# Curriculum Standards for **Developing Curricula** To Train **Parent Designated** Adults (PDAs) Working with Students with Diabetes

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This document outlines standards for diabetes experts to apply when developing curricula used to train Parent Designated Adults (PDA). A work group of Washington State family advocates, diabetes education experts, endocrinology nurses, and representatives from the Office of Superintendent of Public Instruction (OSPI), and the Washington State Department of Health (DOH) Children with Special Health Care Needs (CSHCN) Program developed the standards in November 2008. The Washington State DOH CSHCN Program funded the work group, and the Center for Children with Special Needs (CCSN) coordinated the project.

The work group agreed upon the following assumptions pertaining to the curricula standards and training of PDAs:

# **Assumptions**

- 1. PDA curricula standards must fit within the law.
- 2. Care provided by PDAs should be consistent with the student's Individual Health Plan (IHP).
- 3. PDAs must be familiar with the student's IHP.
- 4. The curricula standards must reflect medical best practice.
- 5. Not all PDAs will perform all aspects of care covered in the standards.
- 6. PDAs should renew their training annually in order to remain aware of updated technology and medical best practice related to diabetes care.
- 7. All trainings will require that the PDA to demonstrate each aspect of required care to the trainer.
- 8. When participating in demonstrations, PDA demonstration of competency should be specific to the student for whom the PDA will provide care.

#### **Background and Methods**

The DOH CSHCN program convened the work group in response to OSPI Health Services division identifying a need for a statewide standard for curricula used to train Parent Designated Adults (PDAs) who serve children with diabetes in schools. Public law (RCW 28A.210.330) allows for trained individuals (PDAs) to participate in a student's care while at school, and sets forth select provisions for training and supervision of PDAs. The law states PDA training must be provided by a registered nurse or certified diabetes educator, but does not outline specific training curricula standards. The purpose of the work group was to develop standards for curricula used to train PDAs so that PDAs throughout the state will have comparable training on how to care for specific students they serve.

The standards were developed by an expert work group (see Participant List) convened by the Center for Children with Special Needs (CCSN). Work group participants were recommended by OSPI Health Services, Washington DOH CSHCN Program, and the CCSN. Prior to convening the meeting staff from the CCSN conducted key informational interviews and completed an internet search as described below:

- Contacted potential workgroup participants and interviewed them regarding known trainers in Washington state, curriculum they use, knowledge of other curricula and trainers, issues related to PDA training.
- 2. Search of the World Wide Web for curricula used to train PDAs.
- 3. Summarized interview and internet search results.
- 4. Obtained copies of curricula used by meeting participants.
- 5. Reviewed and summarized existing curricula similarities and differences.

The work group meeting was held on November 17, 2008 at the Federal Way Public Health Clinic. At the meeting, CCSN staff and manager each recorded group decisions related to curricula standards, and compared their documentation after the meeting for consistency. Following the meeting, CCSN staff drafted standards based upon decisions made at the meeting and emailed the draft to meeting participants and selected experts (see Expert Reviewers) for review and comment. CCSN staff then incorporated comments and revisions from work group members into revised standards. Representatives from the Washington State DOH CSHCN Program and the Washington State OSPI Health Services Program then reviewed the revised standards.

# Curriculum Standards for Curricula to Train Parent Designated Adults (PDAs) Working with Students with Diabetes

The work group recommends that all Washington State PDA training curricula include the following primary topics and specific points within each primary topic area:

# **Primary Topics**

- I. PDA Role and Responsibilities
- II. Parent-PDA Partnership
- III. PDA and the Law
- IV. Diabetes Basics
- V. Blood glucose (hypoglycemia and hyperglycemia)
- VI. Blood glucose monitoring
- VII. Continuous glucose monitoring
- VIII. Insulin Administration
- IX. Insulin Pen
- X. Insulin Pump
- XI. Glucagon Administration
- XII. Ketone Monitoring—Blood
- XIII. Ketone Monitoring—Urine

