Regional stroke transfer framework

Barwon-South Western Health region

VICTORIA State Government | Health and Human Services

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- Ms Heather Smith (Working Party Lead, Stroke Service Coordinator, Barwon Health, and member, VSCN).*

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- Dr Ed Davis (Consultant Director, Medical Services, Colac Area Health)
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- Ms Lisa Smith (Nurse Unit Manager, Otway Health)
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* Also members of the Barwon-South Western Health Regional Transfers Working Party

Introduction

This document was developed to support stroke services in the Barwon-South Western region of Victoria. This area covers the region from the South Australian border in the west to Colac, Geelong and the Bellarine Peninsula in the east, and from Hamilton's catchment in the north to Warrnambool and the coast in the south. The region consists of 13 health services including two multipurpose service centres, two bush nursing centres and one emergency stabilisation centre managed by a private provider (see Figure 1).

According to the Australian Bureau of Statistics, in 2013 the region had an estimated resident population of 374,911. The region has nine local government areas covering the catchments of:

- Colac Otway Shire
- Corangamite Shire
- Glenelg Shire
- City of Greater Geelong
- Moyne Shire
- Queenscliffe Borough
- Southern Grampians Shire
- Surf Coast Shire
- Warrnambool City.

Since 2010, the region has averaged 981 stroke episodes that occur on an annual basis (Victorian Admitted Episode Dataset, 2010–15; Table 2).

People with suspected stroke in the Barwon-South Western Health region predominantly present at Barwon Health (University Hospital Geelong), South West Healthcare (Warrnambool) and Western District Health Service (Hamilton). These sites have stroke unit care with 24-hour computed tomography (CT) imaging and the capacity to administer thrombolysis therapy.

People with suspected stroke presenting to other health services in the region should be transferred to the closest and most appropriate stroke centre, ideally Barwon Health (University Hospital Geelong), South West Healthcare (Warrnambool) or Western District Health Service (Hamilton). This document outlines the process for coordinating those transfers and for repatriating people with stroke back to local health services for ongoing care and rehabilitation as appropriate.

Figure 1: Barwon-South Western Health region public hospitals and bush nursing centre

Source: Public hospitals – Capital Projects and Service Planning Branch, Hospital and Health Service Performance Division, Department of Health (2014). Includes all public health services.

Local Government Areas – 1270.0.55.003 – Australian Statistical Geography Standard (ASGS): Volume 3 – Non ABS Structures (2011) World Shaded Relief, ESRI (2009) GDA 1994 VICGRID94

Map prepared by Modelling, GIS and Planning Products System Intelligence & Analytics Branch Department of Health and Human Services, October 2015.

Purpose

The framework endeavours to:

- maximise access to timely evidence-based hyper-acute and acute stroke care for all people with stroke, achieved through centralising acute stroke care at
  - Barwon Health, University Hospital Geelong
  - South West Healthcare, Warrnambool
  - Western District Health Service (WDHS), Hamilton
- ensure all people with stroke receive ongoing care, including inpatient rehabilitation, beyond the acute phase as close to home as possible
- gain regional agreement to accept timely, appropriate and supported stroke transfers to and from health facilities in the region.

Evidence-based stroke care

The National Stroke Foundation's (NSF) *Clinical guidelines for stroke management 2010* outlines current best practice across the stroke management continuum. It is important that health professionals and members of the public are aware of the available resources to facilitate consistency of clinical management, and therefore equity of access to available and appropriate stroke care.

This regional framework guides implementation of the recommendations in the document *Stroke Clinical Network regional coordination – report and recommendations* to facilitate:

- all people with stroke in the Barwon-South Western Health region having access to timely and appropriate stroke care
- stakeholders in the region working collaboratively to develop and maintain guidelines and protocols to enable and support timely and appropriate transfers
- transfers to and from health facilities being managed and monitored through a continuous quality improvement process and supported by a robust clinical governance system.

Current services in the region

The recently updated and published *National acute stroke services framework 2015* outlines three service categories for stroke centres: general hospital service, primary stroke service and comprehensive stroke service. To read the full framework, visit the Stroke Foundation's website at <www.strokefoundation.com.au> and search for 'national stroke services frameworks'.

Table 1 provides a summary of service categories following criteria set by the NSF. Tables 2 and 3 present data depicting separations and presentations over time by health services in the Barwon-South Western Health region.

Table 1: Barwon-South Western Health region stroke service

Health service	Designation	Service category
Barwon Health (University Hospital Geelong)	Regional	Primary stroke service
South West Healthcare (Warrnambool)	Subregional	Primary stroke service
Western District Health Service (Hamilton)	Subregional	Primary stroke service
Colac Area Health (Colac)	Local	General hospital service
Portland District Health (Portland)	Local	General hospital service
South West Healthcare (Camperdown)	Subregional campus	General hospital service
Western District Health Service (Penshurst)	Subregional campus	General hospital service
Western District Health Service (Coleraine)	Subregional campus	General hospital service
Casterton Memorial Hospital (Casterton)	Small rural	General hospital service
Hesse Rural Health Service (Winchelsea)	Small rural	General hospital service
Heywood Rural Health (Heywood)	Small rural	General hospital service
Lorne Community Hospital (Lorne)	Small rural	General hospital service
Moyne Health Services (Port Fairy)	Small rural	General hospital service
Terang and Mortlake Health Service (Terang)	Small rural	General hospital service
Otway Health (Apollo Bay)	Multipurpose service	General hospital service
Timboon and District Healthcare Service (Timboon)	Multi-purpose service	General hospital service
Cobden District Health Service Inc. (Cobden)	Private aged residential provider	General hospital service
Dartmoor Bush Nursing Centre	Bush nursing centre	General hospital service
Balmoral Bush Nursing Centre	Bush nursing centre	General hospital service

