

Supporting Treatment Safety 2020



Using information to improve
the safety of treatment

ISSN 2703-5549 Supporting Treatment Safety (print version)
ISSN 2703-5557 Supporting Treatment Safety (electronic version)

ACC number: ACC7971 November 2020

Title: Supporting Treatment Safety 2020: Using information to improve the safety of treatment

Author: Accident Compensation Corporation.

Suggested Citation: Accident Compensation Corporation, 2020. Supporting Treatment Safety 2020: Using information to improve the safety of treatment. ACC, Wellington, New Zealand.

An online version of this report can be found at acc.co.nz/treatmentsafety

Contents

Sharing treatment injury information3

Treatment injuries are a result of medical treatment 4

Treatment injuries are injuries caused by treatment from registered health professionals 7

How we define 'treatment' 8

How we define 'treatment injury' 8

We support people with treatment injuries 9

We lead programmes and invest to prevent treatment injuries 9

We work with partners to improve treatment safety 10

Treatment injuries are a subset of patient harm 10

Claims for treatment injuries increased slightly in 2018/19 11

We're working to prevent specific injuries 13

We can all learn from what happens when things go wrong 14

We use data to inform prevention 16

Healthcare associated infections 17

Adverse reactions to medication 21

Preventing Fetal Anti-Convulsant Syndrome 22

Neonatal encephalopathy 25

Pressure injuries 27

Surgery-related treatment injuries (perioperative harm) 32

Rates of injury vary by setting, age, gender, and ethnicity37

Setting 38

Age and gender 39

Ethnicity 40

We measure the impact of treatment injuries45

Entitlement claims grew at a lower rate than accepted claims 46

Treatment injuries have significant costs 47

We are working on resources to help people understand treatment injuries 51

Claim lodgement may be improving 52

We declined some claims for treatment injuries 53

Different settings have different rates of treatment injury 55

Public hospitals 56

Private surgical hospitals 57

General practice 59

Appendices 61

Data sources 62

Glossary 66





Sharing treatment injury information

This report summarises data on claims to ACC for treatment injuries in the 2018/19 year.¹ The report also includes information on ACC's role in preventing treatment injuries, and what we're doing to improve the safety of treatment.

We want to share this information to:

- help improve the safety of medical treatment
- be more transparent about the health information we hold
- be consistent with the New Zealand Health Strategy
- provide a case for investing in treatment safety to reduce patient harm.

We also publish our information about treatment injuries on the New Zealand Government open data website ([Data.govt.nz](https://data.govt.nz)).

¹ Throughout this publication, 2018/19 refers to the financial year period from 1 July 2018 to 30 June 2019. We extracted the data presented in this report in March 2020. However, the data relates to claims decided for treatment injuries up to 30 June 2019.

Summary

Treatment injuries are a result of medical treatment

Treatment injuries happen when a person is injured by treatment from a registered health professional. Many treatment injuries are preventable. You can find out more about what treatment injuries are on [page 8](#).

In 2018/19 we made a decision on 16,285 claims for treatment injuries

We accepted 10,455 claims for injuries caused by medical treatment. This is a slight increase from 2017/18, following a slight decrease from 2016/17. Each of these claims represents a person who was harmed during treatment.

Most accepted claims were from treatment in public hospitals

Most claims we accepted were from treatment injuries in public hospitals (6,191 claims). Other claims we accepted included:

- 1,443 claims from treatment in private hospitals that were members of the New Zealand Private Surgical Hospital Association (NZPSHA)
- 1,425 claims from treatment in general practice
- 1,396 claims from treatment in other settings such as aged care facilities.

The cost of treatment injuries in the 2018/19 year was \$473m

The actual costs and predicted future costs for all treatment injuries in the 2018/19 financial year was \$473m. Our predicted liability for the future costs of all treatment injuries we've accepted (from all previous years) now stands at \$7.51bn. Interest rates falling over 2018/19 has meant an increase in the liability we hold for these claims. This is the main driver of the increase above the expected increase in value from 2017/18.

Note that these calculations do not reflect changes to the predicted liability of future costs due to reduced injury numbers during the Covid-19 restrictions.

We work with partners to improve treatment safety

This publication includes a summary of our injury prevention work. We're working closely with the Ministry of Health (MoH), the Health Quality and Safety Commission (HQSC), District Health Boards (DHBs), clinicians, patients and their family/whānau, and other organisations on programmes to prevent treatment injuries.

You can read more about our prevention initiatives on [page 13](#) of this document.





Treatment injuries are injuries caused by treatment from registered health professionals

We provide cover for people with treatment injuries in line with the Accident Compensation Act 2001 (AC Act). All claims for treatment injuries are clinically assessed before we decide if they can be accepted.

How we define ‘treatment’

The definition of ‘treatment’ is broad and includes diagnosis, treatment decisions, as well as failure to provide treatment. In some cases, the cause of the injury is defined as inappropriate treatment in the circumstances. Examples of treatment injuries could include a deep tissue infection at the site of an injection, an allergic reaction to medication, or damage to teeth during anaesthetic.

How we define ‘treatment injury’

The ‘accident’ event for a treatment injury is treatment by, or at the direction of, a registered health professional. To be considered, a claim for a treatment injury must meet the following requirements:

- an injury has occurred (physical harm or damage to the person)
- the treatment has caused the injury
- the injury is not a necessary part or an ordinary consequence of treatment, after considering the clinical knowledge at the time of treatment, and the underlying health condition of the injured person.

Exclusions in the AC Act mean that not all discomfort, symptoms, or harm experienced by a person having treatment is accepted as an injury caused by that treatment. The definition of ‘treatment injury’ means that claims for treatment injuries are just one part of patient harm.

We support people with treatment injuries

The range of treatment injuries is wide, but most need short term healthcare and have no lasting impact. When a person is more severely affected by a treatment injury, we compensate them for lost income and any permanent loss of function. We also provide rehabilitation to help a person:

- return to activity and work
- participate in society
- use their house and vehicle.

We lead programmes and invest to prevent treatment injuries

We have an important role to play in supporting safer healthcare, and reducing the harm caused to people by treatment injury. We know that health professionals don't come to work to injure people, and that the standard of healthcare delivered in New Zealand is high. That's why we partner with the health sector to co-design and co-implement practical solutions to improve patient safety.

Our prevention initiatives focus on injuries that:

- occur often and are highly preventable
- have a significant impact on patients and family/whānau.

Publishing information about treatment injuries is designed to support the health sector to identify areas where the safety of patients can and should be improved, and to see where change has been achieved. It also contributes to public awareness by engaging New Zealanders in conversations about patient safety.

By publishing our information we have motivated the health sector to develop new initiatives, and some are now being implemented nationwide.

We work with partners to improve treatment safety

We think the best way to improve treatment safety is to work collaboratively using evidence-informed approaches. We work in partnership with patients, clinicians, and other stakeholders across the health sector on a wide range of initiatives.

Our goal is straightforward – to reduce the burden of harm to patients, their families and whānau, and to New Zealand.

To achieve this we focus on supporting and accelerating the implementation of safer practices. Improvement happens when people can and will change things, which means a flexible approach is needed depending on the circumstances. Our support varies from detailed development of improvements by expert groups, through to simple funding support.

We share information about treatment injuries to help improve treatment safety, which:

- reduces suffering for people affected
- contributes to shorter periods of hospitalisation and reduced readmissions
- avoids the ongoing costs of injuries.

Improving treatment safety, in turn, helps us to manage the impact of claims for treatment injury and contributes to good stewardship of the overall ACC Scheme to benefit everyone in New Zealand.

You can read more about our prevention initiatives on [page 13](#).

Treatment injuries are a subset of patient harm

Data helps us understand patient harm. An important way to improve safety is to find out more about the types and levels of patient harm. The full extent of patient harm is not known in New Zealand or any other country, but scientific literature tells us that between 40% and 90% of patient harm is preventable in some way.

No single set of data provides a full picture of patient safety and harm, but our treatment injury information provides a unique contribution to our overall understanding.

The data we have available in New Zealand includes:

- claims for treatment injuries collected by ACC
- hospital standardised mortality ratios from the MoH
- complications captured by the National Minimum Data Set (NMDS) or by private surgical hospitals
- reports of adverse events to HQSC
- complaints to the Health and Disability Commissioner (HDC)
- deaths in healthcare investigated by Coronial Services.

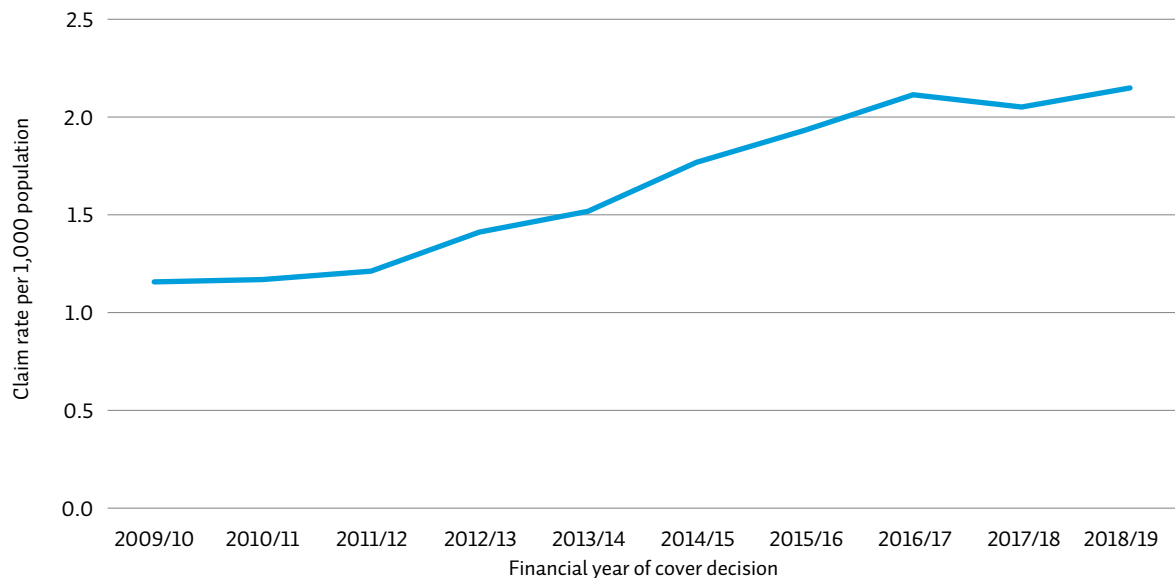
Claims for treatment injuries increased slightly in 2018/19

In 2018/19, we accepted 10,455 claims for treatment injuries – about 2.1 claims per 1,000 population. This rate is nearly double the 2009/10 rate of 1.2 claims per 1,000 population. The number of claims we accepted increased slightly from 2017/18, following a slight reduction that year, after seven straight years of steady growth.

We accepted around 64.2% of claims in 2018/19, compared with 63.7% in 2014/15. During the same period, the number of claims we made a decision on increased (from 12,623 in 2014/15 to 16,285 in 2018/19).

This increase in accepted claims doesn't necessarily mean that more injuries are happening. It could be that clinicians are becoming better informed about treatment injury and are therefore lodging more claims that meet the criteria for cover.

GRAPH 1: ALL ACCEPTED CLAIMS FOR TREATMENT INJURIES FROM ALL SETTINGS







We're working to prevent specific injuries

We have a wide range of initiatives underway to reduce the incidence and severity of treatment injuries. Our Treatment Safety team works together with the health sector, and patients and their family/whānau on these initiatives.

We can all learn from what happens when things go wrong

We know that, despite the best intentions, things can go wrong during medical treatment. We should all learn from the past to improve the future, and act to ensure that similar events don't happen again. As part of our prevention work we're supporting the health sector to learn from mistakes and to share lessons across the sector. This can also involve learning from things that go well.

Learning from adverse events

We know from talking to people who work in healthcare facilities, that they need additional support to learn from when things go wrong.

In the 2018/19 financial year, the Health Quality and Safety Commission (HQSC) received 916 adverse event reports, 566 of which were reported by DHBs ([view report](#)).

We're currently piloting an approach with four DHBs (Southern, Taranaki, Canterbury, and Capital & Coast) to help them get better at learning from adverse events and implementing improvements. We are looking to provide alternative assistance to one private hospital (MercyAscot).

This pilot approach involves providing experts in human factors, and working with services to develop and implement recommendations using a systems approach.

While this pilot is specific to these DHBs, we expect general lessons from these processes to be formalised and shared across the health sector from 2021 onwards, in collaboration with the HQSC.

Improving 'risk of harm' reporting

Under legislation, we must report the 'belief of risk of harm' to the public based on information provided in all claims for treatment injuries (accepted and declined). The purpose is to provide information to support the prevention of harm to patients by the health sector.

Throughout 2018/19, we worked to improve our risk of harm reporting policy and processes to support greater learning from treatment injuries. We did this work in partnership with health agencies, regulatory and professional bodies, medical indemnity insurers, and clinicians. Our new approach is now in place with a strong prevention focus. It includes both a single-event style of reporting, and collective reporting to identify new and emerging issues and trends.

What is an adverse event?

Serious adverse event reports come from hospital or community services notifying the Health Quality and Safety Commission (HQSC) of any incidents that have resulted in – or could have resulted in – serious harm or death. This is a voluntary reporting system.

ACC treatment injury figures measure different but sometimes overlapping incidents. ACC figures come from claims lodged, which may involve support for a person injured during treatment.

Not all treatment injuries are adverse events (e.g. a wound infection after removal of a skin lesion). And not all adverse events are treatment injuries (e.g. breakage of surgical equipment that doesn't result in harm to a patient).

Matt's Story

In 2012, 15-year-old Matthew Gunter underwent surgery to have his appendix out. Following his surgery he had complications and stopped breathing. He was able to be revived, but he passed away several days later.

Many opportunities to intervene and save Matt's life were missed. His death was preventable.

We're supporting Matt's Mum, District Nurse Heather Gunter, to tell '**Matt's Story**' to health professionals all over the country. Throughout 2019, Heather has spoken at more than 70 hospitals, reaching an audience of around 8,000 clinicians. Feedback tells us that this work has saved lives.



