

School Staff Action Tools



Introduction

The School Staff Action Tools have been developed to assist school personnel in managing diabetes care at school. The school nurse can distribute these handouts as well as provide additional training.

The Recommendations for Diabetes Care in the Schools (Section IV) have been divided up into sections that are appropriate for Parents, Students, Authorized Health Care Providers, School Administrators and other personnel who provide clinical care. The following handouts provide an additional overview of actions for school personnel.

School Staff Action Tools

Actions for the Principal

- Receive training on the “Recommendations for Diabetes Care in the Schools” (refer to “A Curriculum for Diabetes Care in the Schools,” training binder). Use The Diabetes School Resource Guide as a resource. Refer specifically to Administrative Recommendations.
- Designate school personnel to be responsible for diabetes management during school hours and school sponsored events. (school nurse assess staff competency to perform health care services).
- Involve school staff in the “Diabetes Basics, A Training Program for School Personnel” (refer to “A Curriculum for Diabetes Care in the Schools,” training binder.) The school nurse is qualified to provide this training as well as ensuring staff competency with ongoing monitoring and supervision.
- Develop school policies that will assist in accommodating individual student’s needs for blood glucose testing whenever and wherever necessary. School policies need to ensure privacy as needed as well as the safety of all students and staff.
- Develop school policies that will assist in accommodating individual student’s needs for insulin administration at school.
- Develop school policies that will enhance a student’s growth towards independent management of their diabetes.
- Provide positive support and encouragement to students with diabetes and their families.

Attachments:

- Copy of the student’s ISHP and relevant procedures.
- Poster form of Hypo and Hyperglycemia Treatment (**Section V, G**).

School Staff Action Tools

Actions for Unlicensed Assistive Personnel (UAP)

- Ensure ongoing communication with the school nurse regarding any new students with diabetes.
- Receive training from the school nurse or certified diabetes educator on “Diabetes Basics, A Training Program for School Personnel” (refer to “A Curriculum for Diabetes Care in the Schools,” training binder) for a comprehensive background on diabetes management at school.
- Receive training on the Individualized School Healthcare Plan (ISHP) for Management of Diabetes at School and School Sponsored Events and specific procedures relating to individual students with diabetes.
- Implement procedures in accordance with the ISHP.
- Assist with classroom accommodations for diabetes care as needed. Communicate with classroom teacher as appropriate.
- Document on all procedures given and alert school nurse to any changes, unusual circumstances, or concerns in regards to care.
- Communicate with the parent as appropriate.
- Provide positive support and encouragement to the student with diabetes and their family.

Attachments:

- Copy of the student’s ISHP and relevant procedures.
- Poster form of Hypo and Hyperglycemia Treatment (**Section V, G**).

School Staff Action Tools

Actions for the School Counselor

- Assist school personnel in understanding the implications of a chronic disease as it relates to learning, emotional and physical well being. Problems may include feeling different from peers, frustration, anger, resentment, withdrawal and possible eating disorders.
- Provide counseling to the student and family as needed to assist with coping skills and compliance to diabetes regimen.

School Staff Action Tools

Actions for the Classroom Teacher

- Receive training on “Diabetes Basics, A Training Program for School Personnel” (refer to “A Curriculum for Diabetes Care in the Schools,” training binder) so appropriate care can be provided in the classroom. Most important is recognizing signs and symptoms of hypoglycemia and providing immediate treatment.
- Receive a copy and become familiar with the student’s Individualized School Healthcare Plan (ISHP) for Management of Diabetes at School and School Sponsored Events.
- Obtain poster form of Hypo/Hyperglycemia for quick reference in classroom. Sudden behavior changes can be related to hypoglycemia. Refer any behavior changes such as low self esteem or withdrawal to the school counselor.
- Prepare a substitute teacher information packet to include copies of hypo/hyperglycemia posters as well as other relevant information. A photo of the student with diabetes would be helpful for identification.
- Provide accommodations for blood glucose testing in the classroom if needed. The student may need a designated area for testing.
- Provide accommodations for hyperglycemia if needed. This includes the allowance of a water bottle in the classroom, bathroom privileges as needed and possible omission of physical exercise per the written details in the student’s ISHP.
- Provide accommodations for snacks if needed during classroom time.
- Provide accommodations for school parties. Notify the parent ahead of time to allow for planning of food accommodations.
- Provide accommodations for educational issues related to hypoglycemic events. The student with diabetes may need to delay school work if hypoglycemia occurs. Hypoglycemia can impair thinking for several hours.
- Encourage the student with diabetes to participate fully in school activities and events.
- Communicate appropriate events to school nurse and parents.
- Provide support and encouragement to the student with diabetes and their families.

