



PREVENTION. CARE. RECOVERY.

Te Kaporeihana Awhina Hunga Whara



SUPPORTING TREATMENT SAFETY



TREATMENT
INJURY
INFORMATION

APRIL 2018

www.acc.co.nz/treatmentsafety

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SUPPORTING TREATMENT SAFETY - APRIL 2018

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FOREWORD

In 2016/17, ACC accepted 9,900 claims for injury caused by medical treatments. Each of these claims represents a person who was harmed during the course of treatment. Most of these injuries are considered preventable. That is why ACC encourages improvements in treatment safety – just as we do for workplaces, sport, on the roads, at home, and in all the ways that people may be injured.

ACC is there to assist patients when things go wrong during treatment. In most cases, the injury will resolve quickly, but for a small number of cases, the treatment injury can have a lasting impact on that person and their family.

Health professionals and clinical teams also need support to understand what happened and try to prevent the same harm from occurring again.

This is why in April 2017, ACC released detailed information on treatment injuries occurring in public hospitals. In this publication, updated information on claims for treatment injuries in public hospitals is presented – along with information on treatment injuries in member hospitals of the New Zealand Private Surgical Hospitals Association (NZPSHA). The information has also been expanded to include additional types of injuries.

By publishing this information, ACC wishes to encourage an open and informed discussion about treatment injury.

In coming years, ACC will publish further updates and a greater range of information on injuries caused by treatment to enable health professionals to better understand and learn from treatment injuries, with the aim of reducing the number and impact of injuries in future.

To support this approach, ACC has committed to investing about \$45 million in treatment injury prevention programmes between 2017 and 2021. ACC is working with the Health Quality and Safety Commission (HQSC), the Ministry of Health (MoH), District Health Boards (DHBs), and others on initiatives to improve treatment safety.

Throughout this publication 2016/17 refers to the financial year period 1 July to 30 June.

EXECUTIVE SUMMARY

INVESTING TO IMPROVE TREATMENT SAFETY

When things go wrong during treatment causing an injury, ACC assists the patient to recover by funding treatments, support services, and provides other compensation. ACC also helps the health system to learn from what happened and prevent the same occurring again.

The information in this publication reports on all claims for treatment injuries across the whole health sector. The report focuses on injuries occurring in hospitals (both public and private hospitals) and on specific types of injury which are more likely to be preventable.

ACC is working closely with health sector organisations to prevent treatment injuries or reduce the severity of injury that has the potential to occur during treatment.

Cover for injuries caused by treatment was widened in 2005. The former medical misadventure provisions were replaced with treatment injury criteria. Claims for treatment injuries have increased in both number and cost since that time and particularly in the last five years.

The actual and predicted future costs for all treatment injuries in the 2016/17 financial year was \$602 million. This is a sum that ACC calculated in order to set aside sufficient funds for future liability. ACC's predicted liability for the future costs of all treatment injuries that have been accepted to date is \$5.7 billion.

The first ACC publication in April 2017 focused on treatment injury information specific to public hospitals, while indicating that future publications would expand to include information for private hospitals and other settings, including general practice and aged residential care.

In 2016/17, ACC accepted:

- 5,678 claims for injury during the course of treatment in a public hospital
- 1,324 treatment injuries sustained in private hospitals that are members of the NZPSHA
- 2,898 claims accepted for injuries sustained in general practice, or other health settings.

Each of these was a person inadvertently harmed.

Common injuries include infections following minor or major procedures, and reactions to medication or medication errors. Most of these injuries resolve quickly, but some are serious and have a lasting impact. The latter type of these cases have the highest human and financial cost and need to be our main target for prevention initiatives.

The number of claims is not a direct indicator of a hospital's safety record. Simple comparisons between DHBs are not valid. Each DHB catchment area/population is made up of different case mixes, demographics and/or socio-economic conditions. These can influence the risk of treatment injury.

Comparisons between private and public hospitals should not be made either because of substantial differences in the types of illnesses being treated, the demographics of patients being treated and the severity of illnesses.

The main purpose of tracking the number of treatment injuries over time is to encourage improvement within each hospital. ACC will continue to provide feedback to the public, clinicians and their managers in a transparent and open manner.

Information about ACC's treatment safety initiatives is available at www.acc.co.nz/treatmentsafety.

SECTION

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SUPPORTING SAFER HEALTH
CARE IN NEW ZEALAND



OVERVIEW OF
ALL TREATMENT INJURY
CLAIMS IN 2016/17

97,786

Registered health
practitioners in New Zealand.

9,900

ACC accepted treatment
injury claims in all settings.

ABOUT
4%

Decided claims reported to
the responsible authority
where there is a risk of harm
to the public.

\$5.7b

Current value of future
costs for all existing
treatment injury claims,
as at 30 June 2017.

SUPPORTING SAFER HEALTH CARE IN NEW ZEALAND

THE PURPOSE OF THIS PUBLICATION IS TO:

- SUPPORT IMPROVEMENTS IN TREATMENT SAFETY
- PROVIDE A CASE FOR INVESTMENT IN PREVENTION: EFFECTIVE IMPROVEMENTS IN TREATMENT SAFETY REDUCE PATIENT HARM
- BE CONSISTENT WITH THE NEW ZEALAND HEALTH STRATEGY, AND THE GOVERNMENT'S DESIRE TO INCREASE TRANSPARENCY OF HEALTH INFORMATION.

SUPPORTING IMPROVEMENTS

Each accepted treatment injury claim represents a person harmed during the course of treatment.

The number of claims has been rising at a faster rate than the increase in the New Zealand resident population. This may be due to higher reporting, more people being harmed, or perhaps both to a degree.

- Greater understanding is needed of the extent and nature of patient harm.
- There is a strong case for investment in injury prevention.
- The health sector needs to be involved to improve patient safety and reduce the number and severity of treatment injuries.

In supporting improvements in patient safety, this publication:

- aims to inform and guide collective efforts to reduce patient harm
- recognises treatment injury information is one measure of patient safety and adds to other measures across the health sector to provide a richer evidence base
- identifies the best way to tackle treatment injuries is evidence-informed approaches to reduce patient harm
- confirms ACC will work with clinicians, managers, institutions, consumers, and health agencies to improve patient and treatment safety.

OVERVIEW OF PUBLIC
HOSPITAL AND NZPSHA
MEMBER TREATMENT
INJURY CLAIMS IN 2016/17

Every treatment injury claim accepted represents a person harmed.

5,678

Accepted claims for treatment delivered in DHBs in 2016/17

\$99.9m

Total costs paid for new and existing treatment injury claims in DHB hospitals in 2016/17

1,324

Accepted claims for treatment delivered in NZPSHA hospitals in 2016/17

\$20m

Total costs paid for new and existing treatment injury claims in NZPSHA member facilities in 2016/17.

This is the second publication by ACC on treatment injury claims. The first edition, published in April 2017, focused on injuries occurring in public hospitals. In this document updated information about the numbers, costs, and overall lifetime cost burden to New Zealand for all treatment injury claims is presented. The publication includes information about injuries occurring in private hospitals that are members of the NZPSHA.

- In addition to regular updates, the scope and level of detail in this publication will broaden over time.
- Improving patient safety is an important priority for health systems around the world.
- The scientific literature indicates that between 40% and 60% of patient harm is preventable in some way, depending on the patient's health condition and types of treatment used.

The focus for this publication is information on treatment injury occurring in hospitals - both public and private.

- Future editions will include other areas of health care in New Zealand, such as primary care.
- Public and private hospitals account for 70% of all accepted treatment injury claims. This is because many patients are admitted in a clinically compromised state, and treatment often includes the use of invasive devices and procedures that carry inherent risk for patient harm.
- Comparisons between private and public hospitals should not be made because of substantial differences in the types of illnesses being treated, the demographics of patients being treated and the severity of illnesses.

The extent of patient harm is not fully known in New Zealand or any other country.

- There is no single way of measuring patient harm. All health systems rely on various ways to detect harm to patients. These include reporting systems, case file reviews, reportable events processes and treatment injury claims. Each of these has some uncertainty and all are 'lagging indicators'.
- In New Zealand, treatment injury claims accepted by ACC involve personal injury experienced by patients due to treatment. Due to the definition of treatment injury, treatment injury claims are a subset of all patient harm.

WE WILL INCLUDE MORE INJURY TYPES AND MORE SETTINGS OVER TIME IN THIS PUBLICATION

ACC'S COMMITMENT TO IMPROVING TREATMENT SAFETY

ACC is working in partnership with District Health Boards (DHBs), NZPSHA, stakeholders and clinicians across the health sector, the Ministry of Health (MoH), Health Quality and Safety Commission (HQSC) to improve treatment safety.

INFORMATION ABOUT ACC'S TREATMENT SAFETY
INITIATIVES IS AVAILABLE AT
WWW.ACC.CO.NZ/TREATMENTSAFETY

THE PURPOSE OF
THIS PUBLICATION IS
TO SUPPORT
IMPROVED TREATMENT
SAFETY THROUGHOUT
NEW ZEALAND. EVERY
TREATMENT INJURY
CLAIM REPRESENTS
AN INJURED PERSON

AN IMPORTANT ROLE FOR INJURY PREVENTION

SUPPORTING IMPROVED TREATMENT SAFETY

Enabling safer health care will reduce the amount and severity of patient harm that occurs. This will improve health outcomes for New Zealanders and reduce treatment injury.

ACC is an important part of the health sector and a key contributor involved in the patient safety area. It has an injury prevention responsibility to help reduce the incidence and severity of treatment injuries.

Improving patient safety is a priority action of the 2016 New Zealand Health Strategy. To achieve this goal, clinicians, managers, institutions, consumers, ACC, health agencies, and others need to work together.

IMPORTANT TERMINOLOGY USED IN THIS PUBLICATION*

Patient safety - the prevention of errors and adverse effects to patients associated with health care.

Patient harm - anything that impairs or adversely affects the safety of patients in clinical care, drug therapy, research investigations, or public health.

Hospital acquired conditions - conditions that developed during a hospital stay.

Treatment injury - a personal injury suffered during treatment from, or at the direction of, a registered health professional. The injury must have been caused by treatment; but not be a necessary part, or ordinary consequence, of the treatment, taking into account all the circumstances of the treatment.

Treatment safety - the prevention of treatment injury.

Accepted ACC treatment injury claim - a personal injury that has been clinically investigated and that meets the criteria under section 32 of the Accident Compensation Act 2001 (AC Act 2001).

Risk of harm - when a treatment injury claim highlights a risk of harm to the public, ACC must report this to the relevant authority responsible for patient safety, under section 284 of the AC Act 2001.

PREVENTION, CARE, RECOVERY

Since its inception over 40 years ago, ACC has provided some type of cover for people harmed during health care. The information collected has not, until recently, been used systematically to inform patient safety initiatives and improve outcomes.

* Selected glossary and definitions relating to treatment injury are contained in the appendices on page 105

A KEY ROLE FOR ACC IS TO PROVIDE INFORMATION TO ASSIST IN PREVENTION OF INJURY

ACC WORKS WITH PARTNERS TO IMPROVE TREATMENT SAFETY

ACC considers the best way to tackle treatment injuries is to work collaboratively to improve treatment safety, using evidence-informed approaches to reduce patient harm.

ACC is working with primary, secondary, and tertiary providers in both the public and private sectors. This is being done in collaboration with the DHBs, NZPSHA hospitals, MoH, HQSC, other agencies, and the professional colleges and associations.

ACC IS SUPPORTING DISCUSSIONS AT THE LOCAL AND NATIONAL LEVEL ABOUT HOW TO ENHANCE TREATMENT SAFETY

SUPPORTING INJURED NEW ZEALANDERS

ACC provides cover for treatment injury according to the provisions of the AC Act 2001. Not all discomfort, symptoms, or harm experienced by people having treatment is accepted as an injury caused by that treatment because of exclusions in the provisions of the AC Act 2001.

Each accepted claim ensures an injured person can access the care and support that they need and to which they are determined to be entitled.

For accepted claims, ACC funds treatment and on-going care to address the injury. Where the patient is incapacitated, compensation is provided for lost income and any permanent loss of function. ACC also provides rehabilitation to help the patient return to activity and work, and to participate in society. Taken together, these costs to ACC provide a reasonable approximation of the economic and social costs of a treatment injury sustained by a patient.

Improving treatment safety will generate substantial benefits through improved health outcomes, reduced suffering, shorter periods of hospitalisation, reduced readmissions, and avoiding the ongoing costs of injuries. This in turn will help to manage the impact of treatment injury claims on ACC.

PROVIDING TREATMENT INJURY INFORMATION

This publication provides information about all treatment injury claims, and those arising in public or private hospitals run by members of the NZPSHA. It summarises the numbers, costs, and the overall cost burden to the ACC scheme and ultimately to New Zealand.

The number of accepted treatment injury claims is useful to help quantify the amount of injury. It does not by itself address the causes or lead to improvement. Rather, it emphasises the need for more effective prevention strategies.

PUBLICATION OF INFORMATION ABOUT TREATMENT INJURIES IS THE BEGINNING OF A PROCESS TO SYSTEMATICALLY USE ACC INFORMATION TO HELP IMPROVE TREATMENT SAFETY

No single data set provides a complete picture of patient safety and harm. Treatment injury claims are an important, but incomplete, indicator of patient safety.

ACC's treatment injury information will be most useful if it is joined up with other measures of patient harm. This process is often referred to as 'triangulation' - and ACC will work toward this approach with other agencies.

Several additional indicators of patient harm are collected in New Zealand. These include hospital standardised mortality ratios from MoH, patient harm captured by the National Minimum Data Set (NMDS) or by private surgical hospitals, adverse event reporting to HQSC, complaints to the Health and Disability Commissioner (HDC), deaths in health care investigated by the Coronial Services, the Health Roundtable, and others.

FOCUS ON PUBLIC HOSPITALS AND NZPSHA HOSPITALS

The April 2017 publication of treatment injury information focussed on public hospitals. This, second publication includes hospitals run by members of the New Zealand Private Surgical Hospital Association (NZPSHA) and public hospitals. Together they account for 70% of all accepted treatment injury claims. The report includes the rate of selected injury types by comparing the number of accepted claims with the number of residents in the population, the number of discharges from hospitals, or the number of procedures performed.

Note, the reason we have focused on hospitals run by members of the NZPSHA (refer p96 of this report) is because these members have been able to provide procedure numbers to use as a denominator to calculate the rates of various types of treatment injuries. NZPSHA hospitals currently cover about 13% of all accepted claims. Work is underway to expand this to include private hospitals that are not members of NZPSHA.

PROGRESS TOWARD ANSWERING THE IMPORTANT QUESTIONS

Over time, we will be able to contribute to answering key questions regarding the New Zealand health system:

- What is the scale and nature of patient harm?
- When, where, and how does patient harm occur?
- What causes and contributing factors can be identified, including system ones?
- Which prevention approaches are successful, for whom, and when?

ACC SUPPORT FOR PEOPLE INJURED DURING TREATMENT

The range of treatment injuries is very wide. Most are easily remedied and only require medical treatment. Most also have no lasting impact.

Some treatment injuries are more serious and require more assistance. The support available from ACC depends on the injury and the person's circumstances. It may include:

- contributions towards treatment costs
- weekly compensation for lost income if the injury keeps the person from working
- home help with activities such as housekeeping and childcare
- house or vehicle modifications
- compensation for permanent impairment.

SECTION .01
SUPPORTING
SAFER HEALTH CARE
IN NEW ZEALAND

SECTION

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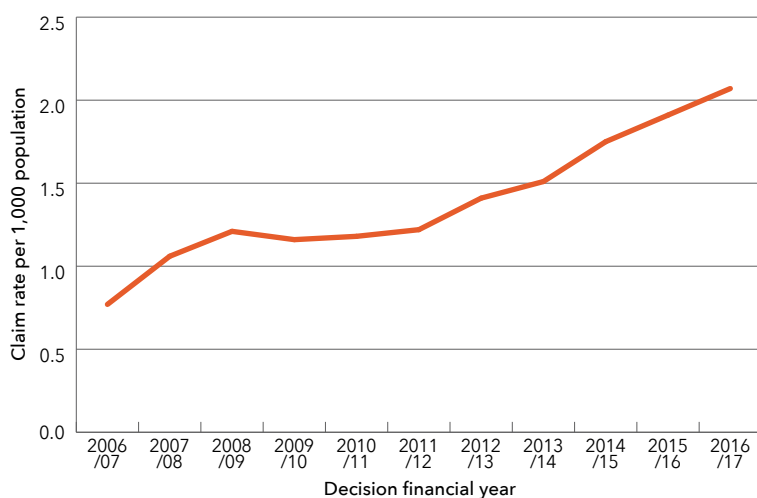
TREATMENT INJURY DASHBOARD
FOR NEW ZEALAND



NATIONAL PROGRESS SUMMARY

The number and rate of all treatment injury claims has been growing steadily. In 2016/17, there were 9,900 accepted treatment injury claims, equivalent to 2.1 per 1,000 people.

ALL ACCEPTED TREATMENT INJURY CLAIMS, IN ALL FACILITIES (PER 1,000 POPULATION, BY DECISION FINANCIAL YEAR)



Note: This data is standardised by the national population¹ because it includes all treatment injury claims from all sources: 57.4% of treatment injury claims are the result of treatment in DHB facilities (public hospitals), 13.4% in NZPSHA hospitals, and 29.2% in other locations - including general practice and aged residential care.

ALL TREATMENT INJURY CLAIMS DECIDED AND ACCEPTED, BY TYPE OF TREATMENT FACILITY, 2016/17			
Facility	Number of claims decided	Number of claims accepted	Percentage accepted
Public hospitals	8,425	5,678	67.4%
NZPSHA hospitals	1,771	1,324	74.8%
Other	5,823	2,898	49.8%
Total	16,019	9,900	61.8%

In 2016/17, there were 1.1 million discharges following treatment at a public hospital², and 5,678 accepted treatment injury claims. Overall, 0.50% of discharges from public hospitals resulted in an accepted treatment injury claim (that is 50 accepted treatment injury claims per 10,000 discharges). This has increased from 0.32% in 2013 (being 32 accepted treatment injury claims per 10,000 discharges).

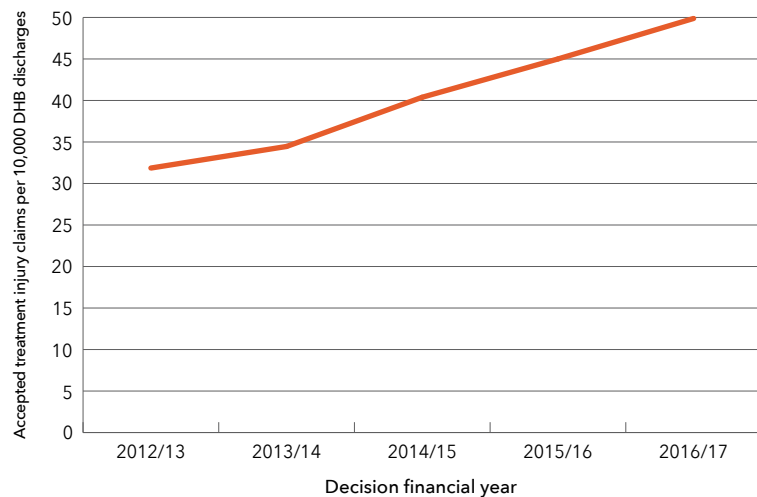
1 Source: Population data from Statistics New Zealand

2 Source: National Minimum Data Set, Ministry of Health

PUBLIC HOSPITALS

Every hospital has opportunities to improve treatment safety. ACC is working in partnership with the health sector to improve safety. This is being done through national initiatives to address common issues, and regional and local actions to address particular areas of focus. Publishing treatment injury information will help to increase the profile of patient safety and support actions to improve patient safety and limit harm.

ACCEPTED TREATMENT INJURY CLAIMS PER 10,000 DISCHARGES FOR ALL DHB FACILITIES, BY DECISION FINANCIAL YEAR



Note: This data is standardised by the number of DHB discharges because it includes only treatment injury claims resulting from treatment in DHB facilities (public hospitals). The name of the facility where the treatment causing the injury was delivered is provided to ACC by the registered health professional lodging the claim.

Each DHB is different - with a distinctive case-mix due to the demographics and health status of their catchment populations. Furthermore, public hospitals provide different types of surgery, treatments, and services. As a result, it is not meaningful to make direct comparisons across or between DHBs.

DIRECT COMPARISONS BETWEEN DHBS ARE NOT MEANINGFUL DUE TO DIFFERENT CASE-MIX, CONTEXT AND SERVICES PROVIDED

SUMMARY CLAIMS INFORMATION FOR ALL DHB FACILITIES, 2016/17				
DHB Region	Accepted treatment injury claims	Number of discharges ³	Accepted claims per 10,000 discharges	Percentage of discharges accepted as treatment injury claims
Auckland	564	142,485	39.58	0.40%
Bay of Plenty	205	60,042	34.14	0.34%
Canterbury	440	121,991	36.07	0.36%
Capital & Coast	574	70,194	81.77	0.82%
Counties Manukau	533	118,341	45.04	0.45%
Hawkes Bay	128	41,317	30.98	0.31%
Hutt Valley	322	37,536	85.78	0.86%
Lakes	92	29,036	31.68	0.32%
MidCentral	227	39,312	57.74	0.58%
Nelson Marlborough	268	31,456	85.20	0.85%
Northland	283	46,876	60.37	0.60%
South Canterbury	115	14,510	79.26	0.79%
Southern	240	67,716	35.44	0.35%
Tairāwhiti	65	11,269	57.68	0.58%
Taranaki	251	32,359	77.57	0.78%
Waikato	681	112,213	60.69	0.61%
Wairarapa	107	10,338	103.50	1.04%
Waitemata	390	126,466	30.84	0.31%
West Coast	29	7,158	40.51	0.41%
Whanganui	154	17,608	87.46	0.87%

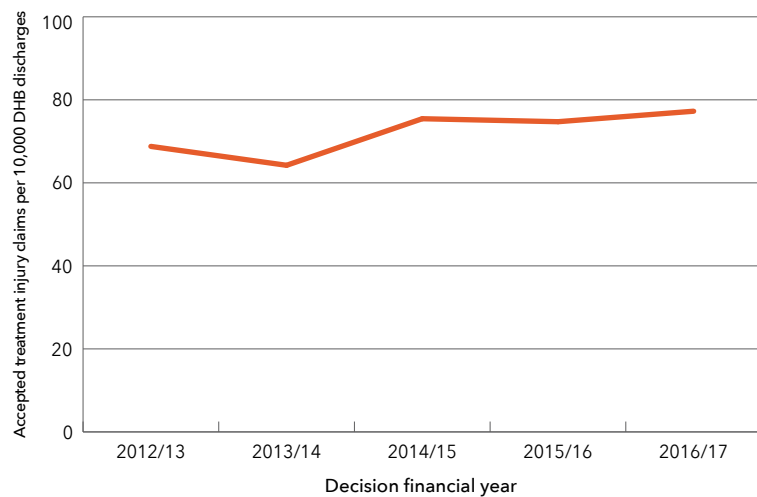
³ Source: National Minimum Data Set, Ministry of Health.

NZPSHA MEMBERS

In 2016/17, there were approximately 171,000 procedures performed in NZPSHA hospitals and 1,324 accepted treatment injury claims. This equates to 0.77% procedures resulting in an accepted treatment injury claim (that is 77 accepted treatment injury claims per 10,000 procedures).

Note: Number of procedures is not equivalent to number of discharges. This means direct comparison of public and private hospital rates is not valid.

ACCEPTED TREATMENT INJURY CLAIMS PER 10,000 PROCEDURES FOR MEMBERS OF NZPSHA, BY DECISION FINANCIAL YEAR



Note: This data is standardised by the number of NZPSHA procedures because it includes only treatment injury claims resulting from treatment in NZPSHA hospitals. The name of the facility where the treatment causing the injury was delivered is provided to ACC by the registered health professional lodging the claim.

NZPSHA ACCEPTED TREATMENT INJURY CLAIMS PER 10,000 PROCEDURES BY FINANCIAL DECISION YEAR					
	2012/13	2013/14	2014/15	2015/16	2016/17
Accept	1,076	1,042	1,238	1,241	1,324
Decline	359	311	382	385	447
Decided claims	1,435	1,353	1,620	1,626	1,771
Ent Claims	648	628	771	758	724
% accepted	75.0%	77.0%	76.4%	76.3%	75%
% Declined	25.0%	23.0%	23.6%	23.7%	25%
Accepted per 10,000 procedures	68.78	64.23	75.45	74.73	77.26

NATIONAL ANALYSIS OF TREATMENT INJURY CLAIMS INFORMATION

There were 9,900 accepted treatment injury claims in all settings in 2016/17. The rate of treatment injury claims has been growing steadily since 2005 per 1,000 population.

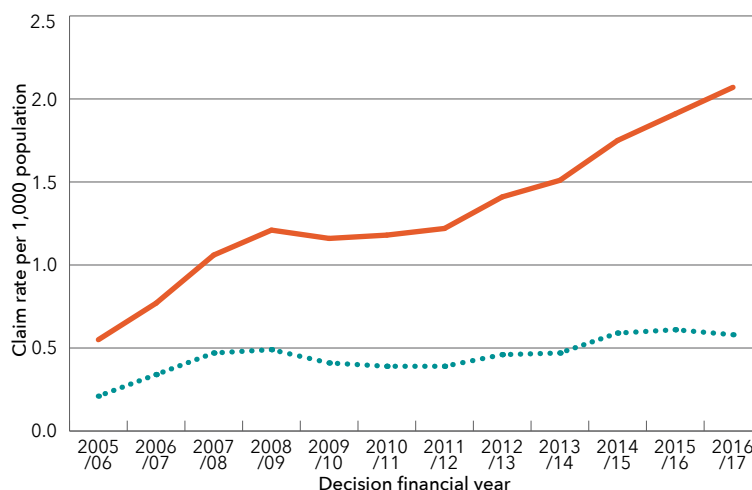
In 2016/17, there were 2.1 accepted treatment injury claims per 1,000 population, more than three times as many as in 2005/06 when the rate was 0.55 per 1,000 population.

Some claims only necessitate medical treatment for their treatment injuries. Other claims, referred to as 'entitlement claims' receive additional support.

ALL ACCEPTED
 TREATMENT INJURY CLAIMS,
 IN ALL FACILITIES
 (PER 1,000 POPULATION,
 BY DECISION YEAR)

KEY

- All claims
- Entitlement claims



Note: This data is standardised by the national population because it includes all treatment injury claims from all sources: 57.4% of treatment injury claims are the result of treatment in DHB facilities (public hospitals), 13.4% in NZPSHA hospitals, and 29.2% in other locations - including general practice and aged residential care.

Growth in treatment injury claims was anticipated with the expansion of cover to some treatment injury from 1 July 2005*. Other factors that may also be contributing to growth of treatment injury claims include: increased volumes of treatment across the health system, greater risk factors in the patient population, and efforts to encourage greater reporting of treatment injury.

* The history of ACC's legislation is outlined in the Appendices.

SOME TREATMENT INJURIES WILL HAVE A BIGGER IMPACT ON THE PERSON INJURED

The cost of a treatment injury claim is an indicator of the severity of the injury. An assumption is that more costly claims have a more severe impact on the person injured. While there is not always a direct relationship, it is one indicator of severity.

