

# PUBLIC SUMMARY REPORT

2019



This document was produced on behalf of the Australian Stroke Clinical Registry (AuSCR) Consortium partners and was approved by the AuSCR Steering Committee.

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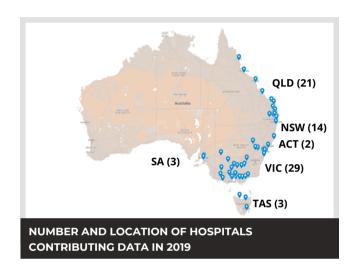




#### THE AUSTRALIAN STROKE CLINICAL REGISTRY

The Australian Stroke Clinical Registry (AuSCR) was established in 2009 to monitor and improve the quality of stroke care in Australia. Hospitals participating in the AuSCR capture data on patients presenting to hospital with acute stroke and transient ischaemic attack (TIA or 'mini stroke'). Patients who are discharged from hospital are followed up by the AuSCR Office via a posted survey or telephone interview about their health between 90 and 180 days after stroke.

In 2019, 72 hospitals from six Australian states and territories contributed data to the AuSCR about the care they provided for patients with stroke or TIA. This report contains information for 18,733 patients and 20,157 episodes of hospital care. Summary information on the status of the quality of care in Australian hospitals is outlined in this report.



#### INFORMATION COLLECTED BY THE AUSCR

Information collected on patients while they are in hospital includes whether or not someone has received:

- Thrombolysis (clot busting medication)
- Endovascular Clot Retrieval (removal of blood clots from the brain)
- Treatment in a stroke unit
- Treatment with an antithrombotic medication (eg aspirin) within 48 hours of a stroke
- Early mobilisation (within 2 days of arriving to a hospital)
- A discharge care plan
- Medications on discharge to help prevent future strokes (e.g. antihypertensives, antithrombotics and cholesterol-lowering medications) and
- Where patients go after leaving hospital (also known as the discharge destination)

Achievable performance benchmarks are calculated using AuSCR data for each of these processes of hospital care. These benchmarks represent the levels of care that hospitals should aim to meet in order to ensure the best possible outcomes for patients with stroke or TIA.

For information on length of hospital stay and patient outcomes at 90-180 days following admission in 2019, please refer to the AuSCR 2019 Health Outcomes Public Summary Report.

# PERFORMANCE BENCHMARKS FOR QUALITY OF CARE

#### **CLOT BUSTING MEDICATION**

#### What is clot busting medication?

Most strokes are caused by a blood clot that blocks the blood flow to part of the brain creating an ischaemic stroke. Brain damage can occur quickly due to the lack of oxygen. Clot-busting medication (known as thrombolysis) can dissolve the clot that is causing the stroke and restore the blood flow and oxygen to the brain.

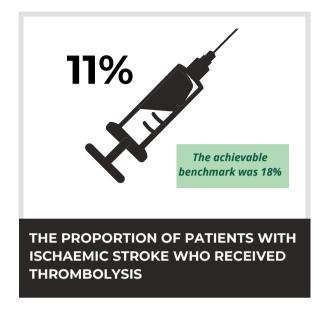
#### Why is it important?

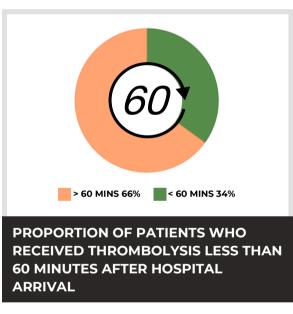
This medication can prevent or significantly reduce disability caused by a stroke. It works best when provided within the first few hours while brain tissue is still alive. Shorter times between stroke onset and treatment with thrombolysis lead to better outcomes.

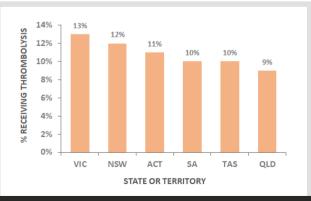
#### Who should get this treatment?

Up to 20% of patients with ischaemic stroke may benefit from this treatment if they are assessed early enough by a specialist team. Arriving to hospital after the allowable time is a major reason why it is not provided.

- On average, 11% of patients with ischaemic stroke received thrombolysis medication. The achievable benchmark for the top performing hospitals was 18%.
- The proportion of patients receiving thrombolysis in less than 60 minutes from arrival at hospital was 34%. The achievable benchmark for the top performing hospitals was 66%.
- The proportion of patients with ischaemic stroke who received thrombolysis was different in each state and territory.
- Patients treated in metropolitan hospitals were more likely to receive thrombolysis (12%) than those treated in regional hospitals (9%).







THE PROPORTION OF PATIENTS WITH ISCHAEMIC STROKE WHO RECEIVED THROMBOLYSIS IN EACH STATE AND TERRITORY

#### **ENDOVASCULAR CLOT RETRIEVAL**

#### What is endovascular clot retrieval?

Endovascular clot retrieval is the removal of large blood clots blocking a blood vessel in the brain. This is done by physically removing the clot via an artery in the body. Not all patients are suitable for this treatment. Highly specialised skills are required to perform endovascular clot retrieval and it is only available at some large city hospitals in Australia.