"There's a lot we can learn from stories like Heather's and I'd like to thank her for her courage in speaking up and sharing Matt's Story with the DHBs around the country to ultimately avoid such unnecessary deaths."

– CEO, District Health Board

"It has created lots and lots of discussion amongst staff and has also empowered staff to speak up and decline to bring a patient back from PACU (Post Anaesthesia Care Unit) when the PACU nurse was insisting that he came back."

– Ward educator, private hospital.

"As a new grad nurse, I have learnt so much from this presentation. Thank you for sharing your story. This will help and guide me during my practice."

– Nurse, private hospital

We use data to inform prevention

We have used our information about treatment injuries to help us identify areas or injury types where we believe prevention programmes may be effective. This includes injury types where the number of cases is low, but the impact on the person and their family/whānau is high. It also includes injury types where the impact may be less, but the number of injuries is high.

TABLE 1: CLAIM NUMBERS AND COSTS FOR SELECTED TREATMENT INJURY TYPES

Injury type	Accepted in 2018/19	Active in 2018/19	Payments in 2018/19
Healthcare associated infections	2,804	4,177	\$21,969,435
Medication adverse reactions	1,141	1,618	\$15,393,116
Neonatal encephalopathy	17	136	\$19,642,426
Pressure injuries*	459	553	\$879,690
Perioperative harm (excluding infection)	1,012	2,355	\$40,499,961
Surgical mesh	149	369	\$4,594,099

*Only considers pressure injuries lodged as claims for treatment injury. See [page 27](#) for further details.

Healthcare associated infections

Healthcare associated infections (HAIs) are infections that are acquired in hospitals or other healthcare facilities. They are the most common form of patient harm, and the most frequent cause of claims for treatment injuries. HAIs can develop immediately after treatment or after a patient has been discharged. These injuries can have a significant impact on patients' lives, and in the most severe cases, cause death.

We accepted slightly more claims for HAIs in 2018/19 than in previous years, relative to the increase in population.

GRAPH 2: CLAIMS WE ACCEPTED FOR HAIS

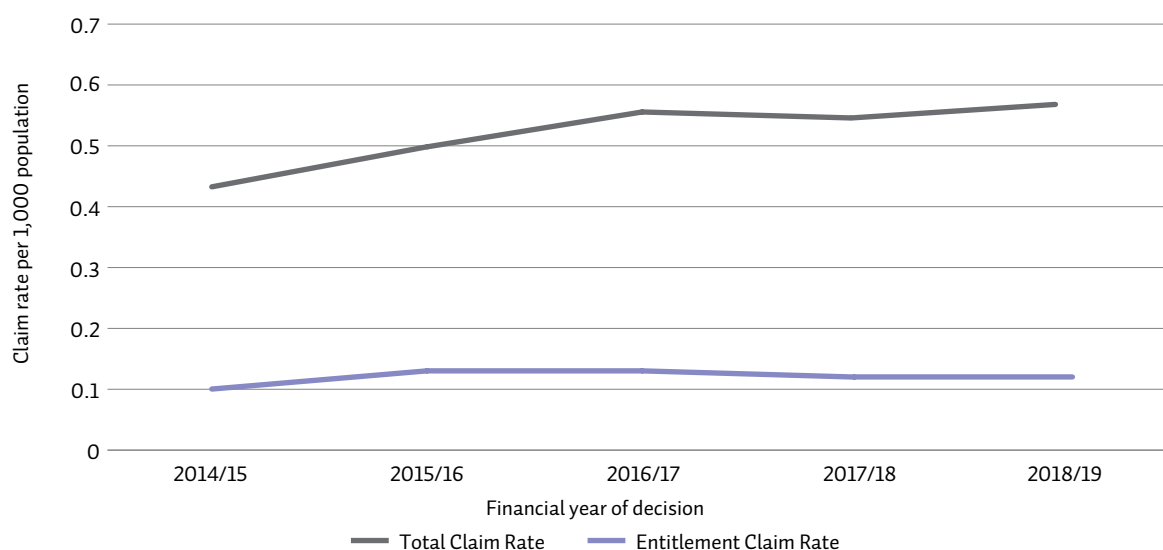


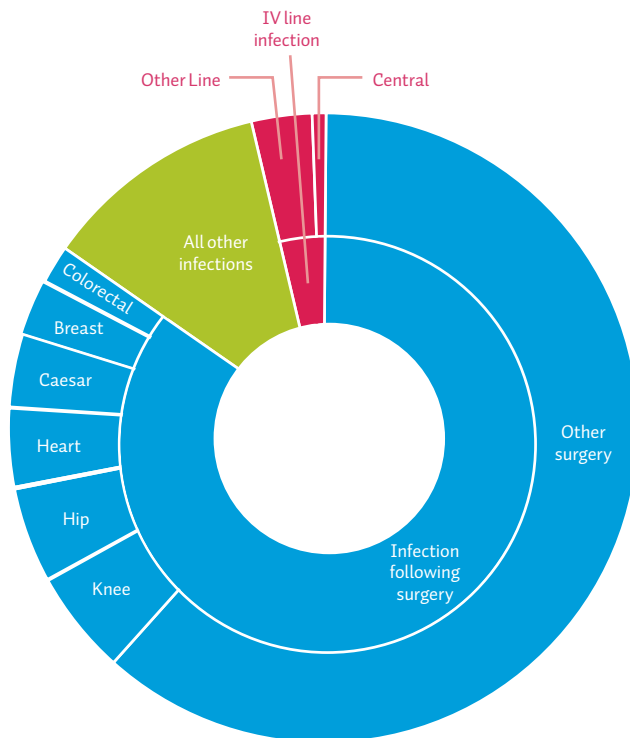
TABLE 2: ACCEPTED HAI CLAIMS BY FINANCIAL YEAR

	Financial year				
	2014/15	2015/16	2016/17	2017/18	2018/19
New claims accepted	1,941	2,334	2,637	2,652	2,804
Entitlement claims accepted	476	584	613	598	577
Total active claims	2,643	3,287	3,745	4,048	4,177
Cost breakdown					
Compensation	\$5,058,520	\$6,268,737	\$7,491,816	\$7,788,926	\$8,632,959
Rehabilitation	\$3,497,833	\$4,062,495	\$5,798,875	\$5,729,049	\$5,622,855
Treatment	\$4,834,858	\$6,723,544	\$7,687,088	\$8,161,144	\$7,713,621
Total cost of active claims	\$13,391,210	\$17,054,777	\$20,977,778	\$21,679,119	\$21,969,435

TABLE 3: ACCEPTED HAI CLAIMS AND COSTS FOR 2018/19 BY EVENT

Infection Site		Claims accepted	Costs paid
Infection following surgery	Knee	160	\$3,395,212
	Hip	137	\$3,200,137
	Heart	79	\$665,563
	Caesarean	116	\$369,525
	Breast	117	\$897,722
	Colorectal	76	\$607,834
	Other Surgery	1,696	\$9,662,740
	Total	2,381	\$18,798,734
IV line infection	Central	16	\$391,599
	Other Line	89	\$311,606
	Total	105	\$703,205
All other infections		318	\$2,467,496
All infections		2,804	\$21,969,435

FIGURE 1: ACCEPTED HAI CLAIMS BY EVENT 2018/19



Preventing healthcare associated infections

In 2019, we established a major programme of work aimed at reducing the incidence and severity of HAIs. The programme involves working in partnership with the health sector on a series of best-practice prevention approaches.

This programme is in its early stages and is focused in the following areas.

HAI Guiding Principles

Developing a core set of guiding principles for prevention

Peripheral Intravenous Cannula

National implementation of the Know Your IV Lines training and education package

National Antibiotic Guidance

Developing a nationally consistent and sustainable antibiotic guidance

NZ Aseptic Technique

Development and implementation of an aseptic technique education package

Sepsis

Researching the incidence and cost of sepsis. Developing an awareness and education campaign and a NZ Sepsis Action Plan

ICNet

Working with DHBs to roll out the ICNet infection detection and surveillance platform

ICNet makes a huge difference at Lakes DHB

In November 2019, Lakes DHB went live with the ICNet infection detection and surveillance platform, becoming the sixth DHB in the country to get the system up and running. Infection Prevention and Control Nurse Specialist Waverley Brinkler says ICNet is making a huge difference already by providing data and information in a timely way.

“It wasn’t that the data wasn’t available before, but it was very time-consuming to find and track, which meant we were only tracking the mandatory requirements. Now we have all of the information proactively provided to us and are able to act on it quickly.”

Waverley says she believes the real potential for ICNet is to provide information to clinicians to help them change practices to improve prevention.

“The future of infection prevention is an electronic system like ICNet. It’s a big change and we are just at the beginning, but it presents a huge opportunity to better manage and reduce the likelihood and impact of infections.”

Know Your IV Lines programme shows early success

Most adult patients admitted to New Zealand hospitals will have at least one peripheral intravenous cannula (PIVC) placed during their admission. Although PIVC are an essential element of care for most patients, they are associated with several complications including infections, the most serious being healthcare-associated Staphylococcus aureus bacteraemia (HASAB).

In 2015, Hutt Valley hospital had 10 cases of HASAB at a rate of 0.14 cases per 1,000 bed days, which was above the national average of 0.12. Almost all cases were associated with PIVC use. Given that this complication represents the severe end of a spectrum of infectious complication, overall rates of PIVC-associated infections are likely to be significantly higher.

In partnership with ACC, Hutt Valley District Health Board developed a program with an aim to reduce the infection rate by 50%. A care bundle targeting the three stages of PIVC use was implemented. This included:

- Ready (insertion using aseptic technique),
- Review (phlebitis monitoring at least once every nursing shift), and
- Remove (early removal of PIVC as soon as they are no longer indicated).

The bundle also focused on encouraging patients to speak up if their PIVC was not being used or had problems. Since the implementation of this programme in 2017, the number of patients with PIVC-associated HASAB has reduced to 1–2 cases per year. There has also been a noted reduction in the number of patients with a PIVC, and patients report that they are more likely to speak up if their PIVC has problems or is not being used.

The Know Your IV Lines programme is now being offered to all DHBs and private surgical hospitals, and feedback from the sector is positive and indicates that uptake will be high.



Adverse reactions to medication

Medication safety is one of our key focus areas for preventing treatment injuries. Rates of treatment injury caused by adverse reactions to medication have increased slightly in 2018/19 compared with 2017/18. Rates of entitlement claims rose, meaning more people with these injuries require ongoing support from us.

GRAPH 3: CLAIMS WE ACCEPTED FOR MEDICATION ADVERSE REACTIONS

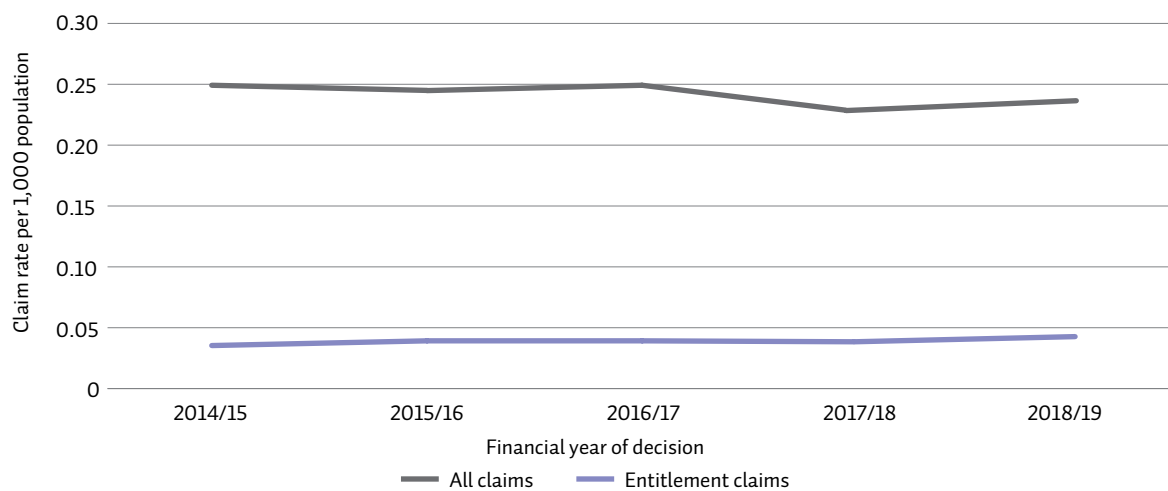


TABLE 4: MEDICATION ADVERSE REACTION CLAIMS BY FINANCIAL YEAR

	Financial year					
	2014/15	2015/16	2016/17	2017/18	2018/19	
New claims accepted	1,142	1,146	1,199	1,103	1,141	
Entitlement claims accepted	166	186	183	179	206	
Total active claims	1,451	1,531	1,603	1,614	1,618	
Cost breakdown	Compensation	\$3,806,150	\$4,845,301	\$4,958,916	\$5,510,259	\$6,752,415
	Rehabilitation	\$3,797,874	\$4,108,171	\$5,977,452	\$6,340,002	\$6,865,679
	Treatment	\$1,159,769	\$1,162,122	\$1,290,544	\$1,474,663	\$1,775,022
Total cost of active claims	\$8,763,794	\$10,115,595	\$12,226,911	\$13,324,924	\$15,393,116	

Preventing Fetal Anti-Convulsant Syndrome

The main focus of our current Medication Safety programme is preventing Fetal Anti-Convulsant Syndrome (FACS). Our goals are to:

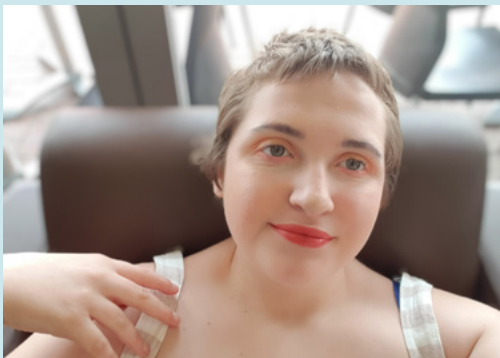
- reduce the prescribing rate of the anti-seizure medication sodium valproate, for people who may become pregnant
- ensure women know about the risks and benefits of anti-convulsant medications.