Attachments:

- Copy of the student’s ISHP and relevant procedures.
- Poster form of Hypo and Hyperglycemia Treatment (**Section V, G**).

School Staff Action Tools



Actions for the Coach & Physical Education Instructor

- Receive training on “Diabetes Basics, A Training Program for School Personnel” (refer to “A Curriculum for Diabetes Care in the Schools,” training binder) so appropriate care can be provided. Most important is recognizing signs and symptoms of hypoglycemia and providing immediate treatment.
- Receive a copy and become familiar with the student’s Individualized School Healthcare Plan (ISHP) for Management of Diabetes at School and School Sponsored Events.
- Obtain poster form of hypo/hyperglycemia treatment to use as a quick reference for treatment.
- Ensure that the student’s blood glucose testing kit, extra snacks and fast acting sugar sources are immediately available to the student at all times.
- Provide accommodations for activities as needed. This is detailed in the ISHP. Accommodations may include blood glucose testing, extra snacks before, during, and/or after exercise and possibly activity restriction with hyperglycemia.
- After the completion of any vigorous activity it is extremely important that the student is not left alone. Ensure that careful monitoring of the blood glucose and the extra carbohydrates are consumed in accordance with the student’s ISHP to assist in preventing hypoglycemia. NOTE: Muscles may continue to use glucose for up to 12 hours after exercise.
- Encourage the student’s participation in physical activity and sports events.

Attachments:

- Copy of the student’s ISHP and relevant procedures.
- Poster form of Hypo and Hyperglycemia Treatment (**Section V, G**).

The Role of the School Nurse



The role of the school nurse must be in accordance with individual state laws governing schools.

The role of the school nurse may include the following responsibilities:

- develop the Care Plan for the student in accordance with that student's growth and development pattern. Every child is at a different developmental stage, has varying degrees of knowledge and skill about their own diabetes, responds in different ways to various management regimens, and has different goals for what is considered successful treatment. All of these factors need to be considered when developing the care plan!

- review/research current (community) standards of care.
- review the federal and state laws, regulations, and rules on provision of health care to students with chronic illness or disabilities.
- utilize the nursing process.
- act as a resource to teacher/staff and parent prior to, during, and after the assessment process.
- act as a liaison between student's authorized health care provider and the school.
- participate in the formal assessment process including the student study team, where appropriate.
- develop and implement health-related goals (via ISHP, IFSP).
- participate in IEPT, IFSPT, and 504 Accommodation meetings regarding relevant health issues.
- utilize multi-disciplinary collaboration and interagency coordination to provide student health services.
- follow up with student, staff, and family after plans are in place, implemented.
- train, supervise, and monitor Unlicensed Assistive Personnel (UAPs) in required specialized physical health care procedures.

The Role of the Unlicensed School Personnel



Unlicensed Assistive Personnel (UAP) includes all school staff who provide healthcare services for students and are not hired as a licensed school nurse. Duties of UAP's must be in accordance with state laws governing schools.

Duties may include:

- assist with distribution of referrals, communications with staff, and follow-up notices to parents.
- perform healthcare procedures subsequent to training, assignment and under the supervision/monitoring of the school nurse.
- document provided health care services on daily log and/or student health record.

UAP's should refer all issues of question, dispute, or controversy to the school nurse.

