

## **Cleaning process and procedure improvements- Sebokeng Hospital, South Africa**

### **GGHH Agenda Goal**

- Chemicals

### **Hospital Goal**

- To improve the overall cleanliness of the hospital
- Ensuring that staff work with proper cleaning equipment as a majority of the mops were dirty and old (not kept in a hygienic state)
- Discontinuing the practice of mixing cleaning chemicals in one container i.e. bleach and dishwashing soap
- Decanting of cleaning chemicals into properly labelled and compliant containers
- Compliance to various standards and legislation such as the Annual Patient Experience of Care Survey, The National Core Standards Assessment as well as the Environmental Health Norms and Standards
- Achieving an overall cleanliness score of above 90%

### **Progress Achieved**

- Reviewing of the Environmental Hygiene checklist (monitoring tool) and incorporation of standards for assessing the condition of cleaning equipment, dilution of cleaning chemicals as well as the use of personal protective equipment by staff
- Environmental health findings and the conditions of the mops were presented to the Executive Management Committee as well as the Quality Assurance forum of Sebokeng Hospital
- Purchase orders were created for the procurement of mops as well as cleaning containers for the decanting of cleaning chemicals
- On the spot trainings were conducted by the Environmental Health Department during inspections
- A formal training session was conducted by Kiarah Chemicals (cleaning chemicals supplier) on safety precautions, dilution techniques cleaning procedures for the General Assistants (Cleaners of the Hospital).
- The Environmental Health Department developed and printed labels/ stickers with dilution instructions, safety precautions and active ingredients for the cleaning chemicals

#### **a. Human Health Benefits**

- This has led to a decrease in the number of toxic fume-inhalation as cleaning chemicals are decanting into properly labelled and colour-coded containers

- There is also a reduction in chemical related injuries as General Assistants have been have been informed and trained on the Active Ingredients and safety precautions that should be followed
- Installation of a basin in the chemical storage area for the decanting of cleaning chemicals

**b. Environmental Benefits**

- The overall cleanliness of the hospital had drastically improved and was noted by the hospital CEO, Hospital Board Members, visitors and patients of Sebokeng Hospital ( Patient Experience of Care (PEC) Survey March 2018

**c. Financial Benefits**

- There has been a decrease in the number of cleaning chemicals being ordered and used by the hospital as cleaning chemicals are decanted into properly labelled containers
- Training on dilution and cleaning techniques has assisted in reducing the amount of chemical being wasted as cleaners are aware of dilution rates

**The Issue**

All public health facilities including hospitals are experiencing a lot of challenges with human as well as financial resources with budgets being cut as well as posts not being replaced timeously. This has led to a decrease in the number of Support Staff (General Assistants) being employed as well as a decrease in the number of cleaning equipment and cleaning materials being procured.

Sebokeng Hospital's Environmental Health Department which consists of 1 Chief Environmental Health Practitioner, 1 Environmental Health Practitioner and 1 Community Service Environmental Health Practitioner conduct Environmental Health Inspections as part of their duties. The department identified the following challenges as hindering the cleanliness of the hospital:

- Poor conditions of mops- dirty and unhygienic
- Poorly labelled cleaning chemicals i.e. bleach and dishwashing liquid into the same container thereby creating toxic fumes

These become a finding during the National Core Standards Assessment and Impact negatively on the overall cleanliness of the Hospital.

The Environmental Health department, after receiving consistent findings of dirty and unhygienic mops; decanting of cleaning chemicals into poorly labelled and unsafe containers as well as poor overall hygiene, embarked on a project by finding innovative ways of improving chemical safety and the overall general hygiene and cleanliness of the hospital by ensuring that

new mops are purchased, procurement of colour-coded containers into which the cleaning chemicals are decanted as well as proper labelling of the containers with labels /stickers stating their active ingredients and safety precautions that should be adhered to and the training of General Assistants on mixing/ dilution rates and safety precautions.

This has led to a drastic improvement of cleanliness within Sebokeng Hospital. During the National Core Standards Assessment in May 2018, cleanliness which is one of the Key Ministerial Priorities Achieved an Overall score of 92% for the hospital.