We're trying to reduce the risk of children being affected by FACS

FACS can cause physical malformations such as heart defects, cleft palate, and spina bifida, as well as learning and behavioural difficulties. FACS also has a life-long impact on affected children and their family/whānau.

The impact of FACS is high

The average lifetime cost to ACC of a single FACS claim is estimated at \$3.5 million. A single severe claim is estimated to cost ACC up to \$25 million. This gives an indication of the impact of a claim on an affected person.



Living with FACS

Kate Stoupe is 16 years old, but developmentally she is the equivalent of an eight-year-old. Kate was exposed to the anti-convulsant medication Epilim® (sodium valproate) while her mother Tash was pregnant. Tash didn't know the medication she was taking to control her epilepsy could harm her unborn baby.

"The guilt that I have is really difficult," says Tash. "I don't regret having Kate, but I didn't know how dangerous these medications could be and that's really unfair."

Tash says FACS affects almost every part of Kate's life. Because of damage to her temporal lobe, she has huge behavioural and anger issues and is extremely vulnerable. Keeping her safe is a big challenge and she needs one-on-one support to manage her daily life.

"Perhaps the hardest part is that Kate just wants to be normal. She thinks she's going to be able to have a job and live on her own, but a lot of that might not be possible, all because we didn't understand the risks of taking sodium valproate during pregnancy."

Risk of malformations

Malformations include spina bifida, cleft palate, and heart defects

2 to 3 out of 100 babies that aren't exposed to sodium valproate (Epilim®) will have malformations.

This is a low risk.

4 to 7 out of 100 babies exposed to sodium valproate (Epilim®) of any dose will have malformations.

This is a medium risk.

24 out of 100 babies exposed to a high dose (1500mg or more) of sodium valproate (Epilim®) per day will have malformations.

This is a very high risk.

Risk of learning problems or autism

Between 2 and 7 out of 100 babies that aren't exposed to sodium valproate (Epilim®) will have autism.

This is a low risk.

Between 4 and 15 out of 100 babies exposed to more than 800mg of sodium valproate (Epilim®) per day will have autism.

This is a medium risk.

Babies exposed to sodium valproate (Epilim®) may also have learning problems and a decreased IQ.

30 to 40 out of 100 babies exposed to more than 800mg of sodium valproate (Epilim®) per day will have developmental delays.

This is a very high risk.

These children are eight times more likely to need extra help at school than other children.

TABLE 5: ACCEPTED FACS CLAIMS BY FINANCIAL YEAR

		Financial year				
		2014/15	2015/16	2016/17	2017/18	2018/19
New claims accepted		<4	4	5	<4	4
Entitlement claims accepted		<4	4	5	<4	4
Total active claims		14	19	20	23	29
Cost breakdown	Compensation	\$47,809	\$66,312	\$122,235	\$113,728	\$114,126
	Rehabilitation	\$524,589	\$566,271	\$1,097,811	\$1,085,421	\$1,540,253
	Treatment	\$19,308	\$37,496	\$49,394	\$57,373	\$87,772
Total cost of active claims		\$591,705	\$670,080	\$1,269,441	\$1,256,522	\$1,742,151

Our prevention work

We made updated information resources available

We worked with our expert reference group (including consumer representatives, partner health agencies, and clinicians) to update our information resources for clinicians and for people taking anti-convulsant medications, in line with the latest information and research.

We shared people's stories

We created a series of videos to educate consumers and health professionals about the realities of living with FACS.



We worked with our partners

In February 2019, Medsafe published a new alert saying the indication for the use of sodium valproate in bipolar disorder has changed. Women who may become pregnant should only use sodium valproate when all other treatments are ineffective or not tolerated. Women must also be advised to use effective contraception while taking sodium valproate.

We provided 'just in time' information

We're supporting the rollout of the Conporto Event Detection & Mitigation (EDM) software across primary care. The EDM software uses secure technology to detect possible risks for patients based on their patient notes. It then provides GPs with a 'just in time' reminder when the patient books an appointment.

Practices can also discuss potential harm events as a practice, and GPs are prompted to consider the risk of harm in their conversations with the patient.

Conporto is now live in:

- 530 practices (2,603 GPs)
- 267 pharmacies

This covers nearly **2.4 million patients**.

Between August 2018 and May 2020, there was:

- a **88% drop** in the number of female patients aged between 10–49 taking sodium valproate
- a **66% drop** in female patients aged 10–49 initiated onto sodium valproate.

Neonatal encephalopathy

Neonatal encephalopathy (NE) is a syndrome of disturbed neurological function in a newborn.

The most frequent cause of NE is lack of oxygen to the baby at some point during pregnancy or birth.

The long-term effects can include:

- severe intellectual disability
- learning difficulties
- cerebral palsy
- epilepsy
- visual impairment.

The predicted lifetime cost of a serious NE case is estimated to be between \$36 million and \$56 million.

While the number of NE cases is low overall, the impact on the person and their family/whānau is extremely high and lasts throughout the person’s lifetime. We are currently setting aside between \$15 million and \$40 million when a claim is accepted.

TABLE 6: ACCEPTED NEONATAL ENCEPHALOPATHY CLAIMS BY FINANCIAL YEAR

		Financial year				
		2014/15	2015/16	2016/17	2017/18	2018/19
New claims accepted		17	13	17	25	17
Entitlement claims accepted		17	13	17	25	17
Total active claims		89	105	126	135	136
Cost breakdown	Compensation	\$351,850	\$650,810	\$883,994	\$795,969	\$938,685
	Rehabilitation	\$9,186,509	\$11,114,809	\$14,253,042	\$16,849,352	\$17,945,914
	Treatment	\$463,814	\$826,670	\$973,693	\$617,709	\$757,827
Total cost of active claims		\$10,002,172	\$12,592,290	\$16,110,730	\$18,263,029	\$19,642,426



The impact on family and whānau

Nearly 15 years ago, Alex Francis was born in Christchurch. He was 13 days overdue and had stopped moving, yet nothing was done to increase his chance of a safe delivery.

Alex was deprived of oxygen during his birth, leading to a severe case of neonatal encephalopathy. He wasn’t expected to survive, but Alex beat the odds.

“He was a delicious baby, but it was very clear that things were not right with him,” says Alex’s mum, Anna Francis.

It took about five years for Anna and her family to fully understand the extent of Alex’s injury.

“He’s nearly 15 now and he needs support with every aspect of his existence – he can’t even swat a fly off his face and he can’t communicate what he wants and needs. It’s like having a six-month-old baby in a 15-year-old’s body.

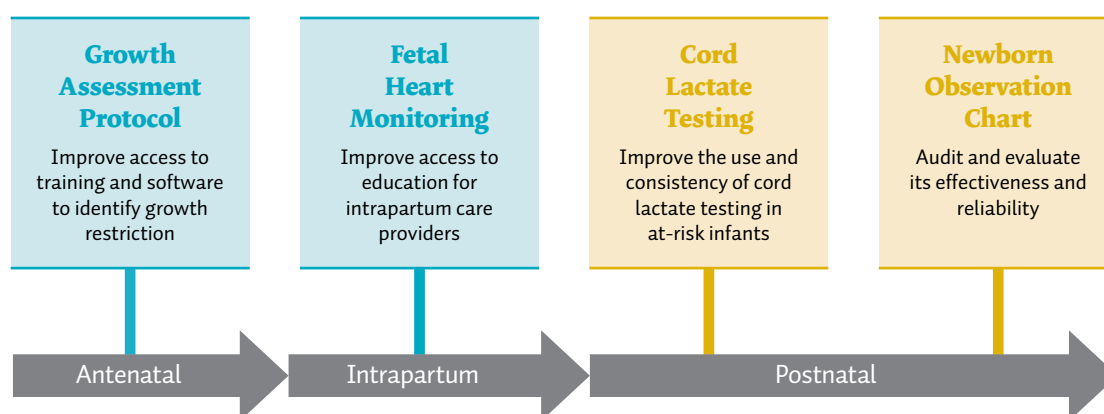
“We love Alex dearly, but his injury has had a huge impact on our family. The fact that his injury was preventable makes it even more difficult to deal with.”

Preventing neonatal encephalopathy

We convene the NE Taskforce that brings together expert representatives including:

- healthcare providers
- clinicians
- professional bodies
- government agencies
- consumer representatives.

We're working with the taskforce to implement a large programme of work, based on research commissioned by the taskforce which showed that more than 50% of NE cases have preventable features. The prevention programme is focused on four priority areas.



DHBs using new tool for identifying at-risk newborns

DHBs around the country are rolling out the Newborn Observation Chart and Newborn Early Warning Score (NOC/NEWS) tool for identifying newborn babies at risk of neonatal encephalopathy.

The tool was originally developed and piloted by Canterbury District Health Board in 2015. It was designed to better identify newborns at risk of neonatal encephalopathy and other serious medical issues, allowing them to receive more timely intervention that may lessen the severity of the condition.

“Through the Canterbury pilot we saw a 50% reduction in babies being retrieved from primary birthing units, meaning that at-risk babies stayed in the hospital instead, where they could be closely observed and receive medical interventions if necessary,” says ACC’s NOC/NEWS Project Manager, Lesley Long.

“Newborn babies tend to get really sick really quickly, so by keeping those at risk in the hospital they are in the best place to receive immediate care if their condition deteriorates.”

The NOC/NEWS tool is a core part of the wider prevention programme for neonatal encephalopathy. The aim is to have all 20 DHBs implementing this system within the next few years.

Pressure injuries

When people stay in one position too long, their skin and flesh can get damaged. This is called a pressure injury. Pressure injuries often occur in a bed or wheelchair. The damage can range from a blister to a deep open wound that can be difficult to treat and take months of recovery.

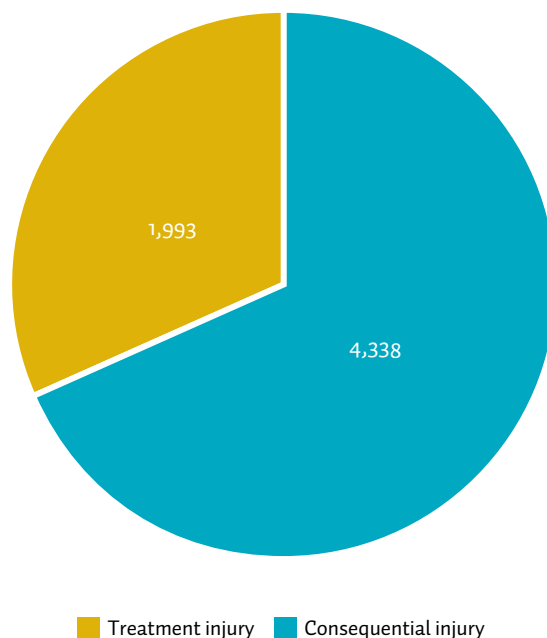
These injuries can greatly affect the quality of life for people who are impacted. In the most severe cases, they can cause death. They also have a significant impact on the health system.

Our treatment injury claim data doesn't capture the full extent of these injuries. Pressure injuries are often a consequence of other serious injuries, such as spinal cord injuries (SCIs) and traumatic brain injuries (TBIs). These 'consequential' injuries are often not recorded as treatment injuries in our data, but we can find evidence of them in accident claims.

Claims for pressure injuries

In the financial years from 2014/15 to 2018/19, we accepted 1,993 claims for treatment injury pressure injuries. Over the same period, over 4,000 patients with other injuries developed consequential pressure injuries that were recorded in our accident claim information.

FIGURE 2: PRESSURE INJURY CLAIMS 2014/15 – 2018/19



Treatment injuries

The rate of pressure injuries accepted by ACC as treatment injuries, per 1,000 population, has declined slightly since 2017/18.

GRAPH 4: CLAIMS WE ACCEPTED FOR PRESSURE INJURIES

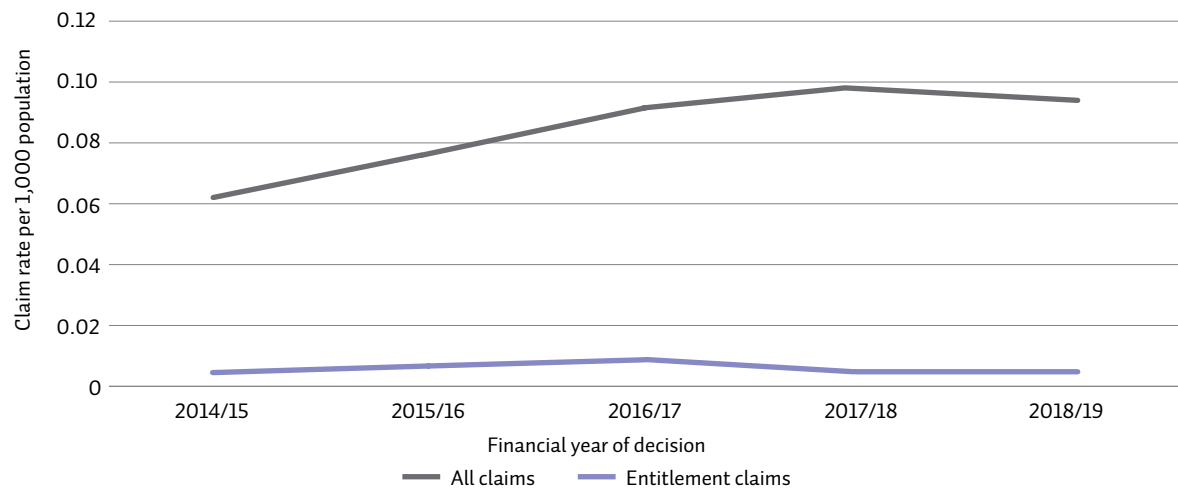


TABLE 7: ACCEPTED PRESSURE INJURY CLAIMS BY FINANCIAL YEAR*

		Financial year				
		2014/15	2015/16	2016/17	2017/18	2018/19
New claims accepted		284	347	433	470	459
Entitlement claims accepted		21	31	44	26	31
Total active claims		316	391	455	554	553
Cost breakdown	Compensation	\$43,519	\$191,303	\$268,210	\$77,220	\$108,671
	Rehabilitation	\$414,181	\$493,935	\$441,172	\$608,164	\$448,412
	Treatment	\$165,887	\$246,769	\$327,856	\$309,167	\$322,607
Total cost of active claims		\$623,586	\$932,006	\$1,037,238	\$994,551	\$879,690

