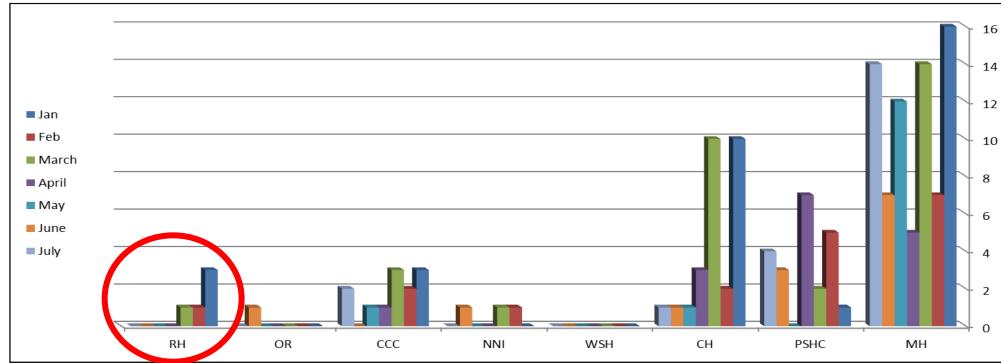


Pressure Ulcer Free Hospital

A multidisciplinary approach Quality Improvement Project Storyboard)

HAPU Prevention and management team members

Janette Elliot – Team Leader Bayan Kaddourah- Nurse Manager Pakiamani Durai – Occupational Therapist Hanan Al Garni – Physical Therapist Hana Al Rowdan- Clinical Dietician Erna Van Der Merwe – Wound care HN Asim Niaz- PMR consultant Mohammad Sallaq – Prothetics and Orthotics



Total number of HAPU in the year 2012 at KFMC

The Situation

The Rehabilitation Hospital is a 92 bedded hospital with a mean daily census of 70 patients, mean length of stay of 60 days and approximately 6 discharges or admission per week. Most of the patients have spinal cord injury, traumatic brain injuries, and other neurological dis-

The prevalence of Hospital Acquired Pressure Ulcers (HAPU) was one of the barriers for Rehabilitation patients over the last 5 years. It ranges between 4 to 5 % of the total number of admissions in 2012. The mean age of the patients was 27 years and 95 % of the patients were males.

Because of the urgency of the problem and need for new solution, the Rehabilitation Hospital at King Fahad Medical City commenced a new quality improvement project. The project was called Pressure ulcer Zero Environment Multi-disciplinary project in Rehabilitation Hospital. It was initiated in January 2013 and was fully implemented by March 2013. The project consisted of 4 components; skin rounds, staff education, patient education and the involvement of the multidisciplinary team in the prevention of HAPU.

Education was mandatory and given to both nurse's and therapists. The educator conducted 1 hour class for one full week. Skin rounds on newly admitted patients were instituted twice a week on Wednesday morning. Twice weekly was determined to be the best way to assess all patients because the medical and surgical patients have a shorter length of stay than the rehabilitation patients. All patients classified as at risk on water low scale were included in the skin rounds. Therapists were encouraged to participate in skin assessments during their contact hours with patients. Therapist played a significant role in reporting area at risk for pressure ulcers to the nursing

Therapist provided rehabilitation patient with daily exercises either in the gym or at the bedside, therefore, they are in an excellent position to assess the patient's skin during this activity. They also assisted in mobilizing patients at risk, thus they are contributing to wards the prevention of pressure ulcers.

Moreover, All patients admitted to Rehabilitation Hospital were given a patient education booklet that highlights the contributing and preventing factors to pressure ulcer. Every patient has his customized goal based on his water low scale and his/her functional status

Step 1: Describe the Problem

<u>Problem Statement:</u> The number of HAPU is increasing in the Rehabilitation Hospital.

Reason Selected: Surveillance data showed significant increases in the number of HAPU over the last 5 years. If not rapidly controlled, the number of HAPU will dramatically increase, thus the number of inactive days for patients will increase too. The consequences will be a long hospital stay, high cost and reduce the chance of new patients to be admitted.

Measures of Project Success:

Reduce the number of Hospital Acquired Pressure Ulcers to zero. Rehabilitation multidisciplinary team will be educated and make sure that they are competent in dealing with the prevention and management of pressure ulcers.