# I. PDA Role and Responsibilities

- A. Washington State statute defines a Parent Designated Adult (PDA) as "a volunteer, who may be a school employee, who receives additional training from a healthcare professional or expert in diabetes care selected by the parents..."
- B. The parent assigns a PDA to provide care for one specific student as outlined in that student's Individual Health Plan (IHP) as approved by the parent.
- C. The parent authorizes, via written letter of intent, what care the PDA volunteers to provide to the student in school.
- D. The PDA must provide the school district with the letter of intent stating the PDA's willingness to volunteer as a PDA for a specific student and the parent's authorization of care the PDA is to provide. Parents and the PDA must update the letter of intent at the beginning of each school year or as the agreement changes.
- E. The PDA must attend school district training offered for staff directly involved in the student's care or provide documentation of comparable training in lieu of attending district offered training.
- F. The PDA must provide documentation of training for additional care authorized by the parents.
- G. The PDA must be familiar with the location and content of the student's IHP and know how to access the IHP.
- H. The PDA is responsible for scheduling any necessary appointments with the school nurse when there is a need to communicate about the student's care.
- I. The PDA provides student-specific care in a professional manner.
- J. The PDA should be aware of their rights and understand they are able to give notice of termination of care to the parent.

- K. If terminating, PDAs must give notice to the school nurse and principal.
- L. The school district may require the PDA to adhere to school safety for all students and ask the PDA to adapt student care based upon safety for all students in the school.
- M. The PDA must follow school district policy with regard to reporting of student maltreatment.

# II. Parent-PDA Partnership

- A. The parent is responsible for initiating communication with the PDA regarding the student's care.
- B. PDAs are responsible for communicating information about changes or events pertinent to the student's diabetes to the parent and to the school nurse.
- C. The parent and the PDA may create a communication plan in order to assure appropriate frequency of communication about changes in the student's care as well as what topics routine communication should cover.
- D. Parent responsibilities relating to the PDA:
  - 1. Provide written authorization for the PDA to provide additional care, specifying the additional care so authorized.
  - 2. Coordinate with the district-designated licensed professional to ensure the additional care is consistent with the student's IHP.
  - 3. Arrange for a healthcare professional or expert in diabetes to train the PDA in care the PDA will provide for the student.

#### III. PDAs and the Law

- A. State law (RCW 28A.210) requires that a student with diabetes must have an Individual Health Plan on file.
- B. If trained as outlined in RCW 28A.210 and authorized by the parent, the PDA may administer prescribed insulin to the student via injections or through use of an insulin pump.
- C. RCW 28A.210 provides PDAs with immunity from criminal action or civil damages when they are acting in good faith and in compliance with a student's individual health plan and the instructions from the student's health care professional.

Sections IV through IX outline criteria the work group recommended that trainers "describe and review" to students, as well as a list of supplies for aspects of diabetes care and management.

#### IV. Diabetes Basics

Describe and review:

- A. The condition of diabetes, including the different types of diabetes.
- B. Physiology and action of glucose, carbohydrates, and insulin.
- C. The balance between nutrition intake, exercise and insulin and that balance is different for every individual.
- D. Good nutrition is important for everyone and contributes to health.
- E. Importance of exercise and how to maintain a safe balance of exercise and blood sugar levels.
- F. Why students must monitor their insulin at school. Maintaining safe levels can be challenging and is unique to each student.
- G. Long-term benefits of maintaining a safe balance of nutrition, exercise and insulin levels.
- H. The consequences of hyperglycemia and hypoglycemia.
- I. Short and long-term effects of hyper and hypoglycemia, including the impact on ability to learn.
- J. How blood sugar imbalance can lead to ketoacidosis (see section XII on ketones). Define ketoacidosis and explain short and long-term consequences.
- K. Basic information about universal body substance precautions. Note that school districts may require PDA training on universal body substance precautions, particularly information about blood borne pathogens.
- L. Psycho-social aspects of a child living with diabetes including:
  - 1. Children do not want to be labeled as "diabetic."
  - 2. The level of confidentiality about the student is determined by the parent and student and must be observed by the PDA.
  - 3. Be aware of bullying and the school district policy against it.
  - 4. Parents might be fearful for their child with diabetes, and that fear might make the parents seem demanding with regard to their child's needs.

