Government of **Western Australia**
Department of **Health**

Minimising Pressure Injury Incidence In Vascular Surgery Patients

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Declaration of Financial Interests or Relationships

I have no financial interest or relationship(s) to disclose

Background

- Pressure Injuries often result in:
  - Decreased quality of life
  - Increased length of stay
  - Readmission to hospital
  - Limb loss


NOT HAVING LEGS
SO HOT RIGHT NOW
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Background

- Established pressure injury risk assessment tools have a poor inter-rater reliability.

- Recent research in Western Australia has found:
  - That nursing PI risk assessment does not adequately assess PI risk in the High Risk Foot.
  - That nursing understanding of the factors leading to pressure injuries is not uniform.

Aims/Outcomes

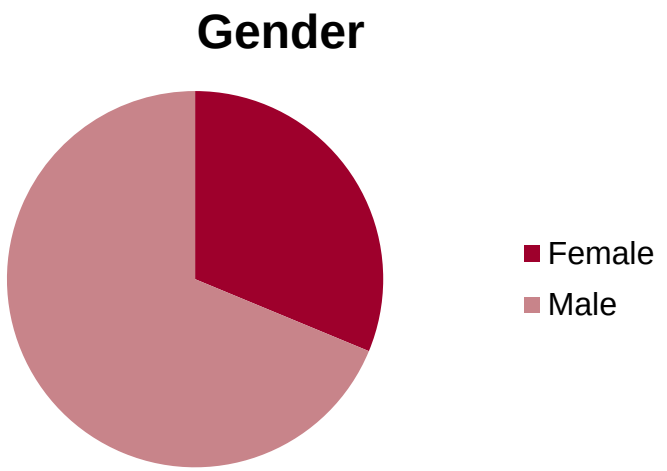
- Identify which patients admitted to hospital by Vascular Surgeons are at increased risk of pressure injury.

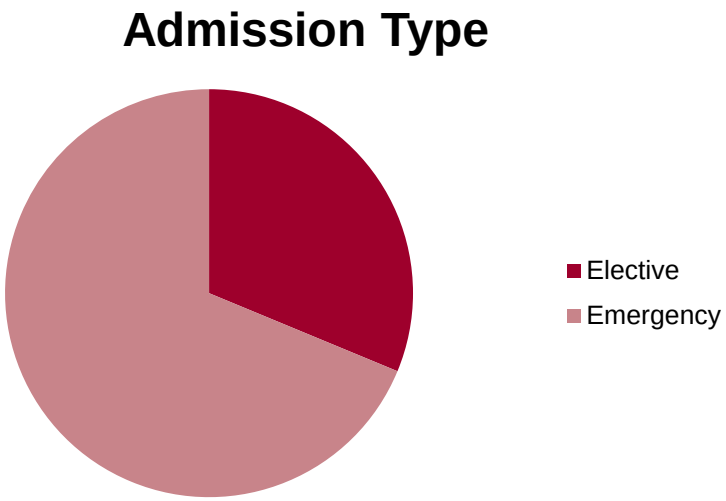
- Decrease pressure injury incidence in patients admitted under the vascular surgical team.

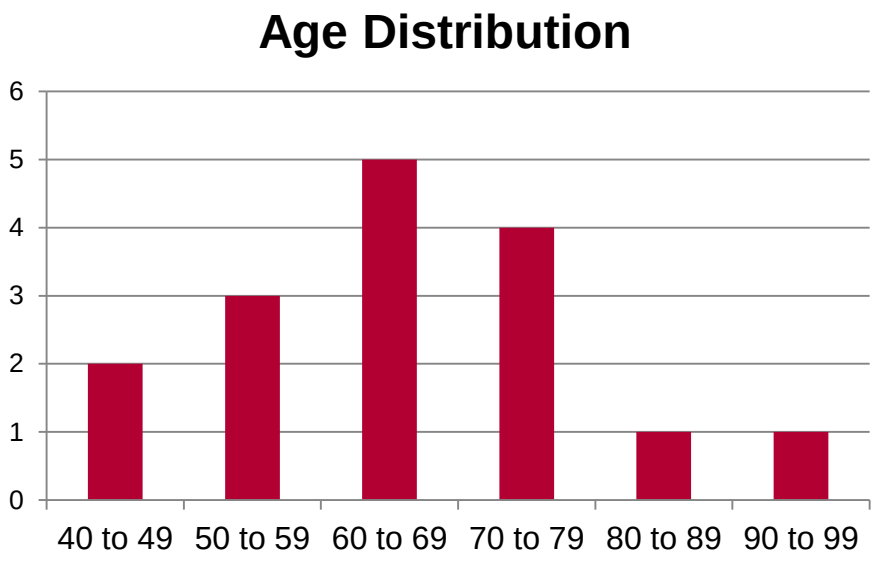
Method

- Retrospective audit of patients who developed pressure injuries over 12 month period
  - Demographics
  - Co-morbidities
  - Surgical time
  - Length of stay
- Develop changes to patient management
- Re-audit at 12 month intervals post intervention

