# Educate patients on the safe disposal of insulin syringes

Port Shepstone Regional Hospital, South Africa

**GGHH agenda goals:**

- ✓ Waste
- ✓ Pharmaceutical

**Hospital goal:**

- ✓ To promote environmentally friendly practices through the development of recycling projects that will significantly reduce or minimise the waste that goes to landfill sites thereby reducing hospital environmental footprint.
- ✓ To educate patients on the safe and correct disposal of expired and unneeded medication that is integral to the safety of our environment, as well as our community.
- ✓ We also planned to implement a hand-in project for all unneeded and expired medication at all medication collection sites.
- ✓ To educate patients on the safe disposal of insulin syringes and needles and to implement a system for collection of said needles and syringes, so that we may dispose of them in a manner that is not damaging to our community or the environment.

**Progress achieved:**

- ✓ Environmental benefit
- ✓ Human health benefit

**The issue:**

Port Shepstone regional hospital services 11 clinics. More than half of these clinics are situated in rural areas where the patients do not have access to basic services such as refuse removal.

This of course raises the question as to where and how these patients are discarding their expired and unneeded medication that they no longer require. More importantly, where are the patients that use insulin disposing of their used insulin needles and syringes?

Port Shepstone Hospital pharmacy decided that this was a good place to start helping the community as well our environment.

**Sustainability strategy implemented:**

We set our project in motion by ordering a sufficient quantity of small sharps containers, for our clinic patients using insulin, to discard their used needles and Syringes into them. This was done by pharmacy stores via non stock item requisition order.
An informative brochure was created by the pharmacy department in both isiZulu and English to educate these patients on the safe use and disposal of their insulin needles and syringes.

Lists were made of all patients taking insulin, by the pharmacy clinic department. These lists were created per clinic for us to certain which patients required sharps containers. The lists will be updated by our clinic department on a regular basis to include new patients and exclude patients who are no longer collecting medication from the pharmacy.

The other project Port Shepstone Hospital pharmacy is working on is the
Hand-in project for expired and unneeded medication.
Once again pharmacy created a brochure in both isiZulu and English to educate the patients on safe disposal of expired and unneeded medication.
Red bags and cable ties were obtained from our supply chain department for patients to put their expired or unneeded medication into.

**Implementation:**

Our roving team handed out a sharps container to each patient using insulin, as they collected their repeat medication. Each patient was counseled on the use of the sharps container by the pharmacy assistants and given a brochure for their information. The patients were asked to sign for receipt of the container and to bring the container with them when collecting their next repeat medication parcel. In this way it would enable us to track how full the container is and when the patient will require a new one.



For the implementation of the hand in project for expired and unwanted medication, the roving team handed out brochures to the patients and counselled them on the safe disposal of this medication. Red bags and cable ties were given to patients who required them and we asked for these patients to give us their contact details.

**Tracking progress:**

In order for us to track our progress a list of all patients on insulin was created per collection point. This list is not only used to track how full the patient's sharps containers are and when they require another, but also for us to gauge the progress of our project. From these lists we can surmise whether patients are using these containers and how many patients are returning full sharps containers. Patients have been very grateful for this initiative and we have received much positive feedback. Many patients were unaware of the dangers of discarding their used needles in general refuse.





We planned to track the progress for our hand-in project for expired and unneeded medication by getting the details of the patients participating in the project using the table outlined below.

Unfortunately, this was not entirely successful. We did receive medication back from patients but many patients were afraid that if they gave their medication back to the hospital, we would not send their medication for the next month. Even the patients, who did return the medication in the red bags, deleted their names off of all containers and labels.

We decided that in order for these patients to remain anonymous demarcated boxes would be sent to the collection points with the roving teams. The patients could use these for the anonymous return of unneeded and expired medication in conjunction with the red bags.

It was decided that we would monitor progress of this project by the number of containers of expired or unneeded that was returned for safe disposal.

**All expired and unneeded medication as well as the full sharps containers returned by patients will be given to 'compass waste' for safe disposal.**

**Demographic information:**

Port Shepstone Regional Hospital is a 366 bed hospital with 336 usable beds with an average bed occupancy rate of 75% for adults (norm 70-80%). There is an average length of stay of 5.4 days (norm 5-7days) and mortality rate of between 5-6%. Outpatients visits average is about 17 000per month inclusive of specialist clinic visits averaging at 3671 per month and 2% is cross-border cases.

We are a satellite training center for nursing, medical and paramedical students with a number of registrars and quite a number of elective (national and international) students being placed here.