

Australasian College of Podiatric Surgeons

2019 National Audit Summary Report



Version 1.0

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Introduction

The following report summarises the surgical activity of all practicing College fellows for 2019. 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 2019.

This report has been peer reviewed at the College 2020 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 2019 Audit Report after considering the outcomes of national peer review meeting.

Admissions and total number of principle procedures

There were 2337 admissions for podiatric foot and ankle surgery which also represents the total number of principle procedures.

Total number of principle procedures

Cross-sectional analysis of all procedures compared to 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]. 175 cases of bilateral hallux abducto valgus correction were recorded in 2019 making the total number of principle procedures 2512.

7 procedure groups were selected to represent a cross section of all surgical activity based on criteria established by Menz. Such data analysis requires cases of bilateral hallux abducto valgus correction be counted as 2 principle procedures The 7 groups selected represent the total number of procedure of the most common forefoot (1st metatarsophalangeal joint, lesser toes, neuroma and toenail), rearfoot, ankle and amputations procedures.

The 7 procedure groups selected represent 59.8% (1504 of 2512) of all principle procedures in 2019 by College members. Forefoot surgery comprised 95.2%(1432 of 1504 procedures) of the 7 procedure groups and 57% (1432 of 2512) of all principle-procedures. Rearfoot, ankle and amputation surgery comprised 4.7% (72 of 1504 procedures) of the 7 procedure groups and 2.8% (72 of 2512) 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	557 / 22%	47906, 47912, 47915, 47916, 47918
Neuroma	96 / 3.8%	49866
Lesser toes	222 / 8.8%	49800, 49803, 49806, 49809, 49812, 49848, 49851, 50345
1 st metatarso phalangeal joints (MPJs)	732 / 29%	49821, 49824* , 49827, 49830* , 49833, 49836* , 49837, 49838* , 49839, 49842, 49845, 49860,
Heel, Rear foot & Tarsal coalitions	39 / 1.5%	49854, 49818, 50118, 50333
Ankle	22 / 0.8%	49706, 49709, 49715, 49718, 49724,
Amputation	11 / 0.4%	44338
Total principle procedures in cross-sectional analysis		2908 2925

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 81.3% (1899) of all admissions (2337) in 2019 are shown below in Table 2.

Principle diagnosis	Count / % of total	Diagnosis code
Hallux valgus (acquired)	481 / 25.3%	M20.1
Ingrown toenail	578 / 30.4%	L60.0
Other hammer toe acquired	304 / 33.8%	M20.4
Hallux Limitus	135 / 7.1%	M20.2
Morton's neuroma	105 / 5.5%	G57.6
Miscellaneous arthropathies – osteophyte	84 / 4.4%	M25.77
Wart	74 / 3.9%	B07
Hammer toe, congenital	51 / 2.7%	Q66.81
Intractable plantar keratosis	51 / 2.7%	L90.5
Miscellaneous arthropathies – arthritis unspec	36 / 1.9%	M13.9
Total	1899	

Table 2: 10 most frequent diagnoses

A total of 2333 principle diagnoses were made by College fellows in 2019. Of the 10 most frequent diagnoses 87% (1654 of 1899) were forefoot and 32.4% (616 of 1899) were 1st 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 57 of 2337 admission, a rate of 2.4%. Below is a summary of readmissions, DVT, infection and wound breakdown rates.

Readmission

5 patients or 0.21% of all cases required readmission. The readmissions included 1 case of DVT, 2 cases of medical complications, 1 case of wound break down and 1 case of self-admission due to bleeding into the dressing.

Infection

Using the ACHS definition for postoperative infection (infection requiring readmission within 30 days of discharge) there were no cases of infection requiring readmission. The rate for 2019 was 0% [5,6]. There were 43 patients or 1.8% of all cases that required outpatient management of infection.

Thromboembolic events

7 patients (0.3% of all cases) developed a postoperative thromboembolic event. All 7 cases of thromboembolic events were for DVT. 1 case (0.04%) was readmitted. 6 cases were managed on an outpatient basis. In each case a deep vein thrombosis 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 0.09% of all cases required readmission for medical complications. Included in this rate was 1 transfer admission for a seizure that occurred in recovery and was found to be unrelated to the admission for foot and ankle surgery. 1 readmission and discharge on the same day to the emergency department of a public hospital for postoperative hypertension associated with dehydration. The Clinical Audit Committee found in both cases the surgeon had managed the complication appropriately. In both cases the outcome was uneventful.

Wound breakdown

1 case (0.04%) developed a wound breakdown which was managed with readmission delayed primary closure healing without complication. 2 Cases (0.08%) of wound breakdown were managed on an outpatient basis. The Clinical Audit Committee found the case was managed appropriately.

Postoperative bleeding

1 case (0.04%) developed bleeding into the patients dressing which led to self-admission and uneventful discharge the same day. 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.

Outcome	2014	2015	2016
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 st MPJ (31.1%)	1 st MPJ (30.2%)	1 st 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

Outcome	2017	2018	2019
Admissions	2185	2305	2337
Total principle procedures	2181	2305	2512
Total all procedures			
7 procedure group % of total principle procedures	77.95%	68.6%	59.8%
Forefoot/RF, Ankle. Amp	93% / 7%	64.7 / 3.9%	57/ 2.8% %
Most frequent pathology	1 st MPJ (38.12%)	Ingrown toenail 26%	Ingrown toenail (30.4%)
Readmissions	0.4% (9 cases)	0.2 % (4 cases)	0.21% (5 cases)
Infection readmissions	0.09% (2 cases)	0.04 % (1 case)	0%
Infection outpatient	2.6 % (55 cases)	2% (47 cases)	1.8% (43 cases)
VTE readmissions	0%	0 %	0.04% (1 case)
VTE outpatient	0.05% (1 case)	0.3% (7 cases)	0.3% (7 cases)
Wound break down readmissions	0.05% (1 case)	0.04% (1 case)	0.04% (1 case)
Wound break down outpatient	0 %	0%	0.08% (2 cases)

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