



# Nutrition and the severe burn injured patient at the Tasmanian Burns Unit

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### Introduction

The Royal Hobart Hospital (RHH) conducted an audit to benchmark burns nutritional care against best practice and existing hospital guidelines. The current burns nutrition guideline at the RHH focuses on commencing enteral feeding within 8 hours of admission for all adult patients with burns greater than 20% total body surface area (TBSA).

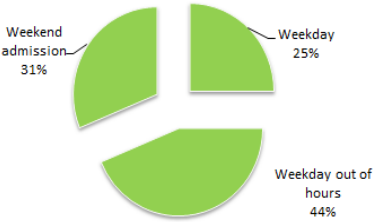
The aim of the audit was to review and update the current health service guidelines to improve nutrition assessment and support for severe burn injured patients at the RHH. The new guideline aims to encompass a greater scope of nutrition care than the current one, including bowel management, micronutrient supplementation and after hours management.

### Method

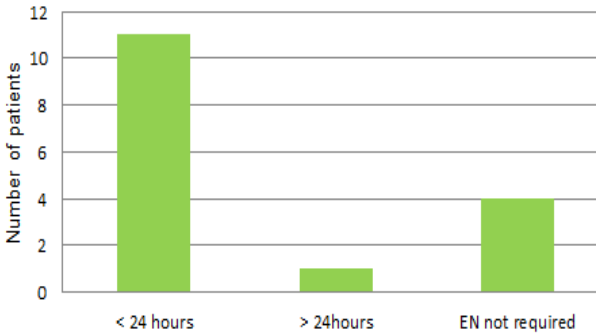
A retrospective medical record review was conducted for adult patients admitted to the RHH between January 2010 and December 2015 with burn injury greater than 20% TBSA. Data was extracted from both the Burns Registry of Australia and New Zealand (BRANZ) and the RHH Digital Medical Record system. Data collected included:

- time to commencement of enteral nutrition
- compliance with weekly weights
- fasting times pre and post theatre
- fasting times for dressing changes
- bowel management

Admission times



Time to enteral nutrition commencement



### Results

Sixteen adult patients were admitted during the study timeframe. 38% of patients requiring nutrition assessment within 24 hours were reviewed within this time frame. Delays to nutrition assessment occurred mostly for weekend admissions. Interestingly, 75% of patients were admitted on the weekend or after hours. There is no after hours dietitian support available at the RHH.

70% of patients were commenced on enteral feeds within 24 hours of admission. The average time to initiation of enteral feeding was 14 hours. There was poor compliance with weighing patients weekly during their admission with only 12.5% of patients weighed weekly.

Fasting times for theatre visits and dressing changes were highlighted as an issue:

- patients were fasted on average for 14.2 hours - 5.8 hours pre and 8.4 hours post theatre
- patients were fasted on average 6 times during their admission
- 8.4% of total admission time was spent fasting

Bowel management was also investigated as part of this audit. Only 40% of patients had their bowels open within 7 days of their admission. Faecal containment devices were used in 55% of patients and aperients were used frequently.

### Conclusion

Results from this audit have provided clear evidence that an updated nutrition policy for burns is required at the RHH. The new policy is currently in draft format for consultation.

The new draft policy includes guidelines for nutrition screening and assessment, initiation of nutrition (oral, enteral and parenteral), micronutrient supplementation, fasting times, re-initiation of feeding post fasting and bowel management protocols.

The audit also provides clear evidence that Dietitian support is required after hours. The guideline will provide direction on initiation of feeding after hours.

The Tasmanian Burns Unit at the RHH is currently submitting data to BRANZ as part of the Burns Quality Improvement Project (BQIP). The new guideline reflects the changes that have been highlighted in this project for nutrition management in the severe burn injured patient. The Unit plans to reaudit yearly using the existing tool and the BQIP standards to benchmark against other units and evaluate the effectiveness of the proposed changes.