Retrospective Audit Results: Demographics







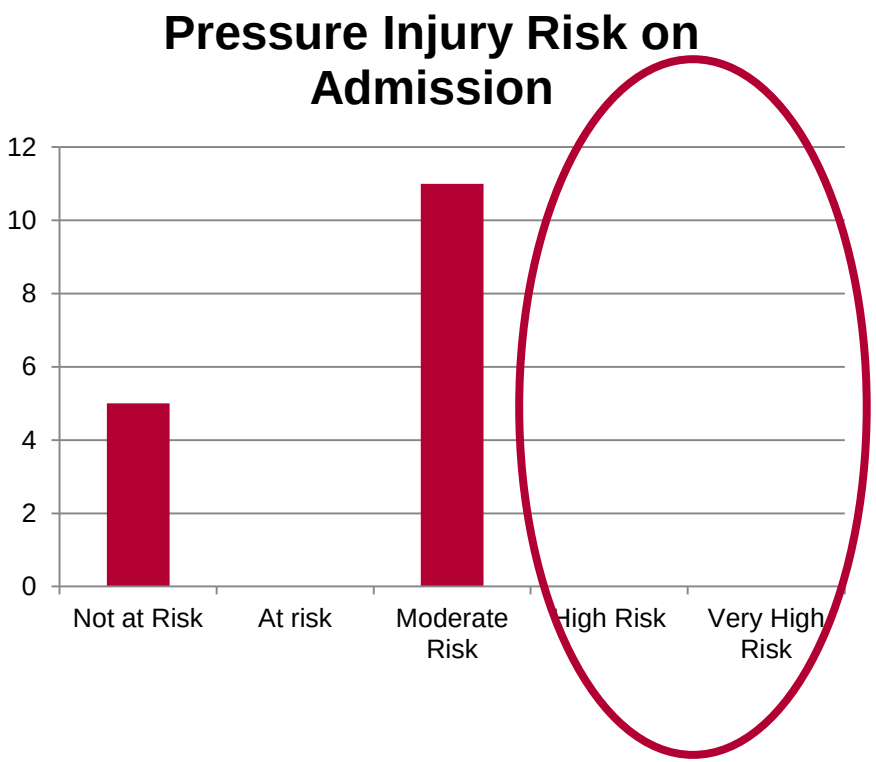
n=16

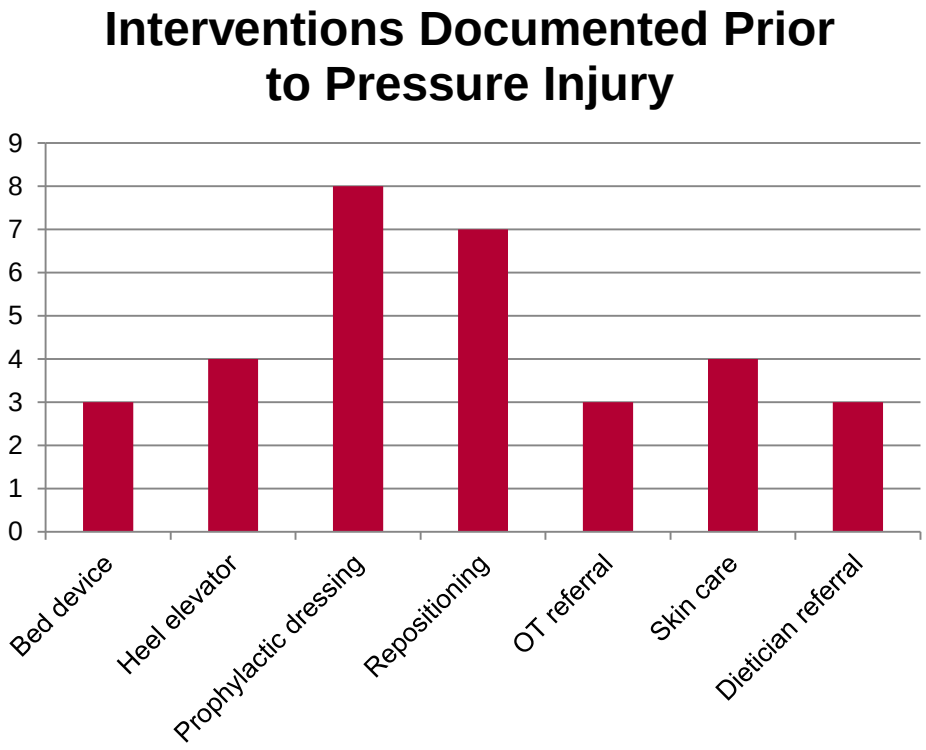
Retrospective Audit Results

- Poor documentation of intervention or patient non-compliance
- Patient weight, length of stay and surgical time did not appear to be relevant in this small sample

Retrospective Audit Results:

Pressure Injury Risk Assessment – How did we do?