We can also compare the number of cases that only require medical treatment for their treatment injury as against those that also receive additional support. The latter are called 'entitlement claims'. These more serious injuries have on-going costs over and above the initial medical treatment. These can be lifetime costs and may include weekly compensation for loss of earnings, home help, attendant care, vehicle modifications, housing modifications, vocational rehabilitation, and/or various other types of social rehabilitation support.

There has been smaller growth in accepted treatment injury entitlement claims between 2005/06 and 2016/17 - even though the rate of accepted treatment injury claims per 1,000 population has increased from 0.55 to 2.1.

A small number of entitlement claims each year are further classified as 'serious injury' claims. A 'serious injury' claim is an internal classification that ACC uses for clients who will have a lifelong relationship with ACC. This enables ACC to ensure allocation of appropriate financial reserves and identification of claims suitable for lifetime rehabilitation planning. Clients are only allocated to the serious injury category if they satisfy specific clinical criteria, because this provides access to long-term support. These criteria include spinal cord injury; moderate and severe brain injury; multiple limb amputations; severe burns; and blindness in both eyes.

Serious injury claims are rare. In 2016/17, 75 entitlement claims were classified as serious injuries. Despite this, they have a substantial impact on the injured patient and their family. It is important for ACC to focus on reducing the incidence and severity of the treatment injuries with the greatest impacts (that is, entitlement claims and, within these subsets, serious injury claims).

TREATMENT INJURIES OCCUR IN A WIDE RANGE OF SETTINGS

The health sector is complex and involves a wide range of professions that work in various settings. For convenience, these are often divided into primary, secondary, and tertiary services. Another commonly used approach is to separate into public and private providers.

Hospitals are a common setting for patient safety events. They face higher risks of patient harm because many patients are admitted in a clinically compromised state, and care often includes the use of invasive devices and procedures that carry inherent risk for patient harm.

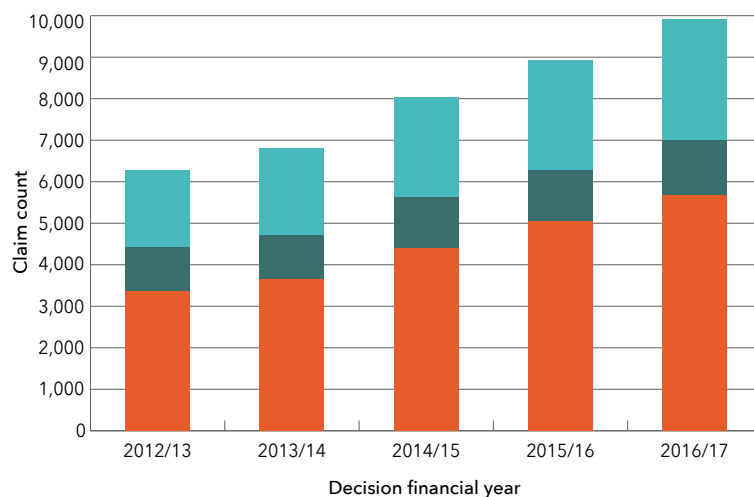
HOSPITAL SETTINGS ACCOUNT FOR 70% OF ACCEPTED TREATMENT INJURY CLAIMS

Public and NZPSHA hospitals account for 70% of accepted treatment injury claims. As a result, hospitals have established treatment safety activities to help manage these risks, and hospitals are important partners of ACC for initiatives to improve treatment safety.

Hospital-acquired conditions are those that develop during a hospital stay. These can lead to poor outcomes and increased health care costs, and may result in treatment injury claims. Many of these injuries are preventable. Consequently, hospital settings are an important focus for improving treatment safety.

ALL ACCEPTED TREATMENT INJURY CLAIMS BY TREATMENT FACILITY AND DECISION FINANCIAL YEAR

- KEY**
- Other
 - NZPSHA hospitals
 - Public hospitals



In this chart 'DHB facilities' cover public hospitals. NZPSHA are private surgical hospitals. The 'other' category includes primary care and community settings such as 'rooms-based procedures'.

SECTION .02
**TREATMENT INJURY
 DASHBOARD FOR
 NEW ZEALAND**

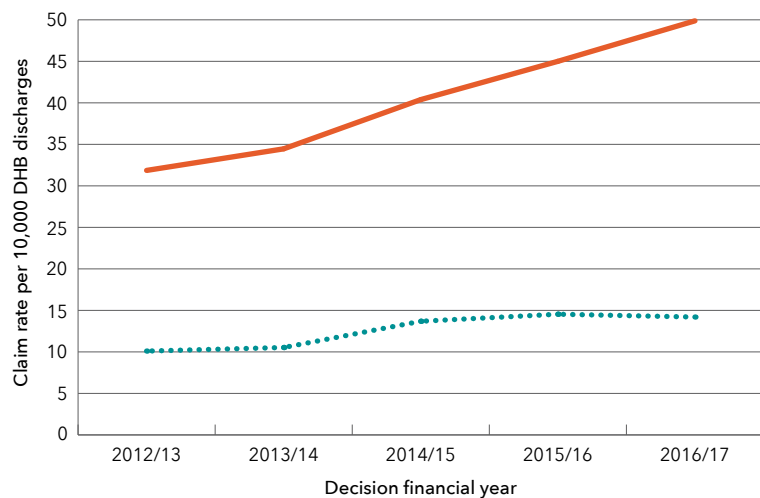
The volume and complexity of treatment across the health system has been increasing. In 2016/17, there were 1.1 million discharges following treatment at a DHB facility, around 8.3% more than in 2012/13. New Zealand’s population grew by about 7.8%, from 4.4 million to 4.8 million over the same period.

In 2016/17 there were 50 accepted treatment injury claims per 10,000 discharges across all DHB facilities (0.50%), compared with 32 accepted claims per 10,000 discharges (0.32%) in 2012/13.

**ACCEPTED TREATMENT
 INJURY CLAIMS PER 10,000
 DISCHARGES FOR ALL DHB
 FACILITIES, BY DECISION YEAR**

KEY

- All claims
- Entitlement claims



Note: This data is standardised by the number of DHB discharges⁴ because it includes only treatment injury claims resulting from treatment in DHB facilities (public hospitals). The name of the facility where the treatment causing the injury was delivered is provided to ACC by the registered health professional lodging the claim.

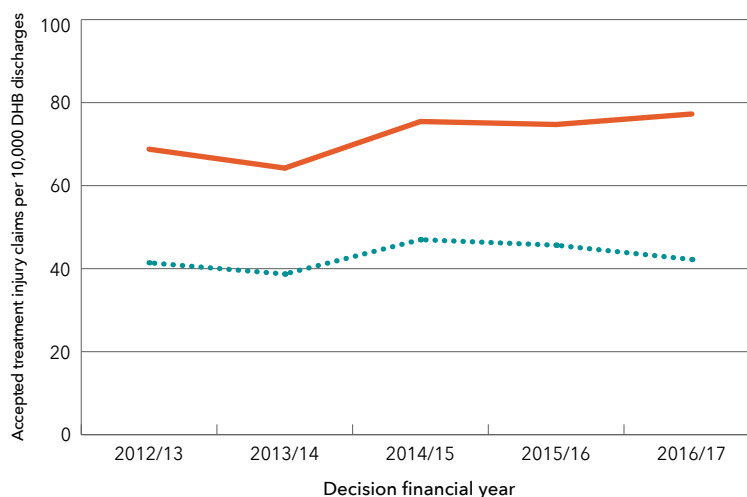
⁴ Source: National Minimum Data Set

TREATMENT INJURY DASHBOARD FOR NEW ZEALAND

ACCEPTED TREATMENT INJURY CLAIMS PER 10,000 PROCEDURES FOR NZPSHA HOSPITALS, BY DECISION FINANCIAL YEAR

KEY

- All claims
- Entitlement claims



Note: This data is standardised by the number of NZPSHA procedures because it includes only treatment injury claims resulting from treatment in hospitals run by NZPSHA members. The name of the facility where the treatment causing the injury was delivered is provided to ACC by the registered health professional lodging the claim.

In 2016/17, there were 171,000 procedures in NZPSHA hospitals, around 9.5% more than in 2012/13.

In 2016/17, there were 77 accepted treatment injury claims per 10,000 procedures across NZPSHA hospitals, compared to 68 accepted claims per 10,000 procedures in 2012/13.

MANY FACTORS INFLUENCE THE RISK OF BEING INJURED DURING TREATMENT

Different hospitals provide varying types of surgery, treatments, and services - many of which carry inherent risks of injury to the patient. For example, some hospitals provide complex medical and surgical interventions, such as cancer management, neurosurgery, cardiac surgery, treatment for severe burns, and advanced services in neonatology.

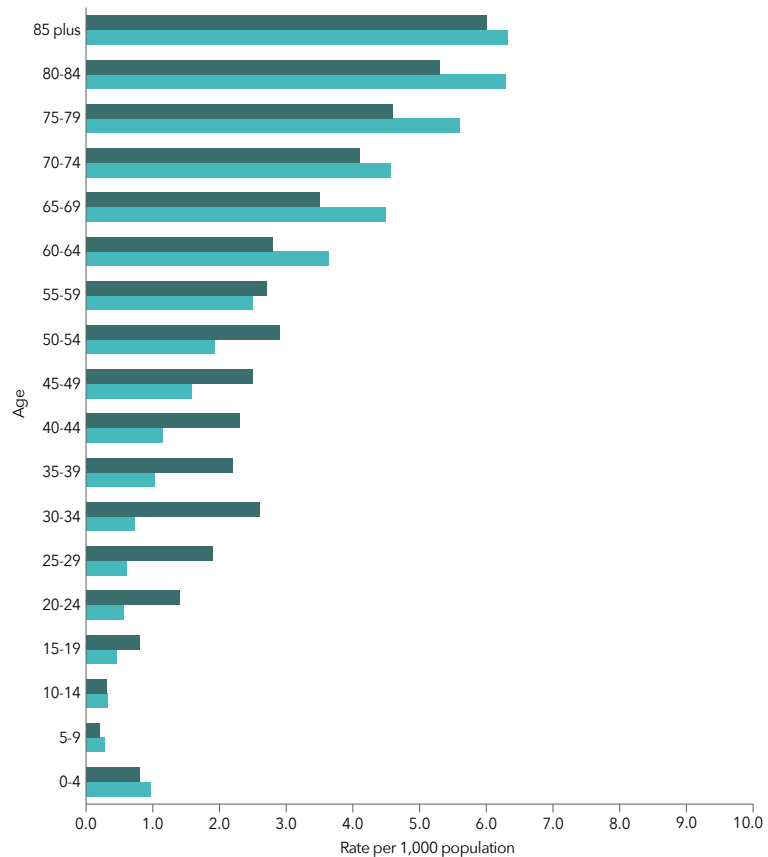
Similarly, each hospital will have a distinctive case-mix reflecting the age and health status of their catchment populations. These characteristics can also increase the risks of treatment injury. For example, some hospitals have relatively high proportions of older people in their admitted population, while other hospitals have relatively high levels of socio-economic disadvantage. Added to this, some hospitals have relatively high rates of diabetes and obesity in their resident population, whilst others cover large geographical areas with a mostly rural population.

SECTION .02
**TREATMENT INJURY
 DASHBOARD FOR
 NEW ZEALAND**

**RATE PER 1,000 POPULATION
 FOR ALL ACCEPTED
 TREATMENT INJURY
 CLAIMS IN 2016/17,
 BY AGE AND GENDER**

KEY

- Female claim rate per 1,000 population
- Male claim rate per 1,000 population



Note: This data is standardised by the national population⁵ because it includes all treatment injury claims from all sources: 57.4% of treatment injury claims are the result of treatment in DHB facilities (public hospitals), 13.4% in NZPSHA hospitals, and 29.2% in other locations - including general practice and aged residential care.

**RATES OF TREATMENT INJURY CLAIMS VARY SIGNIFICANTLY
 WITH AGE AND GENDER**

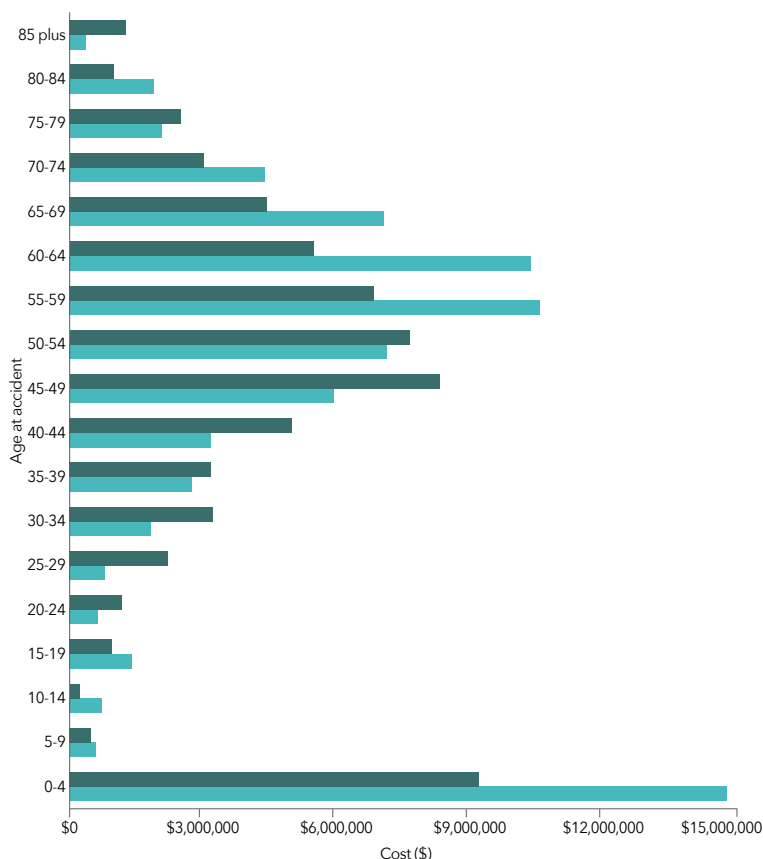
⁵ Source: Population data from Statistics New Zealand

SECTION .02
TREATMENT INJURY
DASHBOARD FOR
NEW ZEALAND

TOTAL COSTS PAID IN 2016/17
FOR ALL NEW AND EXISTING
ACCEPTED TREATMENT INJURY
CLAIMS, BY AGE AND GENDER

KEY

- Female claim cost
- Male claim cost



Note: This data is standardised by the national population⁶ because it includes all treatment injury claims from all sources: 57.4% of treatment injury claims are the result of treatment in DHB facilities (public hospitals), 13.4% in NZPSHA hospitals, and 29.2% in other locations - including general practice and aged residential care.

Patterns by age and gender reflect the greater utilisation of treatment services by certain cohorts at particular times in their life. They also reflect differences in risk factors. We note, for example, that:

- overall, treatment injuries become more prevalent later in life (aged 50 plus) reflecting the greater exposure of older people to treatment
- there is a relatively high rate of injury for young children aged 0 to 4. This includes a small number of very severe birth brain injuries that have a large lifetime impact - increasing the average cost or impact measured for this age group
- women aged 20 to 54 have consistently higher rates of treatment injury than men of the same age, and these injuries have a larger cost or impact on average. This probably reflects their greater use of treatment services in the context of reproductive health and/or maternity care.

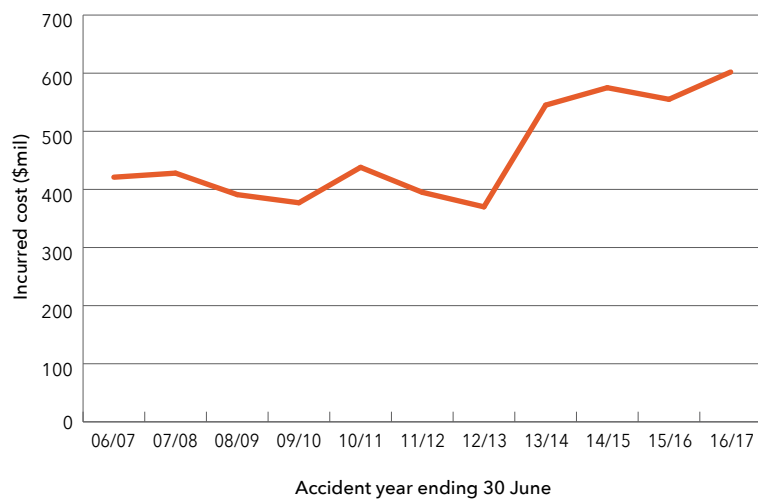
⁶ Source: Population data from Statistics New Zealand

SECTION .02
**TREATMENT INJURY
 DASHBOARD FOR
 NEW ZEALAND**

Incurred costs for all treatment injury were \$602 million in 2016/17. This includes actual and **predicted** cost and reflects the costs of treatment, expected on-going care, support, and rehabilitation for people who were hurt while receiving medical treatment. Incurred costs for treatment injury have increased by 43% since 2007.

**INCURRED COSTS FOR
 ALL TREATMENT INJURY
 CLAIMS IN ALL FACILITIES,
 BY ACCIDENT YEAR
 (2006 - 17)**

Incurred cost includes actual and **predicted** costs of all injuries that occurred in 2016/17



Incurred costs include estimates of the lifetime cost of accepted claims in that accident year, and estimates of claims that will be accepted in future years for treatment injuries that occurred during the accident year. For this reason, it is not possible to analyse incurred costs by treatment facility and injury type.

Total costs paid for new and existing treatment injury claims were \$142.5 million in 2016/17. Costs paid do not include the expected lifetime costs of claims, but this is a measure that can help illustrate the relative impact of differing treatment injury types and different treatment facilities.

COSTS PAID IN 2016/17 FINANCIAL YEAR FOR ALL NEW AND EXISTING TREATMENT INJURY CLAIMS BY TREATMENT FACILITY	
Facility	Costs paid for new and existing treatment injury claims
Public hospitals	\$99,934,717
NZPSHA hospitals	\$20,243,538
Other	\$22,365,174
Grand Total	\$142,543,429

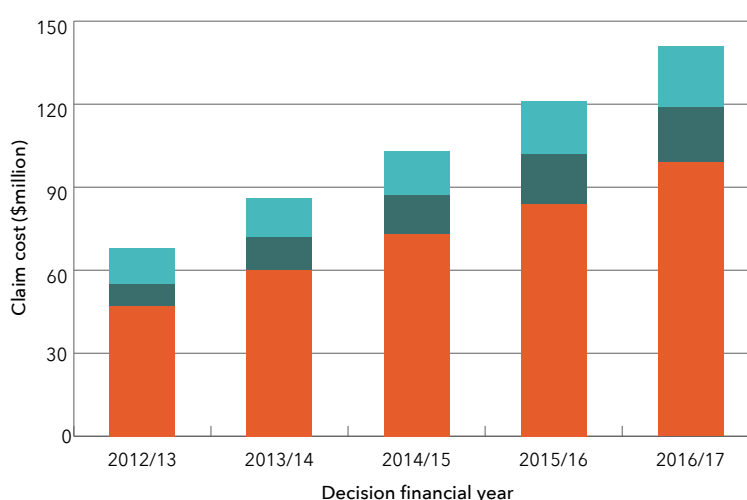
COSTS PAID FOR NEW AND EXISTING TREATMENT INJURY CLAIMS

Total costs paid for new and existing treatment injury claims were \$142.5 million in 2016/17.

TOTAL COSTS PAID IN 2016/17 FOR ALL NEW AND EXISTING TREATMENT INJURY CLAIMS, BY TREATMENT FACILITY AND PAYMENT YEAR

KEY

- Other
- NZPSHA hospitals
- Public hospitals



In this chart 'DHB facilities' cover public hospitals. NZPSHA are private surgical hospitals. The 'other' category includes primary care and community settings such as 'rooms-based procedures'.

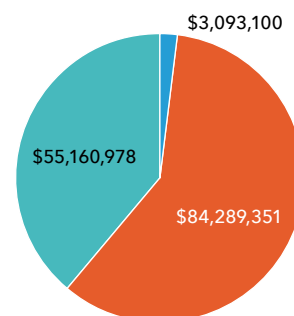
A PROPORTION (0.4% OF ACCEPTED CLAIMS) OF MORE SERIOUS TREATMENT INJURIES GENERATE THE MAJORITY OF COSTS

Approximately 30 percent of all treatment injury claims accepted in 2016/17 were entitlement claims. New and existing entitlement claims accounted for 97% of all costs paid by ACC for treatment injury in 2016/17.

New and existing serious injury claims (a subset of entitlement claims) accounted for 39% of all costs paid for treatment injury in 2016/17.

**COSTS PAID IN 2016/17 FOR
 ALL NEW AND EXISTING
 TREATMENT INJURY CLAIMS**

**TOTAL 2016/17
 \$142,543,429**



KEY

- All other
- Entitlement
- Serious injury

Note, this cost information includes all treatment injury claims from all sources: DHB facilities (public hospitals), NZPSHA hospitals, and other locations (including general practice and aged residential care).

**INCURRED COST FOR ALL TREATMENT INJURY
 IN FINANCIAL YEAR 2016/17**

Estimated lifetime costs for all treatment injury claims that occurred in 2016/17 is \$602 million. These costs include:

- costs paid to date for new claims accepted for injuries that occurred in 2016/17
- an estimate of the costs that will be incurred in future years for those claims (expressed as a present value - that is, the amount needed in 2016/17 to meet those future costs)
- an estimate of the costs for future claims for injuries that occurred in the current year (that is, the present value of claims made in 2018 or later years, for injuries that occurred in 2016/17)
- costs paid for declined treatment injury claims. ACC may pay some costs before a claim is decided. For example, for assessment or expert report.

**ESTIMATED OUTSTANDING CLAIMS COST OF
 TREATMENT INJURY**

The outstanding claims liability for treatment injury was \$5.7 billion as at 30 June 2017.

This is an estimate of the current value of the lifetime impact of treatment injury to those patients who have already been injured.

It is the current value of all future treatment, care and support for all existing accepted treatment injury claims to date. One way of understanding this is to remember that, if ACC went out of existence today, this is the amount that would still have to be paid out in the future.

ACC RISK OF HARM NOTIFICATIONS

ACC is required to assess all treatment injury claims (whether accepted or declined) to determine the actual (or potential) risk of harm to the public⁷. This includes an assessment of the likelihood of recurrence and the actual or potential consequence of the event. All events assessed as presenting a risk of harm to the public are reported to the Director-General of Health. They may also be referred to the relevant professional authority if potential competency issues are identified. ACC also copies the risk of harm notifications to HQSC.

There are parallels between ACC's reporting of risk of harm and the reporting of adverse events to HQSC by health care providers, under the National Reportable Events Policy.

The principal reason for adverse event reporting to exist in any health system is to support learning from clinically meaningful events and near misses. This should involve identification of causes and contributing factors, and using these to inform practice so that the same or similar incidents can be prevented in future.

ACC's assessment of the risk of harm is based on the MoH Severity Assessment Code (SAC)⁸. ACC is working with MoH and HQSC to better align this risk of harm reporting, and to make better use of the insights that can be drawn from treatment injury claims to better support this wider learning to improve patient safety.

IN 2016/17, 469 CLAIMS WERE ASSESSED AS PRESENTING A RISK OF HARM TO THE PUBLIC. THIS IS ABOUT 4% OF ALL DECIDED CLAIMS (BEING BOTH ACCEPTED AND DECLINED CLAIMS)

⁷ Section 284 of the Accident Compensation Act 2001 requires ACC to report 'risk of harm to the public' based on information collected in the course of processing claims for treatment injury, including those that are in the nature of claims for treatment injury but are caused by a person who is not a registered health professional.

⁸ More information regarding risk of harm notification is set out in the appendices.

SECTION .02
**TREATMENT INJURY
 DASHBOARD FOR
 NEW ZEALAND**

RISK OF HARM NOTIFICATIONS AND TREATMENT INJURY CLAIMS DECIDED BY FINANCIAL YEAR					
	2012/13	2013/14	2014/15	2015/16	2016/17
Claims decided	10,067	10,397	12,624	13,867	16,019
Serious risk of harm (aligned with SAC2)	320	236	312	511	381
Serious risk of harm (aligned with SAC1)	49	47	46	77	88

Note: Further information about the MoH Severity Assessment Code (SAC) is contained in the appendices.

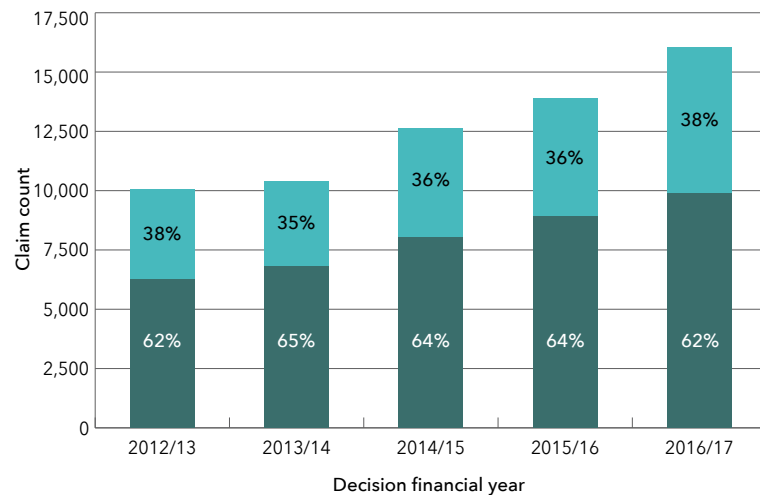
TWO-THIRDS OF TREATMENT INJURY CLAIMS ARE ACCEPTED EACH YEAR

Overall, the proportion of treatment injury claims accepted has remained relatively stable over the past five years, at around 64%. During the same period, the number of claims decided has increased rapidly (from 10,067 in 2012/13 to 16,019 in 2016/17).

RATES OF ACCEPTED AND DECLINED TREATMENT INJURY CLAIMS BY DECISION FINANCIAL YEAR

KEY

- Declined
- Accepted



There are three broad reasons why treatment injury claims are declined:

- **61% of declined claims** do not have an injury caused by the treatment (for 30% there is no injury; for 27% there is no causal link between the treatment and the injury; and 4% are the result of an underlying health condition)
- **13% of declined claims** do not meet the tests to be a treatment injury (11% are an 'ordinary consequence' of the treatment; 1% a necessary part of the treatment; and 1% did not involve a registered health provider in the treatment)
- **20% of declined claims** are withdrawn (11%) or have insufficient information (9%).

All treatment injury claims are submitted with the help of a health professional. Rates of declined claims vary across DHBs - ranging from 21% to 40% of all lodged claims in 2016/17.

25.2% of claims related to NZPSHA hospitals were declined in 2016/17.

The relatively high rate of declined claims highlights an opportunity for ACC to work more closely with health professionals. This includes development of stronger guidance and assistance to better identify cases of treatment injury, and ensuring all necessary information is presented to support ACC's decision on the claim.

Attributing treatment injuries to the setting where treatment occurred relies on accurate information from the treatment provider.

