



## Goals of Diabetes Lesson Plans

14-15 years

### Practical Skills

Goals of Diabetes Lesson Plans	Age Group: 14-15yrs
<b>Topic:</b> Insulin, BG checking and sensors. (Delivered by Nurse)	
<b>Title of session:</b> Practical Skills	<b>Timing of session:</b> Approx 33mins

#### Aim of session:

- Increasing independence in practical skills.
- Use of their own technology and how to programme it.
- Understanding downloads from meters and pumps.

#### Learning Objectives:

- All to practice giving an insulin injection, even if on a pump.
- Explain why important to rotate injection/infusion sites.
- Be able to navigate their own equipment with simple reprogramming.
- Be able to check 14d glucose.
- Simple interpretation 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 calculation app).
- Find 14d average BG on own equipment.
- Analyse anonymised Diasend/Dexcom/Libre 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/phone.
- Printed anonymised Diasend/Dexcom/Libre downloads.
- Access to DigiBete Goals of Diabetes Videos/app on phone.

Time	Session Content/ Taught Content	Resources Needed
<p><b>4 mins</b></p> <p><b>2 mins</b></p> <p><b>5 mins</b></p>	<p>Insulin will only work if it is injected/infused correctly and into healthy skin In pairs to demonstrate correct injection technique, supervised by educator.</p> <p><b>Q:</b> For those on pumps, when might you give an injection?</p> <ul style="list-style-type: none"> <li>• Pump failure.</li> <li>• If 1 correction has not worked through pump.</li> <li>• Pump holiday, some people swap to injections for holidays.</li> </ul> <p><b>Q:</b> If your pump fails, what should you do? Basal insulin = long acting insulin dose. Have all settings written down or stored in app – can set this up today if not done so.</p> <p><b>Q:</b> 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 checking of sites in clinic.</p>	<p>Demo injection pens, needles, injectables.</p> <p>Listen to responses.</p> <p>Listen to responses.</p> <p>DigiBete app on phone.</p> <p>Listen to responses. Show pictures. Lipo box with hidden lumps.</p>
<p><b>3 mins</b></p>	<p><b>Q:</b> With your own meter/app/pump handset, please find: What is your breakfast ratio? What is your correction (ISF) dose at 6pm? What is your 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 BG is Aiming for 14d average of 8mmol.</p>	<p>Own equipment – bolus adviser meter/app, pump handset.</p>

Time	Session Content/ Taught Content	Resources Needed
<p><b>10 mins</b></p> <p><b>5 mins</b></p>	<p><b>Q:</b> How many checks a day is good for managing diabetes? NICE says 5 BG checks/day minimum. What about on a sensor?</p> <p><b>Q:</b> What is the ideal target range? (4-7mmol/L pre-meal, 5-9mmol/L post meal).</p> <p><b>Q:</b> What is the ideal Time in Range if you are wearing a sensor?</p> <p>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. Share with the group their decisions and comments.</p> <p>Is it useful to view other peoples downloads?</p>	<p>Listen to responses.</p> <p>Listen to responses.</p> <p>Pre-selected anonymised Diasend/Dexcom/Libre downloads showing different features: e.g. 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.</p>
<p><b>3 mins</b></p>	<p>Digibete app to record all current doses.</p>	<p>Phone</p>
<p><b>1 min</b></p>	<p><b>Evaluation:</b> What 14d average glucose should you aim for? How many times a day can you check/use your glucose values.</p>	