#### Why is it important?

Endovascular clot retrieval is a procedure to remove the blood clot that is blocking blood flow to the brain.

• In 2019, 1,220 patients with ischaemic stroke received endovascular clot retrieval at 14 metropolitan hospitals in six states.



#### TREATED IN A STROKE UNIT

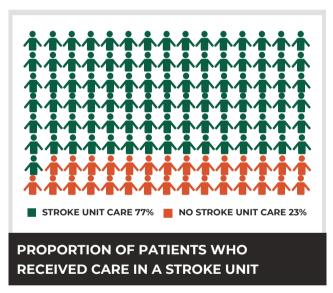
#### What is a stroke unit?

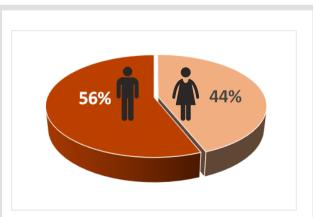
A stroke unit is a ward or area within a hospital that is dedicated to providing care for patients with stroke or mini-stroke.

#### Why are stroke units important?

Patients who are treated in stroke units more often receive the care they require and, have better outcomes after stroke.

- On average, 77% of patients were treated in a stroke unit.
- The achievable benchmark for the top performing hospitals was 96%.
- Women were 13% less likely to be treated in a stroke unit than men after adjusting for other factors including age, stroke type and severity of the stroke.





PROPORTION OF WOMEN AND MEN WHO RECEIVED CARE IN A STROKE UNIT

#### HYPERACUTE ANTITHROMBOTIC MEDICATION

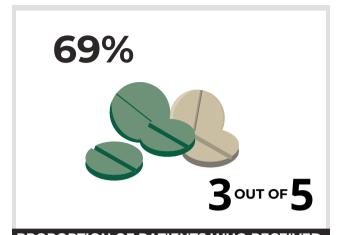
## What is an antithrombotic medication? What makes it hyperacute?

An antithrombotic medication helps to reduce blood clots forming in the blood. A common antithrombotic medicine is aspirin. A hyperacute antithrombotic is one which is given to a patient within 48 hours of having a stroke.

#### Why is it important?

Taking an antithrombotic medication improves the outcomes for patients with stroke and decreases the likelihood of having another stroke.

- On average, 69% of patients received antithrombotic medication within 48 hours of stroke
- The achievable benchmark for the top performing hospitals was 82%.



PROPORTION OF PATIENTS WHO RECEIVED AN ANTITHROMBOTIC MEDICATION (EG ASPIRIN) WITHIN 48 HOURS OF STROKE

#### **EARLY MOBILISATION**

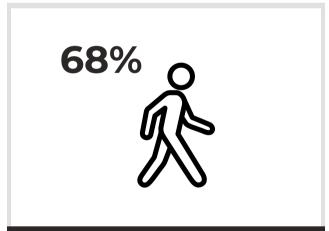
#### What is early mobilisation?

Early mobilisation is out-of-bed activity which commences on the day of hospital arrival or the day after arrival.

#### Why is it important?

Early mobilisation can reduce the risk of complications after stroke and help with recovery.

- On average, 68% of patients were mobilised on the same day or the day after admission.
- The achievable benchmark for top performing hospitals was 81%.

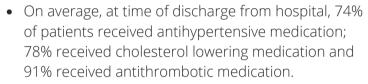


PROPORTION OF PATIENTS MOBILISED ON THE SAME DAY OR DAY AFTER ADMISSION

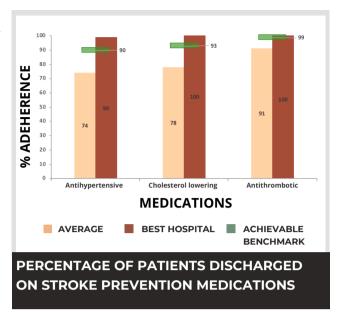
#### **DISCHARGE MEDICATIONS**

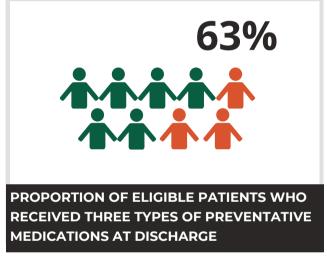
## Why is receiving medication to lower blood pressure, to lower cholesterol, and to reduce blood clots forming important?

High blood pressure (hypertension) is a major cause of stroke and lowering blood pressure reduces the risk of having another stroke. Those who do not have high blood pressure can also benefit from this medication. Cholesterol lowering agents commonly include (but are not limited to) statins and fibrates, are also effective for reducing stroke risk. Antithrombotic medications reduce blood clots forming in the blood. Discharge medications should be provided when you leave hospital. These medications reduce the likelihood of patients having another stroke. Not all patients are eligible to receive all three medications.