THE NAME OF THE FACILITY WHERE THE TREATMENT CAUSING THE INJURY WAS DELIVERED IS PROVIDED TO ACC BY THE REGISTERED HEALTH PROFESSIONAL LODGING THE CLAIM

NATIONAL RATES OF TREATMENT INJURIES BY INJURY TYPE IN DHB AND NZPSHA HOSPITALS

The table provides volumes and costs for the areas of focus for ACC treatment safety, based on all accepted treatment injury claims in the 2016/17 financial year where the treatment provider is a DHB or a NZPSHA hospital.

The selection of areas for focus includes injuries with significant impact on individuals (and their families), injuries which are identified internationally as amenable to prevention strategies, or injuries that may be indicators of safer care.

Over time we will increase the number of categories that we monitor and use this information to support more prevention approaches.

ACCEPTED TREATMENT INJURY CLAIMS IN THE 2016/17 FINANCIAL YEAR WHERE THE TREATMENT PROVIDER IS A DHB OR NZPSHA HOSPITAL, HIGHLIGHTING THE AREAS OF FOCUS FOR PREVENTION.

INJURIES	ACCEPTED CLAIMS	CLAIM COSTS (does not include lifetime costs)	CONTEXT OF CLAIMS
Infection (Total) of which:	1,875	\$16,859,463	This injury type includes skin lesion removal such as moles, hip and knee surgery and I.V. cannulation.
- Infections following surgery	1,689	\$15,526,329	Includes all infection following surgery.
- Line infections	101	\$356,401	Peripheral line infections are higher by volume, while central line infections are more costly due to the level of support required.
- Other infections	85	\$976,733	
Pressure injury	384	\$924,755	The major causes are lack of identifying risk factors (65%), immobilisation (17%) and splints or other casts (8%).
Medication adverse effects	369	\$7,128,339	Reactions to medications such as antibiotics and pain relievers. Reaction to injections make up 16% of this category.
Medication errors	13	\$599,695	Errors in prescribing and/or dispensing medication.
Pulmonary embolism	61	\$462,355	These are included, as internationally, it is regarded as an indicator of safe surgery.
Deep vein thrombosis	95	\$281,230	
Neonatal encephalopathy	14	\$12,046,999	These are rare, high impact and high cost events that have a lasting impact for the individual's lifetime.

SECTION .02
TREATMENT INJURY
DASHBOARD FOR
NEW ZEALAND

The following charts provide further analysis of specific injury types within public hospitals (DHB facilities) and hospitals run by NZPSHA members. This analysis focuses on the injury categories recorded by ACC that are most clinically meaningful. Over time, we will look to add analysis of more types of treatment injury.

DHB INFECTIONS OF ALL TYPES

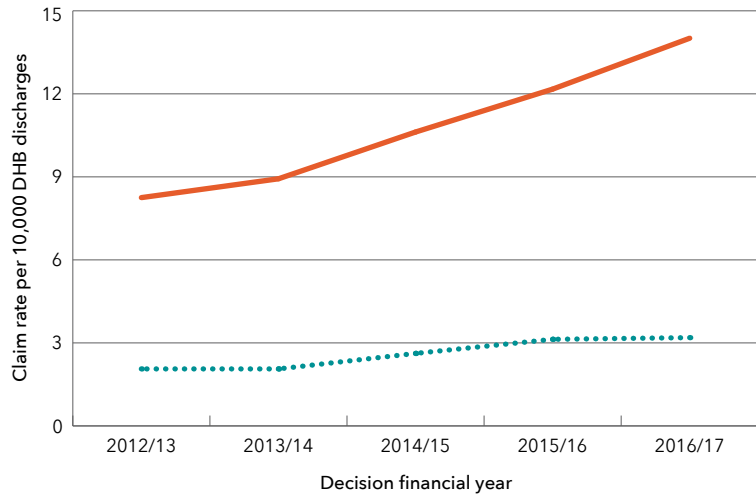
ACCEPTED TREATMENT INJURY CLAIMS PER 10,000 DISCHARGES FOR ALL TYPES OF INFECTIONS IN ALL DHB FACILITIES

KEY

- All claims
- Entitlement claims

1,595

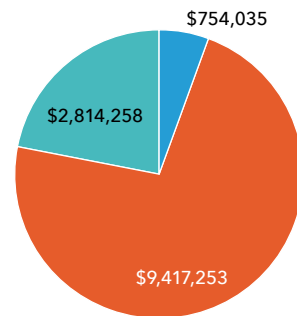
NUMBER OF ACCEPTED TREATMENT INJURIES IN DHBS IN 2016/17 FOR INFECTIONS OF ALL TYPES



Note: This data is standardised by the number of DHB discharges because it includes only treatment injury claims resulting from treatment in DHB facilities (public hospitals). The name of the facility where the treatment causing the injury was delivered is provided to ACC by the registered health professional lodging the claim.

COSTS PAID IN 2016/17 FOR ALL NEW AND EXISTING TREATMENT INJURY CLAIMS INFECTIONS OF ALL TYPES IN ALL DHB FACILITIES

TOTAL 2016/17
\$12,985,546



KEY

- All other
- Entitlement
- Serious injury

Note: Serious injuries are a subset of entitlement claims, and this cost information includes only DHB facilities.

**DHB INFECTIONS
 FOLLOWING SURGERY**

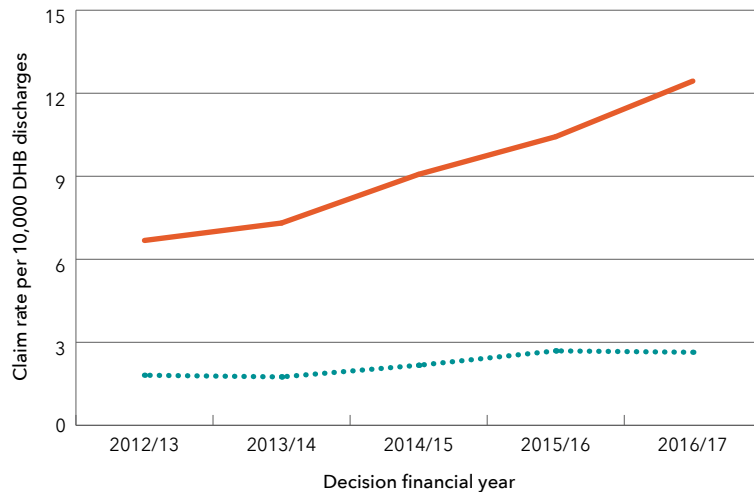
ACCEPTED TREATMENT INJURY
 CLAIMS FOR INFECTIONS
 FOLLOWING SURGERY PER
 10,000 DISCHARGES, IN ALL
 DHB FACILITIES

KEY

- All claims
- Entitlement claims

1,416

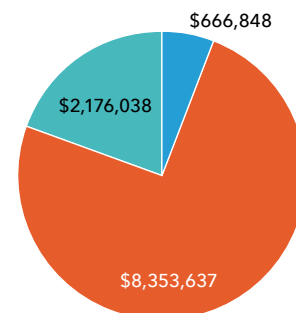
NUMBER OF ACCEPTED
 TREATMENT INJURIES
 IN DHBS IN 2016/17
 FOR INFECTIONS
 FOLLOWING SURGERY



Note: This data is standardised by the number of DHB discharges because it includes only treatment injury claims resulting from treatment in DHB facilities (public hospitals). The name of the facility where the treatment causing the injury was delivered is provided to ACC by the registered health professional lodging the claim.

COSTS PAID IN 2016/17 FOR
 NEW AND EXISTING ACCEPTED
 TREATMENT INJURY CLAIMS
 FOR INFECTIONS FOLLOWING
 SURGERY IN ALL DHB FACILITIES

TOTAL 2016/17
 \$11,196,522



KEY

- All other
- Entitlement
- Serious injury

Note: Serious injuries are a subset of entitlement claims, and this cost information includes only DHB facilities (public hospitals).

DHB LINE INFECTIONS (PERIPHERAL AND CENTRAL)

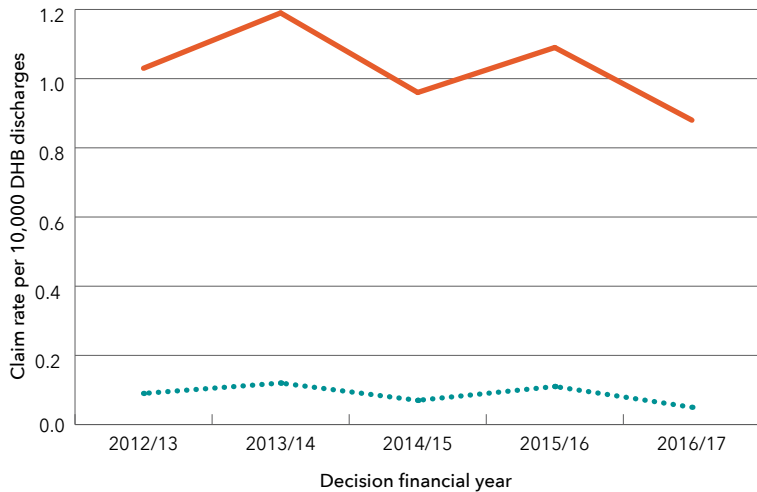
ACCEPTED TREATMENT INJURY CLAIMS FOR PERIPHERAL AND CENTRAL LINE INFECTIONS PER 10,000 DISCHARGES, IN ALL DHB FACILITIES

KEY

- All claims
- Entitlement claims

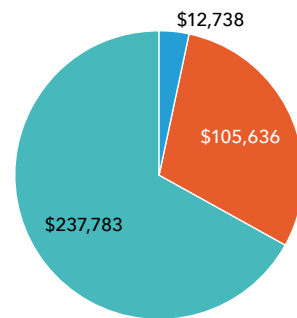


NUMBER OF ACCEPTED TREATMENT INJURIES IN DHBS IN 2016/17 FOR LINE INFECTIONS (PERIPHERAL AND CENTRAL)



Note: This data is standardised by the number of DHB discharges because it includes only treatment injury claims resulting from treatment in DHB facilities (public hospitals). The name of the facility where the treatment causing the injury was delivered is provided to ACC by the registered health professional lodging the claim.

COSTS PAID IN 2016/17 FOR ALL NEW AND EXISTING TREATMENT INJURY CLAIMS FOR PERIPHERAL AND CENTRAL LINE INFECTIONS IN ALL DHB FACILITIES



TOTAL 2016/17
\$356,157

KEY

- All other
- Entitlement
- Serious injury

Note: Serious injuries are a subset of entitlement claims, and this cost information includes only DHB facilities (public hospitals).

CENTRAL LINE INFECTIONS

Within the accepted treatment injury claims for line infections, there were 4 for infections to peripherally inserted central catheter lines in 2016/17. These occurred in non-ICU settings, such as oncology.

DHB PRESSURE INJURIES

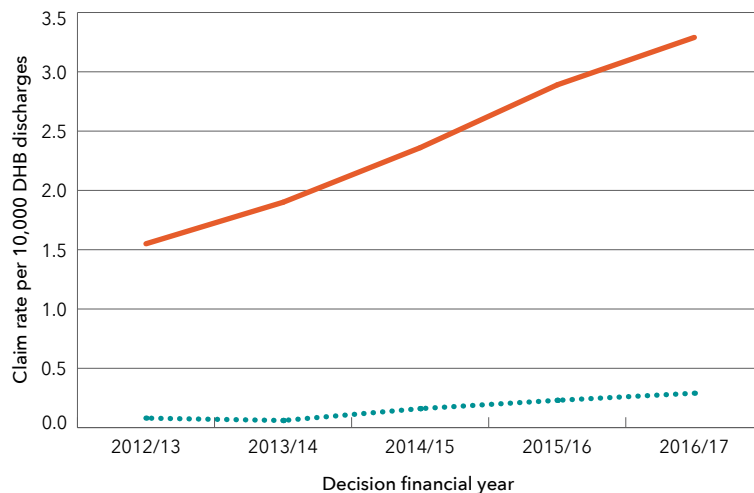
ACCEPTED TREATMENT INJURY CLAIMS PER 10,000 DISCHARGES FOR PRESSURE INJURIES IN ALL DHB FACILITIES

KEY

- All claims
- Entitlement claims



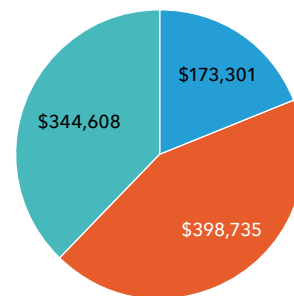
NUMBER OF ACCEPTED TREATMENT INJURIES IN DHBS IN 2016/17 FOR PRESSURE INJURIES



Note: This data is standardised by the number of DHB discharges because it includes only treatment injury claims resulting from treatment in DHB facilities (public hospitals). The name of the facility where the treatment causing the injury was delivered is provided to ACC by the registered health professional lodging the claim.

COSTS PAID IN 2016/17 FOR ALL NEW AND EXISTING TREATMENT INJURY CLAIMS FOR PRESSURE INJURIES IN ALL DHB FACILITIES

TOTAL 2016/17
\$916,644



KEY

- All other
- Entitlement
- Serious injury

Note: Serious injuries are a subset of entitlement claims, and this cost information includes only DHB facilities (public hospitals).

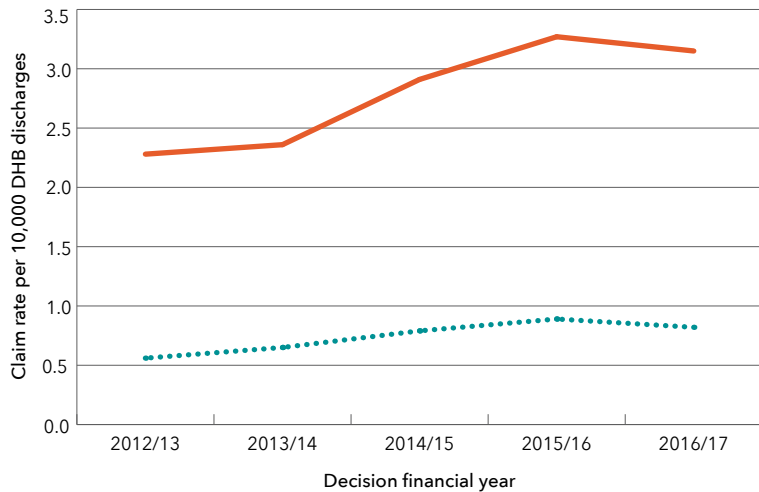
**DHB MEDICATION
ADVERSE REACTIONS**

ACCEPTED TREATMENT INJURY CLAIMS FOR MEDICATION ADVERSE REACTIONS PER 10,000 DISCHARGES IN ALL DHB FACILITIES

KEY
— All claims
••• Entitlement claims

344

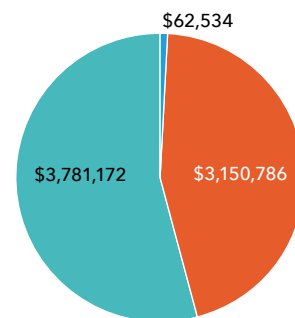
NUMBER OF ACCEPTED TREATMENT INJURIES IN DHBS IN 2016/17 FOR MEDICATION ADVERSE REACTIONS



Note: This data is standardised by the number of DHB discharges because it includes only treatment injury claims resulting from treatment in DHB facilities (public hospitals). The name of the facility where the treatment causing the injury was delivered is provided to ACC by the registered health professional lodging the claim. It does not include accepted claims for medication errors.

COSTS PAID IN 2016/17 FOR ALL NEW AND EXISTING TREATMENT INJURY CLAIMS FOR MEDICATION ADVERSE REACTIONS IN ALL DHB FACILITIES

**TOTAL 2016/17
\$6,994,492**



KEY
● All other ● Entitlement ● Serious injury

Note: Serious injuries are a subset of entitlement claims, and this cost information includes only DHB facilities (public hospitals).

**DHB MEDICATION ERRORS
(PRESCRIBING AND DISPENSING)**

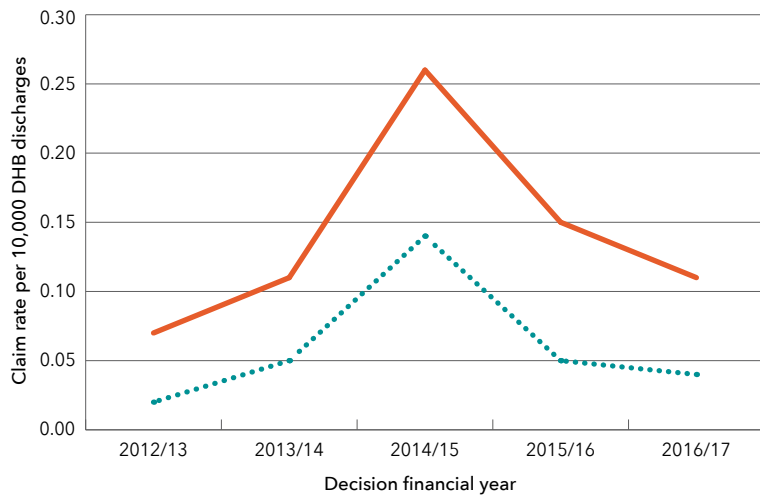
ACCEPTED TREATMENT INJURY CLAIMS FOR MEDICATION ERRORS (PRESCRIBING AND DISPENSING) PER 10,000 DISCHARGES IN ALL DHB FACILITIES

KEY

- All claims
- Entitlement claims



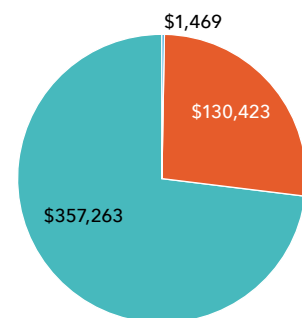
NUMBER OF ACCEPTED TREATMENT INJURIES IN DHBS IN 2016/17 FOR MEDICATION ERRORS (PRESCRIBING AND DISPENSING)



Note: This data is standardised by the number of DHB discharges because it includes only treatment injury claims resulting from treatment in DHB facilities (public hospitals). The name of the facility where the treatment causing the injury was delivered is provided to ACC by the registered health professional lodging the claim. It does not include accepted claims for medication adverse reactions.

COSTS PAID IN 2016/17 FOR ALL NEW AND EXISTING TREATMENT INJURY CLAIMS FOR MEDICATION ERRORS IN ALL DHB FACILITIES

TOTAL 2016/17
\$489,154



KEY

- All other
- Entitlement
- Serious injury

Note: Serious injuries are a subset of entitlement claims, and this cost information includes only DHB facilities (public hospitals).

DHB PULMONARY EMBOLISM (PE)

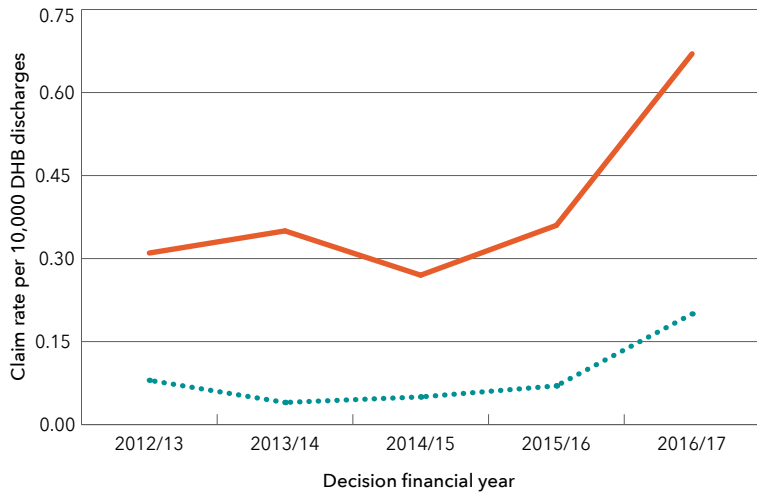
ACCEPTED TREATMENT INJURY CLAIMS FOR PULMONARY EMBOLISM PER 10,000 DISCHARGES IN ALL DHB FACILITIES

KEY

- All claims
- Entitlement claims



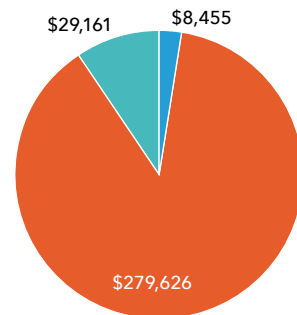
NUMBER OF ACCEPTED TREATMENT INJURIES IN DHBS IN 2016/17 FOR PULMONARY EMBOLISM



Note: This data is standardised by the number of DHB discharges because it includes only treatment injury claims resulting from treatment in DHB facilities (public hospitals). The name of the facility where the treatment causing the injury was delivered is provided to ACC by the registered health professional lodging the claim.

COSTS PAID IN 2016/17 FOR ALL NEW AND EXISTING TREATMENT INJURY CLAIMS FOR PULMONARY EMBOLISM IN ALL DHB FACILITIES

**TOTAL 2016/17
\$317,242**



KEY

- All other
- Entitlement
- Serious injury

Note: Serious injuries are a subset of entitlement claims, and this cost information includes only DHB facilities (public hospitals).

DHB DEEP VEIN THROMBOSIS (DVT)

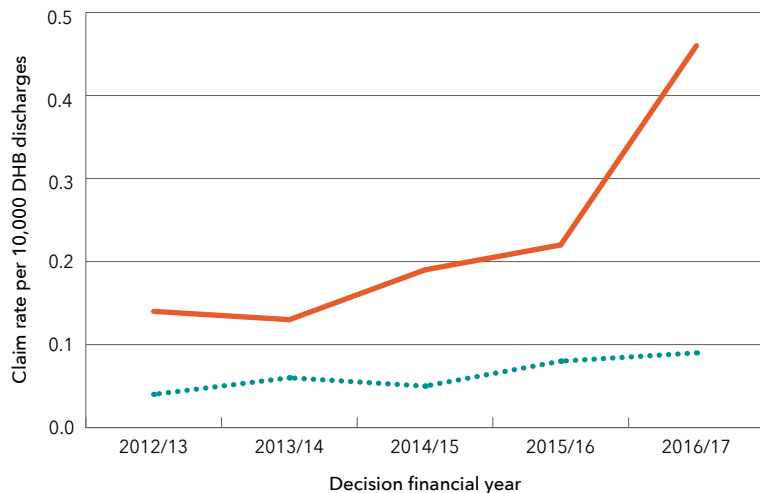
ACCEPTED TREATMENT INJURY CLAIMS FOR DEEP VEIN THROMBOSIS PER 10,000 DISCHARGES IN ALL DHB FACILITIES

KEY

- All claims
- Entitlement claims



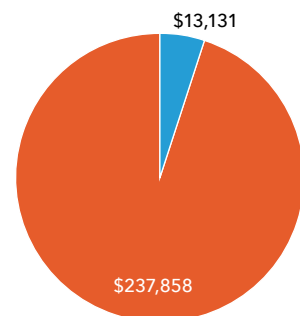
NUMBER OF ACCEPTED TREATMENT INJURIES IN DHBS IN 2016/17 FOR DEEP VEIN THROMBOSIS



Note: This data is standardised by the number of DHB discharges because it includes only treatment injury claims resulting from treatment in DHB facilities (public hospitals). The name of the facility where the treatment causing the injury was delivered is provided to ACC by the registered health professional lodging the claim.

COSTS PAID IN 2016/17 FOR ALL NEW AND EXISTING TREATMENT INJURY CLAIMS FOR DEEP VEIN THROMBOSIS (DVT) IN ALL DHB FACILITIES

TOTAL 2016/17
\$250,989



KEY

- All other
- Entitlement
- Serious injury

Note: Serious injuries are a subset of entitlement claims, and this cost information includes only DHB facilities (public hospitals).

PE and DVT are often reported as indicators of safer surgery. Due to the numbers of accepted treatment injury claims being small for these injury types, they are only reported at the national level.

SECTION .02
TREATMENT INJURY
DASHBOARD FOR
NEW ZEALAND

NZPSHA INFECTIONS OF ALL TYPES

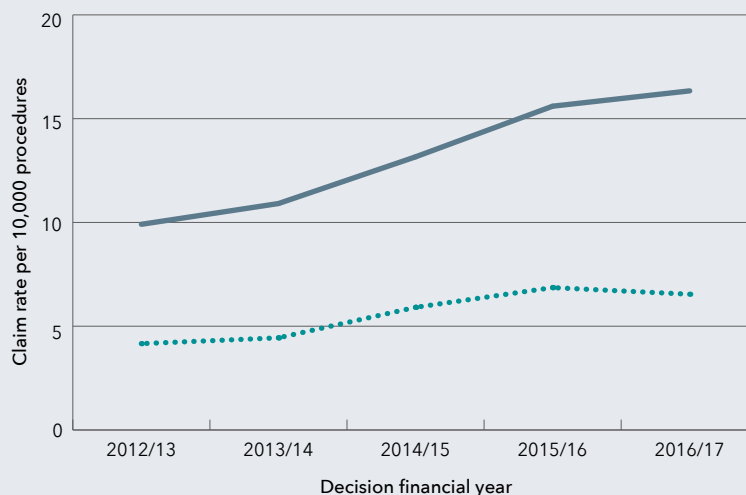
ACCEPTED TREATMENT INJURY CLAIMS FOR INFECTIONS OF ALL TYPES PER 10,000 PROCEDURES BY FINANCIAL YEAR

KEY

- All claims
- Entitlement claims



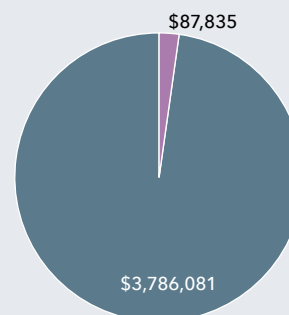
NUMBER OF ACCEPTED TREATMENT INJURIES IN NZPSHA HOSPITALS IN 2016/17 FOR INFECTIONS OF ALL TYPES



Note: This data is standardised by the number of NZPSHA procedures because it includes only treatment injury claims resulting from treatment in hospitals run by NZPSHA members. The name of the facility where the treatment causing the injury was delivered is provided to ACC by the registered health professional lodging the claim.

COSTS PAID IN 2016/17 FOR ALL NEW AND EXISTING TREATMENT INJURY CLAIMS INFECTIONS OF ALL TYPES IN NZPSHA HOSPITALS

TOTAL 2016/17
\$3,873,917



KEY

- Entitlement
- All other

**NZPSHA INFECTIONS
 FOLLOWING SURGERY**

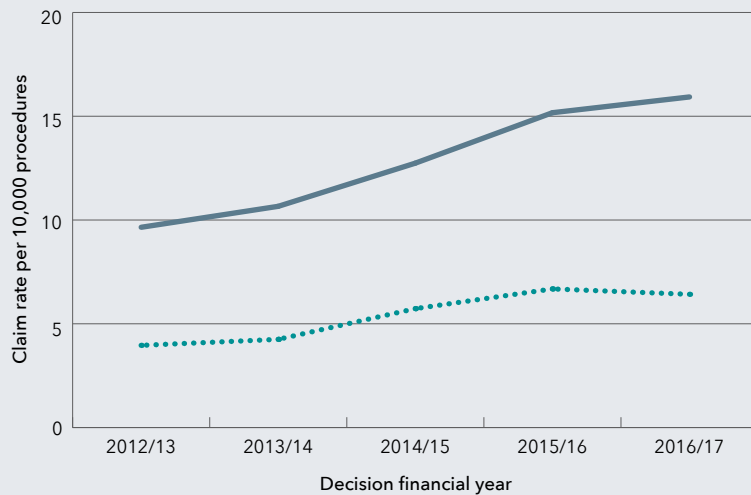
**ACCEPTED TREATMENT
 INJURY FOR INFECTIONS
 FOLLOWING SURGERY CLAIMS
 PER 10,000 PROCEDURES BY
 FINANCIAL YEAR**

KEY

- All claims
- Entitlement claims

273

**NUMBER OF ACCEPTED
 TREATMENT INJURIES IN
 NZPSHA HOSPITALS IN
 2016/17 FOR INFECTIONS
 FOLLOWING SURGERY**



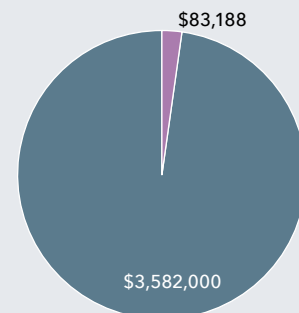
Note: This data is standardised by the number of NZPSHA procedures because it includes only treatment injury claims resulting from treatment in hospitals run by NZPSHA members. The name of the facility where the treatment causing the injury was delivered is provided to ACC by the registered health professional lodging the claim.