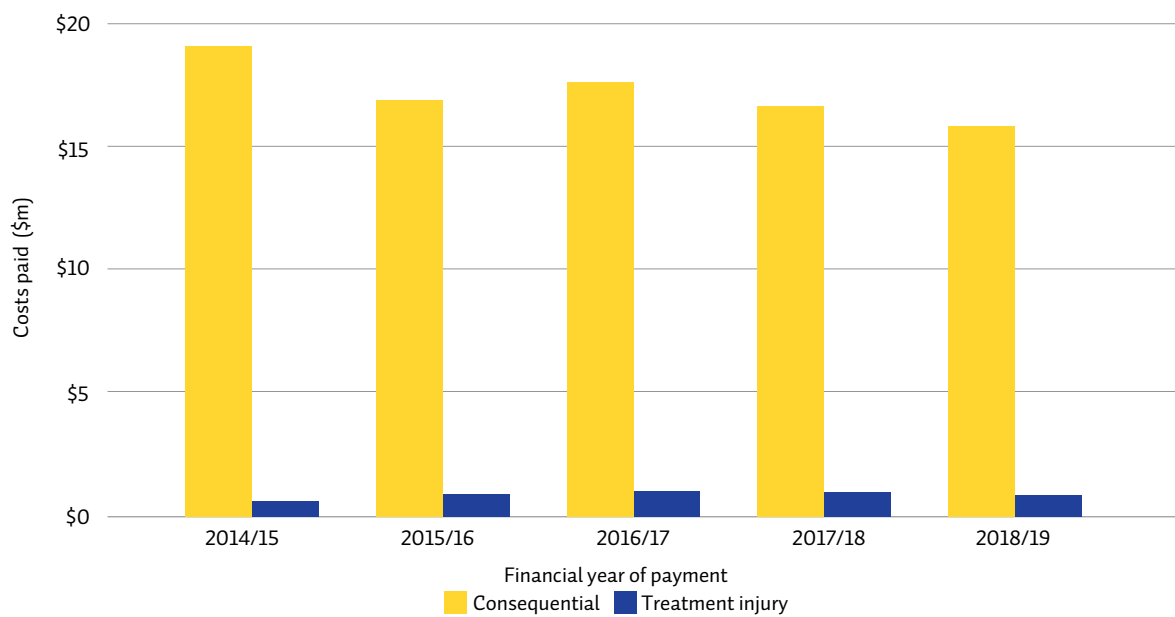
*Only refers to pressure injuries in treatment injury data – excludes consequential injuries.

Cost of pressure injuries

We estimate the annual costs of consequential pressure injuries to be at least \$35,000 on average per injury. We applied this value to accident claims that show evidence of a pressure injury to derive a conservative estimate of total cost.

These costs are indicative of the overall cost of pressure injuries to ACC.

GRAPH 5: ESTIMATE OF ANNUAL PRESSURE INJURY COSTS BY FINANCIAL YEAR – CONSEQUENTIAL AND TREATMENT INJURIES



Preventing, managing, and treating pressure injuries

We've worked with DHBs to implement Guiding Principles

We developed the **Guiding Principles for Pressure Injury Prevention and Management** with the health sector, and we've partnered with 19 DHBs around the country so far to implement them.

The partnership provides funding for DHBs to develop a two-year project to prevent pressure injuries across their hospitals, residential aged care, and community settings. This means we currently have more than 50 people throughout the country working to implement the Guiding Principles and reduce the incidence and severity of pressure injuries.

The Guiding Principles are available at acc.co.nz/treatmentsafety

Canterbury/West Coast Community of Practice tackles pressure injuries

Canterbury and West Coast DHBs were two of the first DHBs to partner with ACC to implement the Guiding Principles.

Director, Quality and Patient Safety, Susan Wood, said their two-year programme of work focused on establishing a community of practice across both DHB regions' agencies to deliver a quality improvement programme.

"Thanks to the partnership with ACC we have been able to make pressure injury prevention front of mind, and implement a range of quality improvement measures," Susan says.

"This includes fully training 33 Pressure Injury Prevention Link Nurses and releasing them one day per month to run their own improvement programmes, creating a graduate paper in pressure injury prevention for the Ara Institute of Technology, developing teaching resources for clinicians and consumers, reviewing issuing of pressure relieving equipment in Canterbury, and much more. While we have found the number of pressure injuries reported have gone up, we have also seen the preventive care become much more front of mind in every setting."

"The increased focus on pressure injuries has also made it easier for us to make business cases for other improvement measures, including a bed mattress replacement programme," Susan says.

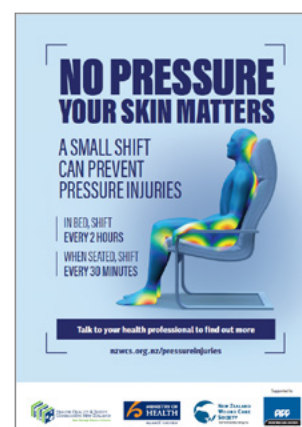
"The opportunity to share and collaborate with our colleagues in other DHBs has also been invaluable".

We worked with partners to deliver 'No Pressure' information resources

During 2019, we worked to develop a consistent set of pressure injury information resources for people at risk and for health professionals. We did this in partnership with the:

- NZ Wound Care Society
- Health Quality and Safety Commission
- Ministry of Health.

These information resources are available in multiple languages, and they're distributed nationwide.





Wellington-based Bob Symon is a member of both the Community Design Group and the Expert Advisory Group for our Pressure Injury programme. He's a trustee of the New Zealand Spinal Trust and has a spinal cord injury.

"It's really important that the recognition and prevention of pressure injuries for people with spinal cord injuries is understood and elevated. Prevention is far better than cure," Bob says.

"Pressure injuries have a significant impact on people, taking them out of society, often resulting in bedrest. When a pressure area occurs and is not managed properly, the area site becomes susceptible to reoccurrences.

"I'm really excited to be a part of the work that ACC's doing in raising awareness of pressure injuries and improving education about this important topic."

We're working on reducing pressure injuries for people with spinal cord injuries (SCIs)

We formed a Community Design Group for people affected by SCIs to help us and the health sector better understand opportunities to prevent and treat pressure injuries for this group. We've also formed a clinical Expert Advisory Group.

The two groups are working towards providing consistent, evidence-informed prevention, treatment and escalation pathway information in an accessible way.

We've also supported the NZ Spinal Trust (nzspinaltrust.org.nz) to develop a series of videos about prevention and treatment of pressure injuries.

We've collaborated with partners to update education materials for health professionals

We worked with partners in the health sector to update materials to educate health professionals about pressure injuries. This included working in partnership with Careerforce to review and update the Kaiāwhina module on preventing pressure injuries. Next we plan to undertake a current state analysis of pressure injury education in New Zealand to determine whether there are education needs not currently being met, and scope requirements to address any gaps.

Surgery-related treatment injuries (perioperative harm)

In 2018/19 we accepted claims for 1,012 surgery-related injuries (not including infections). This number has increased since 2017/18.

GRAPH 6: CLAIMS WE ACCEPTED FOR SURGERY-RELATED INJURIES

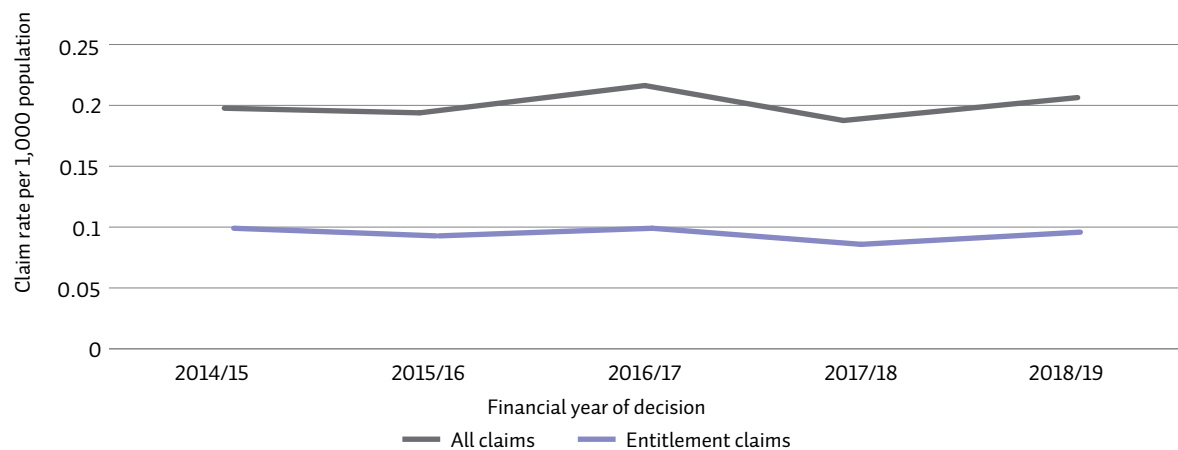


TABLE 8: ACCEPTED SURGERY-RELATED CLAIMS BY FINANCIAL YEAR

		Financial year				
		2014/15	2015/16	2016/17	2017/18	2018/19
New claims accepted		902	905	1,029	903	1,012
Entitlement claims accepted		450	430	467	422	468
Total active claims		1,774	1,908	2,128	2,162	2,355
Cost breakdown	Compensation	\$9,798,297	\$11,525,982	\$12,744,634	\$13,007,185	\$16,524,130
	Rehabilitation	\$10,560,579	\$12,180,915	\$14,311,284	\$16,322,783	\$18,326,839
	Treatment	\$4,512,601	\$4,354,588	\$5,052,225	\$5,022,295	\$5,648,992
Total cost of active claims		\$24,871,476	\$28,061,485	\$32,108,144	\$34,352,263	\$40,499,961

Preventing perioperative harm

To help address injuries from perioperative harm, we're working with The University of Auckland School of Medicine to deliver NetworkZ (networkz.ac.nz) to surgical teams around the country. NetworkZ is a surgical simulation-based team training programme. It allows multidisciplinary teams to train together in state-of-the-art surgical simulation suites while focusing on team-work and communication.

The programme is being implemented in four cohorts, of five DHBs each. All DHBs are now enrolled, and the fourth cohort is beginning in 2020.

As at February 2020:

- 1,193 clinicians had taken part in NetworkZ training
- 279 instructors had been trained
- Eight DHBs are now delivering the programme independently.

Surgical mesh

Mesh implants have been used since the 1990s in a number of surgical procedures to provide additional support when repairing weakened or damaged tissue. They are regulated as medical devices. The most common use worldwide has been for abdominal surgical wounds such as hernia repairs, but it is also used for urogynaecological surgery including repair of pelvic organ prolapse (POP) and stress urinary incontinence (SUI).

Surgical mesh has helped many people, but it is also known to result in complications, and there has been increasing concern from consumers. This resulted in the Ministry of Health commissioning Victoria University to complete a restorative justice process, which we participated in.

A report on that process, titled **Hearing and Responding to the Stories of Survivors of Surgical Mesh** was published in December 2019. The report is based on the responses of over 600 people harmed by surgical mesh and describes the impact on everyday lives. It comprehensively documents the nature and scale of a significant patient safety issue.

The report also contains a list of key actions agreed by the relevant agencies and parties. We engaged in taking action to prevent future injuries and we are working with the Ministry of Health, the professions, consumers, and others to develop and deliver a national education programme.

As of December 2019 ACC had accepted over 1,100 treatment injuries claims for harm due to surgical mesh. Most surgical mesh claims are entitlement claims because patients often need ongoing support.

GRAPH 7: CLAIMS WE ACCEPTED FOR SURGICAL MESH INJURIES

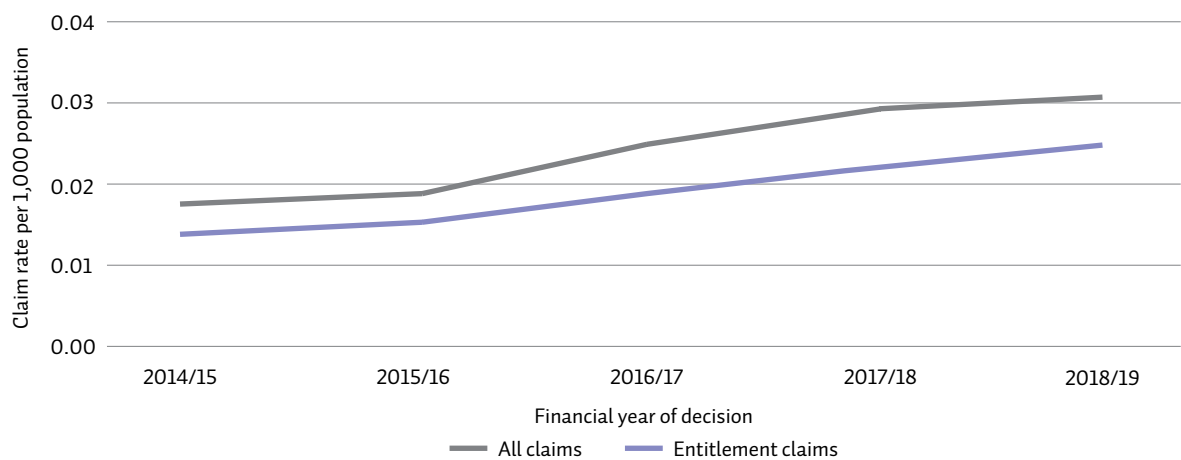


TABLE 9: ACCEPTED SURGICAL MESH CLAIMS BY FINANCIAL YEAR

		Financial year				
		2014/15	2015/16	2016/17	2017/18	2018/19
New claims accepted		82	92	122	141	149
Entitlement claims accepted		69	72	92	110	120
Total active claims		185	212	268	326	369
Cost breakdown	Compensation	\$1,304,953	\$1,391,360	\$1,599,315	\$1,881,376	\$2,239,230
	Rehabilitation	\$290,286	\$434,607	\$507,311	\$565,701	\$596,088
	Treatment	\$1,205,561	\$1,100,766	\$1,308,980	\$1,624,806	\$1,758,782
Total cost of active claims		\$2,800,800	\$2,926,734	\$3,415,605	\$4,071,883	\$4,594,099

“I had a house, steady job, caring sexual relationship, good salary, a racing bike, was a triathlete. I ran half marathons. I had a really nice life. By 2001... all of it was gone.”
(Mesh injured woman/LC)

“I have lost my occupation as a farmer, lost my farm, lost many jobs due to frequent hospital admissions. I have lost my physical fitness which was important to me as a farmer but also as a keen hunter, tramper, and kayaker. I have lost intimacy with my wife due to the pain. These things are impossible due to my daily pain.” (Mesh injured man/SD)

Wailling, J., Marshall, C., & Wilkinson, J. (2019). *Hearing and responding to the stories of survivors of surgical mesh*: Ngā kōrero a ngā mōrehu – he urupare (A report for the Ministry of Health). Wellington, New Zealand: The Diana Unwin Chair Restorative Justice, Victoria University of Wellington.



