

Beginning in the 2014/2015 school year, Nursing Support Services (NSS) Coordinators are available to train and monitor school staff to administer insulin to students who are not yet able to do so using an insulin pump or insulin pen. NSS Coordinators will continue to train and monitor school staff to perform blood glucose monitoring. Details are available in the NSS Practice Standards which can be downloaded at http://www.bcchildrens.ca/SHHC-Your-Visit-Site/Documents/Diabetes_Management_Schools_Practice_Standards2.pdf

1. How were the NSS Practice Standards and delegated care plans created?

The Standards and delegated care plans are based on *Diabetes Care in the School Setting: Evidence-Informed Key Components, Care Elements and Competencies* developed by Child Health BC (CHBC). This report was released in September 2013 and can be downloaded at <http://www.childhealthbc.ca>. It includes a review of clinical evidence used to describe safe and appropriate care of students with diabetes at school. The final NSS Practice Standards were reviewed by CHBC and parents who had participated in the CHBC Provincial Working Group.

The NSS Practice Standards and delegated care plans were created by the Ministries of Children and Family Development and Health, with input from Certified Diabetes Educators (CDEs) and NSS Coordinators who participated in the creation of CHBC's September, 2013 report. Other pediatric CDEs and Endocrinologists were also consulted.

2. How long does it take to train school staff to monitor blood glucose and administer insulin?

Teaching and monitoring school staff to perform a nursing task is a complex process that requires careful planning to protect the health and well-being of the student. This process is called "delegation" and involves child-specific assessment and the creation of an NSS Delegated Care Plan.

It can take several weeks from the time of referral/request before school staff are ready to independently monitor blood glucose and/or administer insulin. This time frame varies, depending on a number of factors, including the student's care needs, the skill and comfort level of the school staff, the availability of school staff, and the current workload of the NSS Coordinator.

School staff will usually be ready to perform blood glucose monitoring before they can administer insulin. If a new delegated task is introduced at the beginning of the school year, it may take longer for school staff to be trained as both schools and NSS Coordinators are unusually busy in September.

3. Who will check a student's blood glucose and administer insulin before school staff are fully trained?

Parents are responsible for performing blood glucose monitoring and for administering insulin at school until at least one school staff person is fully trained and competent in each task.

4. Some parts of the care plan are locked and can't be changed. Why isn't there more flexibility?

NSS delegated care plans for students with T1D are based on recommendations from the September 2013 CHBC report and the Canadian Diabetes Association Clinical Practice Guidelines. The care plans are designed to promote safe, consistent, evidence-based care for all students with T1D, while allowing for some individualization. Consistency in practice is a safeguard that mitigates risk for students with diabetes in the school setting.

In order to ensure that delegated care is delivered according to CHBC recommendations and evidence-based practice the parts of the care plan that can't be changed include treatment for low and high blood glucose (BG) and altering the insulin dose calculated by the insulin pump.

Other sections allow for individualization based on a student's needs and parent preference such as managing activity and food choices. In addition, parents determine each insulin dose by tailoring insulin pump settings to accommodate extra activity or special circumstances. There are also spaces for NSS Coordinators to add comments related to family preferences that do not change the steps in the care plan.

5. What if parents want to be consulted during the day regarding diabetes management? Is this permitted?

Parents can choose to be called for updates on their child's diabetes management. However, they can't direct school staff to deliver care differently from what is in the care plan. The College of Registered Nurses of BC (CRNBC) Practice Standard, [Delegating Tasks to Unregulated Care Providers](#), specifically states that the unregulated care provider is accountable to the delegating nurse for the performance of the delegated task. This means that school staff must follow the care plan, as written. Serious errors, with the potential to cause harm, could occur as a result of school staff misunderstanding directions from parents. Parents can individualize diabetes management during the day by changing basal insulin, providing tools to determine an insulin dose, pre-programming pump settings and choosing meals and snacks.

6. Can parents choose to have school staff treat low blood glucose differently from what is in the NSS delegated care plan?