#### V. Blood Glucose

A. Hypoglycemia

Describe and review:

- 1. Low blood sugar per IHP/Section 504 plan.
- 2. General signs and symptoms.
- 3. Student-specific signs and symptoms (refer to IHP/ECP).
- 4. Possible causes of low blood sugar.
- 5. Treatment of mild, moderate, and severe low blood sugar as specified in the IHP.

## B. Hyperglycemia (high blood sugar)

#### Describe and review:

- 1. High blood sugar per IHP/Section 504 plan.
- 2. General signs and symptoms.
- 3. Student-specific signs and symptoms (refer to IHP/ECP).
- 4. Possible causes of high blood sugar.
- 5. Treatment of high blood sugar as specified in the IHP.
- 6. When to test for ketones.

## VI. Blood glucose monitoring

## Supplies:

Glucometer, unexpired strips, lancets, lancet device, cotton ball or tissue, log record (optional). Plastic bag for disposal is optional.

#### Describe and review:

- A. Blood glucose monitoring should be performed as outlined in the student's IHP or when the student reports symptoms.
- B. It is crucial to respect the student's report of symptoms.

#### Demonstrate:

- C. Use of the specific glucose monitor used by the student to test blood glucose.
- D. Steps in monitoring:
  - 1. Coding needed.
  - 2. How to load the strip and when to change.
  - 3. How to load the lancet device.
  - 4. Preparing the test site.
  - 5. Correct way to operate meter.
  - 6. How to read the meter and interpret results.
  - 7. How to interpret and attend to basic error codes in meter.
  - 8. Storage and disposal of strips.
  - 9. Documentation on log record.

# VII. Continuous Glucose Monitoring (CGM) (Optional)

#### Describe and review

- A. CGM is used to augment blood sugar monitoring. It provides alarms for high and low blood sugars that must be confirmed by checking blood sugar.
- B. CGM as outlined in the student's IHP.

#### Demonstrate

- C. How to review CGM.
- D. How monitor is used to augment testing.
- E. How to respond to an alarm, alarms for low or high blood sugar.
- F. How to confirm with blood sugar monitoring.

#### **VIII. Insulin Administration**

# Supplies:

Insulin (or insulins), syringe, site rotation plan. Sliding scale or decision process for amount of insulin to be given, syringe disposal container, log record.

#### Describe and review:

- A. Types of insulin and actions of each, in general and for the specific student.
- B. From the IHP, determine what type and how much insulin to give.

#### Demonstrate:

- C. Site preparation.
- D. Syringe size.
- E. Air replacement.
- F. Draw up insulin.
- G. How to mix insulins (if necessary).
- H. Expulsion of air.
- I. Choose area to inject.
- J. Inject insulin.
- K. Check site for leakage after injection.
- L. Disposal of syringe.
- M. Insulin storage.

#### IX. Insulin Pen

#### Supplies:

Insulin pen specific to child, pen needles, cartridge, log record

#### Describe and review:

- A. Basic function of insulin pen.
- B. Insulin type in general and for the specific student.
- C. Placement of pen needle.
- D. Determine from the IHP how much insulin to give.
- E. Dialing insulin dose.
- F. Air shots or correction of a "misdialed" dose.
- G. Injecting insulin using the pen.
- H. Disposal of pen needle.
- I. Types of insulin and actions of each, in general and for the specific student.
- J. Pens should not be shared with others.
- K. Insulin actions—child specific.

