

## Switch protocol: Insulin pen needles to cost effective brand

### Applies to

HaRD CCG employed Pharmacists and Medicines Optimisation Technicians.

*These protocols are produced by the NY&AWC MM team hosted by HaRD CCG for use by their employed MM team members. They can be adopted for use by other healthcare staff working in GP practices across NY&AWC CCGs but HaRD CCG accepts no responsibility for the use and application of these protocols in these situations. External staff working to these protocols must agree with their own employer whether they are competent and able to work to these protocols*

### Rationale

Pen needles are sterile single use disposable needles for subcutaneous injection of insulin with pre-filled syringes or pen injection devices.

Insulin pen needles come in a variety of lengths From 4 to 12mm, most patients are likely to benefit from the shorter 4 and 5mm needles with less risk of pain on injection or accidental intramuscular injection. There is no clinical reason to recommend a needle length of over 8mm, unless the patient is historically used to pinching the skin, and no reason for over 6mm in children and adolescents (Frid, et al., 2010) (Hicks, et al., 2018). The 4 mm pen needle may be used safely and effectively in all obese patients. Although it is the needle of choice for these patients, a 5mm needle may be acceptable (FIT 2016)

In addition, the use of shorter needles (e.g.4 mm pen needles) without a skin fold is recommended to minimize the risk of needlestick injury (FIT 2016).

The measurements in mm that are part of the needle descriptions relate to how long the needle is. There is also a gauge size. This denotes the thickness, size, or capacity. The two factors of **gauge** and **needle length** will contribute to perceptions of pain when injecting. The longer the needle is, the harder it is to 'pressurize' the insulin through, so it needs a wider hole down the middle; the lower the gauge number the wider the aperture and the thicker the needle is. FIT UK advise that using needles of the shortest length (4mm) and the smallest diameter (highest gauge number) will help to minimize pain on injection.

It is proposed that repeat prescriptions for pen needles can be switched to lower cost branded alternatives. Patients can be prescribed a needle length similar to but not the same as their current length without clinical impact or any differences in administration (Frid, et al., 2010). However, this switch does not address changing those on needle lengths greater than 8mm to the short lengths and covers only a like for like switch. Patients with the longer needle lengths would potentially need to be retrained before such a switch.

There is a large variation in both the utilisation of insulin pen needles and the uptake of newer, cost-effective alternative products across the CCGs within England. Cost-effectiveness, product range, quality and availability should be considered when making these changes.

A recent NHS England consultation document "Low Priority Prescribing Consultation and Gluten-Free Food Guidance" (Nov 2018), suggests that only insulin needles costing less than £5.00 per 100 needles should be

considered when prescribing. The table below lists the needle brands currently falling into that category (Drug Tariff, January 2019).

Brand	Price	Brand	Price
4SURE	£3.95 (100)	Mylife Penfine Classic	£3.55 (100)
BD Viva	£3.55 (90)	Neon Verifine	£4.50 (100)
CareFine	£2.75 (100)	PROFine	£3.80 (100)
GlucoRx CarePoint	£2.75 (100)	TriCare	£3.95 (100)

Appendix 1 shows a sample of common pen needles along with a switch illustration. (NHSBSA, 2018). The CCG selected brand to switch to can be found on the CCG formulary.

## Method

1. Check the practice has agreed to the protocol and a signed copy is in place.
2. Check for any extra exclusions or amendments to the protocol made by the practice.
3. Rearrange practice formulary/add “do not use” codes where used to prevent future inadvertent prescribing. Check prescribing support software prompts are in place where relevant.
4. Notify local pharmacies/dispensary of work being undertaken and inform any relevant practice staff e.g. dispensary staff.
5. Run a computer search to identify patients who are currently receiving prescriptions for all sizes of needles both brand and generic. See Appendix 1 for a list of needle options.
6. Use the data collection form (Appendix 2) and the medical records to record the following:
  - Patient identifier
  - Age
  - Allergies
  - Current prescription (generic or brand)
  - Previous prescriptions for the CCG selected brand needles
  - Concerns
  - Exclusions
  - Patient referred to prescriber
  - Patient switched and letter sent
7. Identify patients to exclude, those considered suitable to ‘switch now’ and those needing special consideration by prescriber.
8. If a patient is excluded, add a consultation note listing reasons why they are unsuitable.
9. For those patients who can be switched now or approved by prescriber; change repeat medication on computer to:

**CCG selected brand (same needle size)**

(Same instructions)

10. Ensure that the old pen needle prescription is archived.
11. Send a letter to the patient advising them of the change. Liaise with practice staff to organise mail merge of letters and posting. At the end of the session, for all those changes that have been completed, a letter must be ready to send to the patient for information.
12. Add READ code 8B1r or XaJKo (on System One) 'drug changed to cost effective alternative' for all patients switched.
13. Problem link drug to disease (where possible).
14. Inform relevant practice staff.
15. Record the numbers/patients changed using an 'activity log'.
16. Continue to monitor the long term outcomes of the switch e.g. cost savings via PPD data, complaints, problems encountered etc.

