

Prince Sultan Cardiac Center in Riyadh – Kingdom of Saudi Arabia

Reducing Pressure Ulcer Prevalence in Adult Patients

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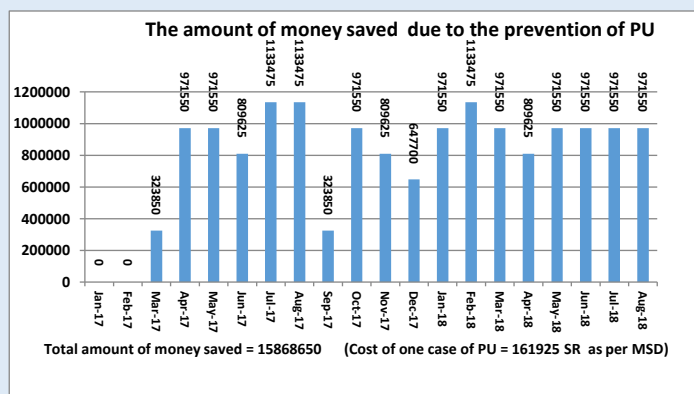
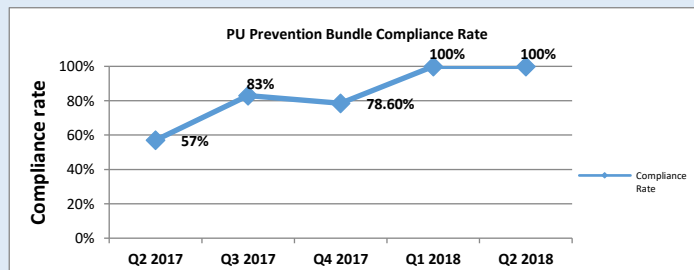
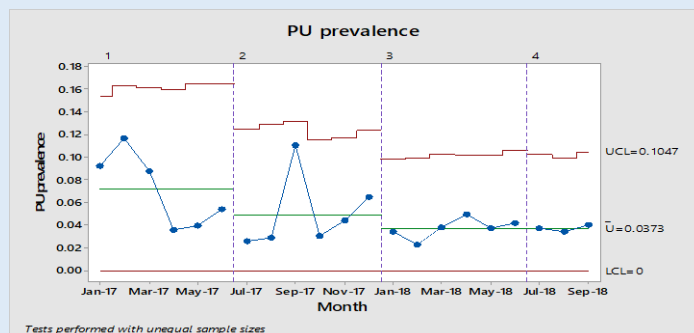
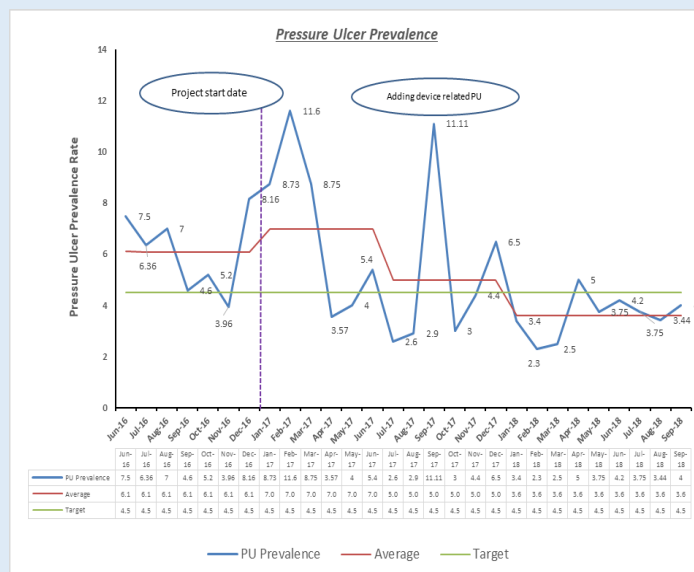
Background: High prevalence rate of pressure ulcer has been noted at the end of 2016 (about 9.28 %) while Medical Service Directorate (MSD - hospital's governance) target is 4.5 %. This high rate of pressure ulcer increased patient's length of stay and utilized hospital resources where one patient with Pressure Ulcer costs the hospital about 161,925 SR (MSD reference) which equals 43,000 US dollars. Pressure Ulcer Prevalence was high because of inconsistent skin assessment and lack of staff compliance with Pressure Ulcer prevention bundle.

Aim: Reduce Pressure Ulcer Prevalence Rate to less than 4.5 % by the end of September 2018.

Project design/strategy: A multidisciplinary quality improvement team for reducing pressure ulcer prevalence has been formed and the team decided to use FOCUS-PDCA methodology for reaching the real causes of the high prevalence rate of pressure ulcer and setting an action plan to reduce it.

Action Plan:

Key Improvement Area	Improvement Step	Improvement Group
Skin assessment	1- Education of nursing staff about skin assessment (skin workshop)	-Wound Care Resource Nurse -Head Nurses
	2- Daily skin round to review the practice and provide ongoing education to nursing staff	-Wound Care Resource Nurse -Head Nurses
	3- Weekly compliance audits to monitor staff compliance with skin assessment requirements	-Wound Care Resource Nurse
Pressure Ulcer Prevention Bundle	1- mplementation of Turning Clock (every 2 hrs.)	-Patient assigned Nurse and patient turning team
	2- Promotion of the use of barrier creams/dressings for patients with continence problems	Patient assigned nurse and head nurse
	3- Weekly compliance audits initiated to monitor implementation of the bundle	Wound Care Resource Nurse
Manual Handling Practices	1- Undertake review of specialized mattress availability within the hospital	-Deputy Director of Nursing -Supplies Director
	2- Weekly compliance audit to monitor correct mattress selection based on risk and clinical status	Wound Care Resource Nurse
	3- Ensuring availability of manual handling aids	-Deputy Director of Nursing -Supplies Director



Results: 1 year and 9 months after implementation of the action plan which includes proper skin risk assessment and monitoring of staff compliance with Pressure Ulcer Prevention bundle, Pressure Ulcer Prevalence decreased from 9.28 in Jan 2017 (start of the project) to 3.75 in September 2018 (below MSD target: 4.5) and staff compliance rate with pressure ulcer prevention bundle increased from 60 % in March 2017 to 100% in June 2018. In addition to that, this project saved 15,868,650 SR (4, 224, 880 US dollars) in 20 months.

Conclusions: We have found that PU prevalence can be reduced in high risk patients like cardiac patients through implementation of PU prevention bundle including consistent skin assessment and reassessment for patients. Staff education is a very important part where it helps staff to build their knowledge in regards to PU prevention. The sustainability of low PU prevalence rate depends on compliance of staff with pressure ulcer prevention bundle and the continuous support of hospital administration by maintaining the availability of required resources.