

A NOVEL PRESSURE INJURY CARE BUNDLE FOR DEPENDENT PATIENTS WITH PRESSURE INJURIES IN BERMUDA

AUTHORS/INSTITUTIONS: H. MYINT, M. Simmons, J. De La Cruz, B. Diaz, G. Benuenza-Baldonado, B. Edwards, K. Drummond, D. Kiriyadoss, E.C. Mulkerrin, Geriatrics, Bermuda Hospitals Board, Hamilton, BERMUDA

INTRODUCTION

Pressure Injury (PI) management is a challenge in dependent patients in Acute Care Wards (ACW) despite standard care (regular pressure relief measures, incontinence management, debridement, optimisation of hydration and nutrition). A Pressure Injury Care Bundle (PICB), introduced by the Department of Geriatrics, could enhance the standard of care of PIs by diligent and regular interdisciplinary team monitoring of patients with PIs following admission to Long Term Care (LTC) wards and thus may improve outcomes.

METHODS

- The PICB was implemented by multiple PI Nurse Champions with education of all nursing assistants and medical staff into PI aetiology/management. Progress was monitored with weekly PI measurements/photography and Nurse Champion-lead team review of all PIs.
- After 96+/-103 days in the ACW, the PICB was applied to 30 consecutive patients in the LTC wards. Patients were followed for 116 +/-274 days. (see Figure 1)
- Patients data were collected between the period of October 2020 to October 2021.
- Incorporation of PICB as part of the Cycle of Pressure Injury Care and Management. The PICB chart is a composite tool comprising all facets of pressure injury care including repositioning schedule, incontinence care monitoring, the use of pressure relieving devices, skin inspection, wound dressing inspection, safety checks, hydration and nutritional intake. (see Figure 2)

	NUMBER	PERCENTAGE	MEAN +/-1SD
GENDER			
MALE	12	40%	
FEMALE	18	60%	
AGE			
<50	1	3%	80+/-14
50-59	2	7%	
60-69	3	10%	
70-79	7	23%	
>80	17	57%	
STAGE 2-4 PIs ON ADMISSION IN ACW	25	83%	
CHARLSON COMORBIDITY INDEX PALLIATIVE	27	90%	7+/-3
MOBILITY			
BEDFAST	24	80%	
CHAIRFAST	4	13%	
AMBULATES OCCASIONALLY	1	3%	
AMBULATES FREQUENTLY	1	3%	
LEVEL OF COGNITION			
NO COGNITIVE IMPAIRMENT	8	27%	
WITH COGNITIVE IMPAIRMENT	22	73%	
MILD TO MODERATE DEMENTIA	10	45%	
ADVANCED DEMENTIA	12	55%	

Figure 1. DEPENDENT PATIENTS WITH PRESSURE INJURIES

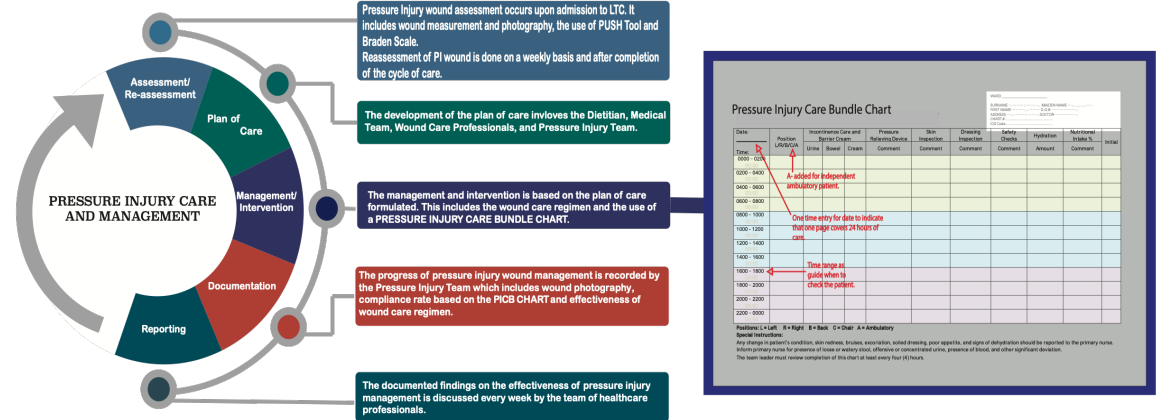


Figure 2. CYCLE OF PRESSURE INJURY CARE AND MANAGEMENT.

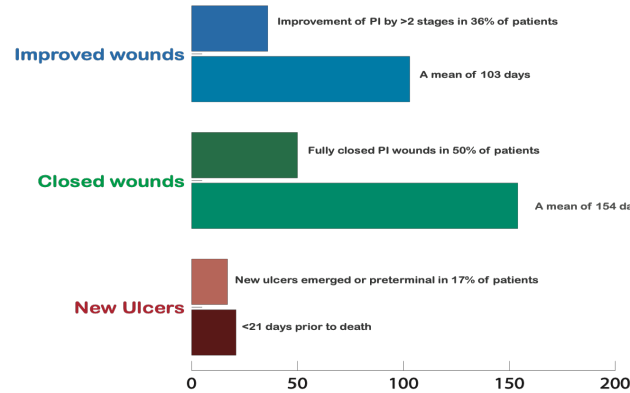


Figure 3. OUTCOME OF PRESSURE INJURY MANAGEMENT.

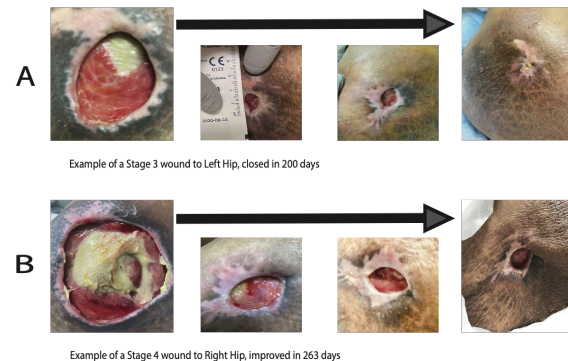


Figure 4. EXAMPLES OF CLOSED AND IMPROVED WOUNDS.

RESULTS

PI improvement occurred in 30% of patients after a mean of 103 days. Ulcers fully closed in 50% of patients in 154+/-48 days. New ulcers emerged in 17% of patients related to severe contractures, preterminal poor nutrition and sarcopenia, and ultimately 16 (54%) of the total number of patients died due to their comorbidities. (see Figure 3, and Figure 4 for examples of wounds)

CONCLUSION

These results suggest that an intensive multimodal intervention involving best practice, results in significant improvement/healing of PIs in severely dependent patients with palliative needs. (see Figure 5)

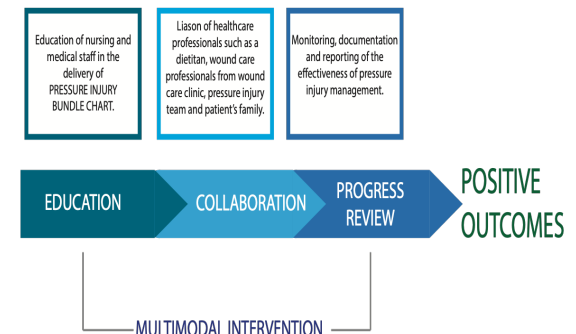


Figure 5. MULTIMODAL INTERVENTION AND ENHANCEMENT.