UAP's play a role in providing student support & encouragement since they may have daily contact with the student. It is very important for the school nurse to educate the UAP regarding these psychosocial issues.

Recommendations for Diabetes Care the Schools

Introduction



Federal and state laws and regulations require that school districts provide health services necessary for students to receive educational services in the least restrictive environment. To assist school districts in this effort, this curriculum, approved by health professionals, educators, and parents, provides the following Recommendations for public schools. All schools should be provided with these Recommendations in order to promote consistent, safe, and effective diabetes management at school and a resulting optimal learning environment.

The primary goal of the medical management of Type 1 diabetes mellitus* is to maintain blood glucose levels at normal or near normal range (commonly referred to as “tight control”). Tight control is achieved by frequent blood glucose testing, insulin injections up to four times a day or the use of an insulin pump, dietary modifications and exercise. Recent research has indicated that maintaining the blood glucose within a narrow range can prevent, reduce, and/or reverse many of the long-term complications of diabetes. The most common long-term complications of diabetes include blindness, kidney damage, nerve damage, limited joint mobility, and blood vessel damage.

In the short-term “tight control” may result in an increased frequency of hypoglycemia or low blood sugar episodes resulting in serious complications or death. Thus, school personnel must be given the tools and training to assess and provide immediate emergency treatment of hypoglycemia.

These Recommendations provide a concise overview on responsibilities and reasonable accommodations needed to provide proper diabetes management at school. The Recommendations are directed towards school administrators, teachers, nurses, physicians, students and parents. References are made throughout the Recommendations to enable the appropriate person(s) to provide proper implementation.

**For purposes of this curriculum “diabetes mellitus” will be referred to as simply “diabetes”.*

Recommendations For Diabetes Care in the Schools

Overview



Parent* Recommendations

Recommendation 1:

PARENTS/GUARDIAN/CAREPROVIDER RESPONSIBILITIES

Student Recommendations

Recommendation 2:

STUDENT RESPONSIBILITIES

** Authorized Health Care Provider Recommendations

Recommendation 3:

AUTHORIZED HEALTH CARE PROVIDER RESPONSIBILITIES

Administrative Recommendations

Recommendation 4:

SCHOOL HEALTH SERVICES STAFF NOTIFICATION

Recommendation 5:

SCHOOL PERSONNEL TRAINING

Recommendation 6:

SCHOOL PERSONNEL AVAILABILITY

Recommendation 7:

PHYSICAL ACTIVITIES/ AND FIELD TRIP ACCOMMODATIONS

Recommendation 8:

ILLNESS ACCOMMODATIONS

Recommendation 9:

SELF-MANAGEMENT OF DIABETES CARE

Recommendation 10:

ADDITIONAL/EXCEPTIONAL HEALTH RELATED
EDUCATIONAL ISSUES

* = Parents/Guardian/Careprovider

** Authorized Health Care Provider = Healthcare provider who has legal authority to provide written orders for medications and/or procedures at school in accordance with individual state law

Recommendations For Diabetes Care in the Schools

Overview (continued)

Clinical Recommendations

Recommendation 11:
DIABETES CARE PLAN DEVELOPMENT

Recommendation 12:
HYPOGLYCEMIA TREATMENT

Recommendation 13:
BLOOD GLUCOSE TESTING

Recommendation 14:
HYPERGLYCEMIA TREATMENT

Recommendation 15:
INSULIN ADMINISTRATION

Recommendation 16:
NUTRITION ACCOMMODATIONS

Recommendations For Diabetes Care in the Schools

Parent Recommendations



Recommendation 1: Parents*/Responsibilities

Parents* must notify the school about their child's diabetes and provide emergency phone numbers to ensure proper and safe care at school. Written parental consent must be given to implement specific health procedures related to diabetes (refer to Recommendation #11) and to allow sharing of medical information between the school nurse and Authorized Health Care Provider. Parents* are responsible for notifying the school of any changes in the care of the diabetes at school. Parents* are responsible for providing Authorized Health Care Provider orders, appropriate medical records and all equipment necessary to implement proper diabetes care at school. It is highly recommended that parents* provide their child with a medical identification tag (bracelet, necklace, or shoe tag).

