohibit discrimination against handicapped people by school districts receiving federal financial assistance. Section 504 require schools to provide individuals with disabilities a Free and Appropriate Public Education (FAPE), including the provision of regular or special education and related aids and services designed to meet the individual educational needs of disabled students as adequately as the needs of nondisabled students are met. Disabled students are to be educated with non-disabled students to the maximum extent appropriate, and disabled students are to have equal access to the buildings, programs, and services of the school district, including participation in nonacademic and extracurricular activities (Office for Civil Rights, 2011). School personnel need to provide appropriate and safe accommodations for students with diabetes so they may participate in the same academic, nonacademic, and extracurricular activities as their peers.

#### **ESSENTIALS**

The goal of diabetes management at school is to maintain blood glucose levels at or near normal range in a safe environment and through safe care management, and such care is essential for all students with diabetes.

Each student with diabetes is unique in regard to his or her disease process, developmental and intellectual abilities and levels of assistance required for disease management. As noted above, the goal of diabetes management in the school setting is to ensure that each student has the ability to fully participate in academics and extracurricular activities.

School districts are responsible for having policies in place that address the needs of students with health conditions at school. Recognize that not all students with diabetes will need consistent access to a school nurse. State laws and the Colorado Nurse Practice Act determine the extent to which school nurses can delegate nursing tasks such as insulin and glucagon administration to other school personnel in the absence of the school nurse. The decision to delegate is a nursing decision and should be done on a case-by-case basis taking into consideration student safety, proximity of the student's classroom to the health office,

and the availability of the school nurse and other appropriately trained staff. (Colorado Revised Statutes; Title 12, Article 38, 2011) (Colorado Board of Nursing, 2007)

The school nurse determines if the student's condition, age, cognitive ability or skills are appropriate for receiving care from unlicensed staff. The nurse provides training and delegation of diabetes care tasks to unlicensed staff using guidelines available on <a href="https://www.coloradokidswithdiabetes.org">www.coloradokidswithdiabetes.org</a>. The school nurse should provide direct supervision of the delegated tasks before the unlicensed staff is able to perform tasks independently. The nurse also must have reasonable opportunity to provide ongoing supervision of diabetes care tasks.

The Colorado Diabetes Resource Nurse Task Force on Appropriate Management of Children with Diabetes will guide appropriate case management numbers of students with diabetes. (Colorado Diabetes Resource Nurse Task Force, March 9, 2012)

The school nurse, diabetes care provider, family and school staff must be able to communicate and collaborate about the needs of the student and the scope and standards of practice that assist in meeting those needs.

An Individualized Health Plan (IHP) developed by the school nurse with input from the family and health care provider, documents and communicates the student's needs and the school's management strategies for that student in the school setting. The school personnel who work with the student with diabetes during the school day and/or supervise the student's participation in non-academic or extracurricular activities need to be knowledgeable about that student's IHP. The consequences of uncontrolled blood glucose, which can be evident in classroom or school activities, can be minimized or avoided by having informed personnel available to assist the student with diabetes management.

An Emergency Plan, developed by the school nurse and the IHP must also address the concerns of how to manage hypoglycemia and hyperglycemia in the school setting. Hypoglycemia (low blood glucose) is always an immediate concern. This condition can be treated easily if identified early, or it can be life threatening if left untreated. Despite a quick and favorable response to treatment for hypoglycemia, cognitive ability can remain impaired for several hours. Untreated hypoglycemia can lead to increased confusion, unresponsiveness, and seizures. Hyperglycemia (high blood glucose) can also affect a student's success in school. The student may not feel well and maybe experiencing symptoms of nausea, fatigue, blurry vision, thirst, and frequent urination. Severe hyperglycemia with the presence of ketones can be very serious and must be addressed as well.

To achieve appropriate diabetes management in the school setting, the student may need access to a variety of diabetes supplies that allow her/him to perform multiple diabetes self-management tasks during the school day. As noted above, each student is unique. Management strategies included in the IHP for a student with diabetes should be developed considering the knowledge base of the student, the developmental level of the student, and the individual needs of the student. Development of the plan should also take into consideration the professional staff needed to oversee the implementation of the IHP. Students who lack diabetes management experience or cognitive and developmental skills must have assistance with their diabetes management during the school day. In addition, all students with diabetes must have access (as appropriate) to glucose monitoring equipment, oral or injectable medications, including insulin and glucagon, nutritional supplements such

as snacks, and a fast acting source of glucose. The student must have knowledge about the equipment used in her/his diabetes management (e.g., syringes, insulin pen, insulin pump), access to a documentation system for his/her blood glucose readings, insulin dosages, and access to a bathroom. For those students who are independently managing their diabetes, a protocol should be in place to document their ability to perform the self-management tasks independently.