#### Demonstrate:

- L. Attaching new pen needle.
- M. Priming the pen with new cartridge and with each use.
- N. Site preparation.
- O. Determine how much insulin to give by sliding scale decision process according to IHP.
- P. Dial dose needed.

- Q. Correction of misdialed dose.
- R. Choose area to be injected according to IHP. Encourage rotation of sites.
- S. Inject insulin. Wait a minimum of five seconds after injection.
- T. Check site for leakage after injection.
- U. Disposal of pen needle.
- V. Storage of pen and insulin.
- W. Documentation on log record.

# X. Insulin Pump

Note: Special training outside the normal PDA instruction is needed.

# Supplies:

Pump, infusion sets, tubing (if applicable), reservoir. Identify complete change of reservoir and infusion set (only if trained for that specific pump), log record.

#### Describe and review:

- A. Insulin type in general and for the specific student.
- B. From the IHP, determine how much insulin to give.
- C. Basics of how pump works including differences between basal and bolus insulin.
- D. Pump function and understanding that readings can be trusted.
- E. What to do if pump fails or if student has unexplained high blood sugar:
  - 1. Insulin may need to be given by injection using syringe or pen.
  - 2. Notify parents.
  - Quick release of pump, specific to student's pump. For use in emergency when blood glucose is extremely low, student is unconscious or seizing. Not for hyperglycemia
  - 4. Plan for failure of insulin delivery.
  - 5. Symptoms of ketoacidosis and how to react.

# F. Site change:

- 1. When able, parents or students usually perform a site change.
- 2. Will need specific instruction by the pump trainer for the specific set insertion and device used.

# Demonstrate and describe giving bolus:

- G. Understand function of bolus.
- H. Based upon IHP or parent instruction, calculate amount of insulin to give or demonstrate use of "bolus calculator."
- Give bolus.
- J. Document on log record.

# XI. Glucagon Administration

# Supplies:

Unexpired glucagon kit (if one is prescribed for student).

#### Describe and review:

- A. What is glucagon?
- B. When to use kit.
- C. Follow dose outlined in IHP.
- D. Don't be concerned about administering too much.
- E. Immediately call 911, then notify parents.
- F. Storage of glucagon kit.

#### Demonstrate and describe:

- G. Glucagon administration.
- H. Proper mixing and administration.
- I. Choose site appropriate for child as described in IHP.
- J. Follow up:
  - 1. Roll child to side in case vomiting occurs.
  - 2. Headache may also occur.
  - 3. Monitor blood sugar.

## XII. Ketone Monitoring: Urine

#### Supplies:

Properly stored and dated ketone test strips, urine collection container, timer

#### Describe and review:

- A. Ketoacidosis is often seen more among younger children.
- B. Testing for ketones should be done only if written into student's IHP.
- C. When and how to test for urine ketones.
- D. Interpreting test results. (Note: Color blindness may interfere with test interpretation).
- E. Contact parents with results.
- F. Document on log record.

# XIII. Ketone Monitoring: Blood

#### Supplies:

Properly stored and dated blood ketone test strips, monitor

#### Describe and review:

- A. Ketoacidosis is often seen more among younger children or teenagers who use a pump.
- B. Testing for ketones should be done only if written into student's IHP.
- C. When and how to test for blood ketones.
- D. Interpreting test results.
- E. Contact parents with results.
- F. Document on log record.

# Appendix A Sample PDA Training Certificate

Certificate of Parent Designated Adult (PDA) Training	
This certifies that (PDA Name)	has received training
according to PDA Training Curricula Standar	(Child's Name)
(Child's Date of Birth)	
Training was provided by	
(Instructor	Name)
at, (Organization of Instructor)	(Date of Training)
This training is valid until (Date When Training Needs Up or until there is a change in the student's heat	odating)
(PDA Signature)	(Signature Date)
(Parent Signature)	(Signature Date)
(Instructor Signature)	(Instructor Date)

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