**Background**

People with diabetes admitted to hospital should be cared for by appropriately trained staff, provided with access to a specialist diabetes team, and *given the choice of self-monitoring and managing their own insulin* (NICE, 2011)

NHS diabetes (2102) developed guidelines regarding insulin self-administration in hospital

Wessey AHSN has developed a self administration tool kit to guide hospitals through the implementation process

Within UHS we have approximately 20% of all our inpatients who have diabetes.

With 12 months at UHS, there were 122 errors relating to insulin, nearly half of these were due to administration errors which included insulin being given at the wrong time by healthcare staff

**Project aim**

- Implement a process allowing patients the choice to self-administer their insulin
- To develop an assessment tool to assess whether it is safe for a patient to self-administer their insulin
- To reduce errors relating to insulin administration

- To ensure patients receive their insulin at appropriate times
- To help stabilise patients blood glucose levels

**Intervention - Assessment form**

An assessment form was developed and piloted in 4 ward areas (a medical ward, a surgical ward, a vascular ward and a cystic fibrosis ward)

The initial assessment was completed by the medicines management technician.

The assessment is documented on the patients electronic prescription

The ward pharmacist then prescribes this as a ‘dummy drug’ on our electronic prescription system

At each drug round, the nurse has to chart if the patient is still able to self administer their insulin at the assessed level

**Intervention - insulin storage**

We decided to use non lockable storage for our insulin pens due to the increased cost that would be required to have locked cabinets installed.

These plastic containers are kept in the patients medication locker if they are level 0 or 1 and in the patients bedside cabinet if they are level 2.

They have met infection prevention requirements as they can be cleaned with the clinell wipes

Risk assessments were completed for each of the wards involved in the pilot.

**Intervention - Sharps storage**

Individual sharps containers were provided for patients who were assessed as level 2 and these were kept at the patients bedside

**Documentation**

**Outcomes and benefits**

- On average the initial assessment process took 5 minutes per patient to undertake
- Insulin administration times improved due to nurses not having to leave the patient to go to the ward fridge
- Patient satisfaction improved as patients were given the choice whether to self-administer their own insulin
- Reduction in wrong insulin selection errors from fridges due to insulin being stored at patients bedside
- Predicted reduction of maladministration of insulin due to timing discrepancies of insulin and food.
- Significant reduction in insulin wastage due to unlabelled pens and discharged patients insulin remaining in ward fridge

**Feedback**

**Pharmacy**

- Like the concept and fitted into our daily routine
- Doctors / nurses need to inform patients if insulin doses changed and record the dose patient has taken on chart

**Staff**

- Quicker administration times as insulin in patients room
- Patients are happy for us to continue to monitor their BGs

**Patients**

- Allowed me to make changes in my doses as required
- Gave me back my independence – been on insulin 20 years

**Lessons learnt**

A project manager who has a knowledge of the insulin administration process is extremely beneficial. Time specifically dedicated to the insulin self administration project and out of their normal working hours is essential as this ensures a smooth roll out process of the project.

Pharmacy and IT co-working have been an essential element of the success of this project.


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