



Review of Results - Rate of blood transfusions in planned hip and knee replacements

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HRT 1704 Financial Performance Improvement Group
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Melbourne, Vic



Key Problem

- 4210 - Rate of blood transfusions in planned hip and knee replacements
- Stubborn Red for at least the past 4 periods



Executive Summary for Panther (based on the trends)

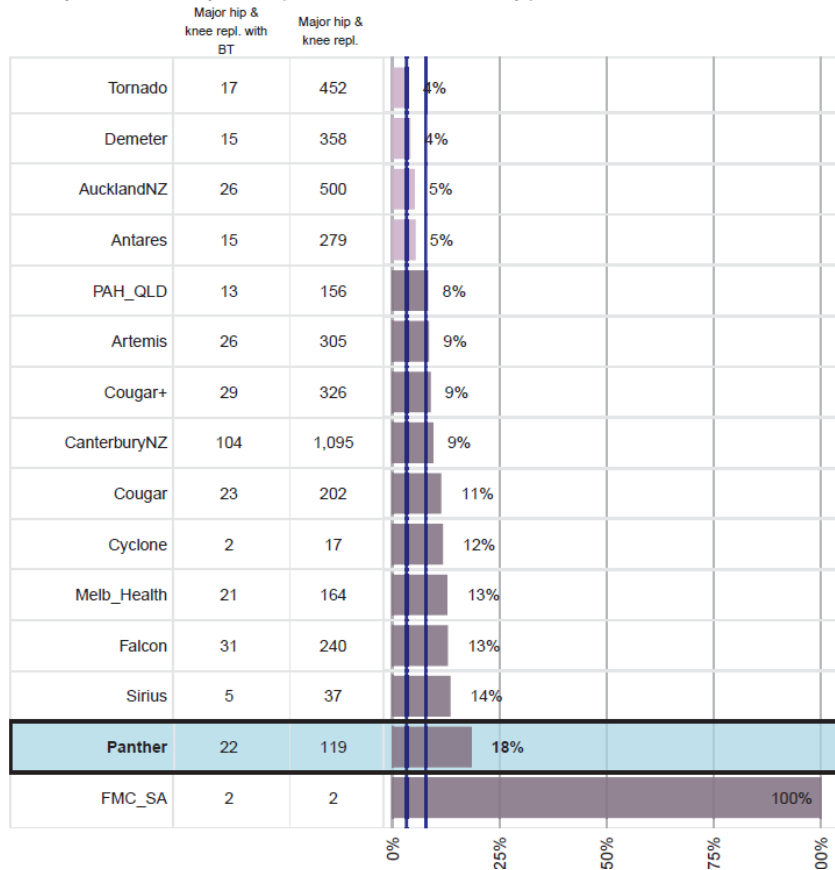
Newly Red		Leaving Green For Yellow		Newly Green	
Indicator	Page	Indicator	Page	Indicator	Page
2042 Indigenous Acute care type Relative Stay Index (excluding mental health)	10	2100 Proportion of formal complaints closed within 35 days	19	2090 Notional revenue per public bed day (overnight)	18
4092 28 day emergency readmission rate (post surgery)	36	2110 Proportion of formal complaints acknowledged in 5 days	20	4040 Percentage of INR results with a level greater than 5	30
4200 Rate of blood transfusions in planned major gastrointestinal surgeries	45				
Stubborn Red (last 4 periods)		Leaving Red For Yellow		Consistent Green (last 4 periods)	
Indicator	Page	Indicator	Page	Indicator	Page
2010 Long stay share of bed days	6	2030 Bed occupancy	7	3010 Percentage of ED patients seen within clinically recommended time	22
2060 DOSA rate	14	3030 Percentage of ED waiting times within 6 hours	25	3040 Percentage of inpatients presenting to ED within 14 days of discharge	27
4080 Rate of hospital-acquired complications	32	4020 Readmission to ICU within 72 hours	29	5030 Operating room list cancellations	49
4081 Rate of major hospital-acquired complications	33	4070 Percentage of patients with pressure injuries stage 3 or 4	31	6070 Agency share of clinical nursing hours	62
4100 Rate of healthcare associated SAB per 10,000 bed days (Coded)	41	4101 Rate of healthcare associated SAB per 10,000 bed days (Collected Online)	42		
4210 Rate of blood transfusions in planned hip and knee replacements	46				
5080 Relative procedure time index (RPTI)	51				
6060 Other staff workers compensation claims (per 100,000 hours)	61				

Online Indicators Submission Status
Provided: 23 indicator(s)
Not Provided: 0 indicator(s)

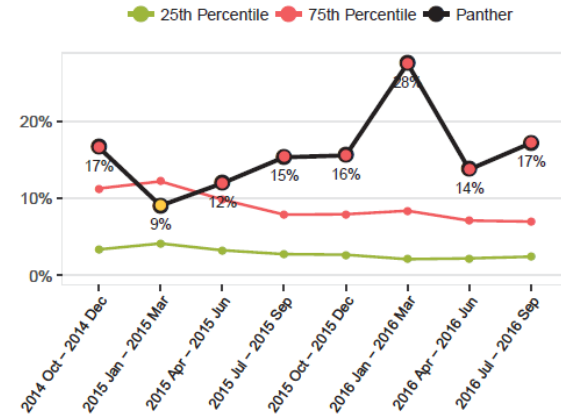
Key Problem

4210 Rate of blood transfusions in planned hip and knee replacements

Comparison with peers (2015 Oct – 2016 Sep)



Stubborn Red (last 4 periods)



Formula: $\frac{\text{[planned hip and knee replacements with blood transfusion]}}{\text{[planned hip and knee replacements]}}$

Source: Casemix

Description: % of episodes having at least one whole blood transfusion during the episode of care for a planned procedure.

