DigiBete Structured Education

Goals of Diabetes Lesson Plans

12-13 years

Practical Skills

Goals of Diabetes Lesson Plans	Age Group: 12-13yrs
Topic: Insulin, BG checking, sensors. (Delivered by Nurse)	
Title of session: Practical Skills	**Timing of session:** Approx 30mins

Aim of session:

- Increasing independence in practical skills.
- Use of their own technology and how to programme it/insert it.
- Develop understanding of downloads from meters, sensors and pumps.

Learning Objectives:

- Have I practiced giving an insulin injection, even if on a pump?
- Can I explain why it is important to rotate injection/infusion sites?
- Can I use my own equipment with simple reprogramming if needed?
- Can I find my 14d average glucose?
- Can I make simple interpretations of downloads?

Assessment for Learning (AfL) activities built into session:

- Demonstrate how to give an insulin injection with correct technique.
- Describe lipohypertrophy and its effect on BG.
- Use own equipment to change doses (pump or expert meter).
- Find 14d average glucose on own equipment.
- Analyse anonymised Diasend downloads.

Evaluation activities to be built into session:

- State what 14d average to aim for to achieve HbA1c close to target.

Materials/resources needed:

- Demo insulin pens, needles and injectables.
- Lipo pictures/lipo box.
- Own pump/BG meter/ expert meter/MyLife app/sensor data on phone (if applicable).
- Printed anonymised Diasend downloads showing different elements.
- Access to DigiBete Goals of Diabetes Videos.

Time	Session Content/ Taught Content	Resources Needed
4 mins	Insulin will only work if it is injected/infused correctly and into healthy skin. In pairs, show each other correct injection technique, supervised by educator.	Demo injection pens, needles, injectables.
2 mins	**Q:** For those on pumps, when might you give an injection? Pump failure. If 1 correction has not worked through pump. Pump holiday, some people swap to injections for holidays.	Listen to responses.
5 mins	**Q:** Why is it important to inject/put infusion cannula in different parts of the body? Educator to explain lipohypertrophy. If lipo box available, YP to find hidden lipos. Educator to explain how to check for lumps at home with gel in shower. Relate to site checks done at annual review/clinic appts.	Listen to responses. Show pictures. Lipo box with hidden lumps.
3 mins	**Q:** With your own meter/pump handset, please find: What is your breakfast ratio? What is your correction (ISF) dose at 6pm? What is you 14d average glucose? Pump only – what is your total basal rate? YP to find their own way round equipment with educator's help if needed. 14d average is an important indicator of how close to target your glucose is. Aiming for 14d average of 8mmol/L or less.	Own equipment – glucose meter, pump handset, Mylife app, sensor data on phone.

Time	Session Content/ Taught Content	Resources Needed
10 mins **5 mins**	**Q:** How many checks a day is good for managing diabetes? NICE says 5 BG checks/day minimum. What about sensor checks? **Q:** What is the ideal target range? (4-7mmol pre-meal, 5-9mmol post meal). For sensors, what is the target Time in Range? Work in pairs to look at some anonymised Diasend/Dexcom/ Libre downloads of real people. With educator supervision, ask YP to make comments, interpretations, explanations, offer generalised advice about insulin changes. Each pair to present their download and their advice, decisions and comments. Ask if it has been useful to see other people's downlaods.	Listen to responses. Listen to responses. Pre-selected laminated anonymised Diasend/Dexcom/Libre. downloads showing different features: e.g. Summary pages for sensors. Glucose values only. Pump downloads with few bolus doses. With very little information. With all high BG. With lots of low BG. With high BG on waking.
1 min	**Evaluation:** What 14d average glucose should you aim for? Complete 12-13y quiz on DB app.	