Educate and increase patient's awareness about pressure ulcers on admission.

Compile a Pressure Ulcer Prevention algorithm that illustrates the clear pathway for patient from admission to discharge.

Compile a multidisciplinary Pressure Ulcer Action plan that mandates all disciplines to share their plans and document on one form.

The team identified 5 measures of its success: One outcome measure and four performance measures for processes important to reaching the outcome goal.

Two process measures – Staff and patient education were identified as areas for improvement and it was clearly identified in our surveys about patient and staff attitude and knowledge regarding pressure ulcer. The third and fourth process were new initiatives that can contribute to the zero pressure ulcer goal.

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Milestones:

Team committed to problem statement

Identified internal standards

Defined measures and targets

Completed first working /learning session

Drafted expectations for members on the team

Step 2 : Describe the current process

Before implementation of the project, preventing pressure ulcers was guided by each patient's primary nurse only and relied on the nurse's preexisting knowledge and experience of the assessment and treatment of skin problems. The primary nurse completed a skin assessment and determined the patients water low pressure area risk assessment score once a shift. Water low pressure area risk assessment chart is a tool used together with the nurses clinical judgment. An indication aim of this tool is to assist the nurse to assess risk of patient/client developing pressure ulcer. The water low consist of seven items; build/weight, height, visual assessment of the skin, sex/age, continence, mobility, and tissue malnutrition, neurological deficit, major surgery, trauma and medication.

The tool identifies three "at risk" categories.

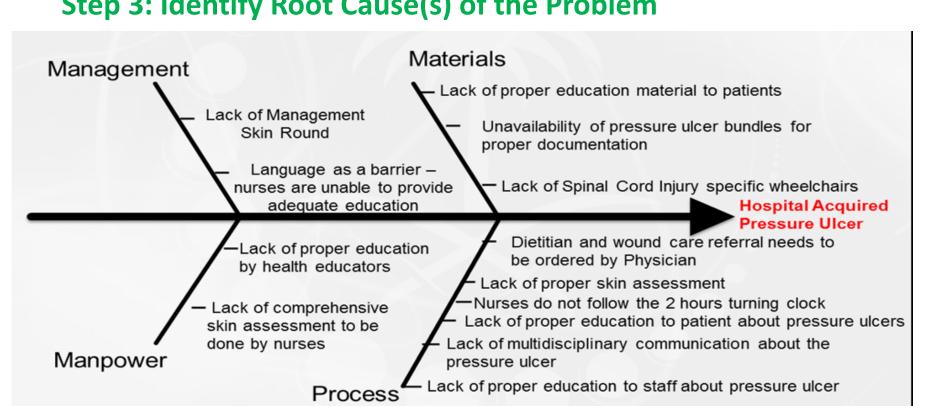
A score of 10-14 indicates at risk.

A score of 15-19 indicates high risk

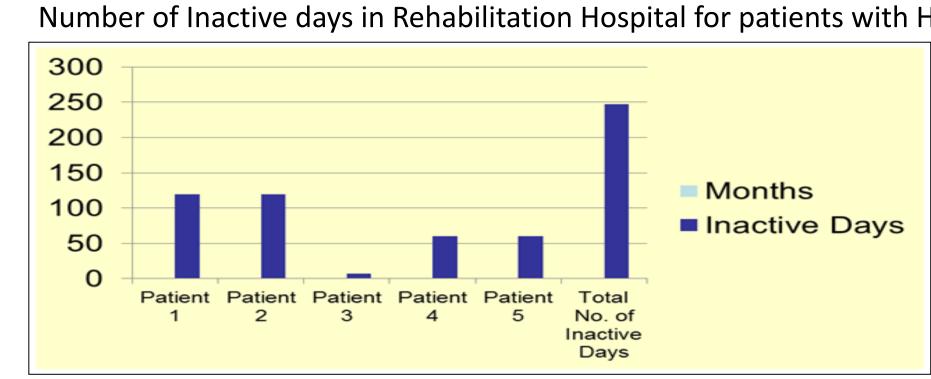
A score of 20 and above indicates very high risk.