Episodes with theACHI code 13706-02 Administration of packed cells
DRG families I03 HIP REPLACEMENT, I04 KNEE REPLACEMENT
Planned, Not transferred, Acute care-type

Details: A sentinel indicator of transfusion practice in selected planned surgical hip and knee replacement DRGs where wide variation in practice has been observed. Casemix data does not capture how many units, only that at least one unit was transfused. Note that this indicator has not been risk adjusted and caution should be exercised when comparing to other hospitals.

Aim of this innovation

- To understand factors behind this measure
 - Elderly patients?
 - Trauma?
 - Revision surgery?
- To understand what differentiates results for Panther when compared with peers
- To identify measures that could be taken to resolve this issue

Baseline Data

- Patient URNs were identified from hospital records;

Patient I	Patient	Age Ra	DRG	Period	Operation Desc
03015784	50	46-55	I03B	Oct-2015	LEFT TOTAL HIP REPLACEMENT
01299700	62	56-65	I03B	Nov-2015	LEFT TOTAL HIP REPLACEMENT - COMPLEX PRIMARY
0B405290	48	46-55	I03A	Dec-2015	RIGHT TOTAL HIP REPLACEMENT + FEMORAL OSTEOTOMY
0B968860	50	46-55	I04A	Dec-2015	LEFT TOTAL KNEE ARTHROPLASTY + CORRECTIVE OSTEOTOMY
01121186	54	46-55	I04B	Jan-2016	LEFT TOTAL KNEE REPLACEMENT
0B365835	71	66-75	I04A	Jan-2016	LEFT TOTAL KNEE REPLACEMENT
03011896	38	35-45	I03A	Feb-2016	LEFT TOTAL HIP REPLACEMENT
01677726	53	46-55	I03B	Feb-2016	RIGHT TOTAL HIP REPLACEMENT FOR METASTATIC ACETABULAR LESION
01306437	74	66-75	I04B	Feb-2016	NAVIGATED TOTAL KNEE ARTHROPLASTY RIGHT KNEE
01662851	66	66-75	I03B	Mar-2016	LEFT TOTAL HIP REPLACEMENT
0B590841	72	66-75	I04B	Mar-2016	LEFT TOTAL KNEE REPLACEMENT
01044126	80	76+	I04A	Mar-2016	RIGHT TOTAL KNEE REPLACEMENT
0B462029	80	76+	I03A	May-2016	RIGHT TOTAL HIP REPLACEMENT (COMPLEX PRIMARY THR FOR PAGET'S)
01871357	64	56-65	I03B	Jun-2016	RIGHT TOTAL HIP REPLACEMENT
0B731879	69	66-75	I04A	Jun-2016	COMPLEX RIGHT TOTAL KNEE REPLACEMENT
01705674	81	76+	I03A	Jun-2016	LEFT TOTAL HIP REPLACEMENT***PRIORITY ICU BED***
0B093051	89	76+	I03A	Aug-2016	RIGHT TOTAL HIP REPLACEMENT***ES-HDU BED*****BYPASS THE HOLDING BAY - TSO TRANSPORT***
0B898270	61	56-65	I03A	Sep-2016	RIGHT TOTAL HIP REPLACEMENT
01119584	78	76+	I03B	Sep-2016	RIGHT TOTAL HIP REPLACEMENT***BYPASS HOLDING BAY - TSO TRANSPORT***
0B388324	95	76+	I03B	Sep-2016	LEFT TOTAL HIP REPLACEMENT***BYPASS HOLDING BAY - TSO TRANSPORT***

Outcomes so far

- Review of patient records via Auslab and IEMR records
 - Age
 - Indications for surgery
 - Pre-surgical assessment data
 - Timing of transfusion
 - quantity
- Summary points
 - Hb checks appear to occur too close in time (median 7 days) to planned operation dates such that opportunity to correct identified anaemia was not generally possible.
 - There did not appear to be a process to investigate and / or treat pre-surgical anaemia in those in which it was documented.
 - Surgery opinion required RE: whether median drop in Hb post-surgery of 49g/L is expected for this type of surgery or not.
 - Hb trigger for transfusion appears appropriate / reasonable (median Hb 75g/L).
 - A significant number of transfused units were transfused after-hours (44%). This practice requires discussion and review with the responsible surgical team.
- Review of patient records to be undertaken by Orthopaedic dept

Key Changes Implemented

- None as yet.
- Review process is underway.

