

Case Study

Green and Healthy Hospital Environment Achievable with Leadership

Taoyuan Chang Gung Memorial Hospital

GGHH Agenda Goals

Leadership

Hospital Goal

- To reduce carbon dioxide emission
- To reduce energy consumption

Progress Achieved

- In pursuit of complying with the decrees and policies on environmental protection. Taoyuan Chang Gung Memorial Hospital launched Energy Management Promotional Team in 2006, led by Vice Superintendent Cheng – Ta Yang. The hospital is committed to uphold fundamental environmental principles such as energy saving and waste minimization.
- The quarterly conference is held for proactive review and promotion of measures for energy saving and waste minimization
- The Taoyuan Chang Gung Memorial Hospital team has been totally committed to energy saving and carbon dioxide emissions reduction. All employable means were implemented to reduce energy consumption while enforcing waste minimization strategies as an allied activity. Waste minimization activities included recycling. The results of the Hospital’s initiative have been impressive which earned them recognition from renowned authorities. These are Environmental Protection Administration, EY, Bureau of Energy and MOEA in Taiwan. The Hospital has received awards for energy saving, waste minimization and green procurement in 2009, 2010 and 2013.
- The Hospital received ISO 20001 in 2014.

		
<p>Receiving the EPA Outstanding Award in Promotion of Waste</p>	<p>Receiving the EPA Outstanding Award in Energy Saving and Emission Reduction Action</p>	<p>Receiving the ISO 50001:2011 energy management systems in 2014</p>

The issues

- Foreign caregivers hired to take care of patients who do not know Chinese characters fail to categorize waste properly
- The habit of workers not removing unnecessary water from waste adds to the volume of generated waste
- The energy saving effectiveness of air conditioners is affected by climate
- The individual behaviors of employees, patients, visitors and family members affect the effectiveness of energy saving and recycling activities
- The growing global demand for energy confines the possibility and range for a drop in energy prices.

Sustainability Strategy Implemented

The commitment of the high-level administrators of the Hospital to the GGHH has led the plan to be wholeheartedly well-implemented by all possible means. Vice Superintendent Cheng-Ta, Yang as the core leader, in collaboration with the members from respective departments, sponsors the quarterly conferences on a regular basis. The sustainability strategies implemented in recent years include the following.

- Ban on non-green (not eco-friendly) items: Patients and employees are encouraged to use washable tableware.
- The e-sheets operating system minimizes paper consumed.
- Digital imaging uses a PACS system.
- The maintenance and repair of equipment are emphasized, with regular maintenance and repairing of equipment taking place.
- The department with the highest rating in waste categorization and overall neatness receives a reward each month.
- The multilingual waste disposal and recycling poster is posted on the walls near the soiled linens room.
- The innovative improvement project for energy saving and waste minimization is rewarded.
- Electronic devices with energy label are bought.
- Applying to and installation of LED lamps and infrared sensors.
- Sponsored training sessions for energy saving and waste minimization allow all employees to be familiar with the measures being promoted.

Implementation process

- A quarterly conference sponsored on a regular basis aims at provision of medical services by energy-saving and global green means in order to manage a healthy workplace and maintain the sustainability of the earth.
- The institutions and departments are required to set energy saving and waste minimization index in advance each year. Those who fail to achieve such index are requested to investigate the cause through an analysis and submit PDCA report.

Tracking Progress

- The departments receive a monthly inspection by the 5S and Safety Inspectors Team led by the supervisors for assessing and rating how well waste recycling and energy saving measures are performed, with the outcomes announced each month in order to enhance ambient neatness and autonomous safety and health management. The departments with good ratings receive a prize of NT\$ 2,000, and the departments with low ratings (i.e. abnormal state), recorded with pictures, receive orders for improvement and their improvement is subsequently tracked by the Administration.

ISO 50001 : 2011 energy management systems along with Plan, Do, Check, Action

- (PDCA) apply to procedural improvement for betterment and understanding of energy consumption in order to set proper energy management goals and to constantly improve energy consumption efficiency.

Challenges and lesson learned

Taoyuan Chang Gung Memorial Hospital as a regional hospital has a thriving quantitative growth of medical services and outpatients over the past few years, but an increase in medical operational affairs leads to a rise in energy consumed and waste produced. This is why we need adequate comparative benchmarks to detect and regulate the rise in energy consumed and waste produced brought by the thriving quantitative growth of medical services provided (patients, employees and medical operations).

Next steps

Taoyuan Chang Gung Memorial Hospital launching ISO 50001 : 2011 energy management systems, being awarded by the Bureau of Energy, MOEA and the Environmental Protection Administration, EY, is continuously committed to the enactment of global green ideas in medical practices in response to global eco initiatives through ongoing improvement, constant advancement, enhanced internal training and global green ideas promoted for patients and employees to exercise at home.

Demographic information

Taoyuan Chang Gung Memorial Hospital , founded in Dec. 2003, is committed to the enhancement of domestic medical care of chronic diseases, the integrity of traditional Chinese and western medicine, and the establishment of a system of preventive medicine and holistic medical treatment for acute and chronic diseases. The Hospital on the hill of Guishan District, Taoyuan City, Taiwan Province, secluded among green hills, is one of the top 3 magnificent architectural works in Taiwan. The structure has an innovative, elegant windmill shape connected by a paired-line cross, making blue sky and green land visible at each corner of the Hospital, i.e. it is indeed a Garden Hospital.

Links

<http://www.cgmh.org.tw>

Quotes:

Energy saving and emissions reduction achieved by me
In pursuit of the best through self-examination
Ongoing improvement with unceasing commitment

Keywords / topics:

Leadership, waste minimization, Energy Saving, CGMH

Submission date: 2015/06/12