Rationale

The school needs be notified of health conditions so that arrangements can be made to train staff in proper

diabetes care. Emergency phone numbers ensure continuity of care and provide for parent notification when health issues occur. Authorized Health Care Provider authorization and proper equipment is needed before school districts can properly provide health care services. Medical identification tags provide for emergency identification.

Procedure

Schools may send district forms to the parents* at the beginning of each school year to obtain necessary health and emergency information. Parents* can call prior to the beginning of the school year to provide this information as well (this may assist in expediting staff training/preparation). Parents* must promptly notify school districts of any changes in the student health care regimen including remitting new written orders from the Authorized Health Care Provider.

* = Parents/Guardian/Careprovider

Recommendations For Diabetes Care in the Schools

Student Recommendations



Recommendation 2: Student Responsibilities

The student, depending on their age-appropriate ability, needs to:

- inform school staff of any symptoms relating to diabetes emergencies;
- abide by appropriate diabetes management and carry supplies for possible hypoglycemia;
- progressively participate in their own diabetes management as determined to be appropriate in the Individualized School Healthcare Plan, ISHP (refer to Recommendation #11);
- abide by school policy for bloodborne pathogens when performing blood glucose testing and/or insulin injections;
- minimize class disruption if performing blood glucose testing in the classroom.

Rationale

If age-appropriate, the student has these responsibilities to assist with ensuring his/her health and safety at school and contributing towards their own optimal diabetes management. It is also the student's responsibility to abide by established school policy.

Procedure

The student's ability to carry out the above Recommendations will be discussed with the parents* and addressed in the ISHP.

Recommendations For Diabetes Care in the Schools

** Authorized Health Care Provider Recommendations



Recommendation 3: Authorized Health Care Provider Responsibilities

The Authorized Health Care Provider must provide written orders to enable school personnel to provide medication and health care services at school. The Authorized Health Care Provider should also provide more comprehensive orders for overall diabetes care at school. The Authorized Health Care Provider Authorization/Parent Consent form (refer to **Section V, D**) can aid the Authorized Health Care Provider in developing this comprehensive plan. If changes in orders are indicated, new written orders must be provided. Parent(s)/ guardian consent will be obtained to allow the school nurse to communicate with the student's Authorized Health Care Provider regarding pertinent health care issues at school.

Rationale

School districts must receive Authorized Health Care Provider authorization in order to provide school health care services. Authorized Health Care Provider communication with the school nurse is necessary to ensure continuity of the student's health and safety at school and home.

Procedure

Schools send out standard district forms at the beginning of each school year to obtain necessary Authorized Health Care Provider orders. Authorized Health Care Provider must promptly provide new written orders to the school districts when any changes in the student health care regimen occur.

* = Parents/Guardian/Careprovider

** Authorized Health Care Provider = Healthcare provider who has legal authority to provide written orders for medications and/or procedures at school in accordance with individual state law

Recommendations For Diabetes Care in the Schools

Administrative Recommendations

Recommendation 4: School Health Services Staff Notification

Each district/school needs to develop an efficient and timely system for notifying health services staff of students with chronic conditions and/or special health care needs during the school day.

Rationale

An efficient system will allow for timeliness in providing the necessary staff training on diabetes emergencies, should they occur.

Procedure

Generally, the office staff receives notification of a health condition on an emergency card/form or via direct parent notification. The office staff must then immediately notify the health services staff so initiation of necessary legal paperwork and inservice training can occur. (refer to School Nurse Checklist for Diabetes Care at School, **Section V, C**).

Recommendation 5: School Personnel Training

In most states the school nurse has the legal responsibility for directly providing training, monitoring, and supervision of school personnel in the care and monitoring of diabetic students. School personnel must receive training to ensure the safety of the student with diabetes.

