



# SCHOOL NURSE PUMP EDUCATION PROGRAM

**Saturday, November 6 2021**

**8:00 AM – 3:45 PM**

**Live/Virtual**

*This program will be LIVE, and will NOT be available online afterwards.*

## LEARNING OBJECTIVES

Upon completion of this program, participants will be able to:

- ✚ Describe pump therapy as a method of insulin delivery
- ✚ Identify advantages and disadvantages of insulin pump therapy
- ✚ Describe the use of insulin pump therapy in the school setting
- ✚ Explain the calculation of insulin doses Discuss common issues with pump therapy that arise in the school setting
- ✚ Identify new glucose monitoring technology
- ✚ List the characteristics associated with successful pump therapy in pediatric patients

## SCHEDULE

|   |                |
|---|----------------|
| Welcome   | 8:00-8:15 AM   |
| Introduction to Pump Therapy                                    | 8:15-9:00 AM   |
| Realities of Pump Therapy in Youth                              | 9:00-9:30 AM   |
| Carbohydrate counting & Insulin Dose Calculations with the Pump | 9:30-10:00 AM  |
| Break   | 10:00-10:15 AM |
| Troubleshooting for the Pump                                    | 10:15-10:45 AM |
| Other Diabetes Technology: Continuous Glucose Monitoring        | 10:45-11:15 AM |
| Pump Readiness  | 11:15-11:45 AM |
| Lunch   | 11:45-12:15 PM |
| Pump Basic  | 12:15-1:00 PM  |
| Does Insulin Pump Therapy Improve Clinical Outcomes?            | 1:00-1:45 PM   |
| Break   | 1:45-2:00 PM   |
| Advanced Insulin Pump Strategies                                | 2:00-2:45 PM   |
| Managing Exercise on an Insulin Pump                            | 2:45-3:30 PM   |
| Q&A, Closure  | 3:30-3:45 PM   |

## CONTENTS

### **Introduction to Pump Therapy**

- What is an insulin pump?
- Rational for initiating pump therapy
- Terminology associated with pump therapy
- Responsibilities of the school nurse in managing a student on pump therapy
- Flexibility of pump therapy, reduction of hypoglycemia, improved blood glucose control, risks of DKA, skin and comfort issues

### **Realities of Pump Therapy in Youth**

- Diabetes in youth: numbers and goals
- Factors predictive of successful insulin pump therapy in the pediatric/adolescent population
- School nurse responsibilities for the student treated with an insulin pump

### **Carbohydrate counting & Insulin Dose Calculations with the Pump**

- Advanced carbohydrate counting: insulin to carbohydrate ratio, sensitivity factor, target blood glucose
- Definition of the 450 and 1650 rules

### **Troubleshooting for the Pump**

- Infusion set site issues and tape issues
- Factors that may cause hypo/hyperglycemia while using pump therapy
- Tools used to manage hypo/hyperglycemia while using pump therapy

### **Other Diabetes Technology: Continuous Glucose Monitoring**

- What is continuous glucose monitoring
- When to use CGM technology
- Who should use CGM

### **Pump Readiness**

- When should pump therapy be considered?
- Characteristics of appropriate candidates for pump therapy: frequent blood glucose monitoring, compliance, family involvement, knowledge of carbohydrate counting, realistic expectations, problem solving skills

### **Pump Basic**

- Mechanics of insulin pumps
- Basic theory and definitions related to insulin pumps and insulin use
- How boluses are distributed
- How basal rates are distributed
- Case studies

### **Does Insulin Pump Therapy Improve Clinical Outcomes?**

- Review Hemoglobin A1c
- Flexibility in insulin use
- Increased risk of ketosis
- Case studies

### **Advanced Insulin Pump Strategies**

- Discuss advanced concepts of insulin delivery, for example: duration of insulin action, negative correction, and complex bolusing
- How to retrieve bolus history, total daily dose history
- How to administer a temporary basal
- Case studies

### **Managing Exercise on an insulin pump**

- The effect of adrenaline on glycemic control
- The use of temporary basal settings for physical activity
- Case studies

**ONLINE REGISTRATION:** <https://snpp2021.eventbrite.com>

**\$130.00 per person**

- ✚ Price includes CEU certificate and program materials.
- ✚ Full payment is required upon registration.
- ✚ Registration must be completed by Wednesday, November 3.
- ✚ Cancellation before Wednesday November 3 is available for refund after \$25 processing fee.
- ✚ No refund will be made for cancellation after Wednesday, November 3 and no-show.
- ✚ Registration after Wednesday, November 3 is \$135. No refund is available.

### **CONTACT HOURS**

This nursing continuing professional development activity was approved to provide 6.5 Contact Hours by American Nurses Association Massachusetts, an accredited approver by the American Nurses Credentialing Center's Commission on Accreditation. In order to receive contact hours, attendees must sign in and stay for the entire program. No partial credit will be provided.

### **QUESTIONS?**

For more information, please visit our website:

<https://joslin.org/SchoolNursesEducationprogram>

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