**Exclusions - do not switch**

1. Those patients receiving snap on pen needles such as Penfine Universal Click Pen Needles
2. Patients already prescribed safety needles – see also comment below in “flag up for special consideration by prescriber” section.
3. Those previously recorded as having received the CCG selected brand needles with a valid reason recorded for them to have been stopped.

**To flag up for special consideration by prescriber – approval required via electronic task**

1. Any patient that you are concerned may be unsuitable for switching, or other prescribing issue that you are concerned about.
2. Children under 16 – parents or carers should be notified and an appointment may be necessary.
3. Those on a long needle length >8mm for review by a nurse, if agreed with the practice.
4. Patients prescribed regular needles where it is apparent the patient is being injected by a third party. FIT UK Recommendations state “Safety-engineered devices should be considered first-line choice if injections are given by a third party. Pen and syringes with needles used in these settings should have protective mechanisms for all needles and sharp ends of the delivery device.” These patients should be recommended for safety needles.
5. Those previously recorded as having received the CCG selected brand needles without a valid reason recorded for them to have been stopped.

**Points to discuss with practice**

1. Who is the contact in the practice for the project?
2. How will under 16s be approached and managed?
3. Should those on a long needle length >8mm be brought in for a review appointment with a view to change to a short length and check of injection technique? If so exclude from the switch and flag to prescriber only.
4. Those patients using snap on needles – can they be invited for review to switch to screw on? If so flag them to the prescriber. Switch only after recorded prescriber consent.
5. Seek agreement from practice as to whether palliative care patients can be switched. Patients considered to be in the last few weeks of life would not normally be recommended for the switch.
6. Agree content of patient letter – a possible form of words is attached below
7. Agree the number of repeats to issue for patients who are switched.
8. Any practice additions, deletions or amendments to the protocol.

**References**

Frid, A., Hirsch, L., Gaspar, R. & Strauss, K., 2010. New injection recommendations for patients with diabetes. *Diabetes & Metabolism 36 Suppl 2(Suppl 2):S3-18*, 36(Supplement 2), pp. s3-18.

Hicks, D., Adams, D., Diggle, J. & Gelder, C., 2018. Best Practice Guideline to support Correct Injection Technique in Diabetes Care [Online]  
Available at: [https://trend-uk.org/wp-content/uploads/2018/11/ITM-Guideline\\_v9-FINAL-251018.pdf](https://trend-uk.org/wp-content/uploads/2018/11/ITM-Guideline_v9-FINAL-251018.pdf)  
[Accessed 31 12 2018].

NHSBSA, 2018. *DM+D*. [Online]  
Available at: <https://apps.nhsbsa.nhs.uk/DMDBrowser/DMDBrowser.do>  
[Accessed 31 12 2018].

The UK Injection and Infusion Technique Recommendations 2016  
[http://fit4diabetes.com/files/4514/7946/3482/FIT\\_UK\\_Recommendations\\_4th\\_Edition.pdf](http://fit4diabetes.com/files/4514/7946/3482/FIT_UK_Recommendations_4th_Edition.pdf)  
[Accessed 12 02 19]

**Agreement to protocol**

Please detail any amendments to the protocol here/or attach a copy of agreed changes:

Signature of practice prescribing lead/ manager	
Practice name	
Date	
Signed on behalf of NYAWC MMT	

The practice representative signing this protocol agrees to take responsibility for the notification of all relevant practice staff.

#### Document version control

Version	State changes	New version	Actioned by	Date
Omnican Pen needles 0.02	Rewritten as interchangeable protocol. Statements checks, format update. Allergies and safety needle statements added. Clarity and safety revisions	1.00	SK	March 2017
1.00	Protocol reviewed. References updated. Information around NHSE consultation added. Table of cost effective brands added. Appendix 1 updated. Clarity regarding safety needles.	2.00	JA	January 2019
2.00	Clarity regarding safety needles included.	2.10	JA	February 2019

**Possible letter**

Dear ~[Title/Initial/Surname]

**Your repeat prescription for insulin needles**

The practice has been reviewing its prescribing of insulin needles. This is to ensure our patients receive the best treatment offering the best value to the NHS. As a result we have changed your future prescriptions from **(insert previous brand)** to **[CCG selected brand] (insert needle size)**.

You should notice no effect on your treatment and you do not need to alter your injection technique.

Your prescription will be changed automatically so please order your next prescription in the usual way. It would help the NHS save money if you would use up any remaining needle type first.

If you have any queries regarding this letter or these new needles please contact [insert name of contact, practice] and or [insert email of local CCG patient relations team]

All needles should be safely stored out of the reach of children.

