Group Discussion: Use of pens and safety pen needles

Date: August 2018

Question:

NSW TAG would like to understand whether:

1. Hospitals have put any 'pen' products on formulary (please provide details of which ones)? If not on formulary, what happens when a patient is admitted who is using a high concentration insulin product e.g. Toujeo®?
2. Hospitals are mandating the use of pen devices for high concentration insulins and other 'pen' products?;
    a. Are patients usually self-administrating these pen products (under supervision)?
3. Are nurses using safety pen needles (rather than the standard pen needle for patient self-administration) when they are administrating the 'pen' products?
4. What local training and policies/protocols have been required with respect to pen products and/or use of safety pen needles?

Background:

NSW TAG was requested by CEC's Medication Safety Expert Advisory Committee (MSEAC) to investigate hospital use of pen devices with insulin (and other meds) and safety pen needles. Last year, Safety Notice 009/17 *High Concentration Insulin Products*, provided recommendations with respect to use of standard pen needles and safety pen needles.
It was noted that:

a) the presentation of insulins was varied and that there may be products which may only deliver drug using pens e.g. [Insulin Glargine 300U/mL (Toujeo®); Exenatide (Byetta®); Liraglutide (Victoza®)] while others may have vials and cartridges for use in pens (e.g. Humulin products including Humulin R 500 Units/mL).
b) Toujeo® was listed on the PBS in May 2018 and its use is likely to increase.
c) during hospitalisation, patients may or may not self-administer these products.
d) nurses have traditionally used vials and insulin syringes to administer insulin.
e) there are now various brands of safety pen needles which have retractable needles that mitigate the risk of needle stick injury when using pen devices.

MSEAC is considering whether there should be further state-wide guidance regarding the use of these devices and products.

Responses:

5 responses were received.

Question 1: Have put any 'pen' products on formulary (please provide details of which ones)? If not on formulary, what happens when a patient is admitted who is using a high concentration insulin product e.g. Toujeo®?

Canterbury: We haven't put any including Toujeo on formulary yet – but endocrinology are keen to add Toujeo. They will need to present a plan addressing this issue prior to our approval

Bankstown-Lidcombe: We use the vials only at BNK. The only reason we keep pens is so that the diabetes educator can teach a patient how to use them before discharge and they then self-administer.

We haven't had the issue with Toujeo® as yet and in fact our endocrine team wants to change the Toujeo® patients back to Lantus whilst they're inpatients. A risk in itself as it relies on good documentation to avoid confusion on discharge - but we have 98% medication reconciliation in our facility within 24 hours of admission so it is a risk that is somewhat mitigated.

Port Macquarie-Kempsey: If it comes in a pen, we have the pen in preference to a vial/amp etc. We have dealt with the Safety alert on Toujeo® (009/17) by saying we won't be keeping Toujeo®. And by writing up the dose as units we can still cope with giving the drug acknowledging it is a bigger volume.

Western Sydney LHD: WSLHD has recently approved High strength insulin glargine (Toujeo®) on the formulary. This was approved after the introduction of BD auto shield safety pen needles to prevent the risk of needle stick injuries. This safety needle is the ONLY needle currently on the market that when used closes at both ends of the needle to prevent a needle stick injury- all other safety needles only close at the injection end. These safety needles are now used regardless of if the patient is prescribed a pen or a penfill insulin.

Before Toujeo® was introduced on the WSLHD formulary only patients could self-administer from pens and nursing staff would only administer insulin from vials or penfills

Question 2: Are hospitals are mandating the use of pen devices for high concentration insulins and other 'pen' products? Are patients usually self-administrating these pen products (under supervision)?

Canterbury: Not mandated as such. But do they come as penfills….? Toujeo doesn't so we haven't needed to mandate?

Port Macquarie-Kempsey: Depends on the patient and the ward. Not always.

Western Sydney LHD: BD auto shield safety pen needles are now used regardless of if the patient is prescribed a pen or a penfill insulin.

Northern Sydney LHD: The Mental Health, Drug and Alcohol Facilities have developed a Procedure Document: *Insulin Pen Use in Mental Health Drug and Alcohol Facilities: Safe Sharps Handling – MHDA- 23/11/17* (available on request to NSW TAG*)*:
'Patients who are using an insulin pen on admission to Mental Health Drug and Alcohol facilities are assessed for their ability to safely perform all steps of self- administration during the period of illness.
If the patient is assessed as able to self-administer insulin:

- "Patient may self-administer insulin" must be written on the medication chart and signed by the Medical Officer
- all steps of the procedure must be supervised by nursing staff
- safety needles are recommended to be used
- if using a non-safety pen needle the patient must remove the pen needle after use and place it in a sharps container
- After the Insulin pen has been opened or commenced using, it does not require refrigeration

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If the patient is assessed as unable to complete the steps necessary to self-administer insulin, consider contacting the diabetes educator for review. If the patient is assessed as unable to reliably and safely self-administer insulin, staff will administer the insulin via syringe. If the preferred insulin is only available in pen form, a safety needle must be used with the insulin pen. A patient may need to be re-assessed for their suitability to self-administer insulin should there be any change to their condition.'

Question 3: Are nurses using safety pen needles (rather than the standard pen needle for patient self-administration) when they are administrating the 'pen' products?

Canterbury: If they can self-administer than they do so with a normal needle; otherwise the diabetes educators have educated all nursing staff that they need to use a safety needle (they page the diabetes educators for supply) and how to use it. If a pharmacist identifies a patient has come in on Toujeo®, we remind staff about the need to use a safety needle and not draw it out of the pen.
Port Macquarie-Kempsey: Yes the pharmacy and stores now stock in the safety pen needles

Northern Sydney LHD: If staff are administering the insulin pen, a safety needle must be used.

Question 4: What local training and policies/protocols have been required with respect to pen products and/or use of safety pen needles?

Canterbury: The diabetes educators do regular training for nursing staff. There is a subcutaneous insulin policy (mostly nursing administration) that will be reviewed shortly. Now that you've mentioned it, it would be good for us to address this in the revised version.

Port Macquarie-Kempsey: The diabetes educator for the Hastings provided education on the nice purple pen needles that retract. The education and roll out was minuted in DTC minutes probably about 18 months ago.

Western Sydney LHD: Documents relating to AutoShield Duo Instructions, Toujeo Nursing Education, Western Sydney LHD Trainer Inservice Guide, Memo for Toujeo and Insulin pen Poster developed; (available from NSW TAG upon request).

Responses received as at 7th August 2018

Please note that all information and policies are only current at the time the response is sent and individual hospitals should be contacted to ascertain current policies and practices. The responses received are only representative of the hospitals participating in the discussion at the time and do not necessarily indicate a complete picture of current practices. Information sharing occurs on the understanding that due acknowledgement will be given to the original source and that the information will not be quoted or used out of the context of the discussion. Permission should be sought from the original source before any policy, protocol or guideline is used or applied in another setting.

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