



# **Guideline on the Choice of insulin needles for CHILDREN and young people with TYPE 1 DIABETES (December 2020)**

## **Introductio**

This guideline aims to assist health care professionals in Trusts with the selection of needles for the administration of insulin via pen devices to children and young people with Type 1 diabetes.

There are over 23 types of standard insulin needles available to prescribe on the N.Ireland Drug tariff. The price of insulin needles on the drug tariff varies between £2.75 and £13.02 for pack size 100.

In order to ensure cost effective prescribing, all Trusts should ensure that a cost effective insulin needle is prescribed to children and young people with Type 1 diabetes.

## **Choice of insulin needle**

There are a number of factors influencing choice of insulin needles:

### **Cost**

In order to ensure cost effective prescribing Trusts should ensure, where possible that a cost effective insulin needle (<£6 for pack size 100) is prescribed to children and young people with Type 1 diabetes.

Appendix 1 outlines the cost effective insulin needle choices available on the NI Drug Tariff (prices correct as per December 2020 NI Drug Tariff). Where possible, newly diagnosed patients should be initiated on a suitable cost effective insulin needle choice from this list.

### **Needle length**

In general children and young people should use a needle with a maximum length of 4mm, to try and prevent inadvertent IM administration of insulin.

For further information on insulin injection technique, including needle length see: [http://www.fit4diabetes.com/index.php/download\\_file/view/428/115/](http://www.fit4diabetes.com/index.php/download_file/view/428/115/)

In certain circumstances e.g. if the child or young person is using an IPORT they may require a needle length of 5mm.

## **Needle Gauge**

Most needles are manufactured in a variety of gauge sizes. The higher the needle gauge, the thinner the needle. For example, a 31 gauge needle is thinner than a 29 gauge needle.

## **Compatibility with insulin pens:**

Needles listed in appendix 1 are compatible with the most commonly prescribed insulin devices. If there is uncertainty whether a specific needle is compatible with the patient's device, the relevant manufacturer's website should be checked.

## **Communication to primary care**

To ensure that a cost effective needle brand is prescribed in primary care by the patient's GP, please ensure that any correspondence to the GP includes the following information:

- **The brand name**
- **The needle length**
- **The needle gauge**

For both new and existing patients, if it is not possible to use a cost effective needle choice, the reason for this should be clearly recorded in the patient's records and communicated to the patient's GP.

## **Switching to a cost-effective needle**

Existing patients should be assessed at routine clinic appointments to check which insulin needle they are using. Where possible, if the patient is not using a cost effective choice listed in Appendix 1, the patient should be changed to a cost effective brand. Patients and their parents/carers should be counselled about the change.

**It is recommended that switching does not take place in primary care.**

## **Revision of guideline**

If following publication of this guideline other cost effective needle choices (<£6 for 100 pack size) are added to the N.Ireland Drug Tariff, prescribers may recommend those brands as cost effective choices. Link to N.Ireland Drug Tariff is:

<http://www.hscbusiness.hscni.net/services/2034.htm>

This guideline will be reviewed in December 2023.

## APPENDIX 1 : AVAILABLE SIZES ( 6mm or less ) OF COST EFFECTIVE NEEDLE CHOICES

(Prices correct as per December 2020 Drug tariff).

NB: Please refer to current drug tariff to ensure prices are still cost effective before picking your needle choice. See link:

<http://www.hscbusiness.hscni.net/services/2034.htm>

<b>4Sure® £3.95/100</b>	<b>BD Microfine+® £4.99/100</b>	<b>BD Microfine Ultra® £4.99/100</b>	<b>BD Viva® £3.59/90</b>	<b>CareFine® £2.75/100</b>	<b>GlucorX Carepoint® £2.75/100</b>
4mm/31 gauge	5mm/31 gauge	4mm/32 gauge	4mm/32 gauge	4mm/32 gauge	4mm/31 gauge
4mm/32 gauge	8mm/31 gauge		5mm/31 gauge	5mm/31 gauge	4mm/32 gauge (GlucorX CarePoint Ultra)
5mm/31 gauge			6mm/31 gauge	6mm/31 gauge	5mm/31 gauge
5mm/32 gauge					6mm/31 gauge
6mm/31 gauge					4mm/31 gauge
6mm/32 gauge					4mm/32 gauge (GlucorX CarePoint Ultra)

<b>Glucosject® £5.95/100</b>	<b>GlucorX FinePoint® £4.50/100 (5 bevelled needle)</b>	<b>Haemofine® £5.35/100</b>	<b>Insupen® £5.95/100</b>	<b>Microdot droplet® £4.95/100</b>	<b>MyLife Penfine® £3.55/100</b>
4mm/32 gauge	4mm/31 gauge	4mm/32 gauge	4mm/32 gauge	4mm/32 gauge	4mm/32 gauge
5mm/31 gauge	4mm/32 gauge (GlucorX Finepoint Ultra)	5mm/31 gauge	*4mm/33 gauge- EXPENSIVE DO NOT USE	6mm/31 gauge	5mm/31 gauge
6mm/31 gauge	5mm/31 gauge	5mm/32 gauge	5mm/31 gauge	<b>Microdot Max® £2.74/100</b>	6mm/32 gauge
	6mm/31 gauge	6mm/31 gauge	6mm/31 gauge	4mm/32 gauge	
		6mm/32 gauge	6mm/32 gauge	6mm/31 gauge	

<b>Neon Verifine® £4.50/100</b>	<b>Omnican fine® £3.95/100 (32 gauge sizes) £6.01/100 (31 gauge sizes)</b>	<b>PROfine® £3.80/100</b>	<b>Tricare® £3.95/100</b>	<b>*Unifine Pentips® PLUS £5.95/100</b>
4mm/31 gauge	4mm/31 gauge (£5.95)	4mm/32gauge	4mm/32 gauge	4mm/ 32 gauge
4mm/32 gauge (Neon Verifine Ultra)	4mm/ 32 gauge (£6.01)	5mm/31gauge	5mm/31 gauge	*4mm/33 gauge EXPENSIVE DO NOT USE
5mm/31 gauge	5mm/31 gauge (£5.95)	6mm/31gauge	6mm/31 gauge	5mm/31 gauge
6mm/31 gauge	5mm/32 gauge (£3.95)			6mm/31 gauge
	6mm/31 gauge (£6.01)			
	6mm/32 gauge (£3.95)			

\*Please note Unifine Pentips® needles are NOT cost effective (£8.34 to £12.64 per 100). The cost effective choice is **Unifine Pentips PLUS®**