Recommendation 6: School Personnel Availability

The school district should provide trained school staff on site during school hours and school events for the student with diabetes. Trained school staff should always be available during school hours and school events (teachers, coaches, office clerks, health aides, bus drivers, etc.) for the student with diabetes. If there are no school personnel willing to be trained, then the school nurse should notify immediately and in writing, appropriate administrative personnel.

Rationale

There is no possible way to predict when diabetic emergencies may occur, so, the school must be prepared at all times. It is the responsibility of educational administration to provide personnel for such training.

Procedure

Each district will have its own policies regarding hiring staff who will be designated to perform health services. Job descriptions should reflect these assigned health services. The school nurse will arrange/provide the specific training (refer to Diabetes Basics Training Program, in P.E.D.S. A Curriculum for Diabetes Care in the Schools) and will observe, monitor and document training.

Recommendations For Diabetes Care in the Schools

Administrative Recommendations (cont.)

Recommendation 7: Physical Activities and Field Trip Accommodations

Students with diabetes must be offered full participation in physical activities and field trips. Trained staff should always be available for off campus school events.

Rationale

Organized sports and activities offer exercise, social skills, and learning experiences. Accommodations may need to be made in order to prevent and/or treat hypoglycemia.

Procedure

Students should be allowed to check blood glucose before, during, or after exercising or attending special events. Extra snacks/glucose sources should be available and consumed as detailed in the ISHP (usually 15 grams of fast acting carbohydrate for every 30 minutes of vigorous activity is recommended). Hyperglycemia may warrant extra insulin and fluids before physical activity occurs. A urine or blood test for ketones may be required. These details must be outlined in the ISHP. Trained staff must always be available to treat emergencies related to diabetes, i.e. hypoglycemia.

Recommendation 8: Illness Accommodations

Students with diabetes may be absent from school for required medical

appointments or for illness exacerbated by diabetes. Prompt parental notification is required if a student with diabetes becomes ill at school. Access to health care personnel should be provided if requested by the student with diabetes.

Rationale

Diabetes can impair normal physiological functions and may require more time to recuperate from illness. Illness in itself may trigger hyperglycemia and the formation of ketones. Prompt medical attention is needed in order to prevent a more serious condition of ketoacidosis.

Recommendation 9: Self-Management of Diabetes Care

Diabetes is a life long condition. School districts should encourage appropriate self-management of diabetes care as a part of its mission to prepare students to become productive health educated citizens. Any student desiring self-management must be considered for age appropriate skills, responsibility, and maturity.

Definition

Self-management may include independent blood glucose testing in the classroom, self-administration of insulin injections, independent insulin dose adjustments, and management of an insulin pump.

Recommendations For Diabetes Care in the Schools

Administrative Recommendations (cont.)

Recommendation 9: (continued) **Rationale**

Diabetes is a chronic disease that ideally requires the student to become independent and successful in daily management. It is the school's responsibility to provide for a safe and healthy environment for the student with diabetes and all other students therefore, all parties should be in agreement as to the student's competency to self-management at school.

Procedure

The areas for self-management can be indicated on the ISHP or a written contract can be used, in conjunction with the ISHP.

Recommendation 10: Additional/Exceptional Related Educational Issues

School districts should provide educational accommodations if determined to be necessary. The following plans are defined for the student with diabetes who requires additional educational accommodations.

504 Plan

A 504 accommodation plan (refer to **Section V. I, 504/IEP**) can be requested by the parents, student or school to ensure that reasonable accommodations are being provided to enable an optimal education program. The district 504 specialist and the school nurse should be contacted to initiate and complete an

approved 504 plan. This includes notifying appropriate school staff of student medical needs. The ISHP for management of diabetes must be attached to the 504 plan.

Individualized Education Plan (IEP)

Any student with health related learning needs may be provided an IEP, (refer to 504/IEP, **Section V. I**), if determined to be appropriate on an individual basis. Diabetes can classify the student as "other health impaired." Accommodations and goals must be made with the educational and health needs taken into consideration. The school nurse and the principal must be contacted to initiate assessments to qualify for the IEP. The ISHP for management of diabetes must be attached to the IEP.