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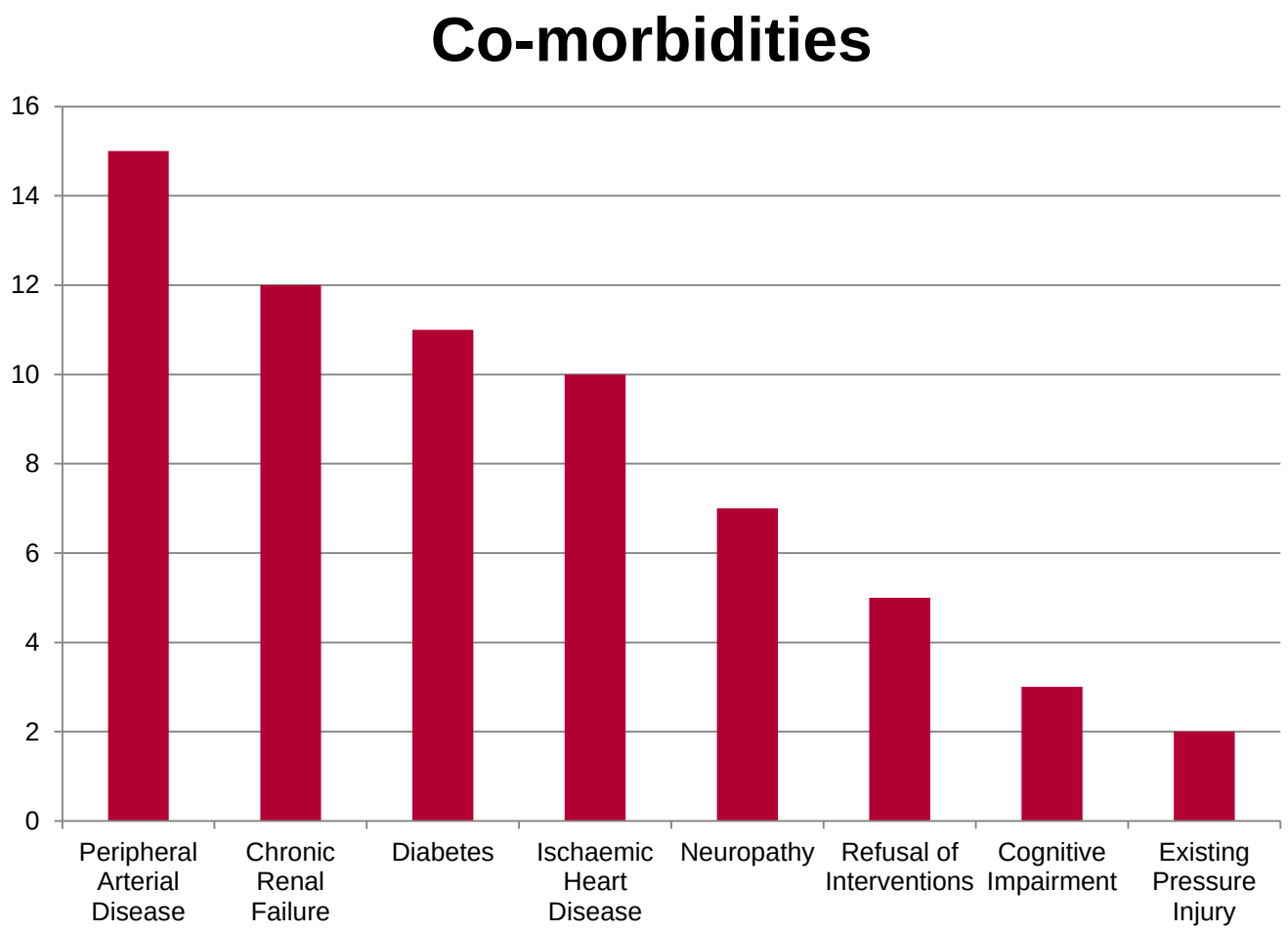
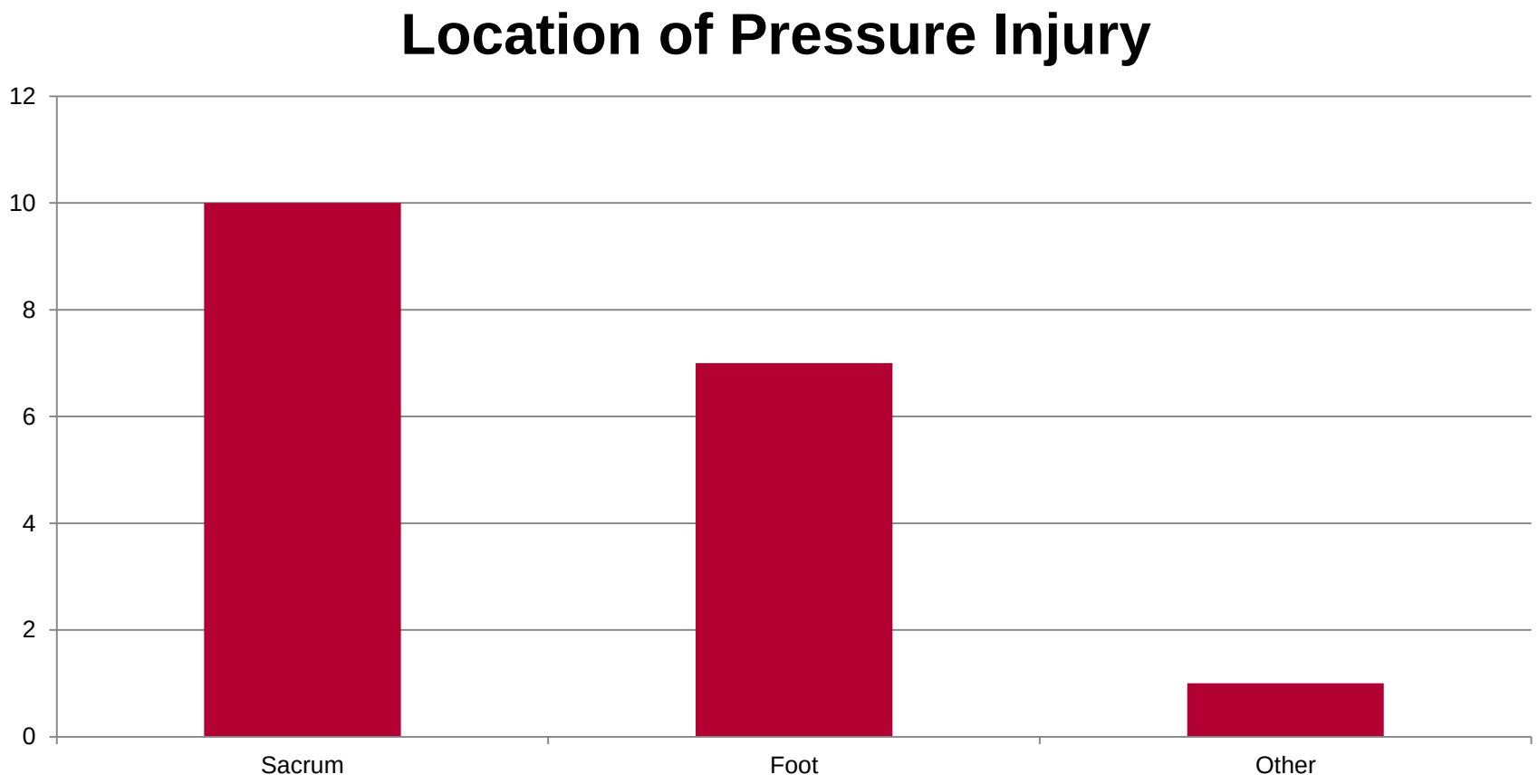
Retrospective Audit Results