Incorrect labelling of cleaning supplies at the hospital



Dirty mops found at the hospital early in the morning

### **Sustainability Strategy Implemented**

- The Environmental Health Department conducts regular Environmental Health inspections in all departments on a monthly basis as a method of monitoring
- A formal training session was conducted by Kiarah Chemicals (supplier) on the 5<sup>th</sup> September 2018, an average of 60 General Assistants were trained on different aspects of Chemical safety as well as cleaning techniques
- Drafting of monthly reports on Environmental Health findings for all departments as well as presentations to the Executive Management Committee on all non-Compliance
- Sebokeng Hospital joined the Global Green and Healthy Hospitals (GGHH) initiative and endorsed Chemical Safety as one of its goals. The GGHH initiative was successfully launched on the 09<sup>th</sup> October 2018

### **Implementation Process**

- Safe, suitable and compliant 1 litre containers with colour-coded lids/tops were procured and used during the decanting of cleaning chemicals
- Labels/ stickers derived from the Material Safety Data Sheets were developed and printed by the Environmental Health Department with active ingredients, safety precautions and dilution rates which were pasted on the containers
- Empty containers labelled with the printed stickers are kept in the chemical storage area
- New colour coded mop heads and new mop sticks were procured and all old mops were replaced. Cleanliness and hygiene of the mops is monitored during Environmental Health inspections
- The distribution day for cleaning chemicals is every week on a Tuesday and all departments go to the chemical storage area for the collection of different cleaning chemicals that are used. During collection; departments are requested to bring the empty containers so that they can be issued with filled ones
- The initiative has assisted with stock management as well as with recycling as the same containers are reused

### **Tracking Progress**

- Continuous inspections are conducted by the Environmental Health Department to Ensure the safe decanting as well as the proper storage of cleaning chemicals and overall cleanliness of the Hospital
- The overall cleanliness of the hospital has drastically improved and was noted by the Hospital CEO, Hospital Board Members, visitors and Patients of Sebokeng Hospital
- Achieving a score of 86% during the March 2018 Patient Experience of Care Survey

- Achieving a score of 92% during the May 2018 National Core Standards Assessment
- To date the project has been awarded the following Awards
  - Alfred Nzo Award (National Environmental Health Award): Overall Winner of the Alfred Nzo Awards September 2018
  - Sediba Service Excellence Award: Gold (Six Key Priorities)- Hospital Cleanliness and Chemical Safety March 2019
  - Khanyisa Service Excellence Awards: 2<sup>nd</sup> Runner up: Best Infection Prevention and Control Project March 2019

### **Challenges and Lessons Learned**

- The procurement of decanting containers for cleaning chemicals as well as the installation of a hand-wash basin were not included in the hospital's procurement demand plan. A motivation was drafted and submitted to the CEO and Executive Management Committee for approval
- Mismatching of labels/ Stickers and the colour-coded containers i.e. bleach label placed on dishwashing container
- Resistance from the cleaning department in terms of implementing the proposed strategy
- Training was conducted by Kiarah Chemicals to staff members to highlight the importance of safety precautions and dilution rates
- Continuous training and monitoring of cleaning chemicals needs to be conducted to ensure compliance
- In order to comply to various standards such as the National Core Standards, Environmental Health Norms and Standards the Environmental Health department needed to explore alternative and innovative ways in order to comply because financial constraints will forever be there
- The decanting of cleaning chemicals into properly labelled containers as well as the monitoring of mops have all led to improved cleanliness of the hospital as General Assistants are well educated on dilution rates as well as the impact of dirty mops in Infection Control

### **Next Steps**

- The procurement of 1 Litre buckets for Pine Gel are still outstanding- to be procured in the 2019 financial year
- Roll out of Chemical Safety to all General Assistants including new appointees

### **Demographic Information**

Sebokeng Hospital is a Regional Public Hospital which is situated in the Emfuleni Local Municipality within the Sedibeng District in Gauteng. The hospital is located in the main

entrance of Sebokeng Township which is about 20 km south of Vereeniging, the main route for getting into the hospital is Moshoeshoe Street.

The Hospital is equipped with 800 patient beds including Theatre, Intensive Care Unit and TB Focal Point and has a staff compliment of 18804 of which 436 posts are still vacant. The hospital provides a variety of healthcare services to the surrounding community and it is the referral hospital for Kopanong and Heidelberg Hospitals as well as other Sedibeng local clinics. The area falls within Region B of Gauteng Province.