Managing Diabetes Safely in the School Setting:
A framework for collaborative care

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**Introduction**

At the core of collaborative care for children with diabetes is communication between all members of the child’s health care team. The team not only includes the child, the parent, and the health care provider, but also includes the array of adults that provide care for the child in the school setting. Effective communication is required to ensure that the responsibilities of each team member have been identified and that each member understands their role. The child and their family are at the center of the team.

The attached white paper was developed over six months by a collaborative group process. A planning committee that included the perspectives of parents, students, school nurses, teachers, administrators, organization leaders, and health care providers, worked to provide educational presentations and consensus-building activities for one hundred participants on priorities for safe care for children with diabetes in the school setting. It is intended that those who provide care to school-age children with diabetes will find this helpful in identifying the role they play in providing a shared plan of safe care.

This white paper should be shared with parents, students, health care providers, school nurses, teachers, administrators, and all other persons involved in the care of school-age children with diabetes.
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Background

Studies suggest that as many as one out of four children in the U.S., or 15 to 18 million children age 17 years and younger, suffer from a chronic health problem (Van Cleave, Gortmaker, & Perrin, 2010; van der Lee et al., 2007). From 2001 to 2009 there was over a 20 percent increase in type 1 diabetes (Dabelea et al., 2014) and indications are that the number is still rising. In Wisconsin, 4,500 children and adolescents have diabetes (Wisconsin Department of Health and Human Services, 2016). Diabetes is complex, and caring for a child or adolescent with diabetes requires constant awareness and frequent monitoring. Diabetes management in schools requires a considerable amount of resources (Marks, Wilson, & Crisp, 2013).

Wisconsin state statutes and federal laws provide that students with disabilities, including diabetes, must have equal access to educational opportunities and must be afforded the free, appropriate public education to which they are entitled (U.S. Department of Education, 2010). This includes timely access to insulin, glucagon, and other diabetes care at school and school-sponsored activities (American Diabetes Association [ADA], 2016). Although national organizations, including the National Association of School Nurses (NASN), the American Diabetes Association (ADA), and the American Academy of Pediatrics (AAP), agree that school nurses should take the lead in coordinating, monitoring, and supervising the care of a student with diabetes (AAP, 2016, American Nurses Association [ANA], American Nurses Association/California, California School Nurses Organization, and the ADA, 2014, NASN, 2012) many schools do not have a school nurse. While some schools may not employ a school nurse, schools are still responsible to ensure there are trained staff members available to provide safe diabetes care. Administrators and the school staff, led by the school nurse or other professional health care provider, need to be educated and engaged in the care of the student with diabetes to ensure the student has access to appropriately trained staff to manage the complex needs of diabetes care, including glucose monitoring, carbohydrate counting, insulin administration, and emergency management during school hours and school-sponsored events. Collaboration between students, parents, teachers, school nurses, health care providers, counselors, coaches, food service employees, administrators, and other school staff is critical to develop a shared plan of care that will promote the health, safety, and academic success of students with diabetes (NASN, 2012).

Collaborative Care for Students with Diabetes

At the core of collaborative care for students with diabetes is communication. Effective communication is required to ensure that the responsibilities have been identified and each member of the team understands their role. The student and their family need to be at the center of the team. Care plans are to be created and carried out with children and families, rather than for them (Lucille Packard Foundation for Children’s Health, 2014). The priority of the care plan should be the student’s safety, with incorporation of opportunities for the student to gain confidence and independence in managing their own care. Each team member plays a key role in implementing the student’s care plan. This paper was developed to assist every member of the team in identifying the role they play in providing a shared plan of care for the student with diabetes. The following are some of the most important responsibilities of the team members.
Role of the student

a. Work with their family, school nurse, and health care providers to learn age-appropriate self-management of their diabetes.
b. Communicate with school nurse and school staff if feeling symptoms of high and low blood glucose.
c. Work with family, school nurse, and health care provider to learn how to communicate needs related to diabetes.
d. Follow diabetes plan, including monitoring blood glucose as directed, making appropriate food choices, administering medications as prescribed, and communicating concerns with parents, school nurse, school staff, and health care provider.
e. Understand rights as a student to be able to participate in all school activities safely.

Role of the parent

a. Be an advocate for their child.
b. Develop in collaboration with the child, school nurse, other appropriate school staff, and health care provider the diabetes shared plan of care.
c. Ensure the school has adequate and appropriate diabetes supplies (glucose meter, test strips, lancet, lancing device, insulin, syringes [if needed], pen needles, insulin pump supplies, etc.) and refill these supplies when they are running low or become out of date.
d. Assist the school staff in emergency management by providing the school with a glucagon emergency kit and telephone numbers for parents and emergency contacts.
e. Provide updates to the school nurse or other appropriate school staff, and communicate essential information directly to the manager of the student’s school health plan.
f. Support their child in developing age-appropriate self-management skills.
g. Promote good attendance.
h. Support communication between the health care providers, school nurse, parent, and child by signing release of information forms, providing current contact information, and communicating any changes in the child’s care.