A decreased ability to learn or inability to concentrate may occur after a hypoglycemic episode. This can be considered a health related learning need. Students with diabetes whom experience hypoglycemia at school may need extra time or an alternative time to complete an exam or a specific classroom assignment. The ISHP a 504 plan, or IEP may be used to provide for this accommodation.

Recommendations For Diabetes Care in the Schools

Clinical Recommendations

Recommendation II: Diabetes Care Plan Development

Students should have an Individualized School Healthcare Plan (ISHP) that addresses how to manage their diabetes during the school day. Ideally, all students with diabetes will have the ISHP and related consents completed before entering school. This plan is supplemented and/or supported with an emergency plan, contracts, a disaster plan and a self-management plan where appropriate. The ISHP shall be modified as often as necessary.

The Individualized School Healthcare Plan Definition/Rationale

The **Individualized School Healthcare Plan (ISHP)** for Management of Diabetes (refer to ISHP, **Section V, D**) is a nursing care plan that provides for each student's individual health care needs at school. Specific step by step health care procedures are a component of the ISHP that are performed by school personnel during school hours. These services are provided by or under the supervision of the school nurse according to state laws and regulations.

Procedure

The school nurse must facilitate and develop an **Individualized School Healthcare Plan (ISHP)** in cooperation with the parent/guardian and the student with input from

the health care provider. If written parent/guardian consent or Authorized Health Care Provider authorization to implement the ISHP is not received by the school, then treatment for diabetes emergencies will be given. This includes administration of a glucose source for hypoglycemia and access to emergency medical services for severe hypo/hyperglycemia. (NOTE: Treatment for hypoglycemia is considered emergency first aid).

Contracts or Agreements Definition/Rationale

The word contract, as used in these Recommendations, represents an agreement between the parties involved (usually the parents, the student, the school nurse, the school administrator and the Authorized Health Care Provider) to further clarify actions and/or behaviors in regards to healthcare issues at school. Contracts can assist with a more effective implementation of Authorized Health Care Provider orders and treatment plan. Contracts specify health actions and delineate the person(s) responsible for these actions. Contracts are attached to the ISHP to further clarify specific issues (insulin pumps, blood glucose testing in the class-room, etc.). NOTE: If the contracts are affected by the ISHP, then the Authorized Health Care Provider must be aware of it and be in agreement with it.

Recommendations For Diabetes Care in the Schools

Clinical Recommendations (cont.)

Recommendation II: (continued) Procedure

When the school nurse believes a contract is needed, it must be done with the full cooperation of the parents* and the student. The school nurse will train appropriate school personnel and include the disaster plan along with the diabetes disaster supplies (refer to Disaster Preparedness for Students with Diabetes, **Section V, F**). The attachment of the student's photo to these plans can provide easy identification in event of any emergency. If the contract involves any changes to the ISHP, a new Authorized Health Care Provider authorization is required.

Disaster Plan

The schools disaster plan should include a three-day disaster plan for diabetes management (refer to Disaster Preparedness for Students with Diabetes, **Section V.F**).

Rationale

Food supply and health support services may be affected during the event of a disaster. Management should be simplified to prevent hypoglycemia as well as severe hyperglycemia.

Self-Management Plan

If a self-management plan is deemed appropriate, it should be included in the ISHP.

Recommendation I2: Treatment of Hypoglycemia

The Use of Pure Glucose:

A fast acting glucose source should be utilized, such as glucose tablets or glucose gel products, in order to expedite the treatment of hypoglycemia. Glucose gel (pure glucose) should always be available in the health office and the classroom for use in emergency treatment of hypoglycemia. (This should be considered preparation for anticipated first aid needs).

Rationale

Hypoglycemia can occur rapidly and has the potential to result in seizures if not treated quickly. In some cases of severe or prolonged hypoglycemia, absorption of glucose from juices, sodas, etc. is delayed, therefore necessitating pure glucose absorption via the mucous membrane in the mouth. Hypoglycemia can temporarily impair cognitive abilities.