- The achievable benchmarks for the top performing hospital were: 90% for antihypertensive medication, 93% for cholesterol lowering medication and 99%, for antithrombotic medication.
- The proportion of eligible patients receiving all 3 medications was 63%.
- Patients who were discharged on all 3 medications were more likely to be men, aged over 75 years, and treated in a regional hospital.





#### **DISCHARGE CARE PLAN**

#### What is a discharge care plan?

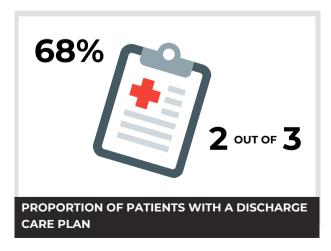
A written plan that details the next steps for care and recovery after leaving hospital should be developed with patients and their families or carers, and, the plan should also be discussed with their treating doctor before they leave hospital.

#### Why is receiving a discharge care plan important?

Recovery and treatment do not finish in hospital. A plan that details additional care required after leaving the hospital should be developed with you and your family.



• The achievable benchmark was 98%.



#### DISCHARGE DESTINATION

#### What is a discharge destination?

The discharge destination is where patients go when they leave hospital. This could include going back home, to inpatient rehabilitation, another hospital facility, or to aged care.

#### Why is it important?

Many patients will need treatment, advice or physical and psychosocial assistance to help them rehabilitate and recover from their stroke. This is why patients may receive inpatient rehabilitation. Inpatient rehabilitation covers many different things including actively helping you to recover from any disability and assisting you with things like completing daily activities, eating and drinking, or the psychological and financial impact of a stroke. Some patients may also receive rehabilitation services in the community.

- After discharge from acute care, 24% patients went to rehabilitation and 52% returned to their usual residence, with or without, some form of support.
- The best performing hospital discharged 43% of patients to inpatient rehabilitation.

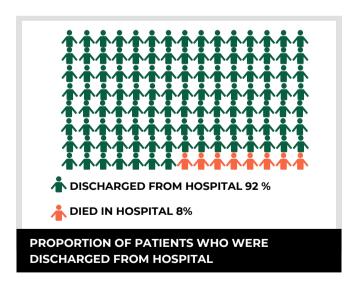
### PATIENTS WENT DATIENTS TO INPATIENT RETURNED HOME REHABILITATION 24% At the best performing hospital 43% patients went to inpatient rehabilitation PROPORTION OF PATIENTS WHO WERE DISCHARGED

TO INPATIENT REHABILITATION OR RETURNED HOME **AFTER STROKE** 

#### **PATIENT OUTCOMES**

Stroke is a time critical emergency and is a leading cause of death and disability. In 2019, 8% of patients died in hospital after stroke.

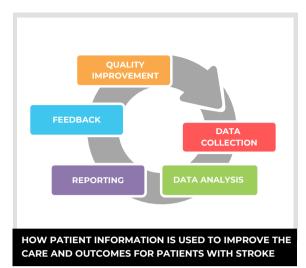
Better outcomes for patients with stroke are linked with: early presentation to hospital; treatment and care in specialised stroke units; and the other quality of care measures that have been presented in this report.



#### INFORMATION FOR PATIENTS AND CARERS

Information about your care is automatically included in the AuSCR. This information has been approved by an ethics committee for each hospital participating in the AuSCR. The information that is collected is used to provide feedback to hospitals about the quality of care that they provide to patients and to identify areas for improvement. You may choose to have your information removed (opted-out) from the registry, or request that you are not contacted about your progress after you leave hospital.

For more information on how to have your information removed, please ask the hospital staff or contact the AuSCR.



Currently, the AuSCR is unable to provide the name of hospitals when reporting quality of care to the public. Similarly, patients will not be identified in any reports produced so that their privacy is maintained.

More information about the AuSCR is available on the website www.auscr.com.au



1800 673 053



@AustStrokeReg

#### **USEFUL RESOURCES AFTER STROKE**

#### **Stroke Foundation services** www.strokefoundation.org.au

The Stroke Foundation website has information about; symptoms of stroke and the FAST message, risk factors and treatments for stroke, how to prevent stroke, recovery and assistance available after stroke.

#### www.enableme.org.au

enableme is a place to talk to, and seek support from other people who have 'been there'. It is a place to ask questions, to find the answers that you need and to set recovery goals.

#### www.informme.org.au

A dedicated website for health professionals working in stroke care.

Strokeline: 1800 787 653

Is available between 9am and 5pm EST, Monday to Friday. They can help answer any questions you might have.

#### **Carers Australia: 1800 242 636**

A useful freecall resource offering information and counselling to carers from 8:30am to 4:30pm, Monday to Friday.

#### Beyond Blue: 1300 224 636

Beyond Blue provides compassionate information for those experiencing mood disorders. The free call phone line is available 24 hours a day, 7 days a week.