Role of the teacher

a. Review health plan with school nurse or other appropriate school staff, and implement necessary steps of care.
b. Respond appropriately to urgent health needs of the student—such as walking with a buddy, calling the health room for concerns, giving permission to see the school nurse or other trained school staff as requested by the student for diabetes care.
c. Provide the family and school nurse with advance notice for snacks, parties, fieldtrips, etc. to allow families and school nurse to plan ahead.
d. Give the student permission to eat a snack anywhere, including the classroom or the school bus, if necessary to prevent or treat hypoglycemia.
e. Work to promote normalcy for the student and limit situations where the student feels singled out because of diabetes.
f. Maintain confidentiality of the student and their health concern.
g. Inform school nurse, parent, or appropriate school staff if there are questions regarding the student’s care.

**Role of the health care provider**

a. Communicate with and support the school nurse as a member of the student’s healthcare team.
b. Advocate for consent of release of information between health care provider and school nurse.
c. Write orders to carry out insulin administration in the school setting with specific dosages or dose ranges for insulin and insulin-to-carb ratios.
d. Provide school nurse with guidelines on how and when the provider should be notified (i.e., frequent absences from school, consistent high or low blood glucose readings).

**Role of the school nurse**

a. Provide care coordination of the student with diabetes in the school setting, and communicate with parents, school staff, and the student’s health care provider.
b. Develop in collaboration with the student, family, and health care provider, the diabetes shared plan of care.
c. Implement or provide oversight of the implementation of the plan of care.
d. Ensure that the student with diabetes has a safe environment in which to implement treatment plan.
e. Advocate for a parent-signed release of information between health care provider and school nurse.
f. Advocate for health services, addressing student needs.
g. Provide training and education of unlicensed assistive personnel (UAP), physical education teachers, coaches, staff, and parents.
h. Work with the student to assist them in gaining age-appropriate self-management skills.
i. Communicate safety concerns to school administration and parents.

**Role of the school administrator**

a. Recognize that the school nurse is the most qualified individual in the school setting to act as a professional resource regarding diabetes care.
b. Establish a school culture that values health services and demonstrates this value in hiring practices, training requirements, funding, and policy development.
c. Highlight the importance of student safety and make staff trainings regarding student health concerns a priority.
d. Ensure there are trained, competent, and willing school staff to care for students with diabetes.
e. Ensure sufficient space and necessary equipment to provide safe, confidential diabetes care.

f. Identify an appropriately licensed health care professional to provide oversight of safety and quality of diabetes care.

Priorities for the safe care of students with diabetes

Schools are responsible for creating a safe environment where students can achieve academic success. Significant collaboration and communication is required to create a safe school environment for students with diabetes. The following should be priorities for schools, parents, and the healthcare team, which includes the school nurse.

**Education of appropriate staff on diabetes care:**

All school staff should receive training that provides a basic understanding of diabetes, how it is managed, how to recognize the signs and symptoms of hypoglycemia and hyperglycemia, and who to contact for help (National Institute of Diabetes and Digestive and Kidney Diseases [NIDDK], 2012).

**Development and implementation of a concise plan for teachers, specialist teachers, assistive staff, coaches, and others involved in the student’s care and well-being:**

School staff that have regular interaction with the student should be aware of the diabetes care plan and understand their role in providing care (Silverstein et al., 2009). The diabetes care plan needs to detail the specific steps that the school staff are responsible for and eliminate the need for unlicensed school staff to make independent decisions about the student’s diabetes management (NIDDK, 2012).

**Documentation of orders, staff training, and care given at school:**

Shared care planning is fundamental for successful care coordination of students with diabetes (Silverstein et al., 2009). Shared care planning cannot occur if team members do not effectively document the intended interventions, trainings, and interventions provided.

**Development and implementation of communication tools to be used between the collaborative team:**

Effective care collaboration requires effective communication. The team should evaluate the communication needs and identify methods that will support effective and timely communication. This could include email, phone calls, text messaging, and telemedicine (such as the use of Skype or Facetime). The team also needs to ensure that safety and privacy of the student is being supported at all times and the communication format does not jeopardize the student’s privacy.
School attendance as an indicator of appropriate care of diabetes:

All members of the team must advocate that the student attend school as much as possible. This may require some thoughtful consideration to the times of medical appointments. This will also require the school staff to provide a supportive environment with as much normalcy as possible for the student, so that he or she feels as connected to the school environment as the rest of the students.

Strategies for Managing Conflicts

Diabetes management in youth is extremely complex and at times can create stressful situations. The heightened level of stress can create conflict. When conflicts arise, the student’s safety should take priority. The team should work together to identify the issues and concerns. Members of the team should be cognizant of not assigning blame but rather working to identify solutions to the concerns. A second goal would be to establish safe lines of communication within the team so the team members involved can provide “clear and realistic behavioral expectations around diabetes management blended with supportive and nonjudgmental communications” (Anderson, 2004, p.25).

As mentioned many times throughout this paper, communication is key to the successful care coordination of a child with diabetes. Each member of the team must respect their teammates and communicate in a non-judgmental, open, and honest fashion.

Conclusion

The goal of diabetes management in the school setting is a healthy, well-adjusted, and academically successful student who feels connected to and supported by their school community. To accomplish this goal, each member of the team must be accountable to their role and responsibility. Student safety needs to be a priority for everyone involved in providing a shared plan of care for students with diabetes. Each team member must be committed to engaging in conversation and willing to collaborate to identify how to best care for the student.

References

American Academy of Pediatrics. (2016). National Center for Medical Home Implementation: Care Coordination. Available at: https://medicalhomeinfo.aap.org/tools-resources/Pages/Care-Coordination.aspx


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