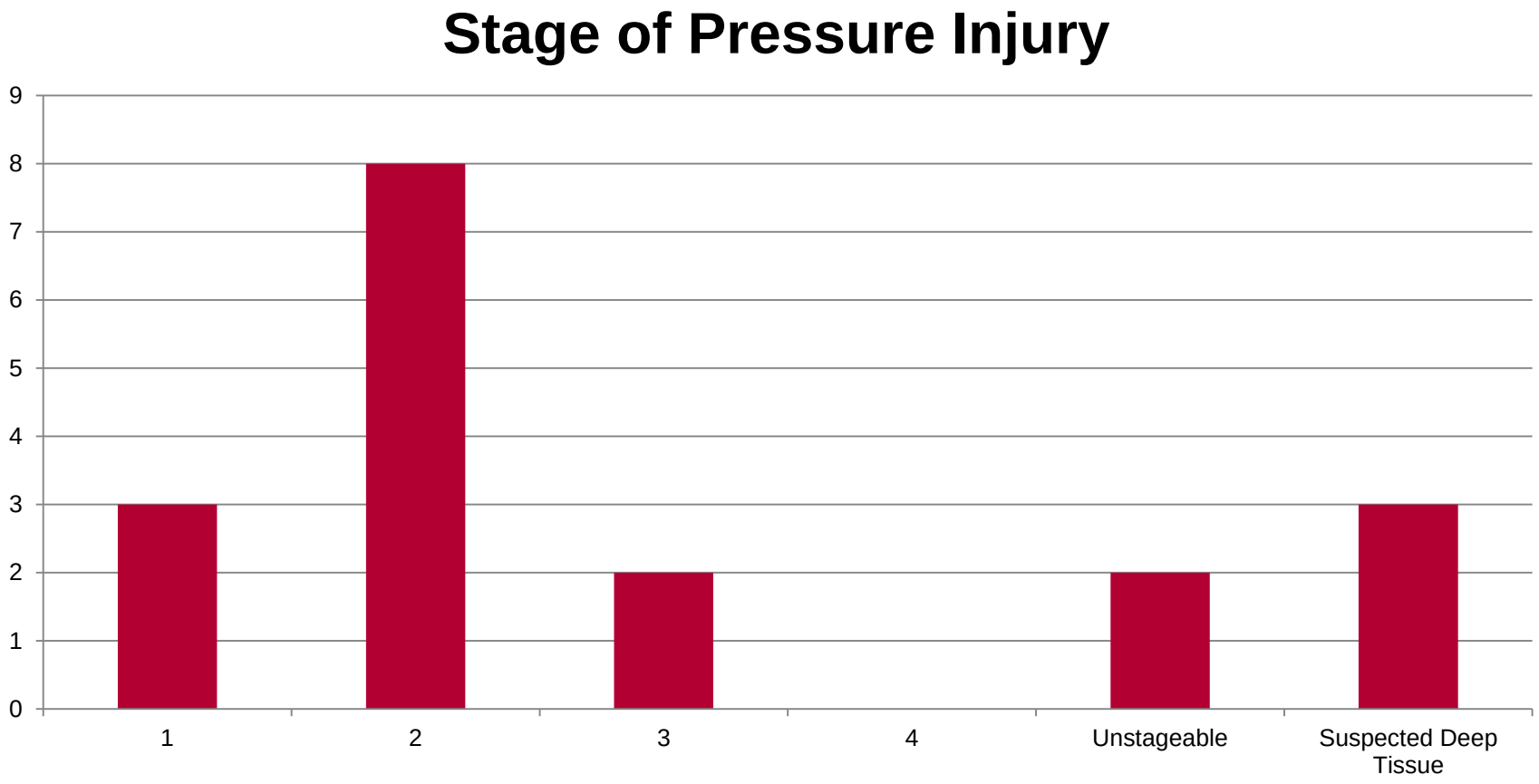
- 9 patients had PAD, CRF **and** Diabetes
- 4 patients had 2 out of 3

