# **Understanding Diabetes Technology**

## Insulin Delivery Systems Traditional Method - Pen injections

#### Connected Pens



Insulin is injected into the skin through a needle. Data held in the pen and is downloadable.

#### Patch Pumps



Insulin held in a small pod/patch connected to a cannula and attached to the skin, which needs to be changed every 2-3 days. Controlled via handheld device connected to Bluetooth.

Insulin is delivered from a small pump device through a tube into a cannula, which sits just under the skin and has to be replaced every 2-3 days. Controlled using the handheld pump device.

# Medtronic 6 Medtrum

# Closed Loop Systems Traditional Method - None

#### Hybrid Closed Loops

A pump working together with a CGM.

Insulin delivered via a pump under the control of data coming from the CGM via an algorithm which is either held within the pump or on a phone app.

Insulin is automatically adjusted with limited intervention from the patient, however carbohydrate calculations for food need to be entered.



Not all combinations of pump/cgm available.

### **Medtronic 780G**



Tubed Pumps







readings.



# Data Uploading

#### Generic

Generic systems speed up the efficiency of teams by reducing the number of software packages needed to view data in clinics. however, not all devices currently allow uploading to generic systems.



All offer extensive and similar reporting options.





#### Traditional Method - Hand Written Diary

#### Industry Generated

Industry developed systems allow upload of individual company devices only to share data with medical teams and support self-management.

#### LibreView 111 CareLink