

**Initiative on Waste Management
St. Paul Hospital Cavite, Inc. - Philippines**

GGHH Agenda Goals

- Leadership
- Waste

Hospital Goal

- Achieve a waste generation decrease of 20%-30% through implementation of waste segregation at source.
- Reduce the volume of waste brought to the landfill through segregation at source, composting and recycling
- Providing safe and healthy environment with on-site facility sterilization (autoclave) for infectious waste
- Increase the number and kind of generated waste being repurposed and recycled



Progress Achieved

Financial Benefits

- The hospital is able to decrease their expenditure for outside treatment and hauling of infectious waste through installed on-site treatment with autoclave. Monthly, approximately USD 586.00 (Php 30,000) is saved.
- Establishments such as hospitals pay for hauling services even for general waste. Each hauling service provided costs USD 59.00 (Php 3,000.00). Required hauling service was deduced to once a month
- Waste segregation practices led to generation of income for the hospital. Recyclables acquired are sold and provided an average of USD 39.00 (Php 2,000) monthly

Environmental Benefit

- Biodegradable waste such as fruit and vegetable peelings are decomposed. Humus from composted wastes are used as fertilizer within the facility of the hospital
- Waste management and segregation lowers generation and lessens the amount of wastes which enter the waste stream. Eventually, this practice aids in decreasing environmental pollution

Human Health Benefit

- Provision of a safe and healthy environment for all with proper waste segregation
- Developing and acquiring the reputation of being a pro-environment and eco-friendly hospital

The Issue

Over the years, St. Paul Hospital Cavite has experienced an increase of traffic inside the hospital. They have gained more clients both for in-patients and out-patient. Accordingly, the number of

employees has been augmented as well to match the clients' demand. Moreover, students conducting On-The-Job training (OJT) and relatives visiting family members have also increased. Consequently, the volume of waste generated has likewise increased.

Naturally, the need for hauling services both for the infectious and non-infectious wastes swelled. This circumstance raised the cost that the hospital has to spend for the service. More importantly, the hospital at that time was aiming to implement sustainable approaches for waste management.

Sustainability Strategy Implemented

Several strategies were implemented by St. Paul Hospital Cavite to address the concerns brought about by the increased hospital population and waste generation. These strategies are presented below:

Committee Development and Policy Institutionalization

A committee was formed to monitor the implementation, lead the development of policies and encourage active participation of employees and patients towards the hospital's advocacy.

Information, Education and Communication

The designated personnel (Healthcare Waste Management Coordinator) conducts orientation with new employees of the hospital. They are oriented about related policies on waste segregation. Included in the orientation are: the appropriate color of bins or waste containers for each category of waste, and different types of waste included on each category.

Periodic lectures on waste segregation during general assembly are organized to remind employees of the proper segregation practices.

Within the patients' rooms and hospital vicinity, several signage are placed reminding both patients and employees to properly segregate wastes.

Waste Categorization and Color - coding

To aid patients and employees on how to better facilitate waste segregation, three specific waste categories are emphasized. Each waste type has a corresponding colored plastic liner: *Infectious wastes* (eg. Used gloves, bandages, masks, gauze, diapers) are in yellow bags while *recyclables* and *residual wastes* are placed in black bags. *Biodegradable wastes* such as food waste, vegetables and fruit peelings are placed in green bags.

Waste Management and Treatment

The hospital constructed a materials recovery facility (MRF) where recyclables are temporarily stored prior to being sold to local recyclers.

The MRF also houses the on-site facility for treating infectious waste. Located in the MRF are two autoclave machines which utilize steam for sterilization. Before infectious wastes are disposed through local landfill, they are first autoclaved for disinfection. Autoclaved wastes are rendered clean and may be considered as ordinary wastes.

Opposite the MRF is the hospital's composting area where the biodegradable wastes are composted and used as fertilizers.

Implementation Process

Committee Development and Policy Institutionalization

Members of the Healthcare Waste Management Committee were chosen from different units and departments, from medical to ancillary departments. Included in the committee are representatives from Nursing Service Department, Housekeeping Department, Laboratory Department, Pharmacy Department, Dietary and Canteen Department, Physical Therapy Rehabilitation Department and General Services. Policies are developed and proposed by the committee to the Hospital Administrator. These are reviewed and approved by the Hospital Administrator. The policy is then institutionalized and implemented. Currently, the hospital has prepared the “Healthcare Waste Management Policies and Procedures Manual”, which serves as a guide to hospital waste management.



Information, Education and Communication

As part of inducting new employees and helping them to integrate in the hospital, orientation is being provided. The orientation highlights waste management policies and processes. This includes the colors and type of bin used for each waste category, examples of waste under each category, wastes that are considered recyclables and the type of treatment and method of disposal for each waste category.

As part of assisting employees and patients in complying with the set policies, communication materials such as signage and infographics are placed in conspicuous areas.

Employees, particularly the nurses, are informed and taught how to use the needle cutter to separate the sharps from the syringe barrel. This practice prevents and protects nurses and other hospital staff to encounter needle-stick injury.

The hospital has also organized fora on environmental leadership for the benefit of nearby hospitals in the city. One of the forums organized is on Laudato Si – A Call for A Home which emphasizes environmental leadership (March 2016).

St. Paul Hospital Cavite has also engaged in partnering with institutions such as Health Care Without Harm (HCWH) to further their learning. As an example, the hospital adopted waste trackers for assessing their waste. With the assistance of the HCWH team, they collaboratively conducted a Vermicomposting Study on diapers and gauze sponges.

Tracking Progress

St. Paul Hospital Cavite currently uses the Waste Tracker forms and graph from HCWH for recording of wastes. In particular the waste tracker form records hazardous, non-hazardous, infectious and recyclable wastes.

Challenges and Lessons Learned

Individuals already have a set of culture and habits formed. This is difficult to change and reform. Due to this, employees’ and patients’ compliance on waste management policies especially the housekeeping staff is compromised.

In order to address this concern, all the new employees are oriented. Periodically, re-orientation is conducted for all employees. Actual demonstration of proper segregation are shown and participants are requested to enact it to assess understanding and mastery. Label on each bin are made available for the information of patients, relatives and visitors.

Next Steps

St. Paul Hospital Cavite plans to implement utilization of washable cloth diapers for newborn and pediatric patients in Neonatal Intensive Care Unit (NICU) and Pediatric Intensive Care Unit (PICU). This initiative will lessen the bulk of infectious waste generated by reducing the utilization of disposable diapers.

Demographic Information

St. Paul Hospital Cavite, Inc. is a Level 2 hospital which has a 100 bed capacity. Available facilities in the hospital are ten emergency room beds, a minor Operating Room, Delivery Room and an Isolation room. The Operating Room (OR) complex is composed of three major OR theaters, one minor OR, two Delivery Rooms, Labor Room (LR), Post Anesthesia Care Unit (PACU).

Other floors are allotted for Private Rooms, male and female Medical Wards, Surgical Wards, obstetrics and gynecology, pediatric and isolation wards. There are also six (6) bed Intensive Care Unit and Neonatal Intensive Care units with isolation.

Recently, a Hemodialysis Unit was opened. Other services provided by the hospital are the presence of Medical Arts Building, Heart Station, Diagnostic and Imaging Department, Laboratory with Blood Station and a Physical Therapy and Rehabilitation Department

Quotes: "As God's highest form of creation, it is our mission and vocation to protect God's handiwork. This is essential to a life of virtue."

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