n=16

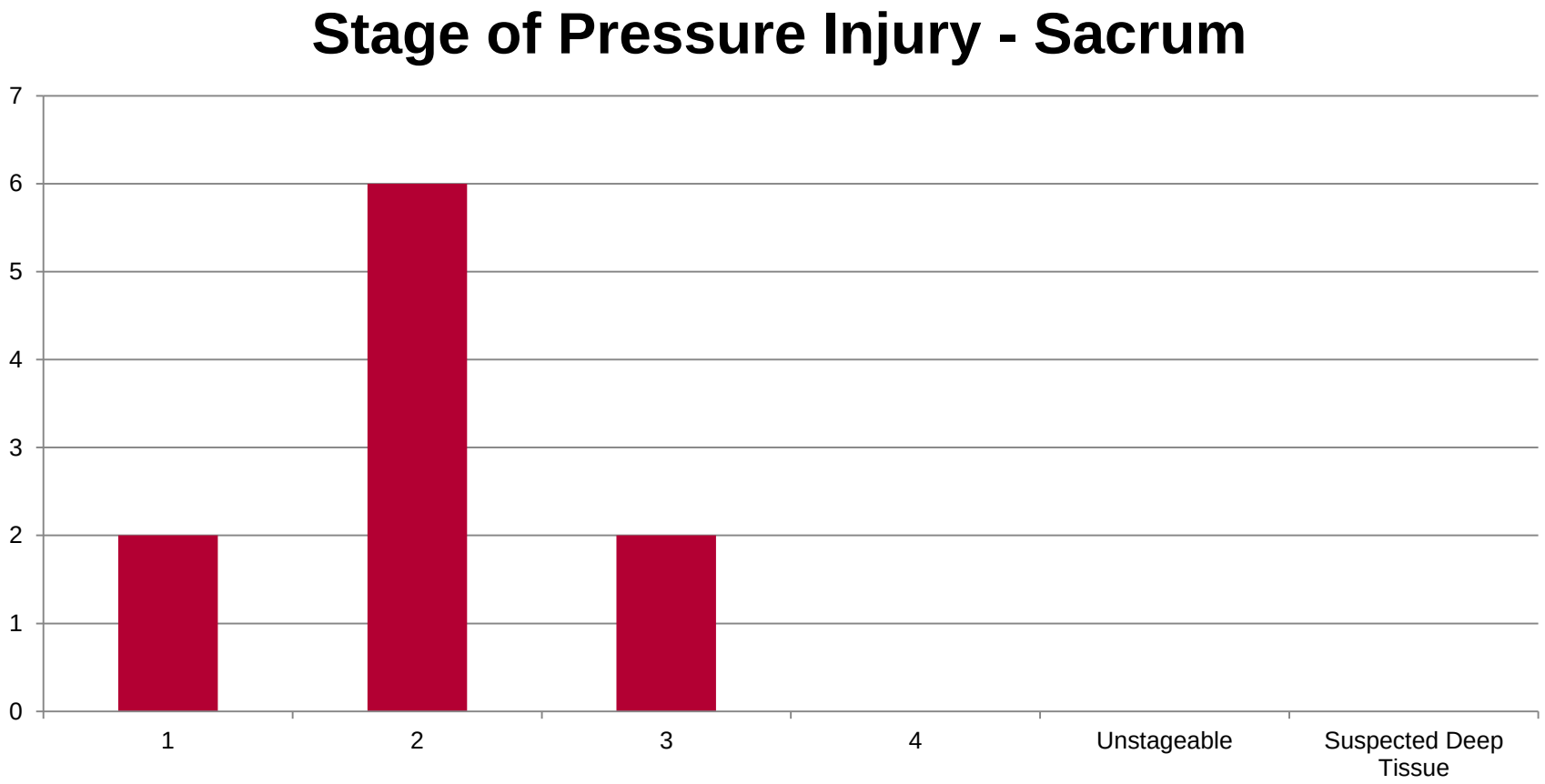
Retrospective Audit Results



Retrospective Audit Results



Retrospective Audit Results



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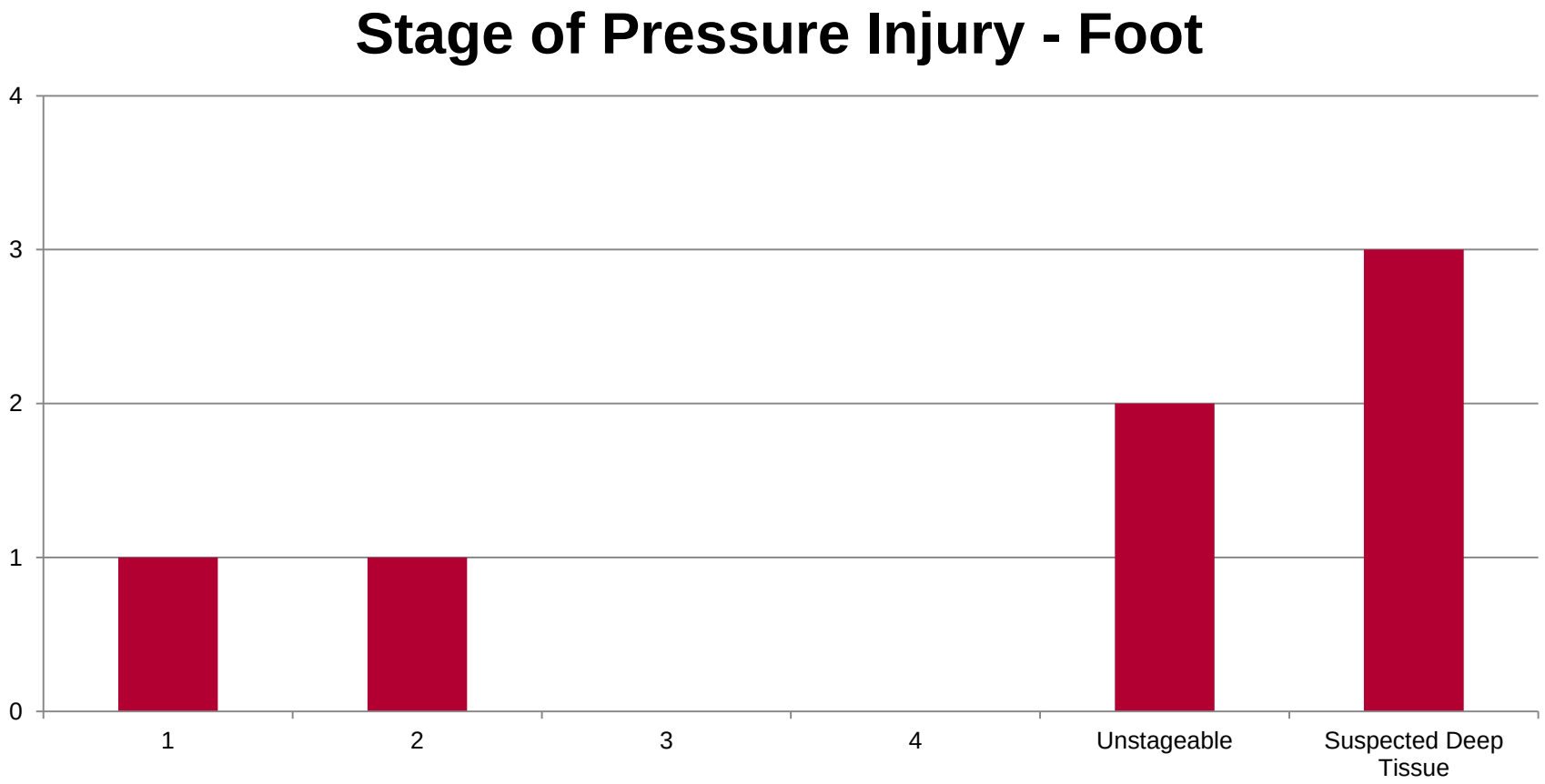
Retrospective Audit Results



