COST OF PRESSURE ULCERS ON HEALTHCARE FACILITIES

Cost efficiency study in Heart Hospital

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INTRODUCTION

Hospital Acquired Pressure ulcers are one of the most common preventable conditions. All research studies cited show PU significantly increases healthcare cost. The overall cost to the healthcare facility includes resources such as dressings, support surfaces, cushions, and treatment, nursing care timings for repositioning and assessment, medication, surgery time. There is also the significant cost to patients in terms of Pain, increase morbidity, decrease quality of life, absence from work and psychological trauma and increased length of stay and vulnerability to hospital acquired infection.

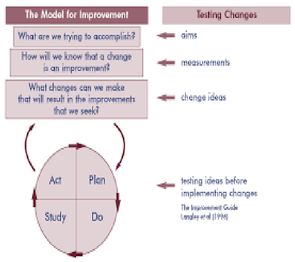
The aim of this study to provide an estimate of the cost of treating pressure ulcer for a 2 year period from 2014 in Hamad Heart hospital.

METHODOLOGY

We studied 12 months retrospective data for the year 2014. The inclusion criteria for the study was total number of reported+/- treated pressure ulcers for the Heart Hospital facility. The total count was 126 Pressure ulcers of varying grades, representing only hospital acquired PU . The Cost spent for treatment of these pressure ulcers were calculated based on HMC resources (Nursing assessment, cost of dressing, wound debridement) which shows huge spending.

For year 2015 and 2016, pressure ulcer prevention strategy was prepared and implemented.

Our Quality improvement methodology is using Model for Improvement as a framework to guide improvement work and small frequent tests of changes.



Aim—Reduction in hospital acquired pressure ulcer count by 60 % by Dec 2016

Measurement

Outcome measure—Number of pressure ulcers

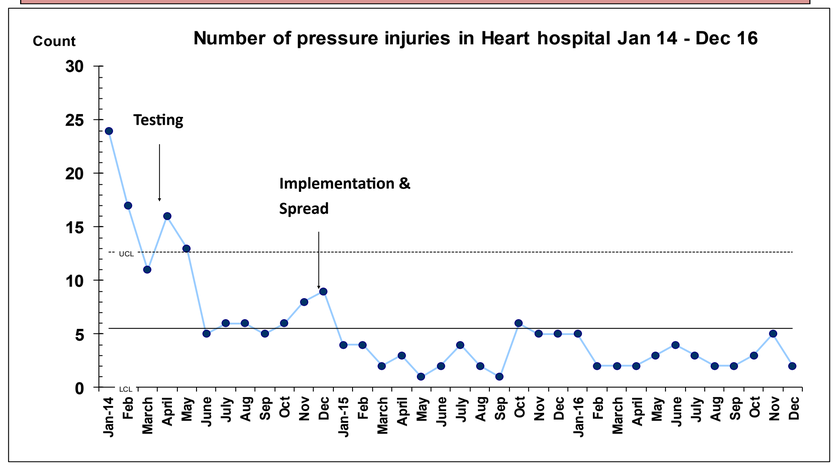
Process measure— Percent compliance with pressure ulcer prevention bundle

CHANGE IDEAS

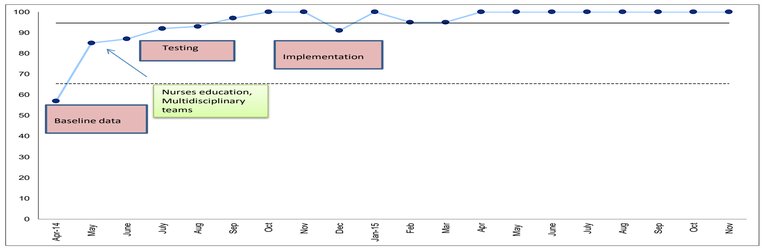
Several change ideas have been tried to reduce hospital acquired pressure ulcers. It includes multiple PDSAs—

1. Education to frontline staff for proper skin assessment by Braden scale use
2. Use of pressure ulcer warning signs to identify patients on high risk of developing pressure ulcers
3. Use of barrier creams cavilon for patients on high risk
4. Pressure ulcer turning clock in the units to act as reminder for positioning
5. Use of pressure ulcer calendars in the unit
6. Use of pressure ulcer prevention bundle and monitoring compliance
7. Reinforcement on education to prevent pressure ulcers
8. Multidisciplinary team involvement including respiratory therapist , dietician, physiotherapist and wound care nurses

RESULTS



Percent Compliance of patients "at risk" receiving the full pressure ulcer prevention bundle- CTICU



CONCLUSION

Hospital acquired pressure ulcers is a significant cost on health care facilities .Unless proper measures are being taken for prevention, incidences will likely keep increasing with a parallel increase to healthcare cost. For all future planning and staff education and development we will emphasize the necessary steps thought to contribute to prevention of Pressure ulcers and their associated cost to the health care service.

By following evidence based practices we are able to reduce incidence of HAPU from 126 in year 2014 to 35 in year 2016 which is almost 75 % reduction in numbers as well l as in cost.

NEXT STEP AND SUSTAINABILITY

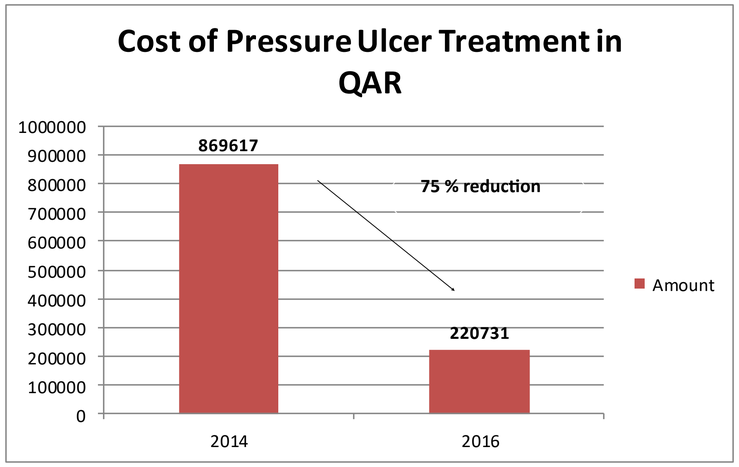
1. Keep the momentum going by sharing the data and celebrating success. Frontline teams feedback and suggestions are playing a key role in our next steps planning and sustaining.
2. Apart from education and compliance monitoring, we are looking forward to test some of th e products which are effective in prevention of device related pressure ulcers. for example—gel pads for bipap masks

ECONOMIC IMPACT

Treatment Cost Per Pressure Ulcer

Intervention	Total cost (In QAR) per day – Stage 2
Risk assessment (includes nursing time)	40
Reposition (includes nursing time and nursing aid)	560
Dressing of wound (includes NS, Betadine, Gauze,Gloves, dressing set, inadine, Silvercel, Tielle, Mepilex, Mepore, Promogran, Nugel, Under pads)	108
Unforeseen costs (approx. 25%)	200
Total	908

Sources—Wound care Department, Survey questionnaires form 61 front-line staff for timings of risk assessment and repositioning



LIMITATIONS

Aim of this study is to raise awareness about cost associated with treatment of pressure ulcers. There are number of limitations in this study like cost of hospital acquired infections due to increases length of stay , support surfaces are not calculated. Also presented figures shows estimated cost not exact figures.

Despite of all these shortcomings, the figures are still alarming and we hope that we would be able to raise awareness in frontline team members and will succeed in adopting prevention of pressure ulcer model rather than treatment.