

# Australasian College of Podiatric Surgeons

## 2018 National Audit Summary Report



Version 1.3

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## Introduction

The following report summarises the surgical activity of all practicing College fellows for 2018. As required by the ACPS Accreditation Program every case of foot and ankle surgery performed in office, day surgery and inpatient settings by College members have been recorded [1]. The ACPS Online Surgical Audit Tool was used to capture and report data in real-time. There has been 100% compliance in data capture by all active surgeons of the College in 2018.

This report has been peer reviewed at the College 2019 Annual General Meeting (AGM). The peer review process examined and discussed all outcomes by ACPS fellows in 2019. Caseload, casemix, trends, complications and identification of ways to improve clinical care were included in the national peer review. On 20 August 2020 the ACPS Clinical Audit Committee provided final approval of the 2018 Audit Report after considering the outcomes of national peer review meeting.

### Admissions

There were 2306 admissions for podiatric foot and ankle surgery. A total of 2303 admissions were recorded using the ACPS Online Surgical Audit Tool. 3 (0.13%) admissions were not validated when entered to the ACPS Online Surgical Audit Tool. These cases were excluded in reporting total number of admissions but not from the remainder of this report.

### Total number of principle procedures

Following data capture methods established by Menz in 2008 and utilised by all ACPS National Audit Reports since 2013, cases of bilateral hallux abducto valgus correction were counted as 2 principle procedures[2, 3]. 193 cases of bilateral hallux abducto valgus correction were recorded in 2018 making the total number of principle procedures 2499.

### Cross-sectional analysis of all procedures compared to principle procedures

7 procedure groups were selected to represent a cross section of all surgical activity based on criteria established by Menz. The procedures selected represent the total number of most common forefoot (1<sup>st</sup> metatarsophalangeal joint, lesser toes, neuroma and toenail), rearfoot, ankle and amputations procedures.

The 7 procedure groups selected represent 1.2 times the number admissions (2896 of 2499) or principle procedures performed in 2018 by College fellows. Forefoot surgery comprised 95.7% (2774 of 2896 procedures) of the 7 procedure groups and 1.2 time (2774 of 2499) the number of principle procedures performed. Rearfoot, ankle and amputation surgery comprised 5.7% (167 of 2896 procedures) of the 7 procedure groups and 6.7% (167 of 2499) of all principle procedures performed. The mix of procedural types and numbers found in table 1 below concur with similar findings in the literature [2, 4].

## Principle Procedure

Procedural group	Procedure count / % of total procedures	MBS item number
Toenail	1087 / 44%	47906, 47912, 47915, 47916, 47918
Neuroma	171 / 6.9%	49866
Lesser toes	663 / 9%	49800, 49803, 49806, 49809, 49812, 49848, 49851, 50345
1 <sup>st</sup> metatarsophalangeal joints (MPJs)	806 / 32.8%	49821, <b>49824*</b> , 49827, <b>49830*</b> , 49833, <b>49836*</b> , 49837, <b>49838*</b> , 49839, <b>49842*</b> , 49845, 49860
Heel, Rear foot & Tarsal coalitions	80 / 3.7%	49854, 49818, 50118, 50333
Ankle	69 / 2.2%	49706, 49709, 49715, 49718, 49724,
Amputation	20 / 0.8%	44338
Total principle procedures in cross-sectional analysis		2896

Table 1: Cross section of procedures. \* Bolded item numbers represent bilateral procedures which have been doubled for the final count of total principle procedures.

## Frequency of pathology

Using International Classification of Disease (ICD 10) codes the 10 most frequently recorded diagnoses comprised 98.8% (2279) of all admissions (2306) in 2018 are shown below in Table 2.

Principle diagnosis	Count / % of total	Diagnosis code
Ingrown toenail	600 / 26%	L60.0
Hallux valgus (acquired)	495/ 21.5%	M20.1
Other hammer toe acquired	269 / 11.7%	M20.4
Hallux Limitus	119 / 5.2%	M20.2
Wart	108 / 4.7%	B07
Morton's neuroma	106/ 4.6%	G57.6
Miscellaneous arthropathies - Osteophyte	40 / 1.7%	M25.77
Osteophyte lower leg	36 / 1.6%	M25.76
Miscellaneous arthropathies - unspecified	35 / 1.5%	M13.9
Hammer toe congenital	31 / 1.4%	Q66.81
Total	1839	

*Table 2: 10 most frequent diagnoses*

A total of 2279 principle diagnoses were made by College fellows in 2018. Of the 10 most frequent diagnoses 88% (1620 of 1839) were forefoot and 33% (614 of 1839) were 1<sup>st</sup> metatarsophalangeal joint pathologies.