On the basis of the water low score, the nurse would then determine a

Step 3: Identify Root Cause(s) of the Problem



Number of Inactive days in Rehabilitation Hospital for patients with HAPU



Step 4 : Develop a Solution and Action Plan

Objective	Responsibility	Timeline	Status
Zero Hospital acquired pressure ulcer	PU Task Force	April, 2013	2 nd quarter 2013 we had zero pressure ulcer in RH. It is going on.
o promote awareness of the physicians and other healthcare team members about PU	PU Task Force	March, 2013 (Education to all RH staff was given)	Ongoing
o implement a multidisciplinary action plan for PU	PU Task Force	April, 2013	ongoing
andardize weekly skin round with NM and HN	Bayan Kaddourah	April, 2013	Ongoing
o modify the pressure ulcer assessment pathway to fit the RH needs	Janette Elliott	April, 2013	ongoing
II RH patients will be given an education session and booklets about PU	Bayan Kaddourah	June, 2013	Ongoing
equest all needed equipment and tools to prevent PU	Janette Elliott	December 2013	Ongoing
oordinate with the RH Nurse Educator to ensure that all nurses completed the KFMC PU online module	Ayman Abu Errah	June, 2013	Done
esign a comprehensive pressure ulcer assessment form	Bayan Kaddourah	June, 2013	Ongoing
tructure a pre pressure ulcer meeting with high risk patients after admission and post meeting after HAPU	PU Task Force	June, 2013	Ongoing

Step 5 : Implement the Solution

The team implemented changes by dealing with easily addressed problems first. Staff and patient education were the two major areas that improve the knowledge and attitudes of patient and staff towards pressure ulcer development and management.

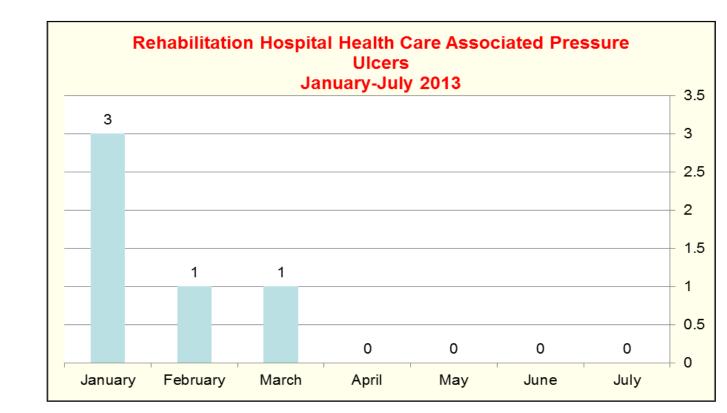
Leadership skin round was one of the core initiatives that urged staff to comply with the proper assessment of skin every shift. It also gives the patient an idea about the seriousness of the HAPU.

Compiling a new algorithm and multidisciplinary action plan were another contributing factor towards the success of our project.

As listed in the action plan above, actions were registered with the name of the owner and the due date and this helped the team to track the progress

The project is an ongoing quality initiative, the last goal was achieved last December 2013, by receiving the equipment needed to prevent HAPU.

Step 6 : Review and Evaluate Results



After the full implementation of the quality project the incidence of HAPU dropped to zero over from April to July 2013.

The prevalence of HAPU in the year 2012 was 4 % of the total number of admissions in 2012, while the prevalence of HAPU after the implementation of the project became 3 %. Therefore the absolute reduction in the number of pressure ulcers is 25% of all newly admitted patients.

Step 7 : Reflect and Act on Learning

Secondary Effects of QI Effort: In addition to advances made in their indicators the team also reported the following successes, which grew out of the QI initiative:

Buy in from the Rehabilitation multidisciplinary team towards the prevention of

Improved morale and teamwork of staff

The success of this project strengthened the staff desire to look for another quality project that will impact on staff and patient satisfaction.

Implementing QI:

Since this was the Nursing department first QI initiative using the multidisciplinary approach, the team learned what support needed to be in place—for a successful project. While some team members had previous QI training, most learned new methods by carrying out the project. All team members were experts in their fields and that helped us to be more focused.

Some challenges identified by the team:

- Dedicating staff to full attendance at team meetings
- Staying focused on priority issues
- Financial support / Budget to buy equipment needed for pressure ulcer prevention