CR243

CR1336

CR243

CR1336



Rates of injury vary by setting, age, gender, and ethnicity

Setting

Nearly 73% of all accepted claims for treatment injuries in 2018/19 were a result of treatment in public and private hospitals (members of NZPSHA). Because of this, we have prioritised the establishment of partnerships and initiatives within hospitals.

In 2018/19, 59.2% of accepted claims for treatment injuries were the result of treatment in public hospitals, 13.8% in private hospitals, 13.6% in general practice settings, and 13.3% in other locations (including aged residential care and rooms-based treatments by specialists).

TABLE 10: CLAIMS WE ACCEPTED BY TREATMENT SETTING OVER THE LAST FIVE YEARS

Setting	Financial year of decision				
	2014/15	2015/16	2016/17	2017/18	2018/19
Public hospitals	4,400	5,047	5,728	5,748	6,191
Private hospitals (members of NZPSHA)	1,244	1,248	1,337	1,249	1,443
General practice setting	1,265	1,284	1,421	1,387	1,425
Other	1,129	1,357	1,465	1,442	1,396
Total	8,038	8,936	9,951	9,826	10,455

The population and services offered are different for each healthcare setting

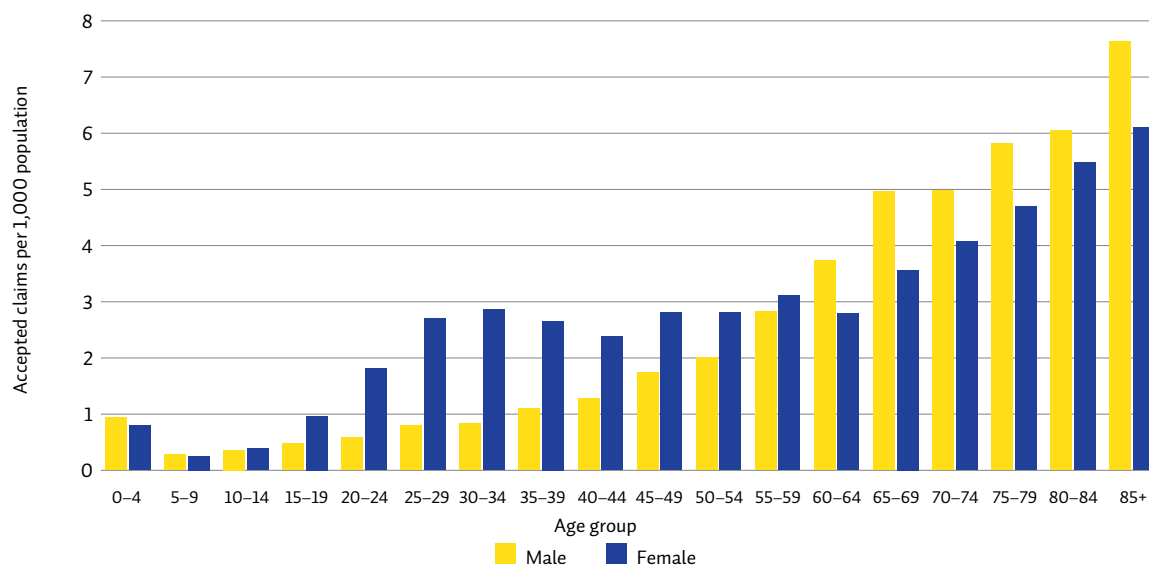
Direct comparisons between healthcare settings can't often be made. Different treatment settings provide different types of treatments, surgery, and services. These activities carry different risks of injury to the patient, meaning that each facility has its own unique level of risk.

Each setting or region also has its own unique population, which affects the likelihood of treatment injuries occurring. For example, some hospitals have higher levels of health conditions like diabetes and obesity. Others may have more older people or a different ethnic mix, and some may have higher levels of socio-economic disadvantage.

Age and gender

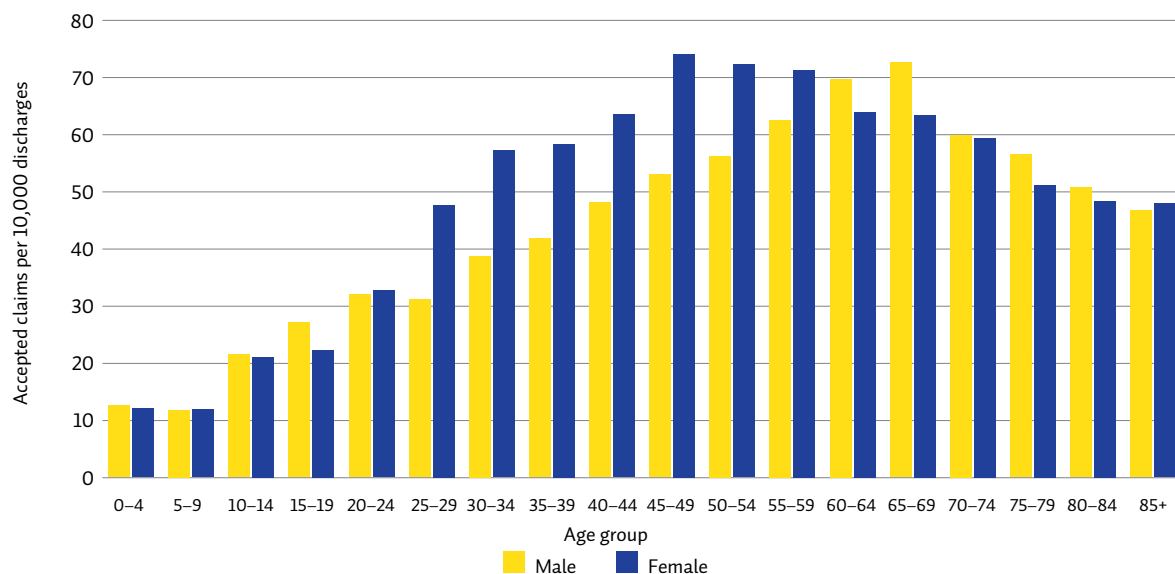
The number of accepted treatment injury claims varies according to age and gender. This variation is because people of different ages and genders use treatment services in different ways and amounts. These patterns don't necessarily reflect an increased risk of injury per treatment, although a person can only get a treatment injury through contact with a registered health provider.

GRAPH 8: CLAIMS WE ACCEPTED IN 2018/19 – RATE PER 1,000 POPULATION



Detailed data on people discharged from public hospitals is collected in the National Minimum Dataset (NMDS). We've used this data to describe the demographic mix of patients who received treatment in public hospital settings. We have linked this to claims for treatment injuries to show the rate of claims we accepted per discharged person, which is effectively a measure of risk of treatment injury per treatment by age and gender.

GRAPH 9: CLAIMS WE ACCEPTED FROM DHBS 2018/19 – RATE PER 10,000 DISCHARGES



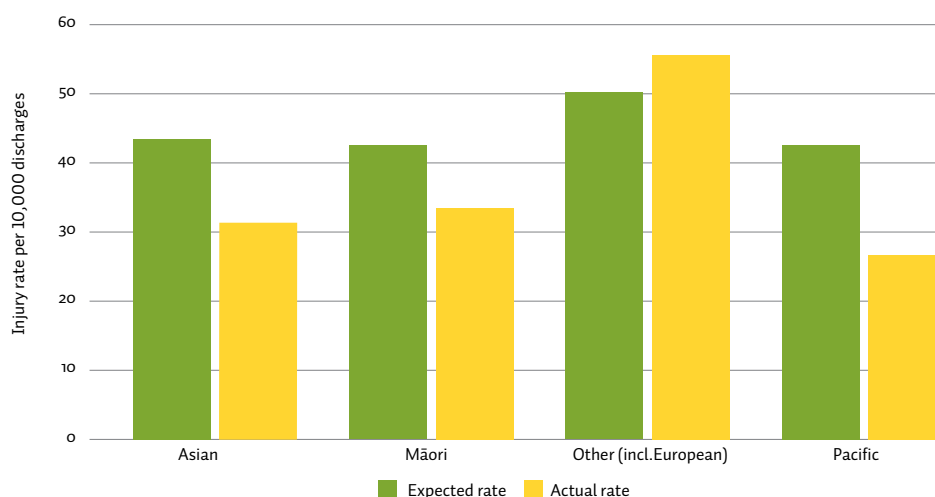
The risk of treatment injury increases with age, up to a point. The risk of treatment injury is noticeably higher for women aged 25–59, than men of the same age.

Ethnicity

Fewer elderly Māori, Pacific, and Asian patients are admitted to public hospitals compared to the rest of the population. As treatment injury risk increases with age, this puts these populations at a lower risk of injury overall. We therefore expect to see higher rates of treatment injury for the 'Other (including European)' group.

Based on age and gender differences alone, we created an 'Expected rate' of injury per discharge to compare with an 'Actual rate'. The 'Actual rate' is the true rate of accepted claims for treatment injuries. Any difference between these two values is not explained by the age or gender distribution.

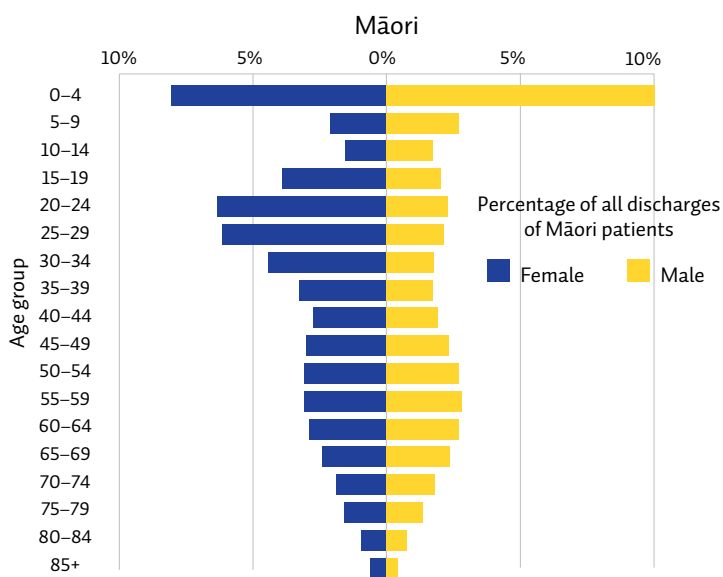
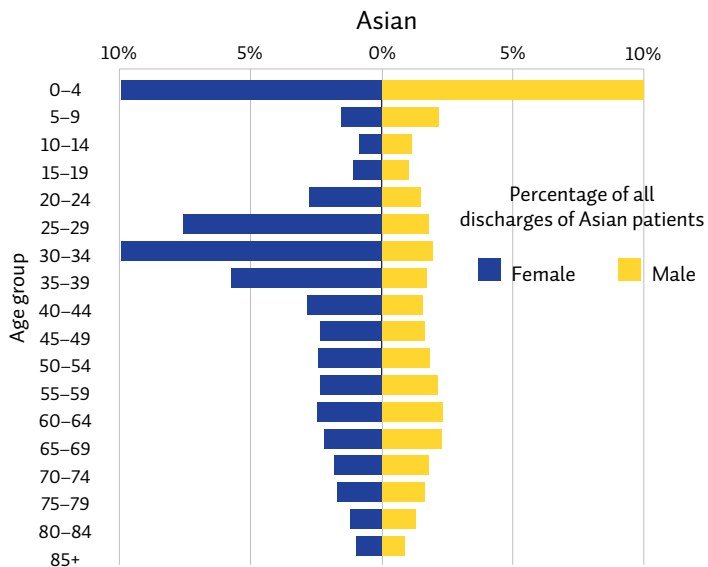
GRAPH 10: DHB EXPECTED AND ACTUAL INJURY RATES BY ETHNICITY: 2014/15 – 2018/19