**COSTS PAID IN 2016/17
 FOR ALL NEW AND EXISTING
 TREATMENT INJURY CLAIMS
 INFECTIONS FOLLOWING
 SURGERY IN NZPSHA
 HOSPITALS**

**TOTAL 2016/17
 \$3,665,189**

KEY

- Entitlement
- All other



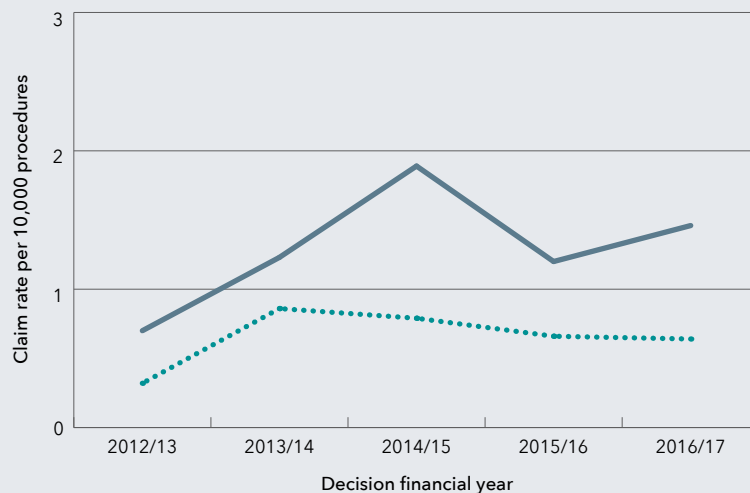
**NZPSHA MEDICATION
 ADVERSE REACTIONS**

**ACCEPTED TREATMENT
 INJURY FOR MEDICATION
 ADVERSE EVENTS CLAIMS
 PER 10,000 PROCEDURES BY
 FINANCIAL YEAR**

KEY
 — All claims
 ••• Entitlement claims

25

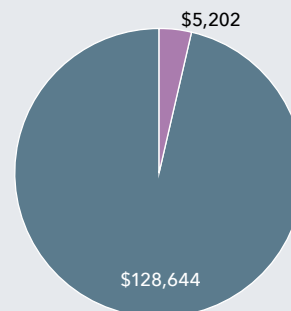
**NUMBER OF ACCEPTED
 TREATMENT INJURIES
 IN NZPSHA HOSPITALS IN
 2016/17 FOR MEDICATION
 ADVERSE REACTIONS**



Note: This data is standardised by the number of NZPSHA procedures because it includes only treatment injury claims resulting from treatment in hospitals run by NZPSHA members. The name of the facility where the treatment causing the injury was delivered is provided to ACC by the registered health professional lodging the claim.

**COSTS PAID IN 2016/17
 FOR ALL NEW AND EXISTING
 TREATMENT INJURY CLAIMS
 MEDICATION ADVERSE EVENTS
 IN NZPSHA HOSPITALS**

**TOTAL 2016/17
 \$133,846**



KEY
 ● Entitlement ● All other

SECTION .02
 TREATMENT INJURY
 DASHBOARD FOR
 NEW ZEALAND

NZPSHA DEEP VEIN THROMBOSIS (DVT)

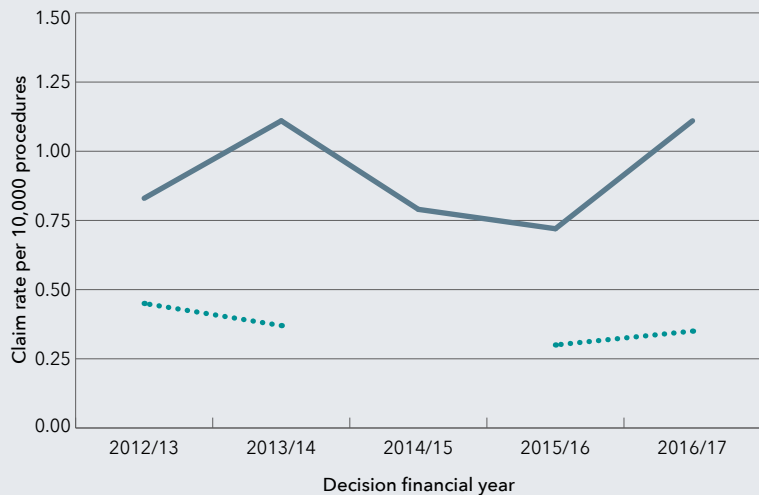
ACCEPTED TREATMENT INJURY
 FOR DEEP VEIN THROMBOSIS
 CLAIMS PER 10,000
 PROCEDURES BY FINANCIAL
 YEAR

KEY

- All claims
- Entitlement claims



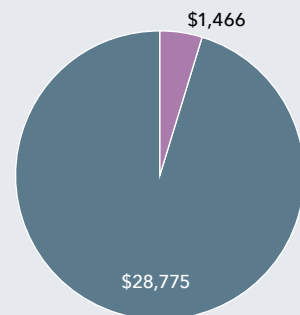
NUMBER OF ACCEPTED
 TREATMENT INJURIES IN
 NZPSHA HOSPITALS
 IN 2016/17 FOR
 DEEP VEIN THROMBOSIS



Note: This data is standardised by the number of NZPSHA procedures because it includes only treatment injury claims resulting from treatment in hospitals run by NZPSHA members. The name of the facility where the treatment causing the injury was delivered is provided to ACC by the registered health professional lodging the claim.

COSTS PAID IN 2016/17
 FOR ALL NEW AND EXISTING
 TREATMENT INJURY CLAIMS
 DEEP VEIN THROMBOSIS IN
 NZPSHA HOSPITALS

TOTAL 2016/17
\$30,241



KEY

- Entitlement
- Serious injury

SECTION .02
TREATMENT INJURY
DASHBOARD FOR
NEW ZEALAND

NZPSHA PULMONARY EMBOLISM

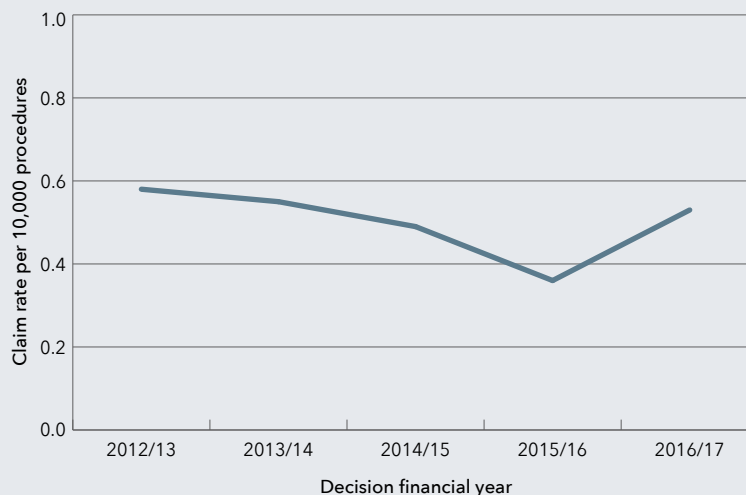
ACCEPTED TREATMENT INJURY FOR PULMONARY EMBOLISM CLAIMS PER 10,000 PROCEDURES BY FINANCIAL YEAR

KEY

— All claims



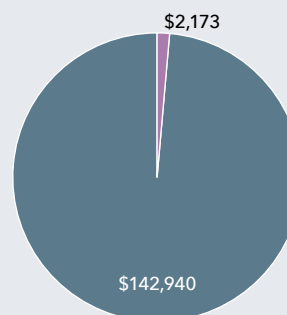
NUMBER OF ACCEPTED TREATMENT INJURIES IN NZPSHA HOSPITALS IN 2016/17 FOR PULMONARY EMBOLISM



Note: This data is standardised by the number of NZPSHA procedures because it includes only treatment injury claims resulting from treatment in hospitals run by NZPSHA members. The name of the facility where the treatment causing the injury was delivered is provided to ACC by the registered health professional lodging the claim.

COSTS PAID IN 2016/17 FOR ALL NEW AND EXISTING TREATMENT INJURY CLAIMS PULMONARY EMBOLISM IN NZPSHA HOSPITALS

TOTAL 2016/17
\$145,113



KEY

● Entitlement ● All other

ALL ACCEPTED CLAIMS FOR SELECTED INJURY TYPES

NEONATAL ENCEPHALOPATHY (NE)

NE includes hypoxic birth injuries and hypoxic ischemic encephalopathy (HIE). The number of NE cases is low, but the impact to the individual and their family is extremely high and lasts throughout the individual's lifetime.

Some cases of NE are not caused by treatment. ACC may only accept a treatment injury claim where NE is caused by treatment by a registered health professional. Each case of NE generates substantial lifetime costs for (often advanced) nursing care. The predicted nominal lifetime cost for an NE serious injury claim was estimated to be between \$36 million and \$56 million as of 31 December 2017.

ACC has accepted an average of 11 claims per annum for NE over the period from 2012/13 to 2016/17 in all settings.

TREATMENT INJURY CLAIMS RELATED TO NEONATAL ENCEPHALOPATHY (NE) FOR ALL FACILITIES BY FINANCIAL YEAR					
	2012/13	2013/14	2014/15	2015/16	2016/17
Accepted claims	9	10	16	11	17
Active claims	51	65	67	78	96
Cost of new and existing active claims	\$6,047,545	\$7,097,562	\$7,416,554	\$9,630,119	\$12,046,999
Cost per active claim	\$118,579	\$109,193	\$110,695	\$123,463	\$125,490

The Perinatal and Maternal Mortality Review Committee (PMMRC) undertakes comprehensive surveillance of NE. It recorded 423 cases of NE of varying severity from 2010 to 2015 - from no harm through to serious injury and death. This amounted to approximately 70 cases per year. These cases are distributed across DHBs.

The PMMRC's NE working group found that death and severity of morbidity was **potentially avoidable in 55% of cases**. For this reason, ACC has convened a taskforce representing stakeholders and professional bodies in maternity care (the NE Taskforce). The NE Taskforce will identify, develop, and implement injury prevention actions to reduce the incidence and severity of preventable NE, based on national and international best practice interventions.

INJURIES TO BABIES AT BIRTH ACCOUNT FOR BETWEEN 35% AND 50% OF ALL SERIOUS INJURY CLAIMS FOR TREATMENT INJURY. ON AVERAGE, ELEVEN NE CLAIMS ARE ACCEPTED EACH YEAR.

SURGICAL MESH

Surgical mesh is a medical device that has been used for many years. The most common use is for abdominal surgical wounds such as hernia repairs. More recently mesh has also been used for plastic surgery work, as well as stress urinary incontinence and pelvic organ prolapse.

In the five years 2012/13 to 2016/17, ACC accepted 483 claims for injuries caused by surgical mesh. Two thirds of those are for mesh implanted in the pelvis for gynaecological or urological reasons. The majority of the other claims are for injuries due to mesh used in repair of abdominal wall defects.

Claims accepted for mesh-related injuries include infections with or without erosion, and damage to other organs. Infections from mesh implants make up 20% of injuries, while mesh erosion or migration into nearby tissues together account for 55% of injuries accepted.

Almost 100% of mesh claims are entitlement claims.

SURGICAL MESH RELATED CLAIMS					
	2012/13	2013/14	2014/15	2015/16	2016/17
Decided claims	68	84	83	96	152
Accepted claims	56	62	69	79	110
Active claims	107	122	155	177	235
Cost of new and existing accepted claims	\$720,020	\$1,849,451	\$2,301,234	\$2,364,934	\$2,859,657
Cost per active claim	\$6,729	\$15,159	\$14,847	\$13,361	\$12,169

* The figures do not include future costs

EQUIPMENT FAILURES

These are claims where injury is caused by the failure of equipment, devices, or tools used as part of the treatment process and includes equipment breakages and mechanical failures.

This may include the failure of an implant or prosthesis, but not failure of the implant or prosthesis due to fair wear and tear.

The majority of accepted claims arise from orthopaedic treatment, with nearly half of accepted claims due to a prosthetic failure.

TREATMENT INJURY CLAIMS RELATED TO EQUIPMENT FAILURE FOR ALL FACILITIES BY FINANCIAL YEAR					
	2012/13	2013/14	2014/15	2015/16	2016/17
Accepted claims	148	115	107	104	91
Active claims	172	209	235	258	231
Cost of new and existing accepted claims	\$1,837,436	\$2,415,189	\$2,547,544	\$2,530,907	\$3,519,500
Cost per active claim	\$10,683	\$11,556	\$10,841	\$9,810	\$15,236

*The figures do not include future costs.

TREATMENT OMISSION

For a small proportion of accepted claims the treatment event that caused injury involves a failure to provide treatment or a failure to provide treatment in a timely manner. Collectively these are termed treatment omission as the failure relates to whether at the time of investigation, diagnosis or treatment, the practitioner should reasonably have reached a different decision or adopted a different treatment pathway.

Omission encompasses failure to diagnose, to follow-up, to provide treatment, to refer, to monitor, incorrect radiation, incorrect site and premature discharge.

To determine if the injury has been caused by an omission requires consideration of the patient's presentation and the clinical knowledge at the time, and the usual care in similar circumstances. As part of deciding these claims, ACC seeks expert reports from registered health practitioners in the same field of practice. If an omission is identified, ACC must be satisfied that this has caused a personal injury.

TREATMENT INJURY CLAIMS RELATED TO TREATMENT OMISSION FOR ALL FACILITIES BY FINANCIAL YEAR					
	2012/13	2013/14	2014/15	2015/16	2016/17
Accepted claims	115	92	114	154	141
Active claims	342	385	447	516	570
Cost of new and existing accepted claims	\$12,014,796	\$15,083,890	\$18,033,911	\$22,383,312	\$25,908,790
Cost per active claim	\$35,131	\$39,179	\$40,344	\$43,379	\$45,454

*The figures do not include future costs.

SECTION

.03 +

TREATMENT INJURY
DASHBOARDS



TREATMENT INJURY DASHBOARDS

WHAT EACH TREATMENT INJURY DASHBOARD CONTAINS

The information provided in each dashboard includes only treatment injury claims resulting from treatment in the facilities (hospitals). The name of the facility where the treatment causing the injury was delivered is provided to ACC by the registered health professional lodging the claim.

Background information has been provided for inclusion by each DHB and the NZPSHA. This provides context to the information about the numbers and costs of accepted treatment injury claims, including:

- the population served, and an outline of key features of the population
- the facilities provided.

The treatment injury information provided includes:

- the rate of accepted claims per 10,000 discharges from the DHB over the last five years¹, presented in a chart that also includes the rate for all DHBs
- the rate of accepted claims per 10,000 procedures from the NZPSHA members over the last five years¹
- the total costs paid for all new and existing accepted treatment injury claims that arose from treatment within the relevant facility during 2016/17. This is also presented in a chart to identify costs paid for serious injury, entitlement, and all other claims²
- the proportion of treatment injury claims that were accepted and declined which arose from treatment within the relevant facility during 2016/17³
- the numbers of accepted treatment injury claims and rates per 10,000 discharges for six types of injury⁴:
 - Infections of all types
 - Infections following surgery
 - Line infections
 - Pressure injuries
 - Medication adverse reactions
 - Medication errors.

1 Data is standardised by the number of DHB discharges because it includes only treatment injury claims resulting from treatment in DHB facilities (public hospitals). For NZPSHA members, it is standardised by the number of procedures. The name of the facility where the treatment causing the injury was delivered is provided to ACC by the registered health professional lodging the claim. Discharge numbers are provided by the Ministry of Health from the National Minimum Data Set.

2 Serious Injury claims are an internal classification that ACC uses for clients who will have a lifelong relationship with ACC. Entitlement claims have on-going costs over and above the initial medical treatment. Both types of claim indicates severity of impact on the person injured.

3 Each declined claim may result in mismatched expectations.

4 These six treatment injury types are those with significant impact on individuals and their families, injuries which are identified internationally as amenable to prevention strategies or injuries that may be indicators of safer care. Over time ACC will increase the number of categories monitored and use this information to support more prevention approaches.

INTERPRETING THE TREATMENT INJURY DASHBOARDS

Comparison across time within a DHB or NZPSHA member

The main purpose of tracking the number of treatment injuries over time is to encourage improvement within each hospital. Each accepted claim represents a person who was inadvertently harmed during the course of treatment. The treatment injury frequency count provides one indication of physical injury experienced by patients due to treatment.

Direct comparisons between hospitals are not meaningful due to different case mix and context.

Each hospital is different, with a distinctive case-mix due to the demographics and health status of their catchment populations. Furthermore, public hospitals provide different types of surgery, treatments, and services. As a result, direct comparisons across hospitals are not possible, or of assistance to the aim of improving patient and treatment safety.

As a matter of practice, ACC has a policy not to disclose data below a certain value to maintain privacy. Accordingly, some entries in the dashboards only indicate that the relevant number is less than four (denoted by "<4") and in those instances where there is no claim this is denoted by "-".

AUCKLAND DHB

523,500
people

564

TOTAL ACCEPTED
TREATMENT INJURY CLAIMS
IN 2016/17 FOR THIS DHB

AUCKLAND DHB HAS THREE
MAJOR FACILITIES:



AUCKLAND CITY HOSPITAL
STARSHIP CHILDREN'S
HOSPITAL
GREENLANE CLINICAL
CENTRE

AUCKLAND DHB



Auckland DHB is based in Auckland City.

It has a population of 523,500 people.

- Auckland's population tends to be younger than the national average.
- Auckland has a lower proportion of Māori and a higher proportion of Pacific people living there in comparison with the national average.
- Auckland's deprivation levels are similar to the national average.

Auckland DHB employs approximately 10,000 health and medical staff, which equates to a little over 8,000 full-time equivalent positions.

Auckland DHB has three major facilities:

- Auckland City Hospital
- Starship Children's Hospital
- Greenlane Clinical Centre.

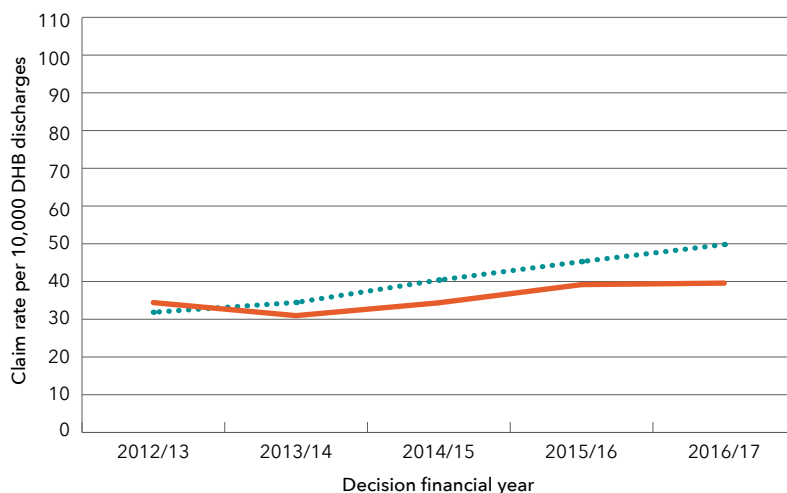
Auckland City Hospital is New Zealand's largest public hospital as well as the largest clinical research facility.

Starship Children's Hospital is a dedicated paediatric health care service and major teaching centre. It provides family centred care to children and young people throughout New Zealand and the South Pacific.

RATE PER 10,000 DISCHARGES FOR ALL ACCEPTED TREATMENT INJURY CLAIMS - BY FINANCIAL YEAR

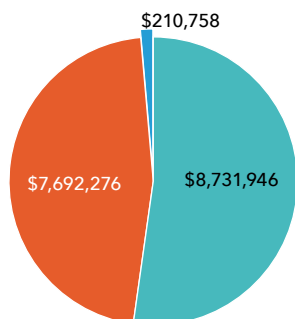
KEY

- Auckland
- All DHBs



COSTS PAID IN 2016/17 FOR ALL NEW AND EXISTING ACCEPTED TREATMENT INJURY CLAIMS

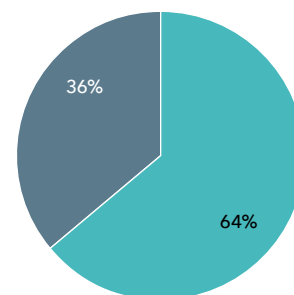
**TOTAL 2016/17
\$16,634,980**



KEY

- Serious injury
- Entitlement
- All other

ACCEPTED AND DECLINED TREATMENT INJURY CLAIMS FOR 2016/17 DECISION FINANCIAL YEAR



KEY

- Accepted
- Declined

Each declined claim may result in mismatched expectations. This underpins the need to understand how and why treatment injury claims are accepted or declined.

NUMBERS AND RATES OF ACCEPTED TREATMENT INJURY CLAIMS PER 10,000 DISCHARGES BY DECISION FINANCIAL YEAR						
		2012/13	2013/14	2014/15	2015/16	2016/17
Infections of all types	Rate	8.10	5.45	7.63	7.88	6.81
	Number	106	73	103	110	97
Infections following surgery	Rate	6.27	4.10	5.63	6.52	5.68
	Number	82	55	76	91	81
Line infections	Rate	0.84	0.90	0.96	0.86	0.63
	Number	11	12	13	12	9
Pressure injuries	Rate	0.38	0.82	1.93	1.15	2.39
	Number	5	11	26	16	34
Medication errors	Rate	-	-	-	-	-
	Number	<4	<4	<4	<4	<4
Medication adverse reactions	Rate	2.68	2.98	3.18	3.87	3.09
	Number	35	40	43	54	44

BAY OF PLENTY DHB

231,900
people

205

TOTAL ACCEPTED
TREATMENT INJURY CLAIMS
IN 2016/17 FOR THIS DHB

BAY OF PLENTY DHB HAS
TWO MAJOR FACILITIES:



TAURANGA HOSPITAL
WHAKATĀNE HOSPITAL

BAY OF PLENTY DHB



Bay of Plenty DHB is based in Tauranga.

It has a population of 231,900 people.

- Bay of Plenty's population tends to have a greater proportion of people aged 50 years and above than the national average.
- Bay of Plenty has a higher proportion of Māori and almost no Pacific people living there, in comparison with the national average.
- Bay of Plenty's deprivation levels are higher than the national average.

Bay of Plenty DHB employs approximately 3,180 health and medical staff, which equates to a little over 2,562 full-time equivalent positions.

Bay of Plenty DHB has two major facilities:

- Tauranga Hospital
- Whakatāne Hospital.

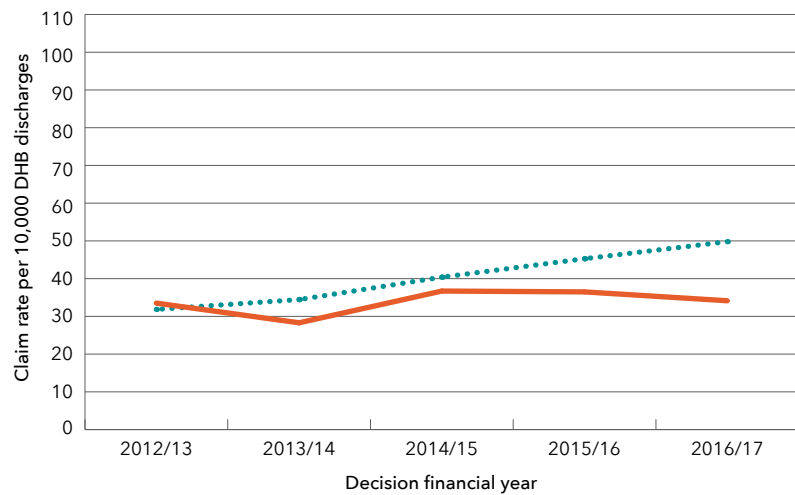
Tauranga Hospital is a secondary hospital that has experienced significant expansion to keep pace with its rapidly growing population.

Whakatāne Hospital is a secondary hospital that serves a rural and coastal population. It is also home to the Project Hope Cancer Centre, which represents a community/DHB collaboration.

RATE PER 10,000 DISCHARGES FOR ALL ACCEPTED TREATMENT INJURY CLAIMS - BY FINANCIAL YEAR

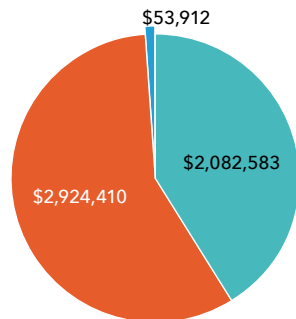
KEY

- Bay of Plenty
- All DHBs



COSTS PAID IN 2016/17 FOR ALL NEW AND EXISTING ACCEPTED TREATMENT INJURY CLAIMS

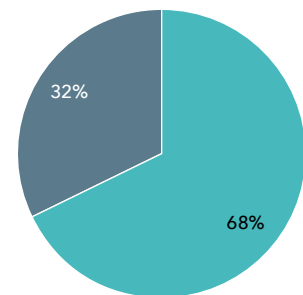
TOTAL 2016/17 \$5,060,904



KEY

- Serious injury
- Entitlement
- All other

ACCEPTED AND DECLINED TREATMENT INJURY CLAIMS FOR 2016/17 DECISION FINANCIAL YEAR



KEY

- Accepted
- Declined

Each declined claim may result in mismatched expectations. This underpins the need to understand how and why treatment injury claims are accepted or declined.