Procedure

For symptoms of hypoglycemia, a fast acting glucose source must be given immediately. A student with hypoglycemia should be treated "on-the-spot," i.e. not be sent to the office or elsewhere for treatment. After 10-15 minutes, the blood glucose has a chance to rise and the student may be sent to the office with a buddy for further treatment and rest if needed. The student may require a rest period

* = Parents/Guardian/Careprovider

Recommendations For Diabetes Care in the Schools

Clinical Recommendations (cont.)

Recommendation 12: (continued)

following treatment to ensure that the ability to learn has returned. The procedure for treating hypoglycemia is included in the ISHP (refer to Procedure for Mild or Moderate Low Blood Glucose, **Section V, E**).

The Use of Glucagon

In the event of severe hypoglycemia (when the student is unresponsive, unable to swallow or experiencing a hypoglycemic seizure) at school, a glucagon injection must be administered, if requested in writing by the parent/guardian and the Authorized Health Care Provider. Have someone call paramedics, school nurse and parent.

Definition

Glucagon is a hormone that stimulates the release of stored glucose from the liver.

Rationale

In the event a student with diabetes is unable to swallow due to hypoglycemia, glucagon may assist in elevating blood glucose and prevent further complications from prolonged hypoglycemia.

Procedure

State laws vary on the issue of the administration of injectable medications by non-licensed school personnel including life saving procedures such as epinephrine and glucagon. This issue is a critical component of the ISHP and must be discussed and a decision made

on how to deal with this issue. Consult the laws and regulations in your state prior to assigning this task to an unlicensed person.

Recommendation 13: Blood Glucose Testing

The student must have access to blood glucose testing at all times and be provided designated areas to perform the test.

Rationale

Current goals for diabetes management include keeping the blood glucose at an age appropriate target range. This blood glucose range may vary depending on the child's management plan. The blood glucose level can fall below 70, causing hypoglycemia or rise well above target range, causing hyperglycemia. In order to determine this, blood testing is required. Blood glucose testing in the classroom may be beneficial in that it minimizes time away from class. The blood glucose meter may also be carried "on-person" (in a fanny pack or back pack) to allow for testing at other times (off campus school activities, sports events, etc.). If a student is symptomatic, a blood test can confirm hypo or hyper-glycemia so proper treatment is given immediately. Blood glucose testing also allows for adjustments in insulin dosage, food and exercise.

Recommendations For Diabetes Care in the Schools

Clinical Recommendations (cont.)

Recommendation 13: (continued) Procedure

Blood glucose testing involves pricking the skin, obtaining a small drop of blood, and applying the blood on or in a chemically treated strip in a meter. The meter then provides a “reading” on the level of blood glucose. The Procedure for Blood Glucose Testing is included in the ISHP (refer to Procedure for Blood Glucose Testing, **Section V, E**).

The ISHP or 504 plan will provide details that include the frequency and circumstances requiring testing.

Infection Control

District policy and OSHA Standards regarding the management of bloodborne pathogens must be followed for blood glucose testing. Specific details such as the disposal of lancets and blood testing strips should be included in the ISHP or a contract. There should be minimal risk of contamination to others due to self-retracting lancets and absorbing pads or tubes on the meter strips. If a problem should occur, then the ISHP or contract should be revised accordingly.

Recommendation 14: Hyperglycemia Treatment

Provisions for access to fluids and restroom availability must be made.

Students with diabetes may need to perform ketone tests on their urine or blood if hyperglycemia is present.

Definition/Rationale

Extra fluids are needed when hyperglycemia leads to excess urination and/or when there is severe hyperglycemia with ketones. Fluids are also needed to assist in preventing dehydration due to excessive heat or exercise which is more serious for children with diabetes. Urine or blood ketones may indicate the need for more insulin and provide necessary information for treatment.

Procedure

The Procedure for High Blood Glucose, Hyperglycemia is on page . An ISHP or 504 plan can provide for necessary accommodations.