### **SUMMARY**

As school nurses have the professional skills needed to assess and support children with diabetes in the school setting, the school nurse is the person qualified to coordinate and implement the plan of diabetes care management for school. Each student with diabetes who is not independent in managing his/her diabetes care will have an IHP. Depending on the student's specific needs, students with diabetes may also have a Section 504 Plan or an Individual Education Plan (IEP), developed in accordance with the requirements of Section 504 or the Individuals with Disabilities Education Act.

School nurses are uniquely prepared to develop an IHP, Emergency Care Plan (ECP), and to provide information relevant to developing a Section 504 Plan or IEP for the student, as appropriate.

The IHP is a description of the nursing interventions and school accommodations that the student needs during the school day. The plan reflects the individual needs and competencies of the student during a particular period of time. The process used by the school nurse for developing the IHP includes:

- Assessing the developmental, cognitive, and physical status of the student within his/her family structure to determine the ability of the student to independently manage diabetes care at school. The younger, less experienced or newly diagnosed student may require more assistance with diabetes management, while the adolescent student with diabetes may only need support to ensure that he/she is independently selfmanaging his/her diabetes.
- Identifying and coordinating the nursing interventions the student requires at school, based on physician orders, in collaboration with the health care provider, and as a result of the nursing assessment of the student.
- Determining the nursing interventions and school accommodations needed for all school activities based on the developmental, cognitive, and physical status of the student, as well as the student's understanding and level of ability.
- Identifying and coordinating the interventions for school activities, which may include, as appropriate, blood glucose monitoring, insulin administration, dietary intake, and instruction in identifying signs of and response to hypoglycemia/hyperglycemia.
- Assisting the student in determining realistic and achievable personal goals for attaining independence in the management of her/his health.

Provision of education and training for school staff: (National Diabetes Education Program, 2010)

 Level 1. Diabetes Overview and How to Recognize and Respond to an Emergency Situation

- Level 2. Diabetes Basics and What to Do in an Emergency Situation
- Level 3. General and Student-Specific Diabetes Care Tasks training for one or more school staff members designated as "trained diabetes personnel." Delegation of tasks to school staff may occur when the school nurse is not available to provide direct care of students with diabetes.

All training, education and delegation will align with Colorado Nurse Practice Act, Safe at School program, and guidelines developed by the Colorado Diabetes Resource Nurse Task Force on Appropriate Management of Children with Diabetes. (American Diabetes Association, 2012)

Under the direction of the school nurse, management strategies may be incorporated in a seamless fashion between home and classroom to help the student with diabetes stay healthy, be academically focused, and participate in all academic and extracurricular activities with as little interruption of activities as practicable. School districts need to provide nurse assignments that ensure the student with diabetes has access to the school nurse or appropriate delegate. The student's management plan must conform to Colorado and federal laws and regulations, the standard of practice, as well as the state's nurse practice act and the related rules for delegation. If diabetes care is delegated to LPNs or UAPs, the school nurse needs to be accessible to provide ongoing supervision of diabetes care tasks. (National Association of School Nurses, 2012) (Colorado School Nurse Leadership, 2010)

Managing diabetes at school is most effective when there is a partnership among students, parents, school nurse, health care providers, teachers, counselors, coaches, transportation, food service employees, and administrators. The school nurse provides the health expertise and coordination needed to ensure cooperation from all partners in assisting the student toward self-management of diabetes. The school nurse can be instrumental in preventing and managing emergency conditions that can result from glucose fluctuations by instructing the entire school team on basic diabetes information and management. Emergency conditions are not necessarily the result of a lack of management and may require nursing interventions even in those situations in which the student is skilled in handling his/her own care. Factors such as illness, hormones, or stress may cause a student who closely follows her/his diabetes plan to experience an emergency situation. The student with diabetes who is independently self-managing his diabetes may require the professional supervision of the school nurse to ensure that he/she has appropriate self-care skills. The school nurse is essential to fulfill the unique role of care coordination, planning and development of the care plan for management of diabetes in school to facilitate academic success. NASN recommends a full-time professional licensed school nurse to facilitate the coordination of quality care for students with diabetes in the school setting.

Parents are an integral part of the student's success at school and in extra-curricular activities. Parents who are well informed about the safeguards in the school setting will support healthy development of their child's independence in living with this chronic condition.

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