NUMBERS AND RATES OF ACCEPTED TREATMENT INJURY CLAIMS PER 10,000 DISCHARGES BY DECISION FINANCIAL YEAR						
		2012/13	2013/14	2014/15	2015/16	2016/17
Infections of all types	Rate	5.75	4.94	6.66	5.06	5.66
	Number	29	26	37	29	34
Infections following surgery	Rate	4.36	4.18	4.86	3.67	4.66
	Number	22	22	27	21	28
Line infections	Rate	1.39	-	1.26	0.70	-
	Number	7	<4	7	4	<4
Pressure injuries	Rate	2.97	2.85	1.98	3.84	2.50
	Number	15	15	11	22	15
Medication errors	Rate	-	-	-	-	-
	Number	-	-	-	<4	-
Medication adverse reactions	Rate	2.78	2.28	3.24	3.32	3.00
	Number	14	12	18	19	18

CANTERBURY DHB

551,400
people

440

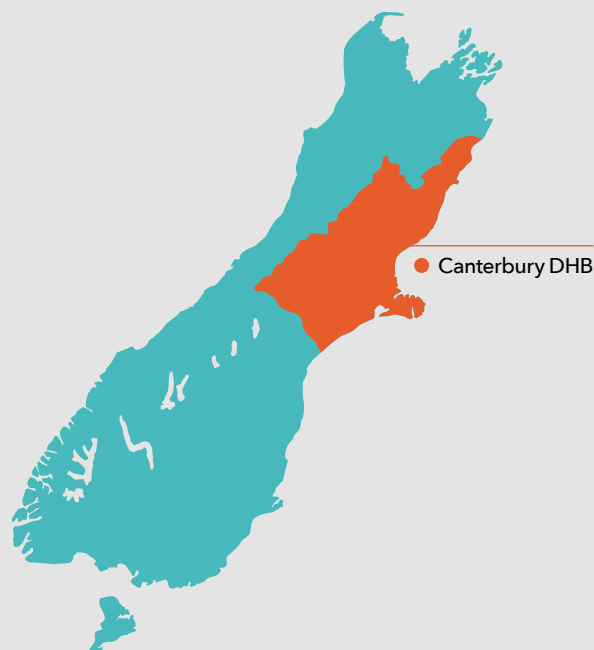
TOTAL ACCEPTED
TREATMENT INJURY CLAIMS
IN 2016/17 FOR THIS DHB

CANTERBURY DHB HAS
TEN MAJOR FACILITIES:



- ASHBURTON HOSPITAL
- BURWOOD HOSPITAL
- CHRISTCHURCH HOSPITAL
- CHRISTCHURCH
WOMEN'S HOSPITAL
- HILLMORTON HOSPITAL
- KAIKŌURA HOSPITAL
- RANGIORA HEALTH HUB
- PRINCESS MARGARET
HOSPITAL
- AKAROA HOSPITAL
- CHATHAM ISLANDS
HEALTH CENTRE

CANTERBURY DHB



Canterbury DHB is based in Christchurch and funds and provides health services to people in Canterbury and the Chatham Islands.

Canterbury has a population of 551,400 people which is 11.5% of New Zealand's population.

- Canterbury's population tends to be similar in age structure to the national average, with slightly more people aged 40 and over.
- Canterbury has a lower proportion of Māori and Pacific people living there, in comparison with the national average.
- Canterbury has New Zealand's largest elderly population.
- Canterbury's deprivation levels are lower than the national average.

Canterbury DHB employs approximately 9,590 staff, which equates to a little over 7,318 full-time equivalent positions.

Canterbury DHB has a number of facilities:

- Ashburton Hospital
- Burwood Hospital
- Christchurch Hospital
- Christchurch Women's Hospital
- Hillmorton Hospital
- Kaikōura Hospital
- Akaroa Hospital
- Rangiora Health Hub
- Princess Margaret Hospital
- Chatham Islands Health Centre.

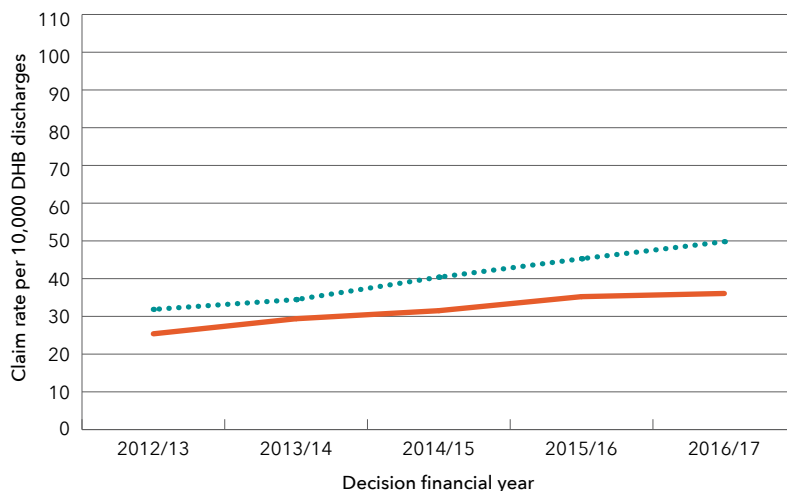
Burwood Hospital is a \$215 million hospital that opened in 2016 that will focus on facilities for older people, while continuing its orthopaedic services, spinal injury treatment and rehabilitation, and brain injury treatment.

The new Acute Services Building at Christchurch Hospital is currently under construction, due for completion in 2018, as is the new Christchurch Outpatients Centre, located adjacent to the hospital.

RATE PER 10,000 DISCHARGES FOR ALL ACCEPTED TREATMENT INJURY CLAIMS - BY FINANCIAL YEAR

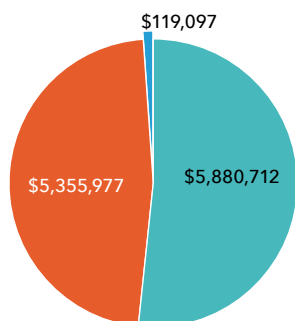
KEY

- Canterbury
- All DHBs



COSTS PAID IN 2016/17 FOR ALL NEW AND EXISTING ACCEPTED TREATMENT INJURY CLAIMS

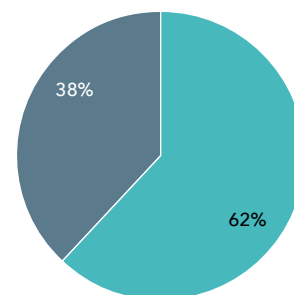
TOTAL 2016/17 \$11,355,786



KEY

- Serious injury
- Entitlement
- All other

ACCEPTED AND DECLINED TREATMENT INJURY CLAIMS FOR 2016/17 DECISION FINANCIAL YEAR



KEY

- Accepted
- Declined

Each declined claim may result in mismatched expectations. This underpins the need to understand how and why treatment injury claims are accepted or declined.

NUMBERS AND RATES OF ACCEPTED TREATMENT INJURY CLAIMS PER 10,000 DISCHARGES BY DECISION FINANCIAL YEAR						
		2012/13	2013/14	2014/15	2015/16	2016/17
Infections of all types	Rate	4.75	5.55	4.27	4.55	8.61
	Number	53	64	50	54	105
Infections following surgery	Rate	3.59	5.03	3.59	3.46	7.79
	Number	40	58	42	41	95
Line infections	Rate	0.72	0.43	-	0.59	0.57
	Number	8	5	<4	7	7
Pressure injuries	Rate	2.60	2.25	2.48	4.21	4.18
	Number	29	26	29	50	51
Medication errors	Rate	-	-	-	-	-
	Number	-	<4	<4	<4	-
Medication adverse reactions	Rate	1.08	2.08	2.73	3.29	3.11
	Number	12	24	32	39	38

CAPITAL & COAST DHB

312,700
people

574

TOTAL ACCEPTED
TREATMENT INJURY CLAIMS
IN 2016/17 FOR THIS DHB

CAPITAL & COAST DHB HAS
FOUR MAJOR FACILITIES:



WELLINGTON
REGIONAL HOSPITAL
KENEPURU
COMMUNITY HOSPITAL
KĀPITI HEALTH CENTRE
RATONGA-RUA-O-PORIRUA

CAPITAL & COAST DHB



Capital & Coast DHB is based in Wellington.

It has a population of 312,700 people.

- Capital & Coast's population tends to be younger than the national average.
- Capital & Coast has a lower proportion of Māori and a slightly higher proportion of Pacific people living there, in comparison with the national average.
- Capital & Coast's deprivation levels are lower than the national average.

Capital & Coast DHB employs approximately 5,500 health and medical staff, which equates to a little over 4,340 full-time equivalent positions.

Capital & Coast DHB has four major facilities:

- Wellington Regional Hospital
- Kenepuru Community Hospital in Porirua
- Kāpiti Health Centre in Paraparaumu
- Ratonga-Rua-O-Porirua campus in Porirua.

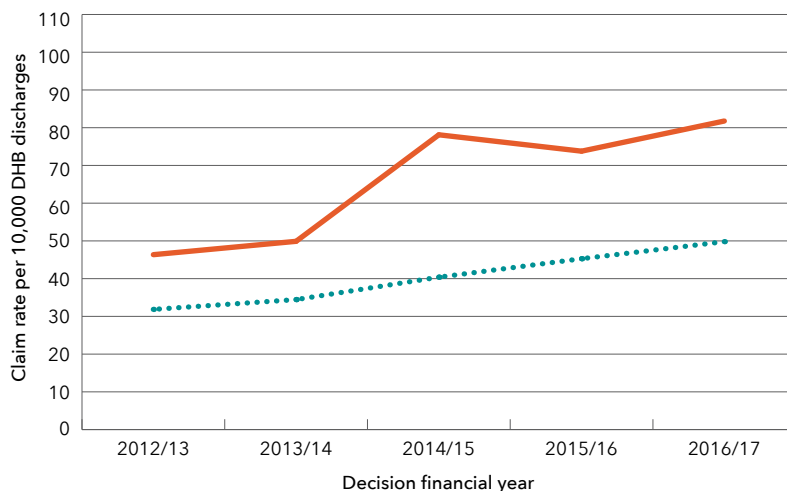
Wellington Regional Hospital is one of five major tertiary hospitals in New Zealand (for Otago University's Wellington School of Medicine and post-graduate training for clinical professionals). It is also the region's main emergency and only trauma service (helipad).

Kenepuru Community Hospital is a secondary hospital, which also includes an adult and adolescent psychiatric facility.

RATE PER 10,000 DISCHARGES FOR ALL ACCEPTED TREATMENT INJURY CLAIMS - BY FINANCIAL YEAR

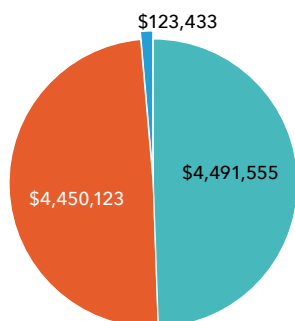
KEY

- Capital & Coast
- All DHBs



COSTS PAID IN 2016/17 FOR ALL NEW AND EXISTING ACCEPTED TREATMENT INJURY CLAIMS

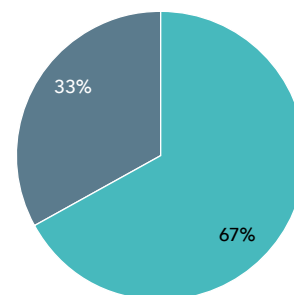
TOTAL 2016/17 \$9,065,111



KEY

- Serious injury
- Entitlement
- All other

ACCEPTED AND DECLINED TREATMENT INJURY CLAIMS FOR 2016/17 DECISION FINANCIAL YEAR



KEY

- Accepted
- Declined

Each declined claim may result in mismatched expectations. This underpins the need to understand how and why treatment injury claims are accepted or declined.

NUMBERS AND RATES OF ACCEPTED TREATMENT INJURY CLAIMS PER 10,000 DISCHARGES BY DECISION FINANCIAL YEAR						
		2012/13	2013/14	2014/15	2015/16	2016/17
Infections of all types	Rate	11.14	11.93	17.22	19.04	22.65
	Number	75	83	121	137	159
Infections following surgery	Rate	9.80	9.78	14.51	16.53	19.66
	Number	66	68	102	119	138
Line infections	Rate	0.74	1.44	1.71	1.53	1.57
	Number	5	10	12	11	11
Pressure injuries	Rate	1.04	3.45	3.84	5.00	5.41
	Number	7	24	27	36	38
Medication errors	Rate	-	-	0.85	-	-
	Number	<4	<4	6	<4	<4
Medication adverse reactions	Rate	3.71	2.88	4.84	5.97	5.27
	Number	25	20	34	43	37

COUNTIES MANUKAU
DHB

546,600
people

533

TOTAL ACCEPTED
TREATMENT INJURY CLAIMS
IN 2016/17 FOR THIS DHB

COUNTIES MANUKAU DHB
HAS THREE
MAJOR FACILITIES:



MIDDLEMORE HOSPITAL
FRANKLIN MEMORIAL
HOSPITAL
PUKEKOHE HOSPITAL

COUNTIES MANUKAU DHB



Counties Manukau DHB is based in Manukau.

It has a population of 546,600 people.

- The population is ethnically diverse. Approximately 16% of the population identifies as Māori, 21% Pacific, 24% Asian, and 38% NZ European and other ethnicities.
- The population is both youthful and aging. Whilst 23% of the population is aged 14 years or younger (the largest child population of any DHB), at the same time, the population aged 65 years and over is increasing (estimated to increase on average 5% each year).
- At the time of the 2013 Census, 36% of the population lived in areas classified as being the most socio-economically deprived in New Zealand (that is, Deprivation Index 9 and 10), including 45% of children 14 years and under.
- This population has very high and rising rates of factors, such as diabetes and obesity, which increase the risk of infection.

Counties Manukau DHB employs approximately 7,400 health and medical staff, which equates to a little over 5,494 full-time equivalent positions.

Counties Manukau DHB has three major facilities:

- Middlemore Hospital
- Pukekohe Hospital
- Franklin Memorial Hospital.

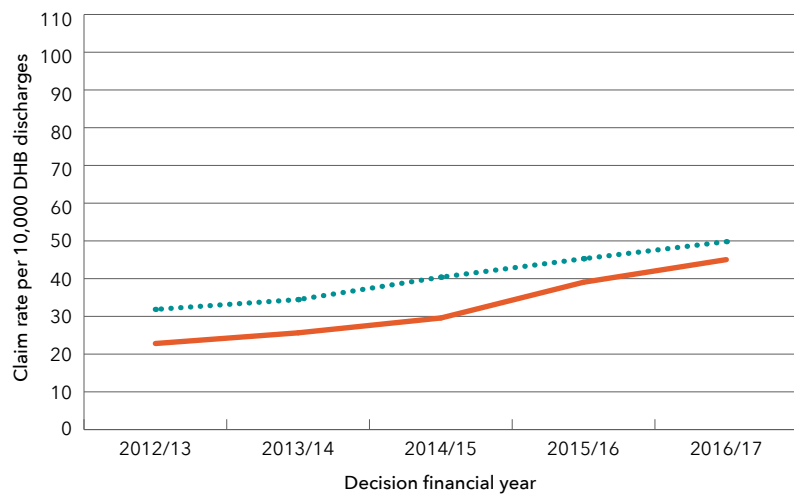
Middlemore Hospital is a secondary hospital and one of the largest tertiary teaching hospitals in New Zealand.

The DHB services include the national burns unit and supra-regional spinal injury services. It also provides surgery for complex orthopaedic and plastic/reconstructive surgical cases referred from other DHBs.

RATE PER 10,000 DISCHARGES FOR ALL ACCEPTED TREATMENT INJURY CLAIMS - BY FINANCIAL YEAR

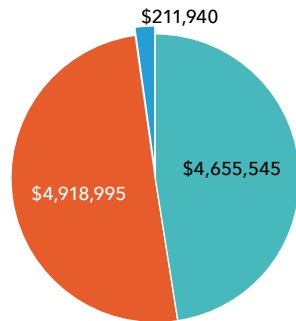
KEY

- Counties Manukau
- All DHBs



COSTS PAID IN 2016/17 FOR ALL NEW AND EXISTING ACCEPTED TREATMENT INJURY CLAIMS

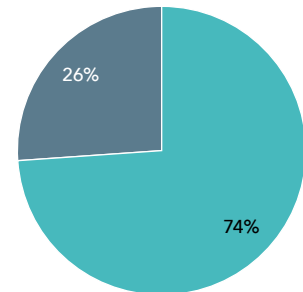
TOTAL 2016/17 \$9,786,481



KEY

- Serious injury
- Entitlement
- All other

ACCEPTED AND DECLINED TREATMENT INJURY CLAIMS FOR 2016/17 DECISION FINANCIAL YEAR



KEY

- Accepted
- Declined

Each declined claim may result in mismatched expectations. This underpins the need to understand how and why treatment injury claims are accepted or declined.

NUMBERS AND RATES OF ACCEPTED TREATMENT INJURY CLAIMS PER 10,000 DISCHARGES BY DECISION FINANCIAL YEAR						
		2012/13	2013/14	2014/15	2015/16	2016/17
Infections of all types	Rate	6.42	8.16	8.74	13.39	11.49
	Number	78	99	107	158	136
Infections following surgery	Rate	5.02	6.84	6.94	11.61	10.14
	Number	61	83	85	137	120
Line infections	Rate	0.82	0.99	1.55	1.52	0.76
	Number	10	12	19	18	9
Pressure injuries	Rate	1.48	1.15	2.61	2.97	3.46
	Number	18	14	32	35	41
Medication errors	Rate	-	-	-	-	0.34
	Number	-	<4	-	<4	4
Medication adverse reactions	Rate	1.15	1.81	1.31	1.95	2.03
	Number	14	22	16	23	24

HAWKE'S BAY DHB

163,900
people

128

TOTAL ACCEPTED
TREATMENT INJURY CLAIMS
IN 2016/17 FOR THIS DHB

HAWKE'S BAY DHB HAS
FOUR MAJOR FACILITIES:



HAWKE'S BAY
FALLEN SOLDIERS'
MEMORIAL HOSPITAL

WAIROA HOSPITAL
AND HEALTH CENTRE

NAPIER HEALTH CENTRE

CENTRAL HAWKE'S BAY
HEALTH CENTRE

HAWKE'S BAY DHB



Hawke's Bay DHB is based in Hastings.

In 2017, the Hawke's Bay district population will grow slightly to just under 163,900.

Most of the population lives in Napier or Hastings, two cities located within 20 kilometres of each other that, together, account for more than 80% of the total numbers.

About 10% of the population lives in or close to Wairoa or Waipukurau, which are relatively concentrated rural settlements, and the remaining 10% live in rural and remote locations.

- Hawke's Bay's population tends to be older than the national average (18% versus 15%).
- Hawke's Bay has a higher proportion of Māori (26% versus 16%) and a lower proportion of Pacific people living there, in comparison with the national average.
- Hawke's Bay's deprivation levels are higher than the national average (28% versus 20%).

Hawke's Bay DHB employs just over 2,900 health and medical staff.

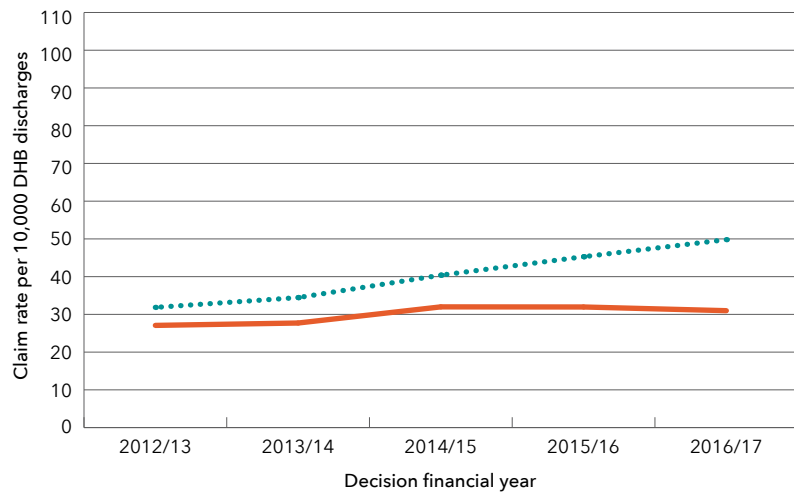
Hawke's Bay DHB has four major facilities:

- Hawke's Bay Fallen Soldiers' Memorial Hospital
- Wairoa Hospital and Health Centre
- Napier Health Centre
- Central Hawke's Bay Health Centre.

RATE PER 10,000 DISCHARGES FOR ALL ACCEPTED TREATMENT INJURY CLAIMS - BY FINANCIAL YEAR

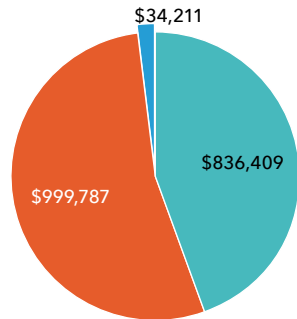
KEY

- Hawke's Bay
- All DHBs



COSTS PAID IN 2016/17 FOR ALL NEW AND EXISTING ACCEPTED TREATMENT INJURY CLAIMS

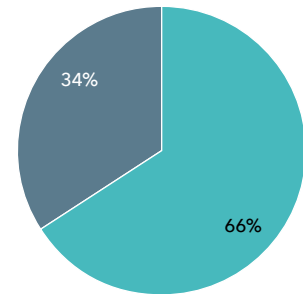
TOTAL 2016/17 \$1,870,407



KEY

- Serious injury
- Entitlement
- All other

ACCEPTED AND DECLINED TREATMENT INJURY CLAIMS FOR 2016/17 DECISION FINANCIAL YEAR



KEY

- Accepted
- Declined

Each declined claim may result in mismatched expectations. This underpins the need to understand how and why treatment injury claims are accepted or declined.

NUMBERS AND RATES OF ACCEPTED TREATMENT INJURY CLAIMS PER 10,000 DISCHARGES BY DECISION FINANCIAL YEAR						
		2012/13	2013/14	2014/15	2015/16	2016/17
Infections of all types	Rate	6.84	7.80	6.87	6.49	8.23
	Number	26	29	26	26	34
Infections following surgery	Rate	5.78	6.46	5.29	4.74	7.50
	Number	22	24	20	19	31
Line infections	Rate	-	-	-	1.00	-
	Number	<4	<4	<4	4	-
Pressure injuries	Rate	1.31	-	1.59	2.50	1.94
	Number	5	4	6	10	8
Medication errors	Rate	-	-	-	-	-
	Number	<4	-	<4	-	<4
Medication adverse reactions	Rate	1.58	1.35	4.23	2.00	1.94
	Number	6	5	16	8	8

HUTT VALLEY DHB

147,900
people

322

TOTAL ACCEPTED
TREATMENT INJURY CLAIMS
IN 2016/17 FOR THIS DHB

HUTT VALLEY DHB HAS
ONE MAJOR FACILITY:



HUTT HOSPITAL

HUTT VALLEY DHB



Hutt Valley DHB is based in Lower Hutt.

It has a population of 147,900 people.

- The age structure of Hutt Valley's population tends to be in line with the national average.
- Hutt Valley has a similar proportion of Māori and Pacific people living there, in comparison with the national average.
- Hutt Valley's deprivation levels are equal to the national average.

Hutt Valley DHB employs approximately 2,400 health and medical staff, which equates to 1,631 full-time equivalent positions.

Hutt Valley DHB has one major facility:

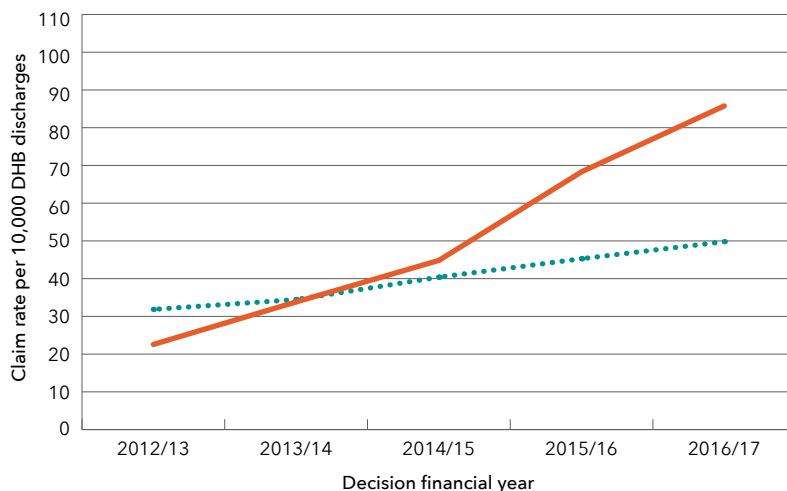
- Hutt Hospital.

Hutt Hospital is one of New Zealand's four regional burns and plastics surgery providers. It also provides breast screening services for the greater Wellington region.

RATE PER 10,000 DISCHARGES FOR ALL ACCEPTED TREATMENT INJURY CLAIMS - BY FINANCIAL YEAR

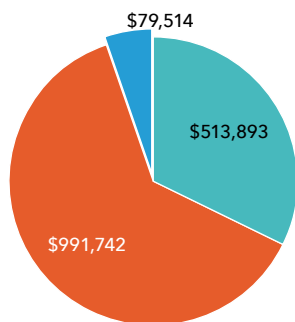
KEY

- Hutt Valley
- All DHBs



COSTS PAID IN 2016/17 FOR ALL NEW AND EXISTING ACCEPTED TREATMENT INJURY CLAIMS

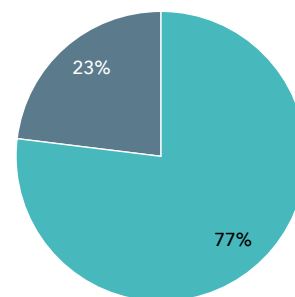
TOTAL 2016/17 \$1,585,149



KEY

- Serious injury
- Entitlement
- All other

ACCEPTED AND DECLINED TREATMENT INJURY CLAIMS FOR 2016/17 DECISION FINANCIAL YEAR



KEY

- Accepted
- Declined

Each declined claim may result in mismatched expectations. This underpins the need to understand how and why treatment injury claims are accepted or declined.

NUMBERS AND RATES OF ACCEPTED TREATMENT INJURY CLAIMS PER 10,000 DISCHARGES BY DECISION FINANCIAL YEAR						
		2012/13	2013/14	2014/15	2015/16	2016/17
Infections of all types	Rate	5.11	11.67	9.54	17.01	24.78
	Number	17	40	33	62	93
Infections following surgery	Rate	4.51	7.58	8.97	11.80	19.98
	Number	15	26	31	43	75
Line infections	Rate	-	3.21	-	4.11	3.20
	Number	<4	11	<4	15	12
Pressure injuries	Rate	-	2.62	6.94	5.49	8.26
	Number	<4	9	24	20	31
Medication errors	Rate	-	-	-	-	-
	Number	-	<4	<4	<4	<4
Medication adverse reactions	Rate	2.71	1.17	3.18	4.11	4.00
	Number	9	4	11	15	15

LAKES DHB

108,500
people

92

TOTAL ACCEPTED
TREATMENT INJURY CLAIMS
IN 2016/17 FOR THIS DHB

LAKES DHB HAS
TWO MAJOR FACILITIES:



TAUPŌ HOSPITAL
ROTORUA HOSPITAL

LAKES DHB



Lakes DHB is based in Taupō and Rotorua.

It has a population of 108,500 people.

- Lakes' population tends to be younger than the national average.
- Lakes has a much higher proportion of Māori (35%) and a lower proportion of Pacific people (2.4%), in comparison with the national average.
- Lakes' deprivation levels are higher than the national average.

Lakes DHB employs approximately 1,500 health and medical staff, which equates to 1,095 full-time equivalent positions.