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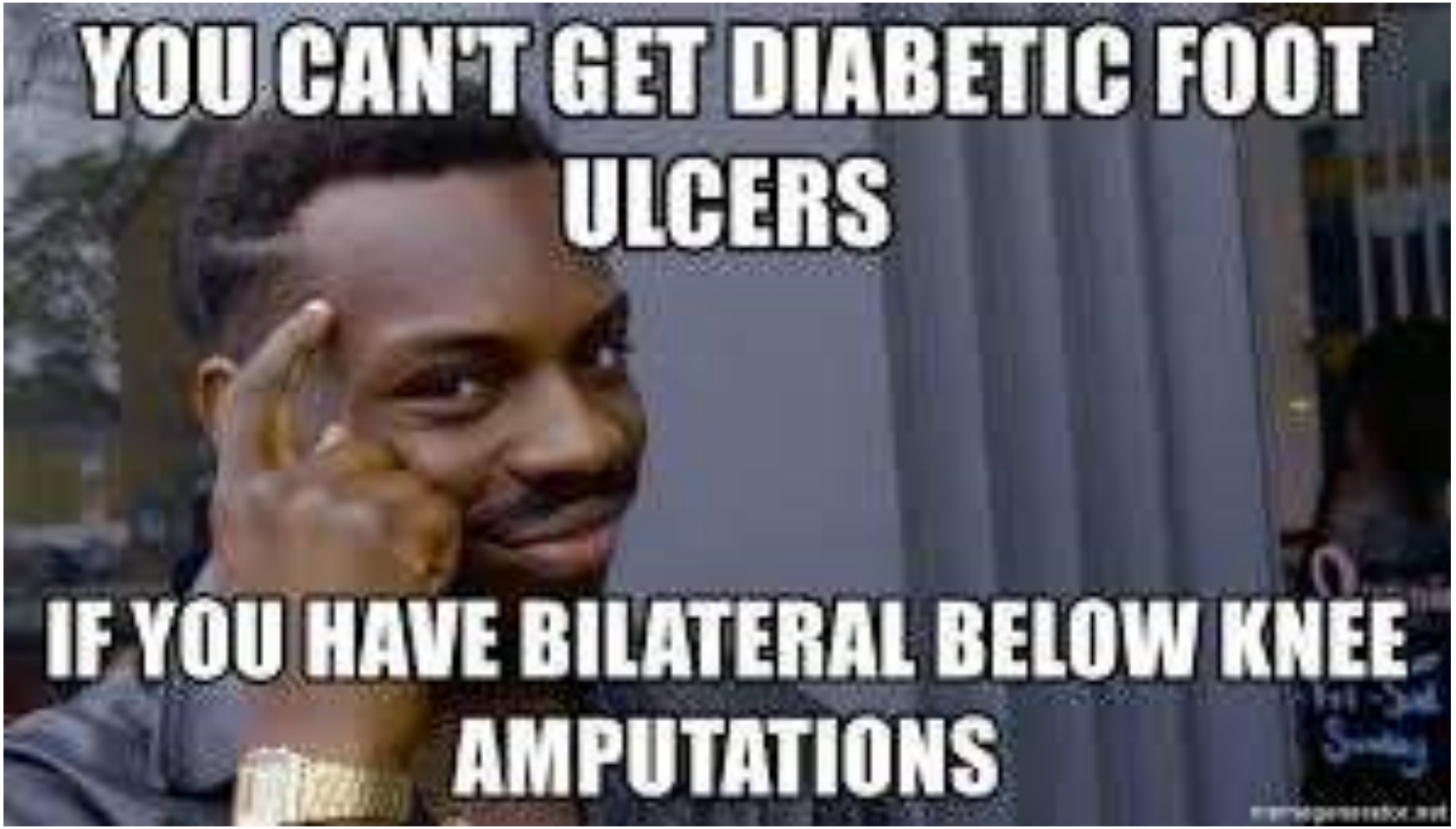
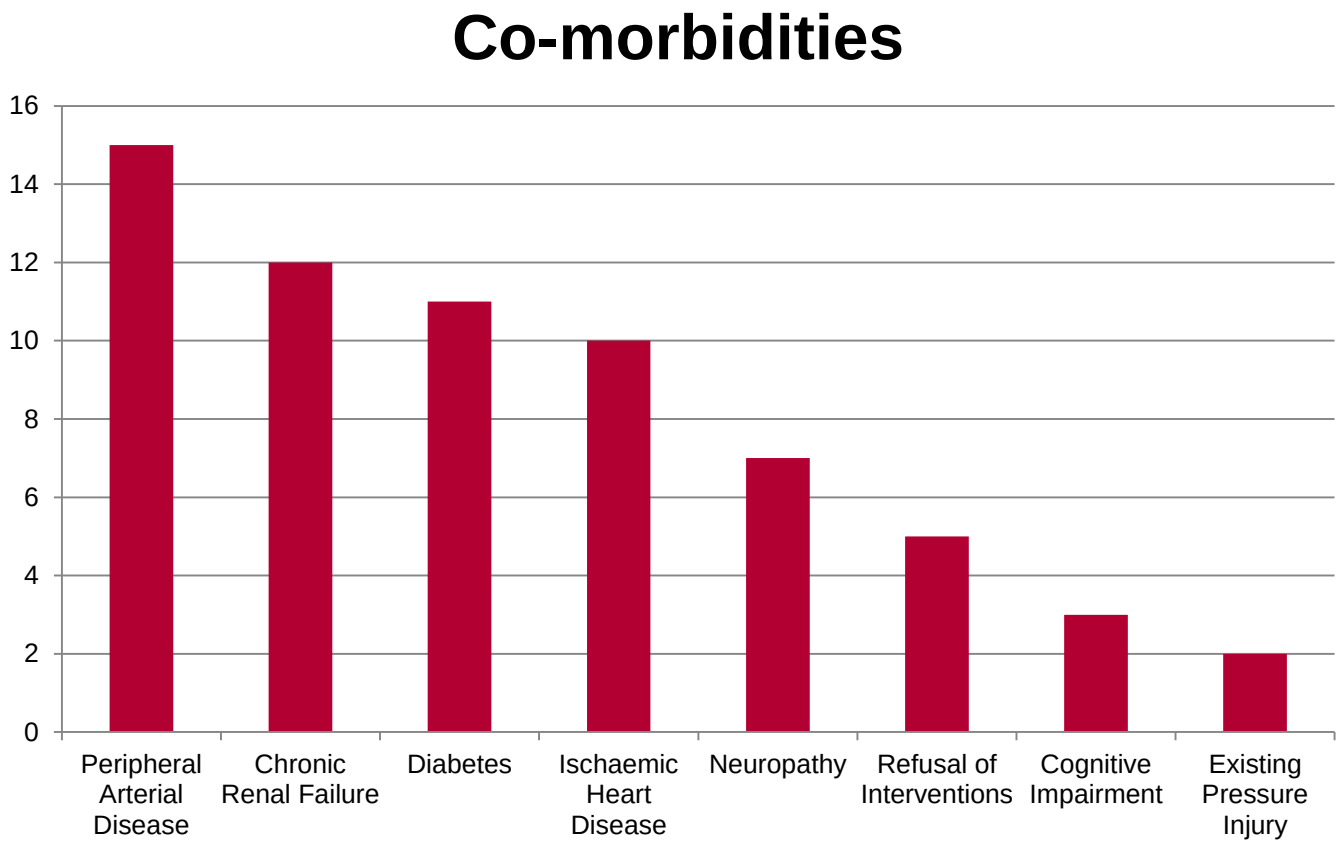