Recommendations For Diabetes Care in the Schools

Clinical Recommendations (cont.)

Recommendation 15: Insulin Administration

The ISHP should include a provision of insulin administration at school, when this is a medical management component for the student. Insulin pens are preferred over syringes for insulin administration at school. Proper storage of the insulin must be provided.

Rationale

To maintain tight control, insulin may be given before lunch. An extra dose of insulin, referred to as a correction or spot dose, may be required for elevated blood glucose or a regularly scheduled dose of insulin may be given as part of the student's daily regimen.

Procedure

Humalog/Lispro, Aspart/Novolog or Regular are the only insulins that are recommended for spot dosing due to their short duration of action. Sliding scale parameters are usually given for a pre-lunch dose at school. A sliding scale must include specific times for administration. Dosages and times of insulin administration will be included on the ISHP.

Determine your state law regarding who may give insulin injections prior to completion of the ISHP. When licensed nurses are unavailable to give insulin the preceding strategies are recommended. Insulin pens are recommended to minimize dose errors. Another alternative for the student who self-administers insulin is pre-

drawn syringes. The Authorized Health Care Provider provides the order for correction calculation, which can be filled and labeled by the school nurse. The syringes can be kept at school in a container designed for pre-drawn syringes (Wright's Pre-filled Syringe Kit). Multiple labeled syringes may be provided and used according to the authorized correction calculation for dosage.

The ISHP or contract will indicate if the student can draw up their own insulin. The parents* and the school nurse should agree upon the student's competency.

The ISHP or contract can also indicate if dose adjustments can be made by the student (if age appropriate). Again, the parents* and the school nurse should agree upon the student's competency. Multiple daily dose modifications may be necessary depending on the student's activity level, food intake, and stress or impending illness.

The procedures for insulin administration are included as part of the ISHP (refer to Procedures, **Section V, E**).

Policy

For students who require supervision of insulin dose verification, school personnel (unlicensed assistive personnel) may be trained to double check the number on an insulin pen or the pre-filled, labeled syringe. Consult the laws and regulations in

Recommendations For Diabetes Care in the Schools

Clinical Recommendations (cont.)

Recommendation 15: (continued)

your state prior to assigning tasks related to insulin administration. The administration of incorrect insulin dosage is the number two medication error in hospitals. Advanced skill and knowledge is required to ensure safe administration of insulin.

Students who receive insulin via an insulin pump and are not able to independently manage the pump, may require supervision and/or pump operation by either a licensed nurse or school personnel who have received training. An assessment by the school nurse and individual state laws and regulations will help determine who can be assigned this task. The school must be notified prior to the student attending school with a pump so proper training can occur. Training can be arranged along with the family receiving the pump or through the pump manufacturer or company's educational representatives, professional materials and/ or videos relating to the specific brand of pump. It is highly recommended that the parents of a child (who cannot independently manage a pump) be electronically accessible at all times (pager and cell phone).

Recommendation 16: Nutrition Accommodations

The scheduling of meals and snacks must be made in accordance with the student's insulin regimen.

Parents* should be notified ahead of time to accommodate for school parties or special events. Snacks must be allowed in the classroom according to pre-scheduled daily snacks and/or for treatment of hypoglycemia. Modifications in the school menu are needed if Authorized Health Care Provider authorized. The school district can provide parents and care-provider with a monthly menu so carbohydrate grams can be calculated.

Rationale

Structured meals and snacks contribute to optimal glucose control and assist in preventing hypoglycemia. Timing of snacks is critical based on peak insulin action times (when the insulin is most effective in lowering the blood glucose). When parents are notified prior to parties or special events then accommodations can be made to ensure that the student can participate appropriately. Some meal plans for students with diabetes limit or omit simple sugars and sweets, which may require school meal menu modifications.

Procedure

Snacks, mealtimes, and special events will be addressed in the ISHP or 504 plan (refer to ISHP, Section V, D). Food service directors may need to be involved for school menu modifications.