Lakes DHB has two major facilities:

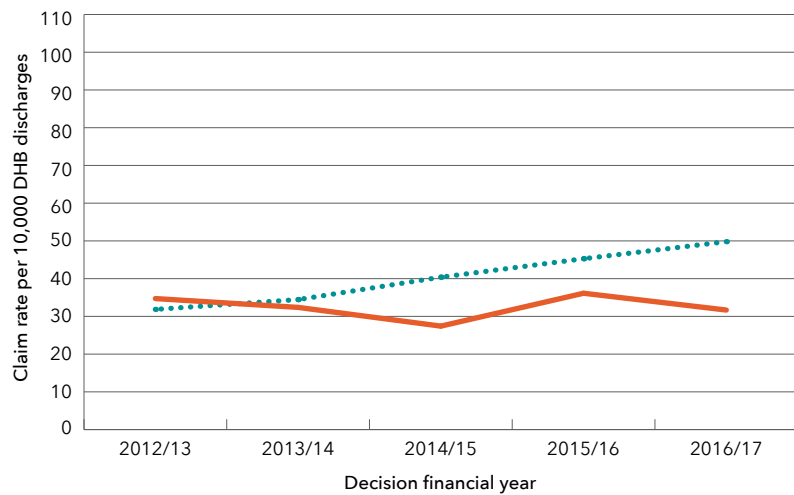
- Taupō Hospital
- Rotorua Hospital.

It also has a hospital specialist service Psychogeriatric Unit.

RATE PER 10,000 DISCHARGES FOR ALL ACCEPTED TREATMENT INJURY CLAIMS - BY FINANCIAL YEAR

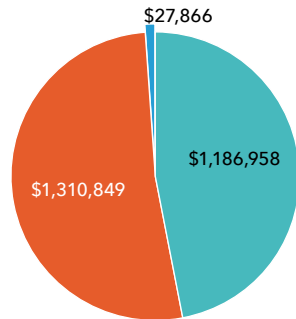
KEY

- Lakes
- All DHBs



COSTS PAID IN 2016/17 FOR ALL NEW AND EXISTING ACCEPTED TREATMENT INJURY CLAIMS

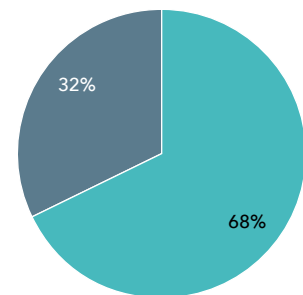
TOTAL 2016/17 \$2,525,674



KEY

- Serious injury
- Entitlement
- All other

ACCEPTED AND DECLINED TREATMENT INJURY CLAIMS FOR 2016/17 DECISION FINANCIAL YEAR



KEY

- Accepted
- Declined

Each declined claim may result in mismatched expectations. This underpins the need to understand how and why treatment injury claims are accepted or declined.

NUMBERS AND RATES OF ACCEPTED TREATMENT INJURY CLAIMS PER 10,000 DISCHARGES BY DECISION FINANCIAL YEAR						
		2012/13	2013/14	2014/15	2015/16	2016/17
Infections of all types	Rate	11.31	7.62	5.12	9.82	8.27
	Number	29	20	14	28	24
Infections following surgery	Rate	8.19	6.10	4.75	9.12	6.54
	Number	21	16	13	26	19
Line infections	Rate	2.34	-	-	-	-
	Number	6	<4	-	<4	<4
Pressure injuries	Rate	1.56	2.29	2.19	2.10	1.38
	Number	4	6	6	6	4
Medication errors	Rate	-	-	-	-	-
	Number	-	-	-	-	-
Medication adverse reactions	Rate	-	1.52	-	2.10	1.72
	Number	<4	4	<4	6	5

MIDCENTRAL DHB

176,600
people

227

TOTAL ACCEPTED
TREATMENT INJURY CLAIMS
IN 2016/17 FOR THIS DHB

MIDCENTRAL DHB HAS
ONE MAJOR FACILITY:



PALMERSTON NORTH
HOSPITAL

MIDCENTRAL DHB



MidCentral DHB is based in Palmerston North.

It has a population of 176,600 people.

- MidCentral's population age profile is broadly similar to the national average but with a slightly higher proportion of older adults.
- MidCentral has a higher proportion of Māori (19%) and a lower proportion of Pacific (3%) and Asian people living there, in comparison with the national average.
- MidCentral's population has a higher proportion of people living in more deprived neighbourhoods, when compared with the national average.

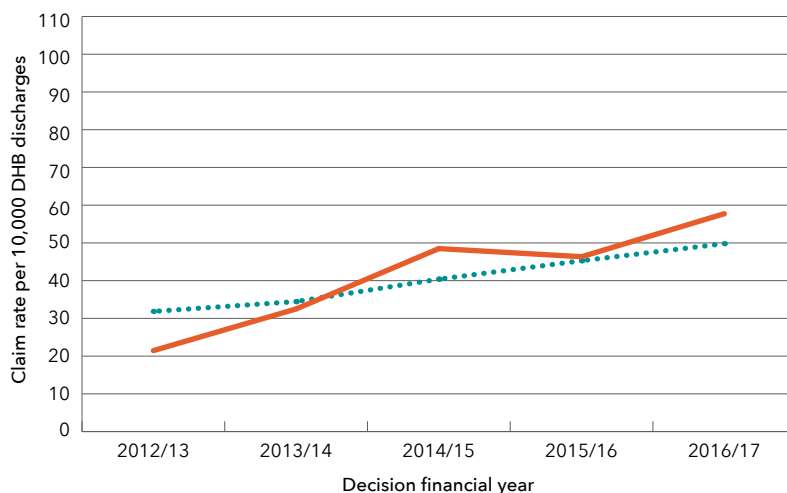
MidCentral DHB employs approximately 2,674 health and medical staff, which equates to 2,160 full-time equivalent positions (December 2015).

- MidCentral DHB has one major hospital facility located in Palmerston North city.
- The centralAlliance is a collaborative agreement between Whanganui and MidCentral DHBs that capitalises on their combined strength to achieve health gains and improve clinical viability for their combined populations.

RATE PER 10,000 DISCHARGES FOR ALL ACCEPTED TREATMENT INJURY CLAIMS - BY FINANCIAL YEAR

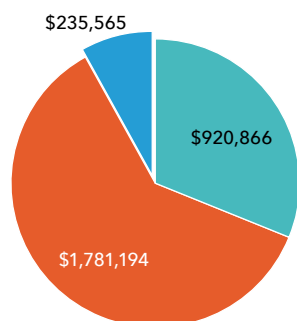
KEY

- MidCentral
- All DHBs



COSTS PAID IN 2016/17 FOR ALL NEW AND EXISTING ACCEPTED TREATMENT INJURY CLAIMS

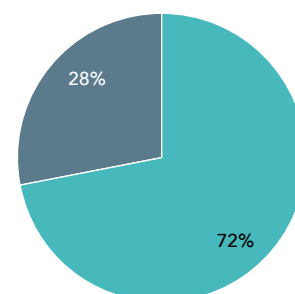
**TOTAL 2016/17
\$2,937,625**



KEY

- Serious injury
- Entitlement
- All other

ACCEPTED AND DECLINED TREATMENT INJURY CLAIMS FOR 2016/17 DECISION FINANCIAL YEAR



KEY

- Accepted
- Declined

Each declined claim may result in mismatched expectations. This underpins the need to understand how and why treatment injury claims are accepted or declined.

NUMBERS AND RATES OF ACCEPTED TREATMENT INJURY CLAIMS PER 10,000 DISCHARGES BY DECISION FINANCIAL YEAR						
		2012/13	2013/14	2014/15	2015/16	2016/17
Infections of all types	Rate	4.19	9.51	15.73	19.08	24.17
	Number	16	36	60	77	95
Infections following surgery	Rate	3.66	7.93	15.21	15.36	21.88
	Number	14	30	58	62	86
Line infections	Rate	-	1.32	-	1.49	1.53
	Number	<4	5	<4	6	6
Pressure injuries	Rate	-	3.17	3.41	3.72	4.83
	Number	<4	12	13	15	19
Medication errors	Rate	-	-	-	-	-
	Number	<4	-	<4	-	-
Medication adverse reactions	Rate	2.35	3.44	3.15	3.96	2.29
	Number	9	13	12	16	9

NELSON
MARLBOROUGH DHB

148,800
people

268

TOTAL ACCEPTED
TREATMENT INJURY CLAIMS
IN 2016/17 FOR THIS DHB

NELSON MARLBOROUGH
DHB HAS FOUR
MAJOR FACILITIES:



NELSON HOSPITAL
WAIRAU HOSPITAL
ALEXANDRA HOSPITAL
MURCHISON COMMUNITY
HOSPITAL

NELSON MARLBOROUGH DHB



Nelson Marlborough DHB is based in Nelson.

It has a population of 148,800 people.

- Nelson Marlborough's population tends to be older than the national average.
- Nelson Marlborough has a significantly lower proportion of Māori (10%) and Pacific people (1.4%), compared with the national average.
- Nelson Marlborough's deprivation levels are lower than the national average.

Nelson Marlborough DHB employs approximately 2,550 health and medical staff, which equates to 1,762 full-time equivalent positions.

Nelson Marlborough DHB has four major facilities:

- Nelson Hospital
- Wairau Hospital
- Alexandra Hospital
- Murchison Community Hospital.

Nelson Hospital and **Wairau Hospital** are secondary hospitals.

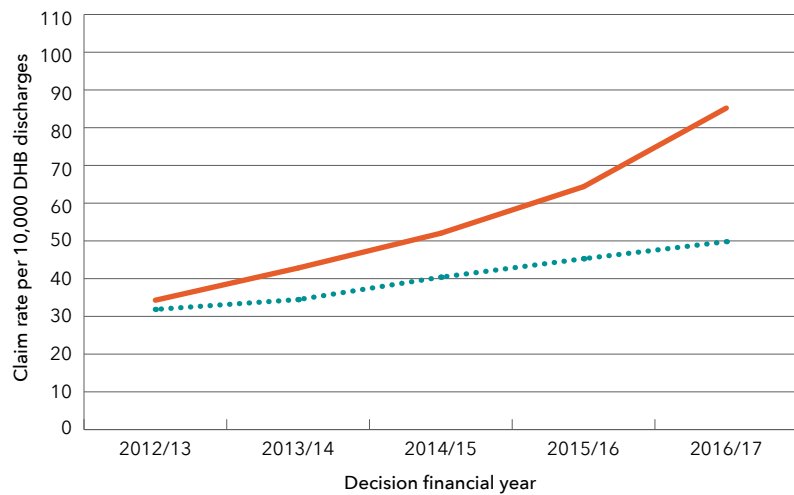
Alexandra Hospital offers dementia and older persons' mental health services.

Murchison Community Hospital is a rural facility.

RATE PER 10,000 DISCHARGES FOR ALL ACCEPTED TREATMENT INJURY CLAIMS - BY FINANCIAL YEAR

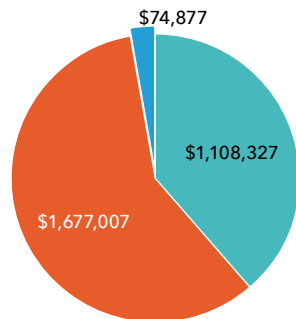
KEY

- Nelson Marlborough
- All DHBs



COSTS PAID IN 2016/17 FOR ALL NEW AND EXISTING ACCEPTED TREATMENT INJURY CLAIMS

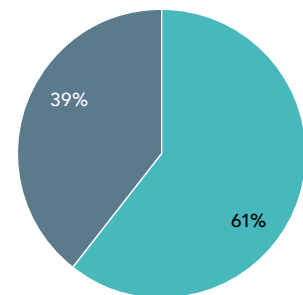
TOTAL 2016/17 \$2,860,211



KEY

- Serious injury
- Entitlement
- All other

ACCEPTED AND DECLINED TREATMENT INJURY CLAIMS FOR 2016/17 DECISION FINANCIAL YEAR



KEY

- Accepted
- Declined

Each declined claim may result in mismatched expectations. This underpins the need to understand how and why treatment injury claims are accepted or declined.

NUMBERS AND RATES OF ACCEPTED TREATMENT INJURY CLAIMS PER 10,000 DISCHARGES BY DECISION FINANCIAL YEAR						
		2012/13	2013/14	2014/15	2015/16	2016/17
Infections of all types	Rate	9.90	10.19	18.23	24.71	30.84
	Number	28	30	55	76	97
Infections following surgery	Rate	9.19	8.16	15.91	24.06	27.98
	Number	26	24	48	74	88
Line infections	Rate	-	1.70	1.99	-	1.27
	Number	<4	5	6	<4	4
Pressure injuries	Rate	-	2.38	-	1.63	4.45
	Number	-	7	<4	5	14
Medication errors	Rate	-	-	-	-	-
	Number	-	<4	<4	-	-
Medication adverse reactions	Rate	2.83	2.72	3.65	3.25	4.77
	Number	8	8	11	10	15

NORTHLAND DHB

175,400
people

283

TOTAL ACCEPTED
TREATMENT INJURY CLAIMS
IN 2016/17 FOR THIS DHB

NORTHLAND DHB HAS
FOUR MAJOR FACILITIES:



WHANGĀREI HOSPITAL
DARGAVILLE HOSPITAL
BAY OF ISLANDS HOSPITAL
KAITAIA HOSPITAL

NORTHLAND DHB



Northland DHB is based in Whangārei.

It has a population of 175,400 people.

- Northland's population tends to be significantly older than the national average.
- Northland has a much higher proportion of Māori (34%) and a lower proportion of Pacific people (1.6%) living there, in comparison with the national average.
- Northland's deprivation levels are much higher than the national average.

Northland DHB employs approximately 2,742 health and medical staff, which equates to 2,205 full-time equivalent positions.

Northland DHB has four major facilities:

- Whangārei Hospital
- Dargaville Hospital
- Bay of Islands Hospital
- Kaitaia Hospital.

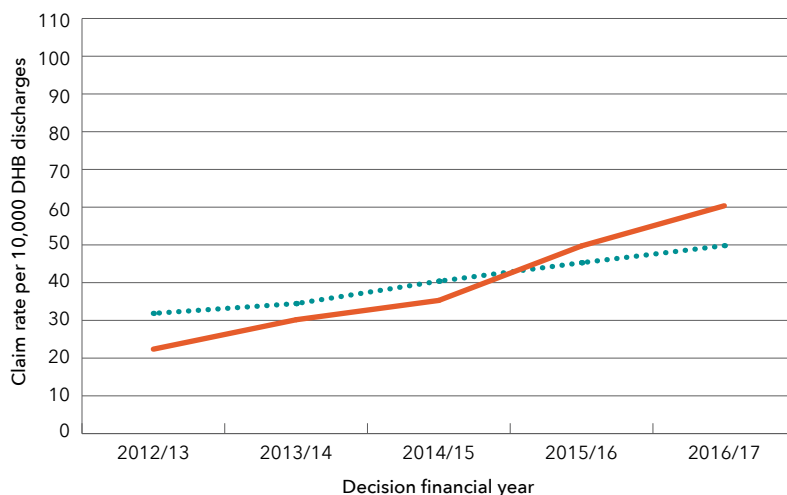
Northland DHB is currently undergoing a long-term redevelopment of its hospitals.

Whangārei Hospital provides secondary specialist care to all of Northland. A new maternity unit, Te Kotuku, opened in February 2016.

RATE PER 10,000 DISCHARGES FOR ALL ACCEPTED TREATMENT INJURY CLAIMS - BY FINANCIAL YEAR

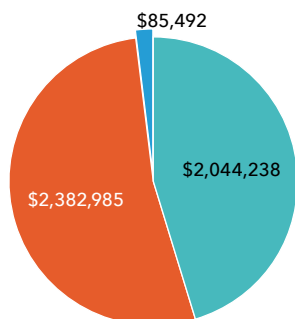
KEY

- Northland
- All DHBs



COSTS PAID IN 2016/17 FOR ALL NEW AND EXISTING ACCEPTED TREATMENT INJURY CLAIMS

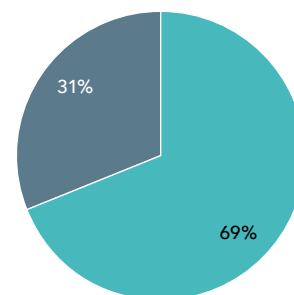
TOTAL 2016/17 \$4,512,716



KEY

- Serious injury
- Entitlement
- All other

ACCEPTED AND DECLINED TREATMENT INJURY CLAIMS FOR 2016/17 DECISION FINANCIAL YEAR



KEY

- Accepted
- Declined

Each declined claim may result in mismatched expectations. This underpins the need to understand how and why treatment injury claims are accepted or declined.

NUMBERS AND RATES OF ACCEPTED TREATMENT INJURY CLAIMS PER 10,000 DISCHARGES BY DECISION FINANCIAL YEAR						
		2012/13	2013/14	2014/15	2015/16	2016/17
Infections of all types	Rate	4.58	8.21	10.40	15.84	20.05
	Number	25	34	46	72	94
Infections following surgery	Rate	3.30	5.31	8.37	14.08	17.49
	Number	18	22	37	64	82
Line infections	Rate	0.92	2.17	1.13	1.54	1.92
	Number	5	9	5	7	9
Pressure injuries	Rate	0.92	1.45	1.58	3.08	4.05
	Number	5	6	7	14	19
Medication errors	Rate	-	-	-	-	-
	Number	-	<4	<4	-	-
Medication adverse reactions	Rate	2.75	2.17	3.85	3.30	4.05
	Number	15	9	17	15	19

SOUTH CANTERBURY
DHB

59,600
people

115

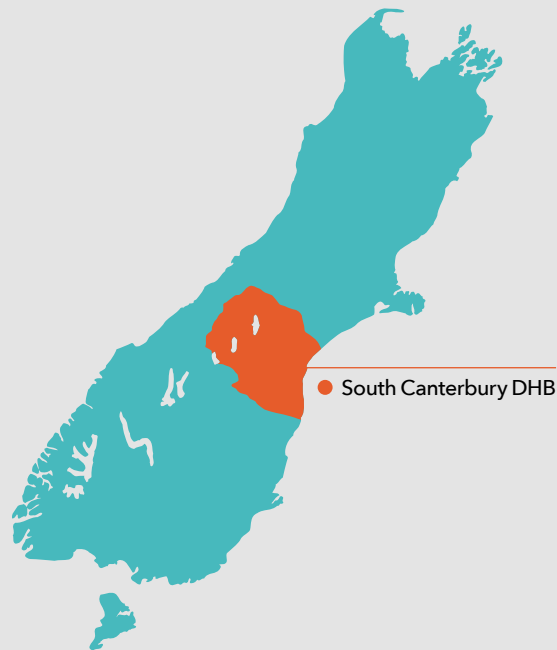
TOTAL ACCEPTED
TREATMENT INJURY CLAIMS
IN 2016/17 FOR THIS DHB

SOUTH CANTERBURY DHB
HAS ONE
MAJOR FACILITY:



TIMARU HOSPITAL

SOUTH CANTERBURY DHB



South Canterbury DHB is based in Timaru.

It has an estimated population of 59,600 people.

- South Canterbury has the highest percentage of people aged 65 and over, compared with the national average.
- South Canterbury has a lower proportion of Māori (8%) and Pacific people (1%) living there, in comparison with the national average.
- South Canterbury's deprivation levels are lower than the national average.

South Canterbury DHB employs approximately 950 health and medical staff, which equates to 620 full-time equivalent positions.

South Canterbury DHB has one major facility:

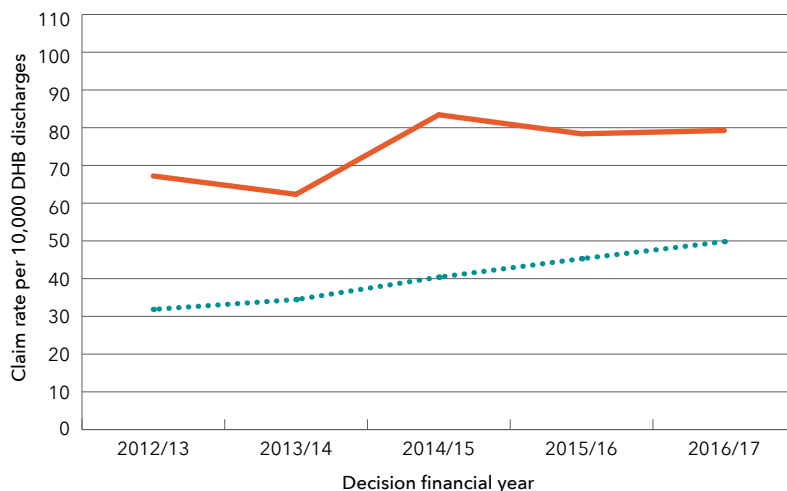
- Timaru Hospital.

South Canterbury is part of the South Island Alliance that enables the region's five DHBs to work collaboratively to develop more innovative and efficient services than could be achieved independently.

RATE PER 10,000 DISCHARGES FOR ALL ACCEPTED TREATMENT INJURY CLAIMS - BY FINANCIAL YEAR

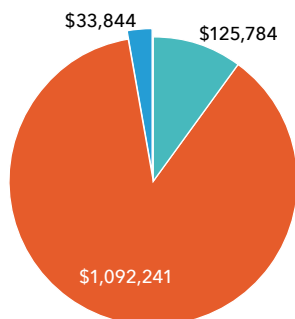
KEY

- South Canterbury
- All DHBs



COSTS PAID IN 2016/17 FOR ALL NEW AND EXISTING ACCEPTED TREATMENT INJURY CLAIMS

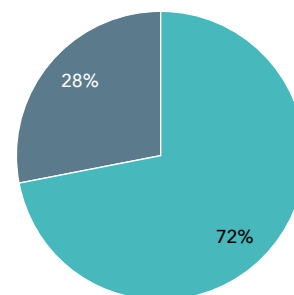
**TOTAL 2016/17
\$1,251,870**



KEY

- Serious injury
- Entitlement
- All other

ACCEPTED AND DECLINED TREATMENT INJURY CLAIMS FOR 2016/17 DECISION FINANCIAL YEAR



KEY

- Accepted
- Declined

Each declined claim may result in mismatched expectations. This underpins the need to understand how and why treatment injury claims are accepted or declined.

NUMBERS AND RATES OF ACCEPTED TREATMENT INJURY CLAIMS PER 10,000 DISCHARGES BY DECISION FINANCIAL YEAR						
		2012/13	2013/14	2014/15	2015/16	2016/17
Infections of all types	Rate	13.28	14.45	26.30	18.53	19.30
	Number	17	19	35	26	28
Infections following surgery	Rate	10.16	12.92	24.80	12.83	17.92
	Number	13	17	33	18	26
Line infections	Rate	3.13	-	-	3.56	-
	Number	4	<4	-	5	-
Pressure injuries	Rate	8.60	12.16	11.27	7.84	8.27
	Number	11	16	15	11	12
Medication errors	Rate	-	-	-	-	-
	Number	-	-	<4	-	-
Medication adverse reactions	Rate	6.25	-	-	3.56	-
	Number	8	<4	<4	5	<4

SOUTHERN DHB

324,300
people

240

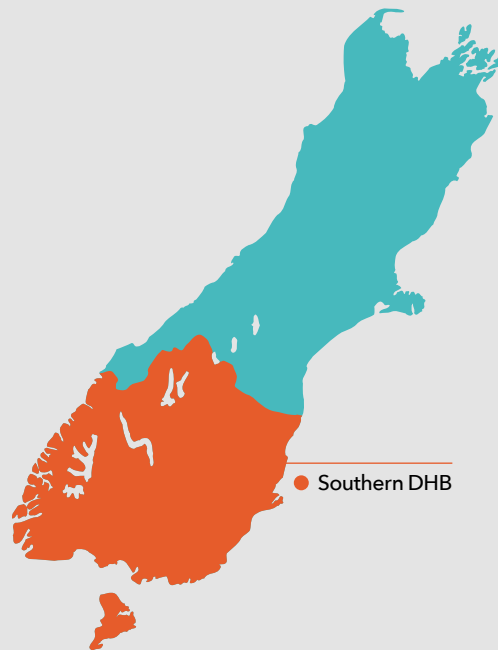
TOTAL ACCEPTED
TREATMENT INJURY CLAIMS
IN 2016/17 FOR THIS DHB

SOUTHERN DHB HAS
FOUR MAJOR FACILITIES:



SOUTHLAND HOSPITAL
LAKES DISTRICT HOSPITAL
DUNEDIN HOSPITAL
WAKARI HOSPITAL

SOUTHERN DHB



Southern DHB is based in Dunedin.

It has a population of 324,300 people.

- Southern's population tends to be slightly older than the national average.
- Southern has a low proportion of Māori (10%) and Pacific people (2%) living there, in comparison with the national average.
- Southern's deprivation levels are lower than the national average.
- Southern covers the largest geographic area of all DHBs and has a large rural constituency.

Southern DHB employs approximately 4,500 health and medical staff, which equates to 3,464 full-time equivalent positions.

Southern DHB has four major facilities:

- Southland Hospital
- Lakes District Hospital
- Dunedin Hospital
- Wakari Hospital.

There are also five rural trust hospitals in the region.

Southern DHB was formed in 2010 as a result of the merger of Southland and Otago DHBs.

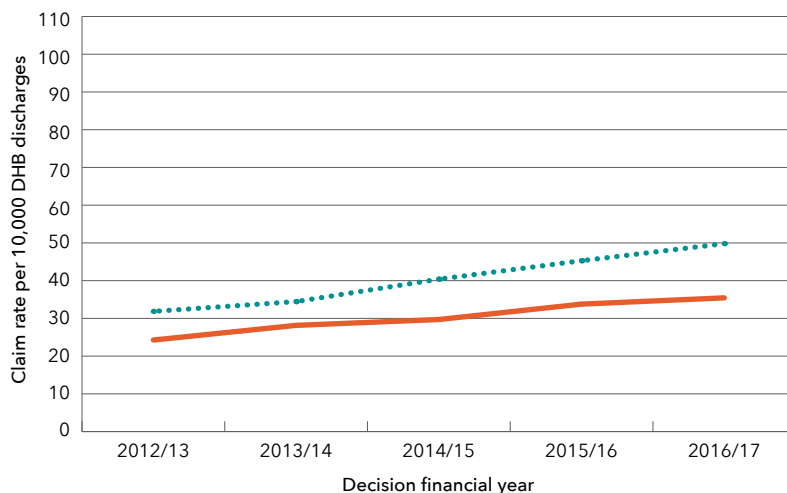
Southern DHB has a close working relationship with Otago University's School of Medicine.

Dunedin Hospital is undergoing redevelopment (long-term project).

RATE PER 10,000 DISCHARGES FOR ALL ACCEPTED TREATMENT INJURY CLAIMS - BY FINANCIAL YEAR

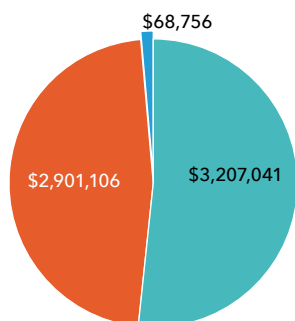
KEY

- Southern
- All DHBs



COSTS PAID IN 2016/17 FOR ALL NEW AND EXISTING ACCEPTED TREATMENT INJURY CLAIMS

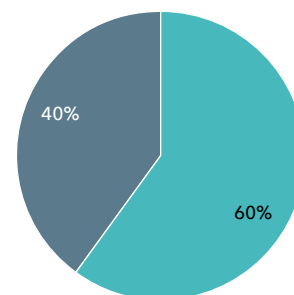
TOTAL 2016/17 \$6,176,903



KEY

- Serious injury
- Entitlement
- All other

ACCEPTED AND DECLINED TREATMENT INJURY CLAIMS FOR 2016/17 DECISION FINANCIAL YEAR



KEY

- Accepted
- Declined

Each declined claim may result in mismatched expectations. This underpins the need to understand how and why treatment injury claims are accepted or declined.