No. Instructions for managing low blood glucose in the NSS delegated care plan are based on the Canadian Diabetes Association's Clinical Practice Guidelines and the September 2013 Child Health BC report. When NSS Coordinators delegate blood glucose monitoring in the school setting, low blood glucose must be managed according to the NSS delegated care plan.

7. Why is insulin not given outside of scheduled times for high blood glucose at school?

For children on an insulin pump, insulin will be administered at recess, lunch and two hours after lunch, as needed. Because each insulin dose is determined based on blood glucose and carbohydrates consumed, blood glucose will be corrected every two hours. Assuming a student arrives at school with blood glucose in target, correcting blood glucose every two hours during the school day is expected to minimize the time students spend with high blood glucose. Parents will be contacted if there are two blood glucose results in a row above 15mmol/L.

For students receiving multiple daily injections (MDI) via an insulin pen, school staff will not give insulin outside of lunchtime due to the inability to accurately account for 'insulin on board' when using a bolus calculator sheet or variable insulin scale. If insulin is given more frequently than every three hours, there is an increased risk of low blood glucose. As with pumps, the lunch time insulin dose for children on MDI will include a correction for high blood sugar.

8. Students with T1D may require different, more intensive care when they have a short term, acute illness such as a cold or other infection. How will this be managed?

Students with T1D who have an acute illness may require more intensive care than what can be delivered by delegated school staff. If a parent wishes to have care delivered differently from what is in the NSS delegated care plan, a temporary alternative such as having care provided by a family member or other individual may be necessary. It is generally recommended that a student who is feeling unwell stays home from school.

9. At what value is high blood glucose corrected?

Parents, in consultation with a student's diabetes care team, provide a bolus calculator sheet or variable insulin scale, or program a student's insulin pump settings. Therefore parents determine the value at which blood glucose will be corrected. As noted above, blood glucose is corrected at scheduled times during the school day.

10. Are students with T1D required to eat snacks at recess and two hours after lunch in order to receive insulin?

Students on basal-bolus insulin therapy, delivered via insulin pump or insulin pen, are not required to eat snacks. If no snack is eaten, zero grams of carbohydrate will be used to determine the insulin dose.

11. Why can't a parent instruct school staff to alter the insulin dose determined by the insulin pump, bolus calculator sheet or variable insulin scale?

Child Health BC specifically recommends against overriding the dose determined by an insulin pump in the school setting. This recommendation is based on a thorough review of clinical evidence to determine safe parameters of care at school. The NSS delegated care plan includes other ways of making sure a child with diabetes is safe during physical activity. When caring for their child at home, parents may choose to alter the insulin dose recommended by an insulin pump, bolus calculator sheet or variable insulin scale. There are various reasons parents may do this, including decreasing the insulin dose because a child will be exercising. However, when insulin is being given by school staff, the NSS Delegated Care Plan must be followed in order to reduce risk for students with T1D. Diabetes care at school may be different from what is done at home.

12. How will following the NSS delegated care plan impact a student's A1C value?

NSS delegated care plans were developed to deliver evidence-based care, and it is expected that they will assist parents in keeping students' A1C values in target.

13. Can parents choose to have NSS Coordinators delegate only some tasks within the NSS Delegated care plan and make different arrangements to have other tasks performed by school staff?

All parts of the NSS delegated care plans are intended to work together, and reference one another. Consistency in having one care plan that school staff refer to is a safeguard that mitigates risk for students with T1D in school. Therefore, NSS will not delegate some aspects of diabetes care when there is another care plan in place for school staff to follow for the same student.

14. What happens when a student can give his or her own insulin?

Students are supported to work towards independence in managing their diabetes care in the school setting, to the extent that is appropriate. When a student is ready to administer his or her own insulin, NSS Coordinators will delegate supervision of the student, to ensure that the student administers insulin correctly. When this supervision is no longer necessary, the student is discharged from the NSS program. Following discharge from NSS delegated care, school staff can remind students to perform diabetes tasks, if required. Parents can indicate the need for reminders on the Diabetes Support Plan and Medical Alert Information Form available for downloading at http://www.bced.gov.bc.ca/health/diabetes/diabetes_support_plan.pdf.