Yours sincerely

~ [Usual prescriber/Registered prescriber/GP Prescribing Lead/Other]

**Agreement to letter**

Please detail any amendments to the letter here/or attach a copy of agreed changes:

Signature of practice prescribing lead/ manager	
Practice name	
Date	
Signed on behalf of NYAWC MMT	

**Appendix 1 – Switch Illustration (NB. CCG choice can be found on individual CCG’s formulary)**

From	To
BD Micro-Fine Ultra Needles Pen Inj Screw On 4mm	Neon Verifine Needles Pen Inj Screw On 4mm/31 Gauge
BD Microfine+ Needles Pen Inj Screw On 5mm	Neon Verifine Needles Pen Inj Screw On 5mm/31 Gauge
BD Microfine+ Needles Pen Inj Screw On 8mm	Neon Verifine Needles Pen Inj Screw On 8mm/31 Gauge
CarePoint Needles Pen Inj Screw On 12mm	Neon Verifine Needles Pen Inj Screw On 12mm/29 Gauge
CarePoint Needles Pen Inj Screw On 4mm	Neon Verifine Needles Pen Inj Screw On 4mm/31 Gauge
CarePoint Point Needles Pen Inj Screw On 5mm	Neon Verifine Needles Pen Inj Screw On 5mm/31 Gauge
CarePoint Point Needles Pen Inj Screw On 6mm	Neon Verifine Needles Pen Inj Screw On 6mm/31 Gauge
CarePoint Point Needles Pen Inj Screw On 8mm	Neon Verifine Needles Pen Inj Screw On 8mm/31 Gauge
IME-FINE Needles Pen Inj Screw On 6mm/31 Gauge	Neon Verifine Needles Pen Inj Screw On 6mm/31 Gauge
IME-FINE Needles Pen Inj Screw On 8mm/31 Gauge	Neon Verifine Needles Pen Inj Screw On 8mm/31 Gauge
Nanopass Needles Pen Inj Screw On 6mm/32.5 Gauge	Neon Verifine Needles Pen Inj Screw On 6mm/31 Gauge
Mylife Clickfine Needles Pen Inj Snap On 10mm	Neon Verifine Needles Pen Inj Screw On 10mm/30 Gauge
Mylife Clickfine Needles Pen Inj Snap On 12mm	Neon Verifine Needles Pen Inj Screw On 12mm/29 Gauge
Mylife Clickfine Needles Pen Inj Snap On 4mm	Neon Verifine Needles Pen Inj Screw On 4mm/31 Gauge
Mylife Clickfine Needles Pen Inj Snap On 6mm	Neon Verifine Needles Pen Inj Screw On 6mm/31 Gauge
Mylife Clickfine Needles Pen Inj Snap On 8mm	Neon Verifine Needles Pen Inj Screw On 8mm/31 Gauge
Nanopass Needles Pen Inj Screw On 4mm/32.5 Gauge	Neon Verifine Needles Pen Inj Screw On 4mm/31 Gauge
Nanopass Needles Pen Inj Screw On 8mm/32.5 Gauge	Neon Verifine Needles Pen Inj Screw On 8mm/31 Gauge
NeedleBay Fine Pen Needles Pen Inj Screw On 4mm/32 Gauge	Neon Verifine Needles Pen Inj Screw On 4mm/31 Gauge
NeedleBay Fine Pen Needles Pen Inj Screw On 5mm/31 Gauge	Neon Verifine Needles Pen Inj Screw On 5mm/31 Gauge
NeedleBay Fine Pen Needles Pen Inj Screw On 8mm/31 Gauge	Neon Verifine Needles Pen Inj Screw On 8mm/31 Gauge
NovoFine Needles Pen Inj Screw On 12mm	Neon Verifine Needles Pen Inj Screw On 12mm/29 Gauge
NovoFine Needles Pen Inj Screw On 6mm	Neon Verifine Needles Pen Inj Screw On 6mm/31 Gauge
NovoFine Needles Pen Inj Screw On 8mm	Neon Verifine Needles Pen Inj Screw On 8mm/31 Gauge
NovoTwist Needles Pen Inj Screw On 5mm/32 Gauge	Neon Verifine Needles Pen Inj Screw On 5mm/31 Gauge
Unifine Pentips Needles Pen Inj Screw On 12mm/29 Gauge	Neon Verifine Needles Pen Inj Screw On 12mm/29 Gauge
Unifine Pentips Needles Pen Inj Screw On 4mm/32 Gauge	Neon Verifine Needles Pen Inj Screw On 4mm/31 Gauge
Unifine Pentips Needles Pen Inj Screw On 5mm/31 Gauge	Neon Verifine Needles Pen Inj Screw On 5mm/31 Gauge
Unifine Pentips Needles Pen Inj Screw On 6mm/31 Gauge	Neon Verifine Needles Pen Inj Screw On 6mm/31 Gauge
Unifine Pentips Needles Pen Inj Screw On 8mm/31 Gauge	Neon Verifine Needles Pen Inj Screw On 8mm/31 Gauge

**Appendix 2 – Insulin Pen Needles to Cost Effective Brand - Data Collection Form**

Patient identifier:	Age	Allergies e.g.: Latex	Current needle <i>[insert name]</i> size and quantity	Previously had CCG <i>selected brand</i> Y/N. If Yes, record reason why stopped	Any contra- indications/cautions If Yes, list and flag to prescriber	Patient has an exclusion to switch to <i>CCG selected brand?</i>	Flag to prescriber? Y/N Record reason	Patient switched? Y/N	Letter sent? Y/N