NUMBERS AND RATES OF ACCEPTED TREATMENT INJURY CLAIMS PER 10,000 DISCHARGES BY DECISION FINANCIAL YEAR						
		2012/13	2013/14	2014/15	2015/16	2016/17
Infections of all types	Rate	4.02	3.78	5.61	5.06	6.20
	Number	26	25	37	34	42
Infections following surgery	Rate	2.32	2.57	4.70	4.17	5.02
	Number	15	17	31	28	34
Line infections	Rate	1.08	0.76	0.61	-	0.74
	Number	7	5	4	<4	5
Pressure injuries	Rate	0.62	0.76	0.76	2.23	1.33
	Number	4	5	5	15	9
Medication errors	Rate	-	-	-	-	-
	Number	<4	-	<4	-	<4
Medication adverse reactions	Rate	1.70	1.51	2.27	2.53	1.77
	Number	11	10	15	17	12

TAIRĀWHITI DHB

48,500
people

65

TOTAL ACCEPTED
TREATMENT INJURY CLAIMS
IN 2016/17 FOR THIS DHB

TAIRĀWHITI DHB HAS
ONE MAJOR FACILITY:



GISBORNE HOSPITAL

TAIRĀWHITI DHB



Hauora Tairāwhiti is the DHB based in Gisborne.

It serves a population of 48,500 people.

- Tairāwhiti's population tends to be much younger than the national average.
- Tairāwhiti has a large proportion of Māori (49%) and a smaller proportion of Pacific people (2.5%) living there, in comparison with the national average.
- Tairāwhiti's deprivation levels are much higher than the national average.

Hauora Tairāwhiti employs approximately 587 health and medical staff, which equates to 470 full-time equivalent positions.

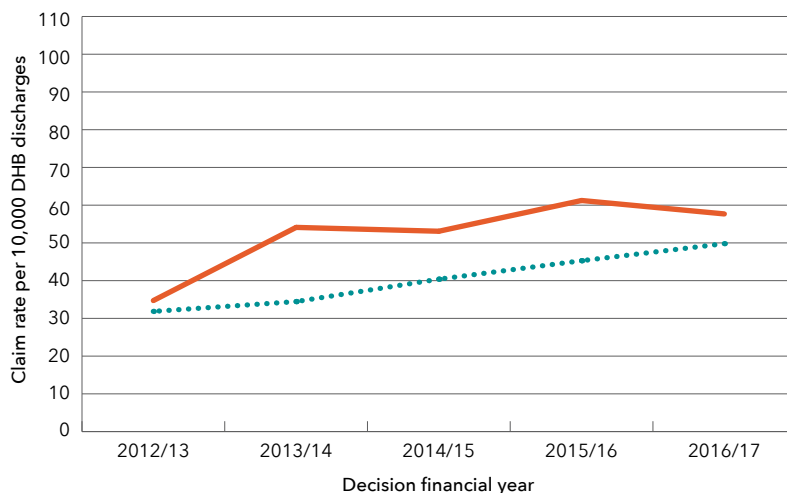
Hauora Tairāwhiti has one major facility:

- Gisborne Hospital.

RATE PER 10,000 DISCHARGES FOR ALL ACCEPTED TREATMENT INJURY CLAIMS - BY FINANCIAL YEAR

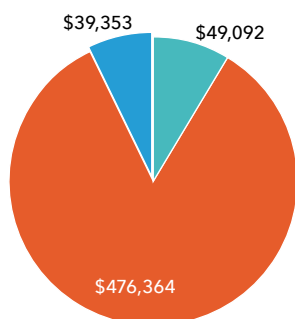
KEY

- Tairāwhiti
- All DHBs



COSTS PAID IN 2016/17 FOR ALL NEW AND EXISTING ACCEPTED TREATMENT INJURY CLAIMS

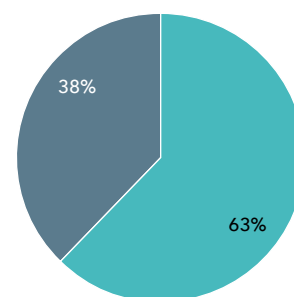
**TOTAL 2016/17
\$564,809**



KEY

- Serious injury
- Entitlement
- All other

ACCEPTED AND DECLINED TREATMENT INJURY CLAIMS FOR 2016/17 DECISION FINANCIAL YEAR



KEY

- Accepted
- Declined

Each declined claim may result in mismatched expectations. This underpins the need to understand how and why treatment injury claims are accepted or declined.

NUMBERS AND RATES OF ACCEPTED TREATMENT INJURY CLAIMS PER 10,000 DISCHARGES BY DECISION FINANCIAL YEAR						
		2012/13	2013/14	2014/15	2015/16	2016/17
Infections of all types	Rate	14.47	21.26	14.22	25.22	22.18
	Number	15	22	15	28	25
Infections following surgery	Rate	13.50	19.33	13.27	24.32	22.18
	Number	14	20	14	27	25
Line infections	Rate	-	-	-	-	-
	Number	-	<4	-	<4	-
Pressure injuries	Rate	-	-	5.69	-	-
	Number	<4	<4	6	<4	<4
Medication errors	Rate	-	-	-	-	-
	Number	-	-	-	-	-
Medication adverse reactions	Rate	-	-	-	-	-
	Number	<4	<4	<4	<4	<4

TARANAKI DHB

118,100
people

251

TOTAL ACCEPTED
TREATMENT INJURY CLAIMS
IN 2016/17 FOR THIS DHB

TARANAKI DHB HAS
TWO MAJOR FACILITIES:



TARANAKI BASE HOSPITAL
HAWERA HOSPITAL

TARANAKI DHB



Taranaki DHB is based in New Plymouth.

It has a population of 118,100 people.

- Taranaki's population tends to be older than the national average.
- Taranaki has a slightly higher proportion of Māori (18%) than nationally (15.5%), and a much lower proportion of Pacific people living there, in comparison with the national average.
- Taranaki's deprivation levels are slightly higher than the national average.

Taranaki DHB employs approximately 1,787 health and medical staff, which equates to 1,287 full-time equivalent positions.

Taranaki DHB has two major facilities:

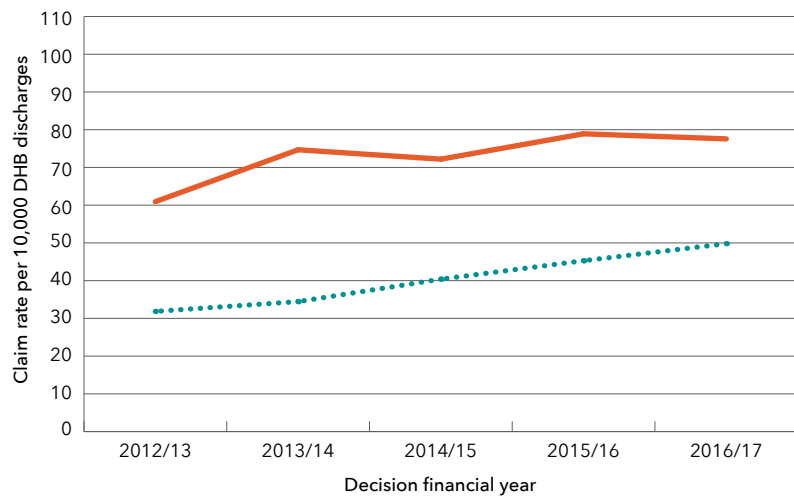
- Taranaki Base Hospital
- Hawera Hospital.

Project Maunga was the major redevelopment project of Taranaki Base Hospital that was completed in 2014.

RATE PER 10,000 DISCHARGES FOR ALL ACCEPTED TREATMENT INJURY CLAIMS - BY FINANCIAL YEAR

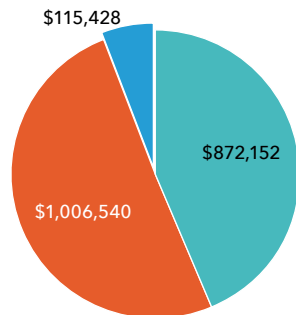
KEY

- Taranaki
- All DHBs



COSTS PAID IN 2016/17 FOR ALL NEW AND EXISTING ACCEPTED TREATMENT INJURY CLAIMS

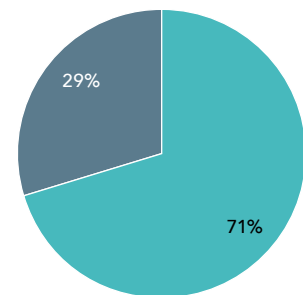
**TOTAL 2016/17
\$1,994,120**



KEY

- Serious injury
- Entitlement
- All other

ACCEPTED AND DECLINED TREATMENT INJURY CLAIMS FOR 2016/17 DECISION FINANCIAL YEAR



KEY

- Accepted
- Declined

Each declined claim may result in mismatched expectations. This underpins the need to understand how and why treatment injury claims are accepted or declined.

NUMBERS AND RATES OF ACCEPTED TREATMENT INJURY CLAIMS PER 10,000 DISCHARGES BY DECISION FINANCIAL YEAR						
		2012/13	2013/14	2014/15	2015/16	2016/17
Infections of all types	Rate	29.74	38.98	32.35	36.67	29.98
	Number	82	107	95	112	97
Infections following surgery	Rate	24.30	33.52	28.95	33.73	28.12
	Number	67	92	85	103	91
Line infections	Rate	3.99	4.37	2.04	2.62	-
	Number	11	12	6	8	<4
Pressure injuries	Rate	-	4.01	2.72	3.27	4.02
	Number	<4	11	8	10	13
Medication errors	Rate	-	-	-	-	-
	Number	-	-	-	<4	<4
Medication adverse reactions	Rate	2.90	2.55	3.41	4.91	8.03
	Number	8	7	10	15	26

WAIKATO DHB

408,800
people

681

TOTAL ACCEPTED
TREATMENT INJURY CLAIMS
IN 2016/17 FOR THIS DHB

WAIKATO DHB HAS
TWO MAJOR FACILITIES:



WAIKATO HOSPITAL
THAMES HOSPITAL

WAIKATO DHB



Waikato DHB is based in Hamilton.

It has a population of 408,800 people.

- Waikato's population age profile tends to be similar to the national average.
- Waikato has a higher proportion of Māori (23%) and a lower proportion of Pacific people (3%) living there, in comparison with the national average.
- Waikato's deprivation levels are slightly higher than the national average.

Waikato DHB employs approximately 6,560 health and medical staff, which equates to 5,480 full-time equivalent positions.

Waikato DHB has two major facilities:

- Waikato Hospital
- Thames Hospital.

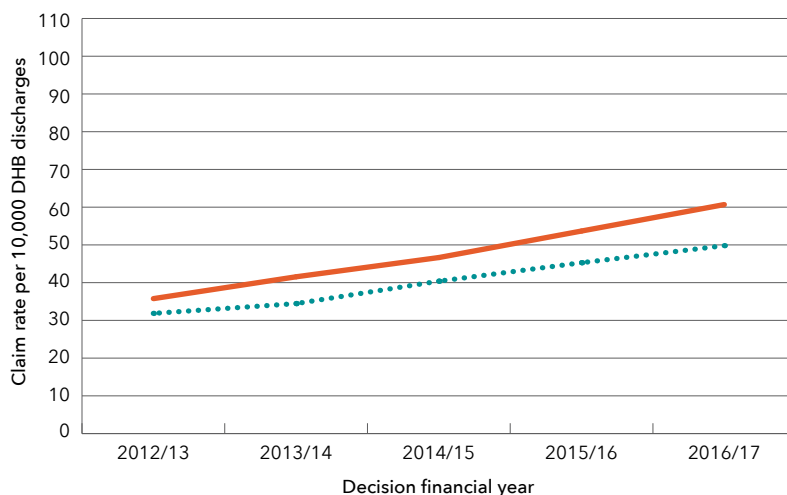
Waikato Hospital is a tertiary provider, while Thames Hospital is a secondary provider.

Te Puna Oranga (Māori Health) is a service within Waikato DHB.

RATE PER 10,000 DISCHARGES FOR ALL ACCEPTED TREATMENT INJURY CLAIMS - BY FINANCIAL YEAR

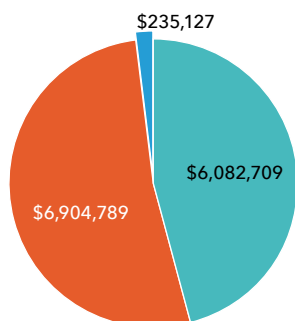
KEY

- Waikato
- All DHBs



COSTS PAID IN 2016/17 FOR ALL NEW AND EXISTING ACCEPTED TREATMENT INJURY CLAIMS

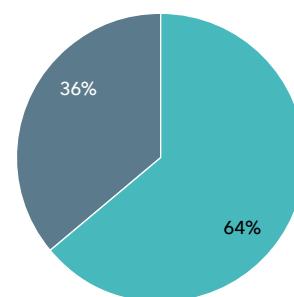
**TOTAL 2016/17
\$13,222,624**



KEY

- Serious injury
- Entitlement
- All other

ACCEPTED AND DECLINED TREATMENT INJURY CLAIMS FOR 2016/17 DECISION FINANCIAL YEAR



KEY

- Accepted
- Declined

Each declined claim may result in mismatched expectations. This underpins the need to understand how and why treatment injury claims are accepted or declined.

NUMBERS AND RATES OF ACCEPTED TREATMENT INJURY CLAIMS PER 10,000 DISCHARGES BY DECISION FINANCIAL YEAR						
		2012/13	2013/14	2014/15	2015/16	2016/17
Infections of all types	Rate	8.08	11.41	13.55	15.47	18.63
	Number	80	114	142	166	209
Infections following surgery	Rate	6.06	9.31	12.11	13.42	17.20
	Number	60	93	127	144	193
Line infections	Rate	1.41	1.40	0.76	0.84	0.53
	Number	14	14	8	9	6
Pressure injuries	Rate	3.54	2.70	2.29	2.61	2.41
	Number	35	27	24	28	27
Medication errors	Rate	-	-	0.38	0.37	-
	Number	-	<4	4	4	-
Medication adverse reactions	Rate	1.62	3.10	2.00	2.52	3.03
	Number	16	31	21	27	34

WAIRARAPA DHB

44,500
people

107

TOTAL ACCEPTED
TREATMENT INJURY CLAIMS
IN 2016/17 FOR THIS DHB

WAIRARAPA DHB HAS
ONE MAJOR FACILITY:



WAIRARAPA HOSPITAL

WAIRARAPA DHB



Wairarapa DHB is based in Masterton.

It has a population of 44,500 people.

- Wairarapa's population tends to be significantly older than the national average.
- Wairarapa has a similar proportion of Māori and a much lower proportion of Pacific people living there, in comparison with the national average.
- Wairarapa's deprivation levels are slightly higher than the national average.

Wairarapa DHB employs approximately 642 health and medical staff, which equates to 440 full-time equivalent positions.

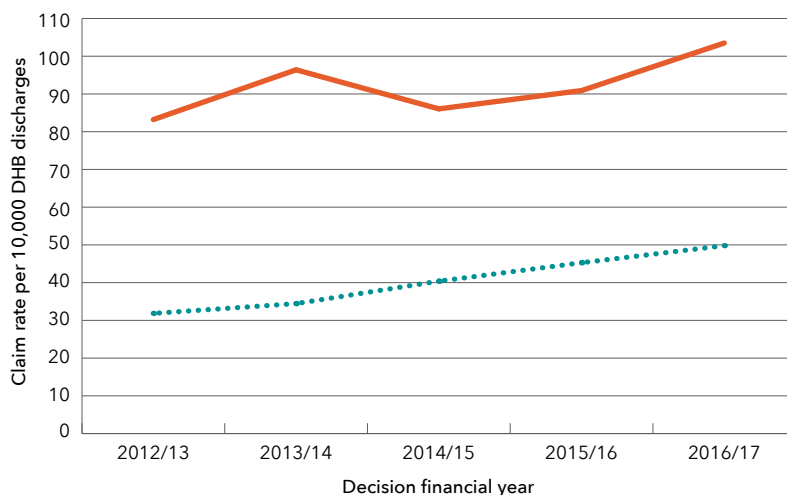
Wairarapa DHB has one major facility:

- Wairarapa Hospital.

RATE PER 10,000 DISCHARGES FOR ALL ACCEPTED TREATMENT INJURY CLAIMS - BY FINANCIAL YEAR

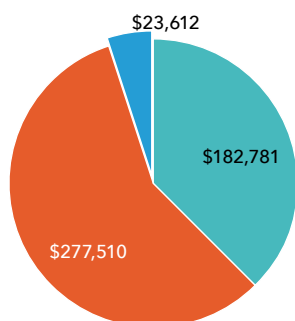
KEY

- Wairarapa
- All DHBs



COSTS PAID IN 2016/17 FOR ALL NEW AND EXISTING ACCEPTED TREATMENT INJURY CLAIMS

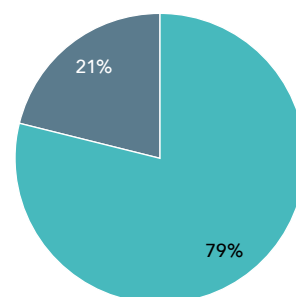
TOTAL 2016/17 \$483,903



KEY

- Serious injury
- Entitlement
- All other

ACCEPTED AND DECLINED TREATMENT INJURY CLAIMS FOR 2016/17 DECISION FINANCIAL YEAR



KEY

- Accepted
- Declined

Each declined claim may result in mismatched expectations. This underpins the need to understand how and why treatment injury claims are accepted or declined.

NUMBERS AND RATES OF ACCEPTED TREATMENT INJURY CLAIMS PER 10,000 DISCHARGES BY DECISION FINANCIAL YEAR						
		2012/13	2013/14	2014/15	2015/16	2016/17
Infections of all types	Rate	41.60	45.55	29.75	20.08	23.22
	Number	36	43	28	19	24
Infections following surgery	Rate	36.98	41.31	26.56	17.97	17.41
	Number	32	39	25	17	18
Line infections	Rate	-	-	-	-	4.84
	Number	<4	<4	<4	-	5
Pressure injuries	Rate	4.62	5.30	-	-	10.64
	Number	4	5	<4	<4	11
Medication errors	Rate	-	-	-	-	-
	Number	-	-	<4	<4	-
Medication adverse reactions	Rate	8.09	4.24	6.37	8.46	6.77
	Number	7	4	6	8	7

WAITEMATĀ DHB

606,000
people

390

TOTAL ACCEPTED
TREATMENT INJURY CLAIMS
IN 2016/17 FOR THIS DHB

WAITEMATĀ DHB HAS
TWO MAJOR FACILITIES:



NORTH SHORE HOSPITAL
WAITAKERE HOSPITAL

WAITEMATĀ DHB



Waitematā DHB is based in Takapuna.

It has a population of 606,000 people.

- Waitematā's population tends to be similar to the national average in terms of its age profile.
- Waitematā has a lower proportion of Māori (10%), a similar proportion of Pacific people and a much higher proportion of Asian people living there, in comparison with the national average.
- Waitematā's deprivation levels are lower than the national average.

Waitematā DHB employs approximately 6,800 health and medical staff, which equates to 5,700 full-time equivalent positions.

Waitematā DHB has two major facilities:

- North Shore Hospital
- Waitakere Hospital.

Waitematā DHB is the largest DHB by population.

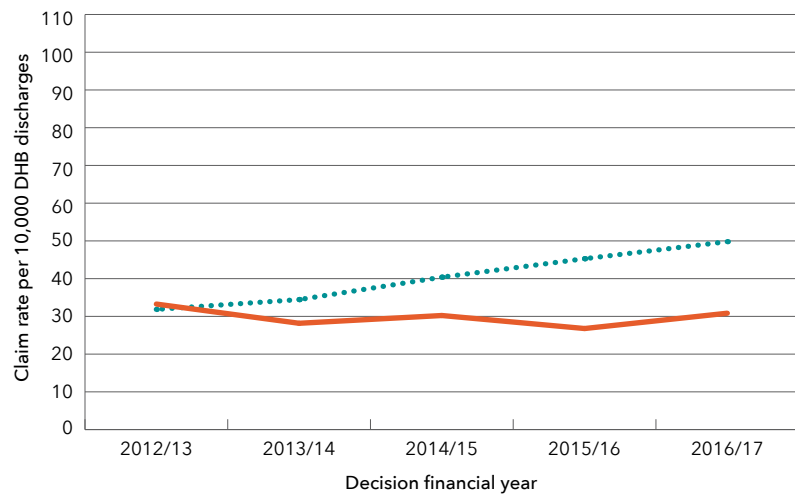
Includes the Regional Forensic Psychiatric Services (the Mason Clinic).

The Wilson Centre is a child rehabilitation service.

RATE PER 10,000 DISCHARGES FOR ALL ACCEPTED TREATMENT INJURY CLAIMS - BY FINANCIAL YEAR

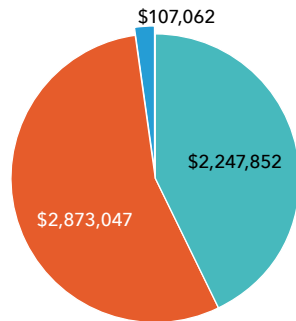
KEY

- Waitemata
- All DHBs



COSTS PAID IN 2016/17 FOR ALL NEW AND EXISTING ACCEPTED TREATMENT INJURY CLAIMS

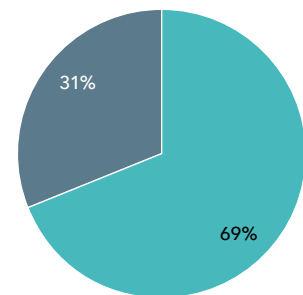
TOTAL 2016/17 \$5,227,962



KEY

- Serious injury
- Entitlement
- All other

ACCEPTED AND DECLINED TREATMENT INJURY CLAIMS FOR 2016/17 DECISION FINANCIAL YEAR



KEY

- Accepted
- Declined

Each declined claim may result in mismatched expectations. This underpins the need to understand how and why treatment injury claims are accepted or declined.

NUMBERS AND RATES OF ACCEPTED TREATMENT INJURY CLAIMS PER 10,000 DISCHARGES BY DECISION FINANCIAL YEAR						
		2012/13	2013/14	2014/15	2015/16	2016/17
Infections of all types	Rate	11.05	7.88	10.96	7.44	8.14
	Number	118	89	128	90	103
Infections following surgery	Rate	9.84	6.56	9.59	6.61	7.12
	Number	105	74	112	80	90
Line infections	Rate	0.94	0.97	1.20	0.58	0.55
	Number	10	11	14	7	7
Pressure injuries	Rate	1.31	0.53	0.77	1.07	0.95
	Number	14	6	9	13	12
Medication errors	Rate	-	-	-	-	-
	Number	-	-	-	<4	<4
Medication adverse reactions	Rate	1.87	1.68	1.46	1.32	1.98
	Number	20	19	17	16	25

WEST COAST DHB

32,500
people

29

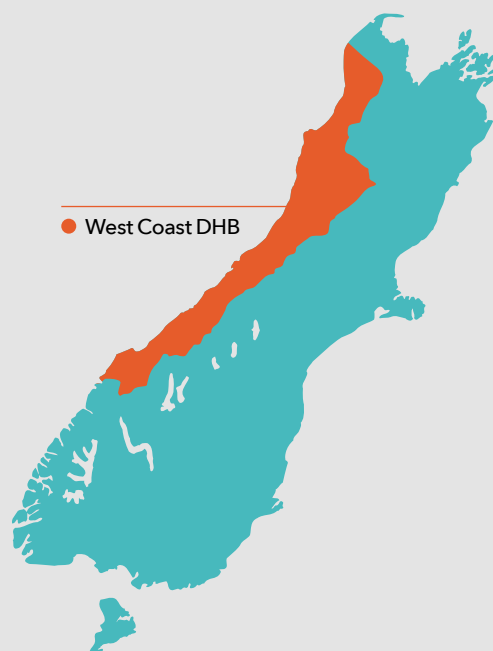
TOTAL ACCEPTED
TREATMENT INJURY CLAIMS
IN 2016/17 FOR THIS DHB

WEST COAST DHB HAS
ONE MAJOR FACILITY:



GREY BASE HOSPITAL

WEST COAST DHB



West Coast DHB is based in Greymouth.

It has a population of 32,500 people.

- West Coast's population tends to be older than the national average.
- West Coast has an increasing proportion of Māori (11.7%) although still lower than the national average (15.5%). West Coast has fewer Pacific people (1%), in comparison with the national average.
- West Coast's deprivation levels are higher than the national average.
- West Coast DHB is the smallest DHB by population, but has a large geographical area, making the West Coast DHB the most sparsely populated DHB in the country.

West Coast DHB employs approximately 985 health and medical staff, which equates to 610 full-time equivalent positions.

West Coast DHB has one major facility:

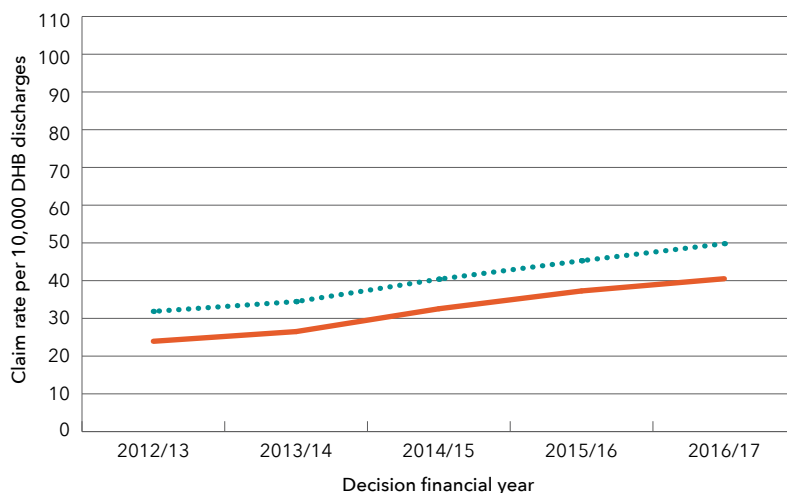
- Grey Base Hospital.

The Government is funding a \$77.8 million new hospital and integrated family health centre in Greymouth to service the West Coast community - the new Grey Base Hospital and Integrated Family Health Centre.