YOU CAN'T GET DIABETIC FOOT ULCERS
IF YOU HAVE BILATERAL BELOW KNEE AMPUTATIONS

Retrospective Audit Results



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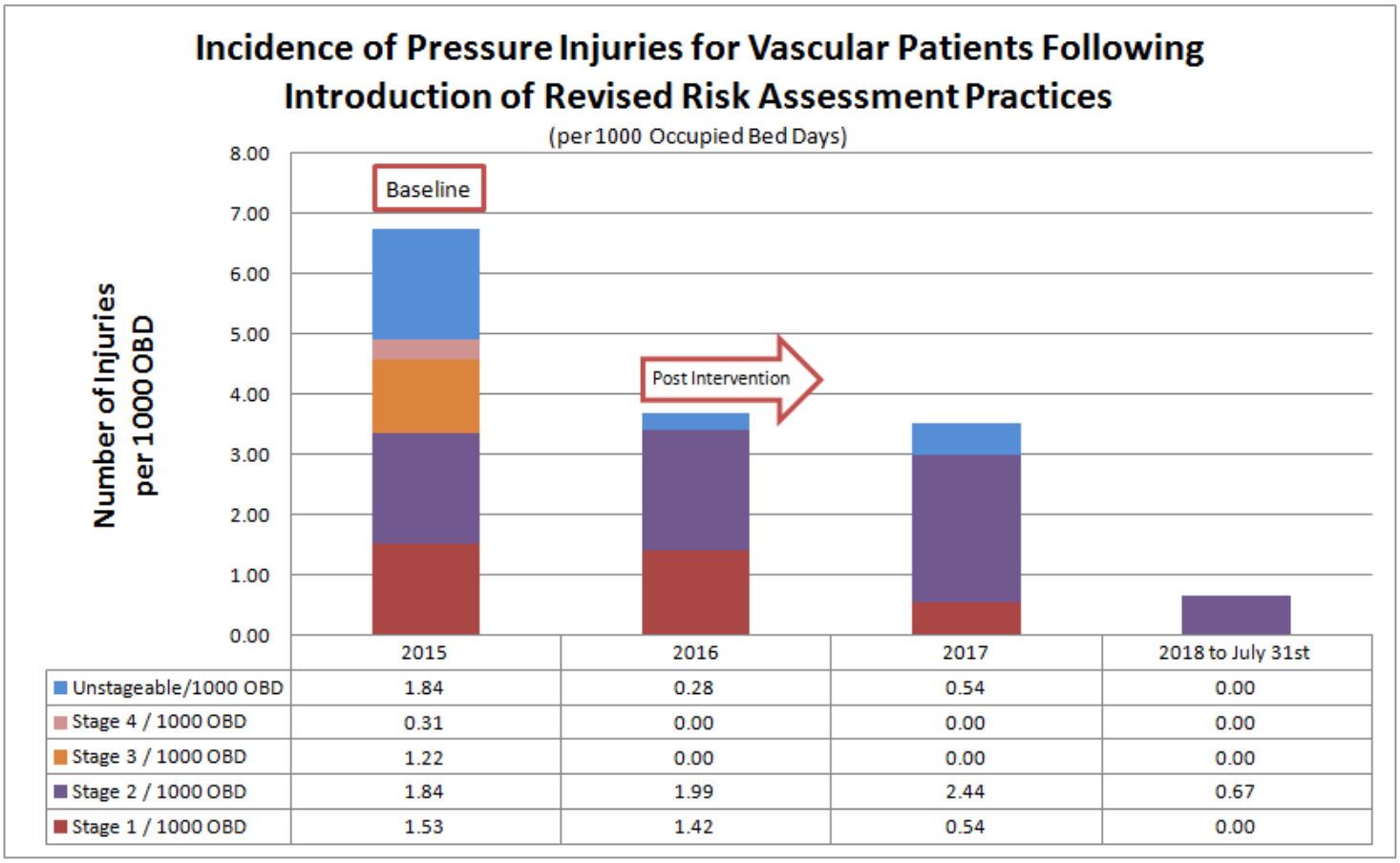
Interventions