## Complications

The Australian Council on Healthcare Standards (ACHS) requires healthcare organisations collect complication data for 30 days after discharge. The ACHS requires data collection of complications such as deep vein thrombosis (DVT) and infection only if readmission is required. The College collects data to record complications in line with ACHS recommendation. In addition, complications that do not require readmission but occur within 30 days of discharge are collected. Using this criteria, the total number complications occurring within 30 days of discharge was 61 of 2303 admission, a rate of 2.6%. Below is a summary of readmissions, DVT, infection and wound breakdown rates.

### Readmission

5 patients or 0.2% of all cases required readmission. The readmissions included 1 case of infection, 2 cases of medical complications, 1 case of wound break down and 1 case of painful internal fixation device.

### Infection

Using the ACHS definition for postoperative infection (infection requiring readmission within 30 days of discharge) there was 1 case of rearfoot surgery that developed a superficial infection requiring readmission. The rate for 2018 was 0.04% [5,6]. The case notes for the admission have been evaluated by the ACPS Audit Committee. The management provided by the admitting surgeon was found to be appropriate and the Therapeutic Guidelines for antibiotic surgical prophylaxis were followed [7]. There were 47 patients or 2% of all cases that required outpatient management of infection.

### Thromboembolic events

7 patients (0.3% of all cases) developed a postoperative thromboembolic event. In each case a deep vein thrombosis was diagnosed by the admitting podiatric surgeon and referred for medical management on an outpatient basis. Analysis of surgeon case records was conducted to evaluate case management. The Clinical Audit Committee found that in each case all National Health and Medical Research Council (NHMRC) guidelines for the prevention of venous thromboembolism had been followed and no further action was required [8].

### Medical readmission

2 cases or 0.08% of all cases required readmission for medical complications. Included in this rate was 1 transfer admission for a reaction to medication, 1 readmission for postoperative oedema. The Clinical Audit Committee found in both cases the surgeon had managed the complication appropriately through clinical handover. In both cases the outcome was uneventful.

### Wound breakdown

One case (0.04%) developed a wound breakdown which was managed with readmission delayed primary closure healing without complication. The Clinical Audit Committee found the case was managed appropriately.

### Removal of failed internal fixation device

One case (0.04%) developed a failed internal fixation device requiring readmission for replacement. The Clinical Audit Committee found the case was managed appropriately.

The above findings regarding complications are either within or below rates reported in the literature [9-14].

## Comparison of 2014 & 2015 & 2016 & 2018 outcomes

A comparison of the outcomes for the years 2014 to 2018 is found below in table 3.

<b>Outcome</b>	<b>2014</b>	<b>2015</b>	<b>2016</b>
Admissions	2106	2266	2080
Total principle procedures	2106	2266	2080
Total all procedures			
7 procedure group % of total principle procedures	77%	76.5%	74.18%
Forefoot/RF, Ankle. Amp	96%/4%	94.2%/5.8%	94%/6%
Most frequent pathology	1 <sup>st</sup> MPJ (31.1%)	1 <sup>st</sup> MPJ (30.2%)	1 <sup>st</sup> MPJ (43.4%)
Readmissions	0.2% (4 cases)	0.09% (2 cases)	0.34% (7 cases)
Infection readmissions	0%	0.09% (2 cases)	0.14% (3 cases)
Infection outpatient	2% (43 cases)	1.72% (39 cases)	1.54% (32 cases)
VTE readmissions	0.05% (1 case)	0%	0.14% (3 cases)
VTE outpatient	0.09% (2 cases)	0.2% (4 cases)	0.14% (3 cases)
Wound break down readmissions	0%	0%	0%
Wound break down outpatient	0.5% (10 cases)	0.35% (8 cases)	0.29% (6 cases)

Table 3: Comparison of outcomes for 2014 to 2018

<b>Outcome</b>	<b>2017</b>	<b>2018</b>
Admissions	2185	2303
Total principle procedures	2181	2499
Total all procedures		
7 procedure group % of total principle procedures	77.95%	96.6%
Forefoot/RF, Ankle. Amp	93% / 7%	95.7/ 6.7 %
Most frequent pathology	1 <sup>st</sup> MPJ (38.12%)	Ingrown toenail (26%)
Readmissions	0.4% (9 cases)	0.2 % (4 cases)
Infection readmissions	0.09% (2 cases)	0.04 % (1 case)
Infection outpatient	2.6 % (55 cases)	2% (47 cases)
VTE readmissions	0%	0 %
VTE outpatient	0.05% (1 case)	0.3% (7 cases)
Wound break down readmissions	0.05% (1 case)	0.04% (1 case)
Wound break down outpatient	0.%	0%

## References

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