RATE PER 10,000 DISCHARGES FOR ALL ACCEPTED TREATMENT INJURY CLAIMS - BY FINANCIAL YEAR

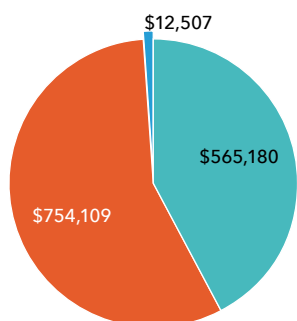
KEY

- West Coast
- All DHBs



COSTS PAID IN 2016/17 FOR ALL NEW AND EXISTING ACCEPTED TREATMENT INJURY CLAIMS

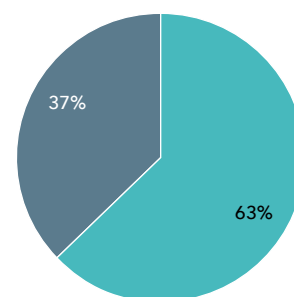
TOTAL 2016/17 \$1,331,797



KEY

- Serious injury
- Entitlement
- All other

ACCEPTED AND DECLINED TREATMENT INJURY CLAIMS FOR 2016/17 DECISION FINANCIAL YEAR



KEY

- Accepted
- Declined

Each declined claim may result in mismatched expectations. This underpins the need to understand how and why treatment injury claims are accepted or declined.

NUMBERS AND RATES OF ACCEPTED TREATMENT INJURY CLAIMS PER 10,000 DISCHARGES BY DECISION FINANCIAL YEAR						
		2012/13	2013/14	2014/15	2015/16	2016/17
Infections of all types	Rate	-	-	-	5.32	8.38
	Number	-	-	<4	4	6
Infections following surgery	Rate	-	-	-	-	8.38
	Number	-	-	<4	<4	6
Line infections	Rate	-	-	-	-	-
	Number	-	-	-	<4	-
Pressure injuries	Rate	-	-	-	5.32	5.59
	Number	-	-	-	4	4
Medication errors	Rate	-	-	-	-	-
	Number	-	-	-	-	-
Medication adverse reactions	Rate	10.47	-	-	5.32	-
	Number	7	-	<4	4	-

WHANGANUI DHB

64,100
people

154

TOTAL ACCEPTED
TREATMENT INJURY CLAIMS
IN 2016/17 FOR THIS DHB

WHANGANUI DHB HAS
ONE MAJOR FACILITY:



WHANGANUI HOSPITAL

WHANGANUI DHB



Whanganui DHB is based in Whanganui.

It has a population of 64,100 people.

- Whanganui's population tends to be significantly older than the national average.
- Whanganui has a higher proportion of Māori (26%) and a lower proportion of Pacific people (2.6%) living there, in comparison with the national average.
- Whanganui's deprivation levels are much higher than the national average.

Whanganui DHB employs approximately 1,031 health and medical staff, which equates to 819 full-time equivalent positions.

Whanganui DHB has one major facility:

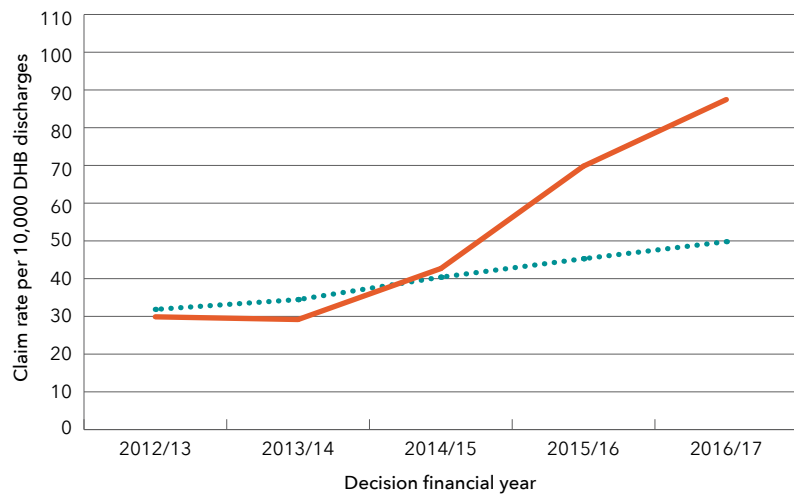
- Whanganui Hospital.

It is part of centralAlliance (together with MidCentral DHB).

RATE PER 10,000 DISCHARGES FOR ALL ACCEPTED TREATMENT INJURY CLAIMS - BY FINANCIAL YEAR

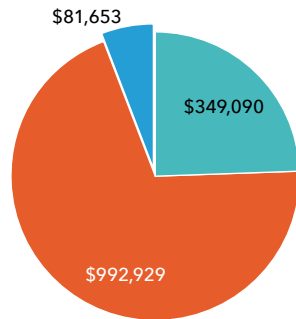
KEY

- Whanganui
- All DHBs



COSTS PAID IN 2016/17 FOR ALL NEW AND EXISTING ACCEPTED TREATMENT INJURY CLAIMS

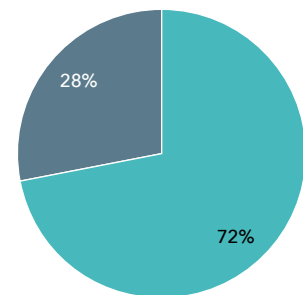
**TOTAL 2016/17
\$1,423,672**



KEY

- Serious injury
- Entitlement
- All other

ACCEPTED AND DECLINED TREATMENT INJURY CLAIMS FOR 2016/17 DECISION FINANCIAL YEAR



KEY

- Accepted
- Declined

Each declined claim may result in mismatched expectations. This underpins the need to understand how and why treatment injury claims are accepted or declined.

NUMBERS AND RATES OF ACCEPTED TREATMENT INJURY CLAIMS PER 10,000 DISCHARGES BY DECISION FINANCIAL YEAR						
		2012/13	2013/14	2014/15	2015/16	2016/17
Infections of all types	Rate	7.15	5.71	17.19	33.75	51.68
	Number	11	9	29	58	91
Infections following surgery	Rate	5.85	4.44	14.82	31.42	50.55
	Number	9	7	25	54	89
Line infections	Rate	-	-	-	-	-
	Number	<4	<4	<4	<4	<4
Pressure injuries	Rate	-	-	2.96	6.40	5.68
	Number	-	-	5	11	10
Medication errors	Rate	-	-	-	-	-
	Number	-	-	<4	-	-
Medication adverse reactions	Rate	2.60	3.80	2.37	-	-
	Number	4	6	4	<4	<4

NZPSHA HOSPITALS

171,359
procedures

NZPSHA MEMBERS PROVIDE
APPROXIMATELY 171,359
PROCEDURES IN 2016/17

50%

NZPSHA MEMBERS
PROVIDING IN THE
REGION OF 50% OF ALL
ELECTIVE SURGERIES IN
NEW ZEALAND

38

SURGICAL FACILITIES

1,445

SURGICAL BEDS

3,438

FTE IN STAFF

1,324

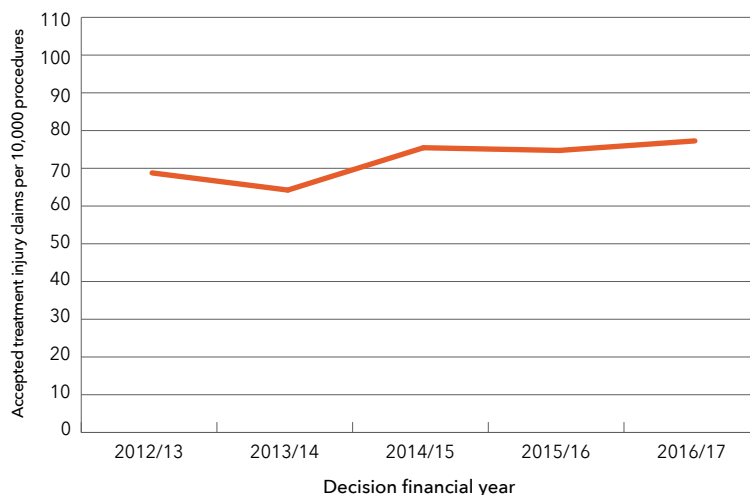
ACCEPTED CLAIMS FOR
NZPSHA HOSPITALS IN
FINANCIAL YEAR 2016/17

NZPSHA MEMBERS

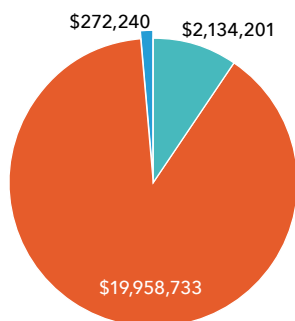
New Zealand Private Surgical Hospitals Association promotes, positions and connects the private surgical hospitals in New Zealand.



ACCEPTED TREATMENT INJURY CLAIMS PER 10,000 PROCEDURES FOR MEMBERS OF NZPSHA, BY DECISION FINANCIAL YEAR

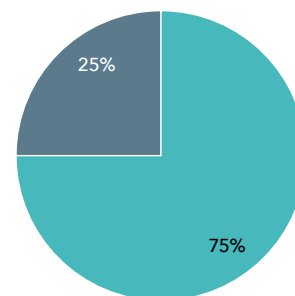


COSTS PAID IN 2016/17 FOR ALL NEW AND EXISTING ACCEPTED TREATMENT INJURY CLAIMS



**TOTAL 2016
\$22,365,174**

ACCEPTED AND DECLINED TREATMENT INJURY CLAIMS FOR 2016/17 DECISION FINANCIAL YEAR



KEY

- Serious Injury
- Entitlement
- All other

KEY

- Accepted
- Declined

NUMBERS AND RATES OF ACCEPTED TREATMENT INJURY CLAIMS PER 10,000 PROCEDURES BY FINANCIAL YEAR						
		2012/13	2013/14	2014/15	2015/16	2016/17
Infections of all types	Rate	9.91	10.91	13.16	15.60	16.34
	Number	155	177	216	259	280
Infections following surgery	Rate	9.65	10.66	12.74	15.17	15.93
	Number	151	173	209	252	273
Line infections	Rate	-	-	-	-	-
	Number	<4	<4	<4	<4	<4
Pressure injuries	Rate	0.26	-	-	0.24	0.53
	Number	4	<4	<4	4	9
Medication adverse reactions	Rate	0.70	1.23	1.89	1.20	1.46
	Number	11	20	31	20	25
Medication errors	Rate	-	-	-	-	-
	Number	<4	<4	<4	-	-
Pulmonary embolism	Rate	0.58	0.55	0.49	0.36	0.53
	Number	9	9	8	6	9
Deep vein thrombosis	Rate	0.83	1.11	0.79	0.72	1.11
	Number	13	18	13	12	19

SECTION

.04+

APPENDICES



DATA SOURCES AND METHOD

DATA SOURCES

ACC's treatment injury claims information is based on data collected via the ACC45 and ACC2152 forms. An ACC45 Injury Claim Form is completed by all clients in order to lodge a claim with ACC, often with the assistance of a treatment provider. For a treatment injury claim, a treatment provider also completes an ACC2152 form, to provide clinical information to support the claim.

The published analysis is based on data for treatment injury related claims. The majority of treatment injury claims are covered by ACC's Treatment Injury Account.

A small number of treatment injury claims are the result of consequential injuries that result from treatment for an injury that is already covered under another ACC account. While they are covered under another account, they are treatment injuries that are relevant to patient safety, and so these consequential injuries have been included in the data used for this analysis.

For example, a client may require surgery as a result of a motor vehicle accident. If the client experiences a treatment injury as part of this surgery, it would be a consequential injury that is covered under the Motor Vehicle Account as part of their original claim. It is also a treatment injury that is relevant to patient safety, and so the consequential injury would be included in the data used for this analysis.

The treatment injury claims data used in this publication reflects the information held as at February 2018 - for claims lodged from 1 July 2005 to 30 June 2017. All ACC claims data (including treatment injury claims data) is subject to revisions over time. For example, the claim numbers may change as a result of the review or appeal of an ACC decision.

Population data was sourced from Statistics New Zealand to calculate injury rate per 1,000.

Hospital discharge data was sourced from the MoH's national minimum dataset to calculate treatment injury claims rates per 10,000 patients discharged (and also as a percentage).

Procedure data was provided by the New Zealand Private Surgical Hospitals Association to calculate treatment injury claim rate per 10,000 procedures.

DATA ASSURANCE

ACC analysts have reviewed the treatment injury data against the original claims information, to ensure the data captured accurately reflects the information submitted.

A panel of ACC experts from operational, clinical and analytical backgrounds provided decision-support to develop the inclusion and exclusion definitions used to assemble the data by injury type. For example, adverse reactions to medication include a number of different injury types recorded in the underlying data - depending on the nature of the adverse reaction - and, at the same time, adverse reactions that are not the result of medication also need to be included.

ACC has also undertaken a data-matching exercise with all NZPSHA members. This exercise was to verify data for infections. The data held by ACC was compared with the claims data (and underlying case notes) held by the hospitals.

This data-matching confirmed that the ACC processes are accurately capturing and recording the information provided by claimants and treatment providers.

Less than 5% of cases had incomplete information provided in the claims forms. In all of these cases, the data-matching exercise confirmed that a treatment injury had occurred. The corrections were confined to two aspects of the claims data: for some claims the specific injury type was updated and, for others, the facility where the injury occurred was updated.

HISTORY AND LEGISLATION

ACC has provided comprehensive, no fault cover for people injured in accidents since 1974.

The right to take legal action for personal injury covered by ACC is removed other than for exemplary damages.

Levies from workers, employers, vehicle registrations, motor fuel, and taxpayers are collected to support the recovery of people with injuries. These monies are then managed to fund the current and future needs of people with long-term injuries.

ACC assistance is available to all New Zealand residents and temporary visitors. New Zealanders who are ordinarily resident may also be covered if they are injured while overseas, with assistance available on their return to New Zealand. New Zealand residents who suffer an injury from medical treatment overseas may be covered although restrictions apply.

Once a claim is accepted by ACC, an injured person may have access to a range of entitlements from treatment and rehabilitation aids, to weekly compensation and lump sum compensation - depending on the injury and the person's circumstances.

ACC's primary function is injury prevention (refer section 3, AC Act 2001). This is to be achieved with interventions and approaches that reduce the incidence and severity of personal injury (see section 263, AC Act). Invoking the injury prevention provisions of the AC Act to support patient safety is a new approach for ACC.

CHANGE FROM MEDICAL MISADVENTURE TO TREATMENT INJURY

Law changes since the scheme's introduction have also seen the criteria for cover evolve. The Accident Compensation Act 1974 added 'medical, surgical, dental, or first-aid misadventure' as a category of personal injury by accident.

Between 1992 and 2005, cover was available for medical misadventure. The Accident Rehabilitation and Compensation Insurance Act 1992 included specific categories of medical misadventure, namely 'medical error' and 'medical mishap' - injuries that were both a rare and severe outcome from properly given treatment. If there was an issue of medical error, the claim was considered by a Medical Misadventure Advisory Committee.

Changes in 2005 reduced the need to find fault as the cause of an injury, but finding that a health professional could and should have taken an alternative treatment pathway is still one of several 'causes' of a treatment injury.

Treatment injury (section 32, AC Act) is a personal injury that is caused by treatment from a registered health professional, and that is not a necessary part or ordinary consequence of that treatment, taking into account the underlying health condition of the patient and clinical knowledge at that time.

REPORTING RELATED TO MEDICAL MISADVENTURE

ACC was required to notify relevant government agencies or professional bodies when it was believed there was risk of harm to the public. This included a series of medical misadventure incidents attributed to a single registered health professional.

ACC also had the discretion to report to the Health and Disability Commissioner and/or the Director-General of Health any accepted claim caused by treatment by a non-registered health professional such as an osteopath or a herbalist.

REPORTING OBLIGATIONS CONNECTED TO TREATMENT INJURIES

Since 1 July 2005, ACC is required to report a belief of risk of harm to relevant authorities. After making the decision on whether to accept a claim, ACC staff also review information on file to consider if there is a risk of harm to the public.

Harm assessments are conducted on decided (both accepted and declined) claims and notifications made based on the likelihood of the event recurring in the future and the potential consequence of the event. The claim notification date could be in the year following the claim cover decision date.

TREATMENT INJURY CLAIM PROCESS

If an individual suffers a treatment injury, they need to see a health professional as soon as possible after the event to avoid delays in getting a decision and assistance.

Medical treatment can be complex, and sometimes the desired outcome is not always achieved. Not all outcomes or treatment are covered by ACC. Actual entitlement will depend on the individual's circumstances.

If a claim is accepted, ACC may be able to help with the cost of treatment and other assistance, such as rehabilitation or weekly compensation. Only a registered doctor or a nurse practitioner can certify work incapacity.



More information on the claims process is available from the ACC website:

www.acc.co.nz/assets/provider/acc2152-treatment-injury-claim.doc

COMPLEX CLAIMS

Accident compensation legislation describes some claims for cover as 'complicated'. These claims take more time to assess because of the additional information needed. Complicated claims include personal injuries caused by treatment and claims lodged more than 12 months after the date the personal injury occurred.

When assessing complicated claims, ACC may seek the consent of the patient to contact treatment providers for additional information.

WHAT IS THE 'ACCIDENT' FOR TREATMENT INJURY CLAIMS?

A treatment injury is a personal injury caused by treatment from a registered health professional – but some exclusions apply.

The 'accident' event is treatment by, or at the direction of, a registered health professional. The definition of treatment is broad and includes diagnosis, treatment decisions, as well as omission or failure to provide treatment.

In some cases the cause of the injury will be defined as inappropriate treatment in the circumstances.

Examples of treatment injuries range from a deep tissue infection at the site of an injection to operating on the wrong limb.

EXCLUSIONS FROM TREATMENT INJURY

Both an underlying disease and other pre-existing diseases are not covered – although a significant worsening of disease caused by treatment may be covered.

Also excluded are:

- a necessary part of the treatment (for example, a skin puncture or surgical incision or the removal of a body part when those are a necessary part of the treatment required)
- the ordinary consequences of treatment (for example, hair loss following chemotherapy or radiotherapy burns are unlikely to be covered)
- injury caused solely by decisions about allocating health resources (such as waiting list delays for joint replacement surgery)
- injury caused because a patient unreasonably delayed or refused to give consent for treatment
- treatment that does not achieve the desired result is not a treatment injury.

SELECTED GLOSSARY AND DEFINITIONS RELATING TO TREATMENT INJURY

ACCEPTED CLAIMS

Most of the information provided in this publication is based on accepted claims. The number of claims accepted is subject to small changes over time, because claims lodged in a specific year but not accepted until a later year are included in the updated dataset. Numbers can also change following a review or an appeal of an ACC decision.

ACTIVE CLAIMS

Active means a claim is open and has received a payment in that year.

AGE GROUPS

This relates to the age of the injured person as at the date of injury.

CALENDAR YEAR

The period from 1 January to 31 December.

CONSEQUENTIAL CLAIMS

A consequential treatment injury is an injury that occurs during treatment for an already covered personal injury.

Treatment related claims information might include consequential claims funded outside the treatment injury account. For instance, a claim for an injury sustained when receiving treatment for an initial injury from a motor vehicle accident will be funded through the motor vehicle account.

COST OF NEW AND EXISTING CLAIMS

Total cost of new and existing claims or active claims in that year.

COST PER ACTIVE CLAIM

Average cost per active

COSTS PAID

Costs paid for new and existing treatment injury claims in a given year are likely to be an underestimate, because some treatment - in particular, accident and emergency treatment in the first 24 hours after admission - is funded through the Public Health Acute Services (PHAS) agreement between ACC and the Ministry of Health, and is not included as part of an ACC claim.

There are three broad categories of claim costs:

1. Compensation (weekly compensation for lost earnings, lump sums, and death benefits).
2. Treatment (initial hospital treatment and ongoing primary and secondary treatment).
3. Rehabilitation support (physical rehabilitation and various forms of personal support).

DATE OF INJURY

The date of injury (DOI) for a treatment injury is the date the person first sought or received treatment for the personal injury.

DECISION FINANCIAL YEAR

Treatment injury claims that had a cover decision made during 1 July to 30 June.

DISCHARGE

This relates to Ministry of Health data for the number of discharges from DHB facilities (public hospitals). This data also changes slightly over time, as National Minimum Dataset (NMDS) discharge figures are updated.

ENTITLEMENTS

Once a claim has been accepted, ACC will contribute to the costs of rehabilitation and treatment, and provide financial support to the injured person. The amounts depend on the injury and circumstances of the injured person.

An entitlement is the term given to ACC's contribution, and includes:

- rehabilitation and treatment (including pharmaceuticals, x-rays, elective surgery), home-based care, and consumables
- support with transport, housing modifications, and equipment
- services aimed at restoring health and independence
- compensation for lost earnings as a result of the injury
- death benefits such as funeral grants and payments to dependants
- an independence allowance for injuries that occurred before 1 April 2002
- lump sum compensation for injuries that happened on or after 1 April 2002.

ENTITLEMENT CLAIMS

The majority of treatment injury claims are for relatively minor injuries that resolve after initial medical treatment. Claims that require more support will have additional entitlements counted against the claim. In this publication, the costs of those claims requiring additional support are included as 'entitlement claims'.

FATAL CLAIMS

When someone dies from a treatment injury, ACC can provide financial support to the family of the deceased, including a contribution to the funeral costs and financial assistance to dependants.

FINANCIAL YEAR

The period from 01 July to 30 June.

INFECTION

This includes a range of injuries such as abscess, cellulitis, endocarditis, osteomyelitis, septicaemia, wound infection, arterial or venous line infections, post-surgical infection.

Note: Some adverse reactions to medication may also be reported as infections.

INJURY CAUSED BY ACCIDENT

Cover is provided for 'personal injury' that is caused by:

- an accident
- a work-related gradual process, disease or infection (WRGPDI)
- treatment that was provided by a registered health professional (treatment injury).

LONG-TERM COSTS – LIABILITY

Some injuries result in the injured person requiring long-term or lifetime support from ACC. ACC needs to estimate the total of those costs and put money aside for those people. The amount needed is determined by analysis of the types and numbers of injuries – as well as the expected support needed.

MENTAL INJURY

Cover is also available for mental injuries that result from a physical injury, including treatment injuries. A mental injury is a clinically significant behavioural, cognitive or psychological dysfunction. It does not include emotional effects such as hurt feelings, stress or loss of enjoyment.

NEONATAL ENCEPHALOPATHY

This term includes cerebral palsy, hypoxic ischaemic encephalopathy, and stillbirth.

NUMBERS OF CLAIMS LODGED

Claim lodgement rates are influenced by factors such as the health status of the population and rates of contact with treatment services; the facilities available (for example, tertiary versus secondary level hospitals); and the familiarity of health providers with the process of making a treatment injury claim.

The figures reported will differ from previously released data due to changes in underlying data as new information becomes available and claims are updated.

PERSONAL INJURY

Personal injury is defined in the Accident Compensation Act as:

- death
- physical injury
- damage to dentures or prostheses that replace a part of the human body.

With limited exceptions such as an WRGPDI mentioned above, wear and tear or injuries due to the ageing process are not covered by ACC.

PRIVATE HOSPITAL

The claims identified as occurring in private surgical hospitals are those where ACC is able to identify the hospital, operating theatre or ward was a private facility (but not an overseas facility).

SERIOUS INJURY

The term 'serious injury' is a classification ACC created for people who will have a lifelong relationship with ACC due to the nature of their injury. Examples include damage to the spinal cord or brain.

TREATMENT INJURY CLAIMS AND OTHER DATA SOURCES

The ACC information is based on claims made to ACC. The reasons for lodging a claim with ACC are different from the reasons for making a complaint to the Health and Disability Commissioner or reporting of a serious or sentinel event to the Health Quality and Safety Commission. The data is complementary and there are some overlaps, however, the rates or numbers or types of injuries in this publication cannot be directly compared with reports from other sources.

REPORTING 'RISK OF HARM TO THE PUBLIC'

Section 284 of the Accident Compensation Act 2001 requires ACC to report 'risk of harm to the public' based on information collected in the course of processing claims for treatment injury, including those that are in the nature of claims for treatment injury but are caused by a person who is not a registered health professional.

ACC's definition of harm is based on those developed by the MoH.

EVENT	DEFINITION OF HARM
Sentinel event	An event during care or treatment that has resulted in an unanticipated death or major permanent loss of function not related to the natural course of the claimant's illness or underlying condition, pregnancy or childbirth.
Serious event	A serious event or pattern of events that has the potential to result in death or major permanent loss of function not related to the natural course of the claimant's illness or underlying condition, pregnancy or childbirth.
Major event	An event that results in short- to medium-term lessening of bodily function (sensory, motor, physiologic or intellectual) unrelated to the natural course of the illness and differing from the expected outcome of patient management, or any of the following: <ul style="list-style-type: none"> • increased length of stay as a result of the incident • surgical intervention required as a result of the incident.
Minor event	An event that results in minimal lessening of bodily function and that may require an increased level of care, review and evaluation, further investigation, or referral to another clinician.

These definitions are based on the MoH Severity Assessment Code (SAC) that provides a rating of 1 to 4 for adverse events that occur, or have the potential to occur, to any person as a result of, or related to, the provision of health and disability services.

⁷ <http://www.hqsc.govt.nz/our-programmes/adverse-events/publications-and-resources/publication/320/>

SECTION .04 APPENDICES

The National Reportable Events Policy⁷ requires providers to determine the severity of every reported incident using the Severity Assessment Code, to report all SAC 1 and SAC 2 events to the HQSC and to undertake a formal review of all SAC 1 and SAC 2 events using a Root Cause Analysis (RCA) methodology or a serious incident review.

Sentinel and serious events may be notified to a health professional registration authority if ACC reasonably believes they pose a risk of harm, are clearly related to an individual professional, and have peer advice regarding the appropriateness of care from either:

- the HDC office
- the Coroner's office, or
- an ACC External Clinical Advisor.

ROLE OF TRANSPARENCY IN IMPROVING PATIENT SAFETY – SUMMARY OF EVIDENCE REVIEW

ACC commissioned an independent evidence review from the International Centre for Allied Health Evidence (iCAHE), located within the Sansom Institute in the University of South Australia. The review was completed in September 2015. It explored how publishing patient safety data might improve the quality of care and contribute to a reduction in the number and severity of claims received.

METHODOLOGY

The literature review focused on peer-reviewed literature drawn from eight academic databases and the reference lists of grey literature (for example, government reports). Following a rigorous search and assessment, 58 articles (51 primary research articles and seven secondary evidence reviews) were identified and included in the review.

KEY FINDINGS

Overall, the evidence base provides moderate support for publication of patient safety information and insights into how the impact of publication can be improved. In particular:

- there is evidence that public reporting of risk-adjusted mortality data for hospitals from well-defined surgical technique has had a positive effect on overall mortality rates, and that the public release of patient safety data altered provider behaviour
- there is limited evidence related to the effects on morbidity related to treatment. The evidence suggests that the main influence was through providers with a culture of improving patient safety, that will use patient safety data to improve their performance
- the evidence suggests that publication of patient safety data reports had limited effects on patient choices overall, and that more affluent and educated patients were more likely to be influenced by patient safety data
- there was mixed evidence on whether publication could result in some providers avoiding high-risk surgery
- there was limited evidence that providers may change their clinical behaviours related to intervention risk (as suggested in the literature in relation to cardiac surgery reports), which could lead to a reduction in treatment injury
- there has been no primary research into the effects of Australia's initiative to publish patient safety information from 2010 – either overall or on major hospitals.

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Te Kaporeihana Āwhina Hunga Whara

www.acc.co.nz
0800 101 996

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