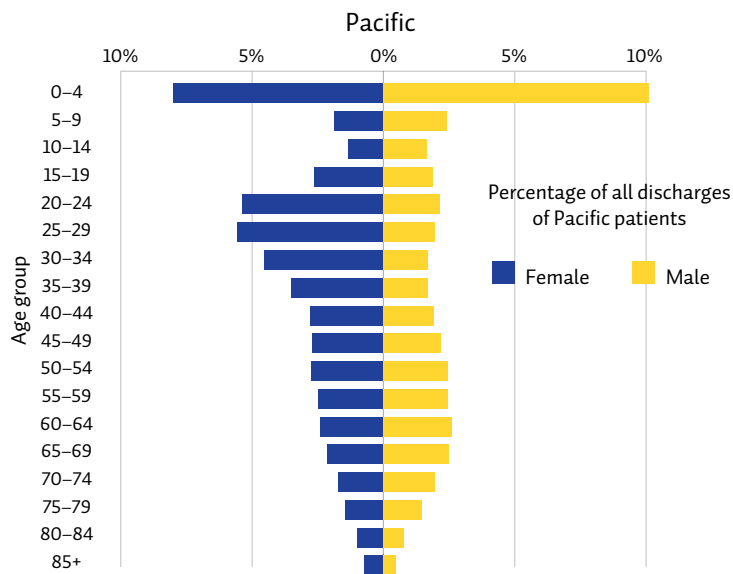
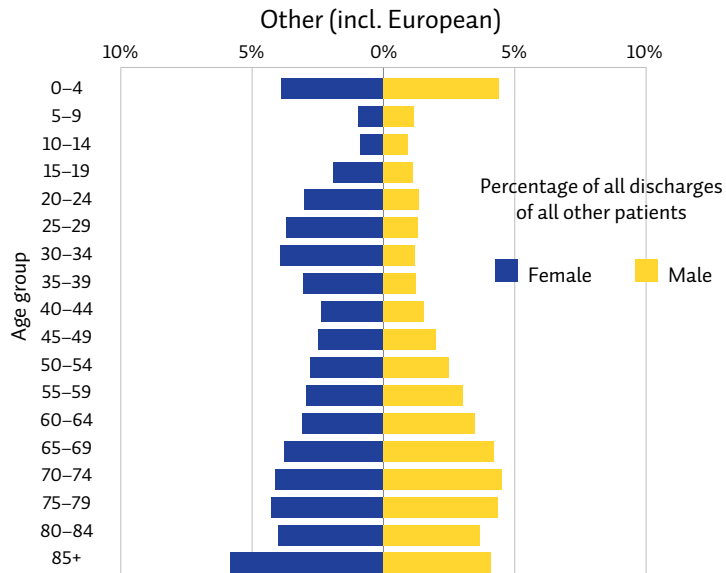


“The treatment injury data in this report demonstrates a lower rate of accepted treatment injury claims than expected for Māori, Pacific and Asian patients discharged from a public hospital (DHB) admission. Even after accounting for age and gender (European patients are older) and higher hospital utilisation rates for those of European ethnicity, the rates of claims for Europeans remains above that for Māori, Pacific and Asian patients. This information raises the possibility that Māori, Pacific and Asian people injured during treatment have not been supported to lodge a claim and receive support for their recovery. It indicates that DHBs and ACC need to investigate the reasons for this noticeable difference.”

– Dr. Curtis Walker, FRACP (Te Whakatohea, Ngati Porou)
Renal & General Physician, Chair, Medical Council of New Zealand.

The use of public hospitals varies between ethnic groups, reflecting differences in population, access, and health behaviours.





Note: We use the prioritised definition for ethnicity provided by DHBs to match claimant ethnicity with discharge ethnicity.
 The ethnic classification used here is based on the concept of self-identification. People can only be included in one ethnic group. This means that those people who identify with more than one ethnic group have had their ethnicity prioritised in the following order: Māori, Pacific, Asian, and Other.





We measure the impact of treatment injuries

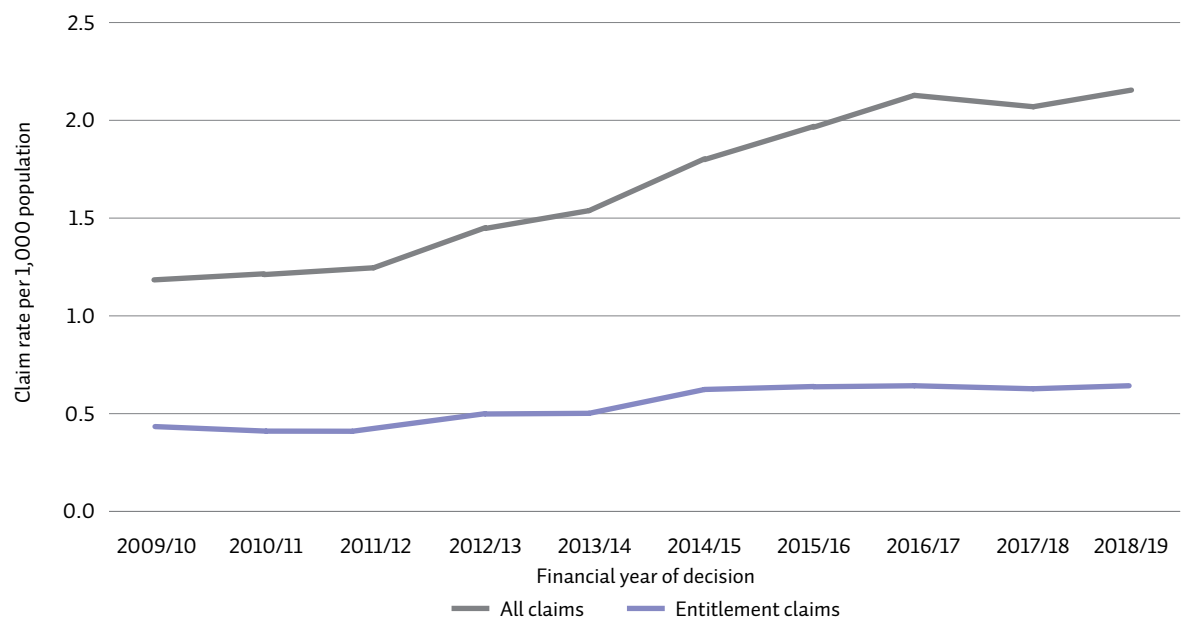
Measuring how severely a treatment injury affects a person is difficult. The overall cost to date, and the predicted cost of the claim, are useful indicators of the severity of the injury. The higher the cost of the claim, the more medical treatment, rehabilitation, support, and compensation for time off work the person is likely to have had.

Entitlement claims grew at a lower rate than accepted claims

At ACC, we use the term ‘entitlement claim’ to help us distinguish between lower and higher-impact claims. ‘Entitlement claim’ means the person has received support beyond medical treatment for their injury. This extra support can take the form of weekly compensation for any lost earnings, rehabilitation, and support to continue their daily life.

The growth in entitlement claims for treatment injuries between 2009/10 and 2018/19 is lower than the total growth rate of accepted claims for treatment injuries per 1,000 population.

GRAPH 11: ALL CLAIMS AND ENTITLEMENT CLAIMS WE ACCEPTED IN ALL SETTINGS



Treatment injuries have significant costs

We look at the costs of claims in different ways so we can understand the initial cost of the treatment injury, and the long-term costs that we need to put funds aside for. Some of the ways we look at costs are:

- future costs for the lifetime of the claim
- costs paid for active claims for treatment injuries each year
- actual costs incurred in the years after the claim is accepted (for example, if the injury happened before 2018/19, but payments are still being made during 2018/19).

Future costs

Outstanding claims liability (OCL) is a term we use to estimate the money we need to put aside to cover the lifetime cost of claims for treatment injuries. OCL includes all future treatment, care, and support for people who have already been injured.

Current OCL

The OCL for claims for treatment injuries was \$7.51 billion as at 30 June 2019. This has increased from \$5.7 billion in 2017/18 due to declining interest rates, beyond our control, resulting in a significant revaluation of the total OCL for all claims.

Because the OCL is the lifetime cost of supporting all existing injury claims 100 years into the future, it is highly sensitive to changes to long-term interest rates. A lower interest rate increases the OCL. The opposite is true when interest rates increase.

Incurred costs

We use the term ‘incurred costs’ for costs that will cover the lifetime of the claim. The actual and predicted costs reflect the cost of treatment, expected ongoing care, support, and rehabilitation for people harmed while receiving medical treatment.

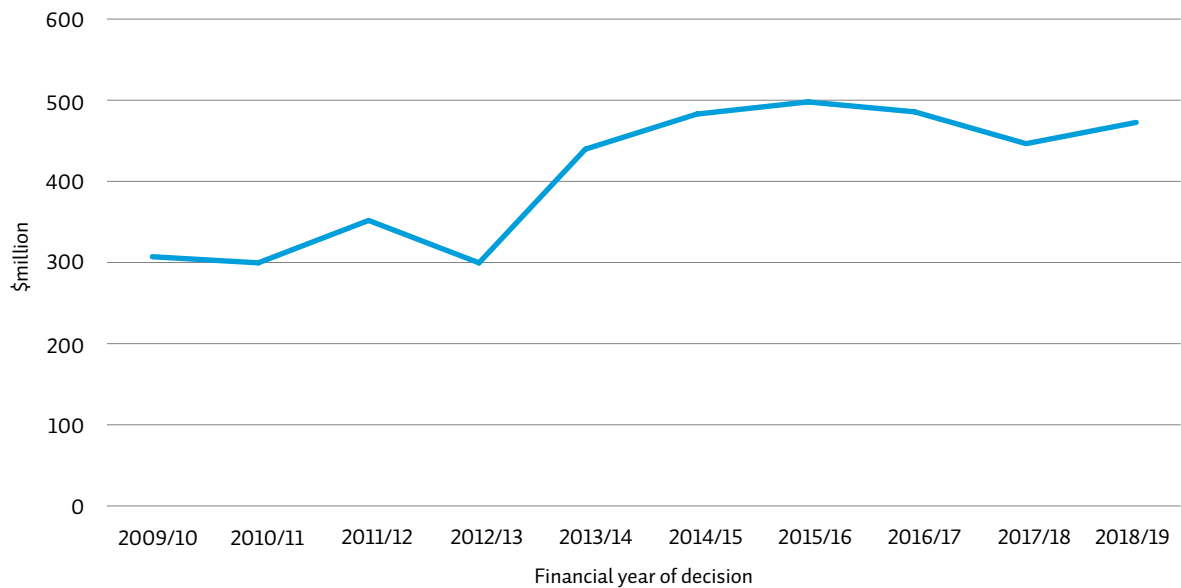
Incurred costs also include estimates of claims that will be accepted in future years for treatment injuries due to treatment delivered in 2018/19. Some injuries are not immediately apparent, like fetal anti-convulsant syndrome caused by taking the anti-seizure medication sodium valproate during pregnancy, or a delayed cancer diagnosis. For this reason, it’s not possible to analyse incurred costs by treatment facility and injury type.

See [page 67](#) in the glossary for a full definition of ‘incurred costs’.

Current estimate of incurred costs

We estimate a cost of \$486 million for the lifetime of all claims for treatment injuries that occurred in 2018/19. Since 2008, incurred costs have increased by 30%.

GRAPH 12: INCURRED COSTS FOR ALL CLAIMS FOR TREATMENT INJURIES IN ALL SETTINGS, BY FINANCIAL YEAR

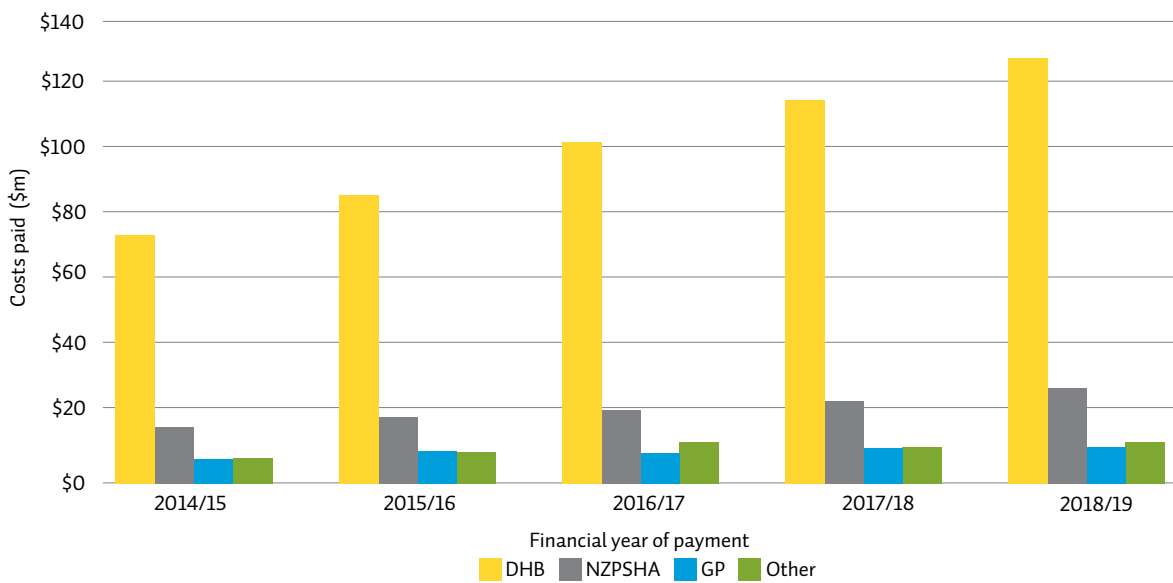


Costs paid

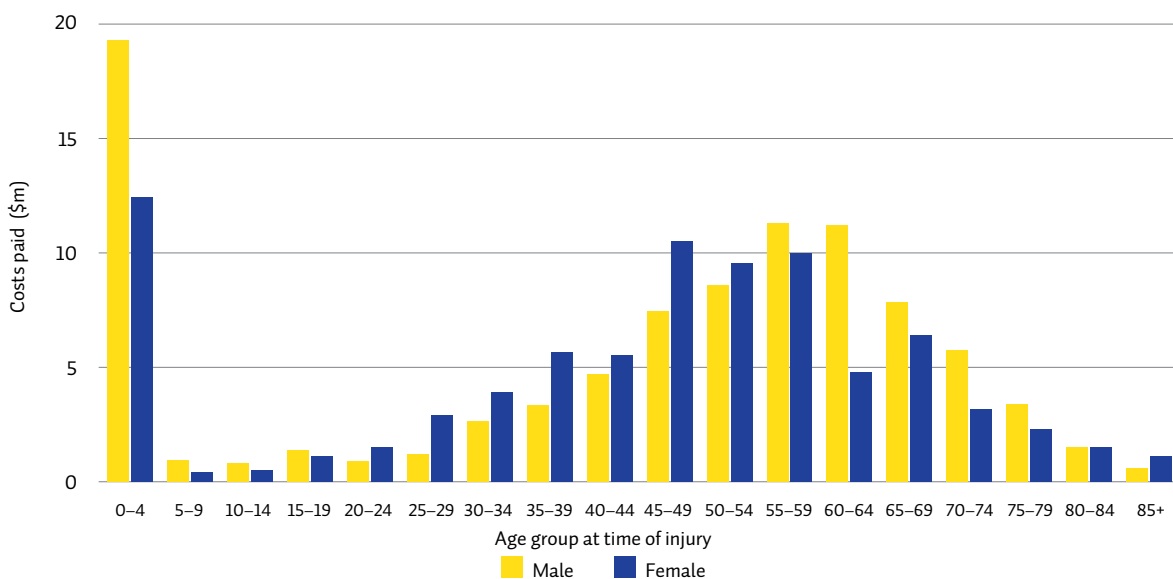
We paid \$177 million for active claims for treatment injuries in 2018/19. Active claims are any claims that have generated a payment within that year. This means we paid for the person affected to have treatment, rehabilitation, or support during the year.