- Patients with PVD, CKD and/or Diabetes were managed as high risk of pressure injuries. This included utilising:
  - Prophylactic dressings to heels and sacrum
  - Offloading devices such as cushions
  - Offloading mattress
- Education to improve documentation of interventions as well as patient non-compliance

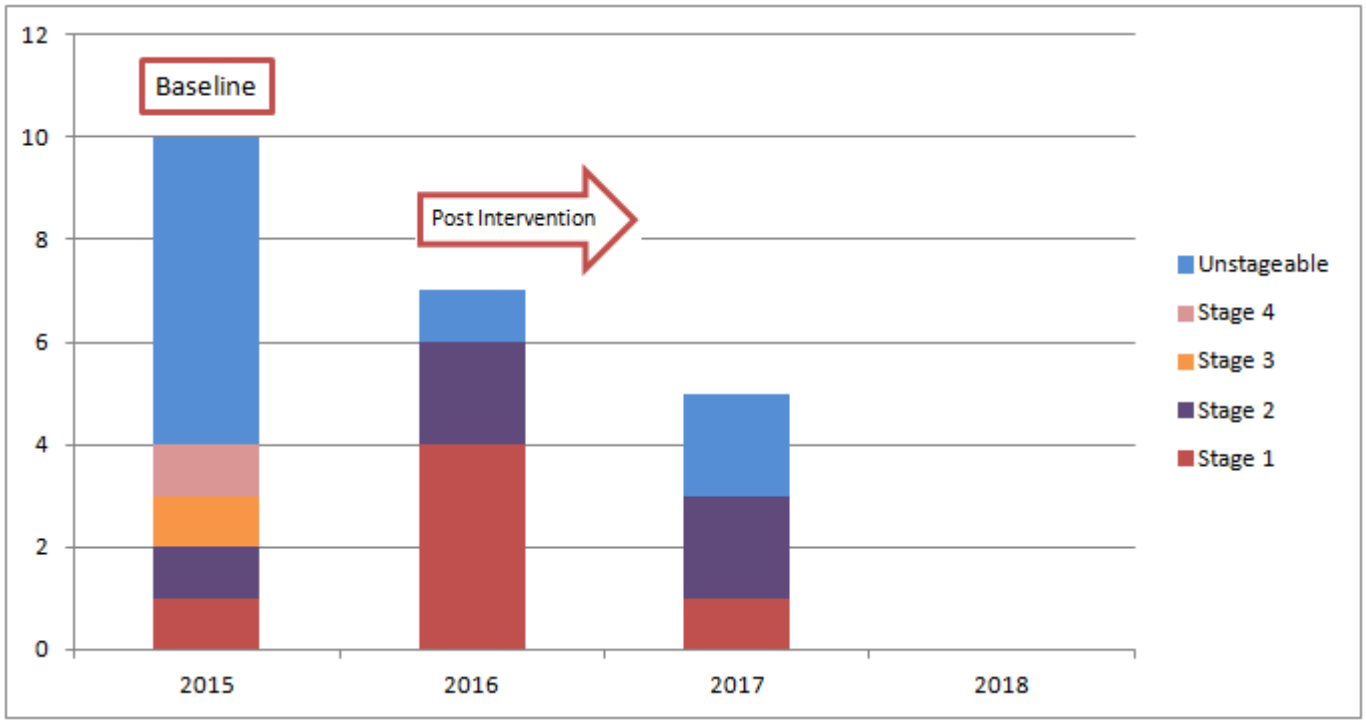
Results



	2015	2016	2017	2018 to July 31st
Unstageable/1000 OBD	1.84	0.28	0.54	0.00
Stage 4 / 1000 OBD	0.31	0.00	0.00	0.00
Stage 3 / 1000 OBD	1.22	0.00	0.00	0.00
Stage 2 / 1000 OBD	1.84	1.99	2.44	0.67
Stage 1 / 1000 OBD	1.53	1.42	0.54	0.00

Results – Foot Injuries

Incidence of Foot/Heel Pressure Injuries for Vascular Patients



Summary

- Incidence of pressure injuries decreased over intervention period
- There were ZERO foot pressure injuries in the last audit period.

Further interventions

- Integration of the Waterlow Score across the hospital site as this grades diabetes, chronic diseases and peripheral vascular disease as increasing majority of vascular surgery patient risks.

- Further research is required to improve methods for assessing pressure injury risk.

Acknowledgements

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Director Heart and Vascular Research Institute, Harry Perkins Institute of Medical Research, WA, Australia
Adj Clin Prof, Faculty of Health and Medical Sciences, University of Western Australia, WA

Miss Kathryn Jafferies BNurs, GradCertHlthEd
Registered Nurse, G62, Sir Charles Gairdner Hospital, Perth WA

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