This amount doesn't include the expected lifetime costs of claims. However, it can help to show the relative impact of different treatment injury settings. These costs also don't include any treatment for acute services (in a public hospital emergency department), as this is covered by the Public Hospital Acute Services (PHAS) payments, which we contribute to via Vote Health.

GRAPH 13: COSTS WE PAID FOR ACTIVE CLAIMS, BY TREATMENT SETTING AND PAYMENT YEAR



GRAPH 14: COSTS WE PAID IN 2018/19 FOR ACTIVE TREATMENT INJURY CLAIMS, BY AGE AND GENDER



The high costs paid for the 0-4 age group are due to brain injuries at birth, called neonatal encephalopathy (NE). You can read about our NE prevention initiative on [page 25](#).





We are working on resources to help people understand treatment injuries

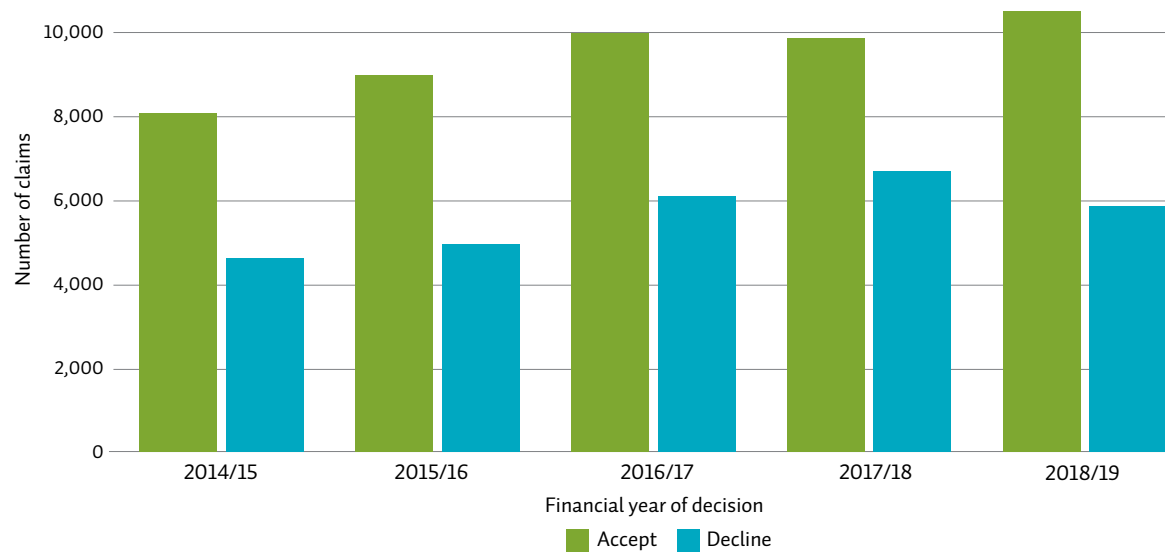
We published clearer guidance for registered health professionals in early 2019, to help them identify cases of treatment injury, understand when to lodge a claim for treatment injury, and ensure all necessary information is presented to support our decision on the claim.

Our Treatment Injury Claim Lodgement Guide assists clinicians, patients, and support staff, to better understand the criteria for treatment injury. The guide is available at acc.co.nz/treatmentsafety. We have also worked with the sector to develop detailed guidance for some specific injury types.

Claim lodgement may be improving

We may be seeing some improvement in claim lodgement. In 2018/19 we accepted 64.2% claims for treatment injury, compared with 63.7% in 2014/15. During the same period, the number of claims we made a decision on increased (from 12,623 in 2014/15 to 16,285 in 2018/19).

GRAPH 15: ACCEPTED AND DECLINED TREATMENT INJURY CLAIMS BY FINANCIAL YEAR OF DECISION



We declined some claims for treatment injuries

60% of declined claims didn't have an injury caused by treatment

- For 31%, no physical injury occurred
- For 27%, there was no causal link between the treatment and the injury
- For 2%, the injury was the result of an underlying health condition

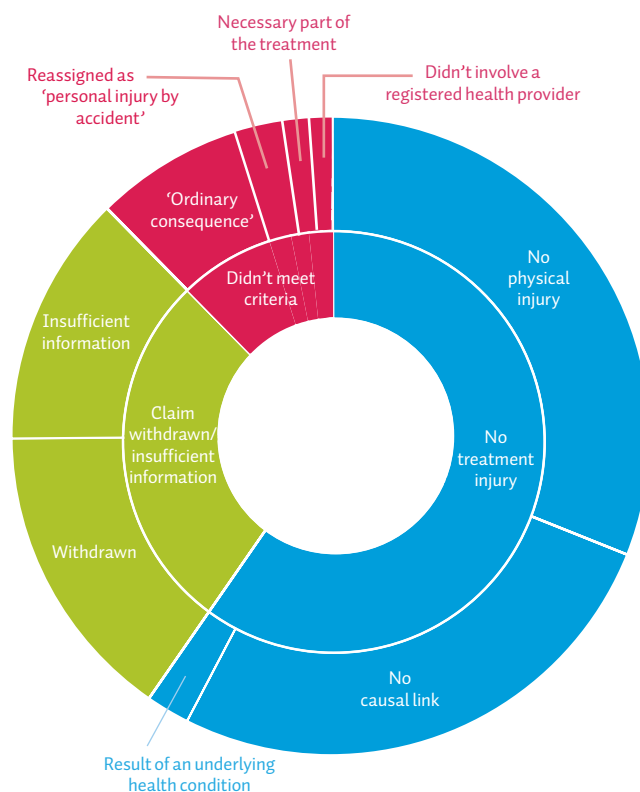
12% of declined claims didn't meet the criteria to be a treatment injury

- 7% were an 'ordinary consequence' of the treatment
- 1% were a necessary part of the treatment
- <1% didn't involve a registered health provider in the treatment
- 2% were reassigned as ACC 'personal injury caused by accident' (PICBA) claims

28% of claims were declined because the claim was withdrawn or insufficient information was provided

- 15% were withdrawn
- 13% had insufficient information to make a decision within nine months (the timeframe required by law)

FIGURE 3: REASONS WE DECLINED TREATMENT INJURY CLAIMS IN 2018/19



Different settings have different rates of treatment injury

Making direct comparisons between treatment settings often can't be done, and can lead to misinterpretation. The best way to compare rates of treatment injury is within the same treatment setting over time.

Public hospitals

According to Ministry of Health data, 1.18 million people were discharged after treatment at a public hospital in 2018/19. In the same period, we accepted 6,191 claims for treatment injuries from public hospital treatment.

Overall, 0.5% of patient discharges from public hospitals resulted in an accepted claim for a treatment injury (that is 52.6 accepted claims for treatment injuries claims per 10,000 discharges). This proportion increased from 0.4% in 2014/15 (40.5 accepted claims for treatment injuries per 10,000 discharges).

The proportion of claims for treatment injuries from DHBs we accepted has increased from 65.7% in 2017/18 to 71.3% in 2018/19. This increase likely reflects health professionals becoming more knowledgeable about treatment injury and which claims can be accepted under the AC Act.

This increase is due to a significant increase in claims for minor injuries due to treatment in DHBs (less than \$500 in value). Over 55% of claims from DHBs fit this category. The payments on these minor claims across all 20 DHB regions in New Zealand are about \$500,000 per year. These payments largely represent administrative costs, with little or no benefit to the patient. This change has not been observed in other treatment settings.

GRAPH 16: ACCEPTED CLAIMS PER 10,000 DISCHARGES FROM PUBLIC HOSPITALS (DHBs)

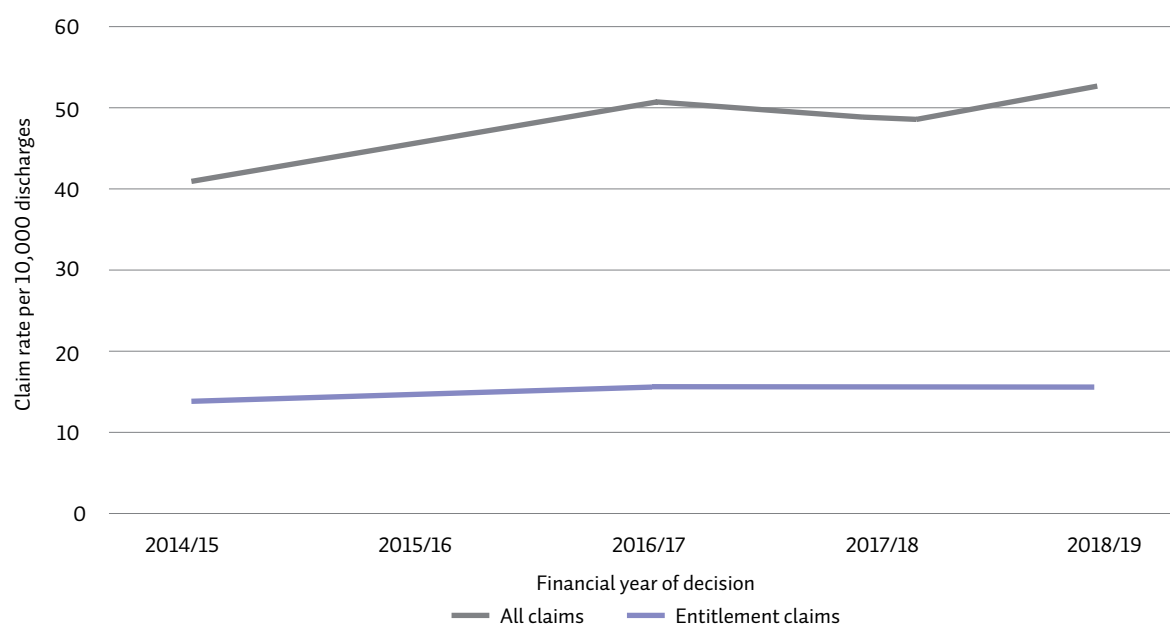


TABLE 11: CLAIMS FROM TREATMENT AT PUBLIC HOSPITALS (DHBs)

		Financial year of decision				
		2014/15	2015/16	2016/17	2017/18	2018/19
Accept	Number	4,400	5,047	5,728	5,748	6,191
	%	67	69	68	66	71
Decline	Number	2,160	2,227	2,739	2,997	2,498
	%	33	31	32	34	29
Total Decided Claims		6,560	7,274	8,467	8,745	8,689
Entitlement Claims		1,509	1,646	1,740	1,721	1,816

Private surgical hospitals

In 2018/19, 189,075 people were discharged after treatment at private surgical hospitals (members of NZPSHA). We accepted 1,443 claims for treatment injuries due to treatment at private surgical hospitals. Overall, 0.76% of discharges from a private surgical hospital resulted in an accepted claim for a treatment injury (that is 76 accepted claims for treatment injuries per 10,000 discharges).

Claim rates per 10,000 discharges are only available for the past two years.

GRAPH 17: ACCEPTED CLAIMS FOR TREATMENT INJURIES AT PRIVATE SURGICAL HOSPITALS (MEMBERS OF NZPSHA)

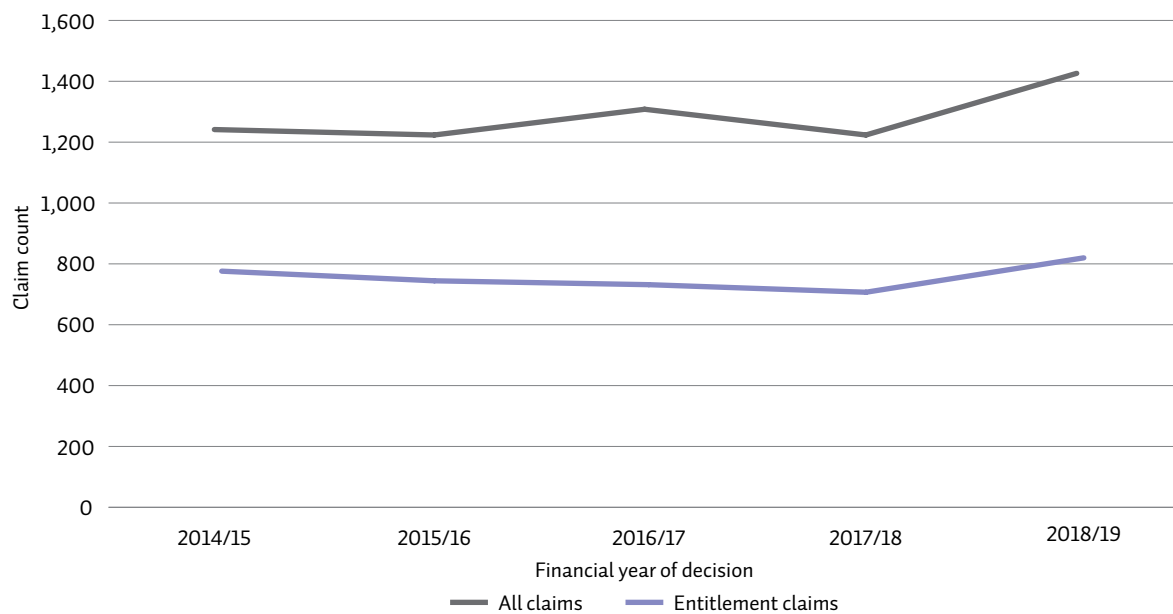


TABLE 12: CLAIMS FOR TREATMENT INJURIES AT PRIVATE SURGICAL HOSPITALS (MEMBERS OF NZPSHA)

		Financial year of decision				
		2014/15	2015/16	2016/17	2017/18	2018/19
Accept	Number	1,244	1,248	1,337	1,249	1,443
	%	76	76	75	72	78
Decline	Number	383	388	439	475	396
	%	24	24	25	28	22
Total Decided Claims		1,627	1,636	1,776	1,724	1,839
Entitlement Claims		779	771	761	719	811

TABLE 13: ACCEPTED CLAIMS FOR INJURIES AT ALL HOSPITALS (PRIVATE AND PUBLIC)

	Number of claims	Number of discharges	Claim rate per 10,000 discharges
Public Hospitals			
Auckland	635	145,870	44
Bay of Plenty	219	62,955	35
Canterbury	632	124,556	51
Capital & Coast	637	72,162	88
Counties Manukau	460	118,444	39
Hawke's Bay	118	44,769	26
Hutt Valley	228	40,285	57
Lakes	155	29,942	52
MidCentral	194	40,360	48
Nelson Marlborough	215	32,433	66
Northland	246	49,288	50
South Canterbury	106	14,611	73
Southern	345	70,583	49
Tairāwhiti	81	12,146	67
Taranaki	233	34,718	67
Waikato	731	119,132	61
Wairarapa	80	10,361	77
Waitematā	665	127,412	52
West Coast	28	7,760	36
Whanganui	183	18,118	101
Private Hospitals			
ALL NZPSHA	1,443	189,075	76

General practice

In 2018/19, we accepted 1,425 claims for treatment injuries due to treatment in a general practice setting. This includes treatment by general practitioners (GPs), practice nurses, and other clinicians working in the practice. This number equates to 0.29 accepted claims for treatment injuries per 1,000 population. This proportion has increased slightly since 2014/15.

GRAPH 18: ACCEPTED CLAIMS FOR GENERAL PRACTICE SETTINGS BY FINANCIAL YEAR

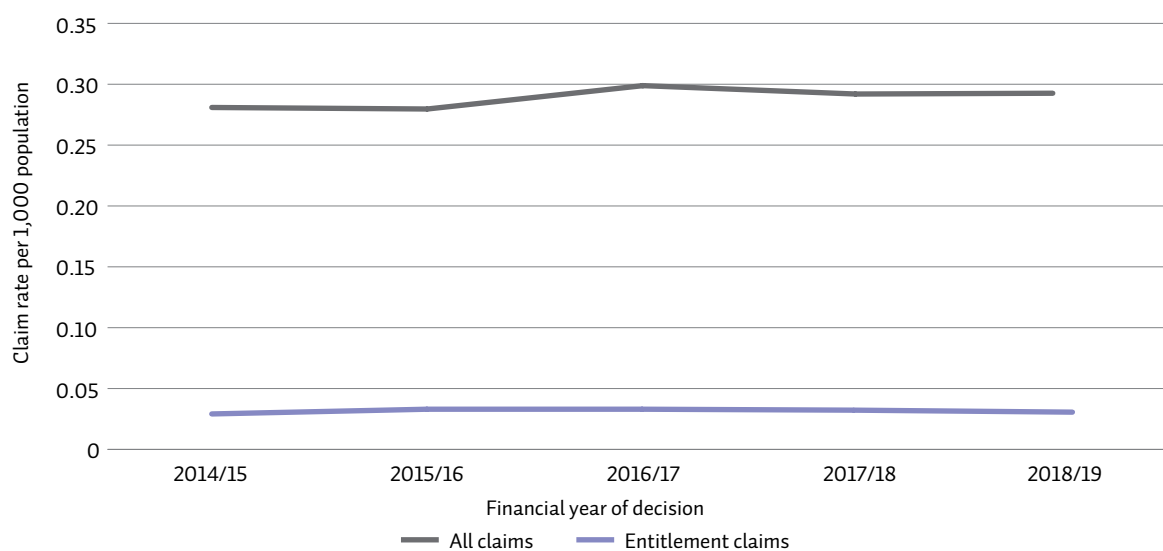


TABLE 14: CLAIMS FOR GENERAL PRACTICE SETTINGS BY FINANCIAL YEAR

		Financial year of decision				
		2014/15	2015/16	2016/17	2017/18	2018/19
Accept	Number	1,265	1,284	1,421	1,387	1,425
	%	68	69	70	69	71
Decline	Number	593	577	614	617	583
	%	32	31	30	31	29
Total decided claims		1,858	1,861	2,035	2,004	2,008
Entitlement claims		132	147	139	139	148





Appendices

Data sources

Our information about claims for treatment injuries is based on data collected from the ACC45 and ACC2152 forms. An ACC45 Injury Claim Form is completed by all clients who 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 that provides clinical information to support the claim.

The published information is based on data from claims related to treatment injuries. Most of the information in this publication is about claims for treatment injuries. A small number of claims for treatment injuries are the result of consequential injuries from treatment for an injury that is already covered by another ACC claim. These consequential injuries have been included in the data used for this analysis as they are treatment injuries that are relevant to patient safety.

The claims data for treatment injuries in this publication reflects the information held as at February 2020 – for claims lodged and decided from 1 July 2005 to 30 June 2019. All of our claims data (including data on claims for treatment injuries) is subject to revisions over time. The claim numbers may change because of the reassessment, review, or appeal of a cover decision.

Further detail about healthcare associated infections following surgery is also included. Text search data extraction methods were used to identify infections following knee, hip, heart, caesarean, breast, and colorectal surgery. Text search methods are not as reliable as structured data extraction methods and although they help us provide a greater level of detail, they can result in anomalies in the data.

Statistics New Zealand

We sourced population data from Statistics New Zealand. We used this data to calculate injury rates for the national summaries as well as for general practice settings.

Ministry of Health

Data on patients discharged from hospital was sourced from the Ministry of Health's National Minimum Data Set (NMDS). We used this data to calculate claim rates for treatment injuries for DHBs per 10,000 patients discharged.

New Zealand Private Surgical Hospitals Association

We used discharge data provided by the New Zealand Private Surgical Hospitals Association to calculate claim rates for treatment injuries per 10,000 discharges.

NZPSHA Members

Auckland

Auckland Eye Limited
Auckland Surgical Centre Limited
Endoscopy Auckland Limited
MercyAscot
Ormiston Surgical and Endoscopy Limited
Quay Park Surgical Limited
Remuera Surgical Centre
Rodney Surgical Centre
Southern Cross Hospital, Brightside
Southern Cross Hospital, Gillies
Southern Cross Hospital, North Harbour

Bay of Plenty

Grace Hospital

Christchurch

Christchurch Eye Surgery Limited
Forté Health Limited
St. George's Hospital Inc
Southern Cross Hospital, Christchurch

East Coast

Chelsea Hospital Trust

Hawke's Bay

Royston Hospital

Manawatu

Crest Hospital Limited

Marlborough

Churchill Private Hospital Trust

Nelson

Manuka Street Hospital Limited

Northland

Eye Specialists Limited
Kensington Hospital Limited

Otago

Mercy Hospital Dunedin Limited

Rotorua

Southern Cross Hospital, Rotorua

South Canterbury

Bidwill Trust Hospital

Southland

Southern Cross Hospital, Invercargill

Taranaki

Southern Cross Hospital, New Plymouth

Waikato

Anglesea Hospital Limited

Braemar Hospital Limited

Southern Cross Hospital, Hamilton

Tristram Clinical Limited

Wairarapa

Selina Sutherland Hospital Limited

Wellington

Boulcott Pulse Health Limited

Bowen Hospital

Southern Cross Hospital, Wellington

Wakefield Hospital

Whanganui

Belverdale Hospital Limited

ACC history and legislation

We've 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. This money is then managed to fund the current and future needs of people with long-term injuries.

Our assistance is available to all New Zealand residents and temporary visitors. New Zealanders who are ordinarily a 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, though restrictions apply.

Once we've accepted a claim, 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.

Our primary function is injury prevention (refer to Section 3, AC Act 2001). We do this through interventions and approaches that reduce the incidence and severity of personal injury (see Section 263, AC Act).

Changes to treatment injury cover

Law changes since the ACC 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, considering the underlying health condition of the patient and clinical knowledge at that time.

Glossary

Important terminology used in this publication

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).
Accepted claims	A claim for ACC cover that has been accepted. 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.
Accident Compensation Act 2001	The major piece of legislation under which ACC is governed.
Active claim	A claim that is open and has received a payment in that financial year. The claim could be a new claim accepted during that year or an existing claim.
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	<p>A consequential treatment injury is an injury that occurs during treatment for an already covered personal injury.</p> <p>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.</p>
Cost per active claim	Average cost per active claim.
Costs paid	<p>Costs paid for active treatment injury claims in a given year are likely to be an underestimate. This is because some 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. These costs are not included when we calculate the costs for an accepted claim.</p> <p>Claim costs fall under three broad categories:</p> <ol style="list-style-type: none">1. Compensation: weekly compensation for lost earnings or loss of potential 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 the person first sought or received treatment for the personal injury caused by treatment.

Discharge	The number of patients discharged from a hospital. Numbers for public hospital discharges are from the Ministry of Health’s National Minimum Dataset (NMDS). The New Zealand Private Surgical Hospital Association (NZPSHA) provides the numbers of private surgical discharges.
Entitlement	<p>Our contribution to the costs of rehabilitation and treatment, and to providing financial support to the injured person once we’ve accepted their claim.</p> <p>The contribution provided depends on the injury and circumstances of the injured person.</p> <p>An entitlement claim includes:</p> <ul style="list-style-type: none"> • rehabilitation and treatment (including pharmaceuticals, X-rays, and 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 because 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 occurred on or after 1 April 2002.
Fatal claim	A claim to provide financial support to the family of the deceased when someone dies from a treatment injury. If a claim is accepted, two examples of financial support are contributions to the funeral costs and financial assistance to dependants.
Financial year	The period from 1 July to 30 June.
Financial year of decision	Treatment injury claims that had a cover decision made from 1 July to 30 June.
Health practitioner registration authorities	<p>Authorities established under the Health Practitioners Competency Assurance Act 2003 for each health profession to:</p> <ul style="list-style-type: none"> • set standards • prescribe scopes of practice • promote education and training.
Healthcare associated infection (HAI)	An infection that is acquired in a hospital or other health facility. This includes a range of injuries such as abscesses, cellulitis, endocarditis, osteomyelitis, septicaemia, wound infections, arterial or venous line infections, and post-surgical infections.
Incurred costs	<p>Incurred costs include:</p> <ul style="list-style-type: none"> • costs paid to date for new claims accepted for injuries that occurred in 2018/19 • 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 2018/19 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 2019 or later years, for injuries that occurred in 2018/19) • costs paid for declined treatment injury claims: ACC may pay some costs before a claim is decided (for example, to get assessments or expert reports).

Injury caused by accident	Cover is provided for ‘personal injury’ that is caused by: <ul style="list-style-type: none"> • an accident • a work-related gradual process, disease, or infection • treatment that was provided by a registered health professional (treatment injury).
Long-term costs (Outstanding Claims 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 (NE)	A syndrome of disturbed neurological function in a newborn. Features of NE include difficulty with breathing, reduced muscular tone and reflexes, reduced consciousness, and often seizures. When NE is due to a period of reduced oxygen supply during birth, the term hypoxic ischemic encephalopathy (HIE) is used. Other reasons why a baby may have signs and symptoms of NE include metabolic abnormalities, medication, infection, or bleeding within and around the brain.
New Zealand Private Surgical Hospitals Association (NZPSHA)	Representative association for private surgical hospitals in New Zealand.
Numbers of claims lodged	Numbers of claims lodged 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. Once a claim is lodged, it will be assessed, then accepted or declined. The figures reported will differ from previously released data due to changes in underlying data as new information becomes available and claims are updated.
Patient harm	Anything that impairs or adversely affects the safety of patients in clinical care, drug therapy, research investigations, or public health.
Patient safety	Prevention of errors and adverse effects to patients associated with healthcare.
Payment financial year	Financial year in which a payment was made.

Personal injury	<p>Defined in the Accident Compensation Act as:</p> <ul style="list-style-type: none"> • death • physical injury • damage to dentures or prostheses that replace a part of the human body. <p>With limited exceptions, the following are not covered by ACC:</p> <ul style="list-style-type: none"> • an injury from a work-related gradual process • disease • infection • wear and tear or injuries due to the ageing process.
Pressure injury	A localised injury to the skin and/or underlying tissue (usually over a bony prominence) because of pressure, or pressure in combination with shear and/or friction. Many factors interact to make a person likely to have such an injury.
Risk of harm	When a treatment injury claim highlights a risk of harm to the public, we must report this to the relevant authority responsible for the treatment.
Treatment injury	An injury that a person suffers due to treatment by a registered health professional or by someone else directed by that health professional. The injury must have been caused by the treatment but not be a necessary part, or ordinary consequence, of the treatment after considering all the circumstances of the treatment.
Treatment injury claims and other data sources	Our information is based on claims submitted to us. The reasons for lodging a claim are different from the reasons for making a complaint to the Health and Disability Commissioner or reporting a serious or sentinel event to the Health Quality and Safety Commission. The data in this publication 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.
Treatment safety	The prevention of injuries caused by treatment.
Treatment omission	Failure to diagnose, to follow up, to provide treatment, to refer, to monitor, or to provide the right treatment.



Te Kaporeihana Āwhina Hunga Whara

www.acc.co.nz
0800 101 996

New Zealand Government