Table 2: Acute separations for Barwon-South Western Health region, 2010–15

Designation	Health service	VAED separations				
		2010–11	2011–12	2012–13	2013–14	2014–15
Regional	Barwon Health (Geelong)	724	717	591	597	657
Subregional	South West Healthcare (Warrnambool)	178	184	148	174	133
	Western District Health Service (Hamilton)	71	58	68	67	75
Local	Portland District Health (Portland)	36	33	31	34	27
	Colac Area Health (Colac)	37	31	16	20	31
Subregional campuses	South West Healthcare (Camperdown)	16	12	8	10	14
	Western District Health Service (Penshurst)	0	0	0	0	0
	Western District Health Service (Coleraine)	0	0	0	0	0
Small rural	Casterton Memorial Hospital (Casterton)	9	6	0	0	0
	Hesse Rural Health Service (Winchelsea)	0	0	0	0	0
	Heywood Rural Health (Heywood)	0	0	0	0	0
	Lorne Community Hospital (Lorne)	0	0	0	0	0
	Moyne Health Services (Port Fairy)	5	6	0	0	5
	Terang and Mortlake Health Service (Terang)	7	8	10	0	12
Multipurpose services	Otway Health (Apollo Bay)	0	0	0	0	0
	Timboon and District Healthcare Service (Timboon)	0	0	0	0	0
Private aged residential provider	Cobden District Health Service Inc. (Cobden)	n/a	n/a	n/a	n/a	n/a
Bush nursing centres	Dartmoor Bush Nursing Centre	n/a	n/a	n/a	n/a	n/a
	Balmoral Bush Nursing Centre	n/a	n/a	n/a	n/a	n/a

Source: Victorian Admitted Episodes Dataset (VAED). Number of separations based on list of 60 ICD-10-AM 8th edition codes to define stroke/TIA as per *Stroke care strategy for Victoria* (2007).

Note: Health services with numbers < 5 are marked 0 for privacy and confidentiality.
n/a = not applicable as VAED data is not being collected

Table 3: Emergency presentations for Barwon-South Western Health region, 2010–15

Health service	Mode of arrival	VEMD presentations				
		2010–11	2011–12	2012–13	2013–14	2014–15
Barwon Health (Geelong)	Ambulance	478	514	480	518	552
	Other	261	245	265	258	216
	Total	739	759	745	776	768
South West Healthcare (Warrnambool)	Ambulance	99	124	114	128	125
	Other	71	71	72	85	64
	Total	170	195	186	213	189
Western District Health Service (Hamilton)	Ambulance	50	35	39	40	47
	Other	16	22	26	37	21
	Total	66	57	65	77	68

Source: Victorian Emergency Minimum Dataset (VEMD). Number of presentations based on list of 60 ICD-10-AM 8th edition codes to define stroke/TIA as per *Stroke care strategy for Victoria* (2007).

Acute transfer principles

Refer also to Appendix 3 ‘Stroke transfer pathway’ flow chart.

- All people with stroke in the Barwon-South Western Health region have access to timely and evidence-based stroke care.
- All people suspected with acute stroke who present to any Barwon-South Western Health region hospital or centre should have access to appropriate hyper-acute and acute stroke care.
- All people suspected with acute stroke who present to non-stroke units or those hospitals categorised as providing a general hospital service (see Table 1) should be assessed using a recognised stroke assessment tool. For an example google ‘rosier scale’ and select ‘Appendix G’ from the National Health and Medical Research Council (NHMRC) website.

  Other assessments may be completed if prompt transfer is not compromised. Utilisation of the *Emergency department stroke and transient ischaemic attack care bundle* is recommended by the NHMRC as per the *Emergency department stroke and transient ischaemic attack care bundle: summary for clinicians* document. To read the summary for clinicians, visit the NHMRC website at <www.nhmrc.gov.au> and search by publication title.
- People with suspected transient ischaemic attack (TIA) should have a full assessment as per the recommendations in *Clinical guidelines for stroke management* (NSF 2010). A risk-factor screen should be completed and referral to a specialist may be required for ongoing treatment. If identified as high risk (for example, $ABCD^2$ score > 3 and/or any one of atrial fibrillation, carotid territory symptoms or crescendo TIA), they should also be referred to the nearest stroke care centre for further investigations. To read the full guidelines, visit the Stroke Foundation’s website at <www.strokefoundation.com.au> and search ‘clinical guidelines’.
- Local guidelines and procedures should be followed when transferring to Barwon Health (University Hospital Geelong), South West Healthcare (Warrnambool) and WDHS (Hamilton). It is recommended that transfer and admission to the receiving centres be completed within three hours of suspected stroke onset and that receiving stroke care units be pre-notified to facilitate timely transfer.

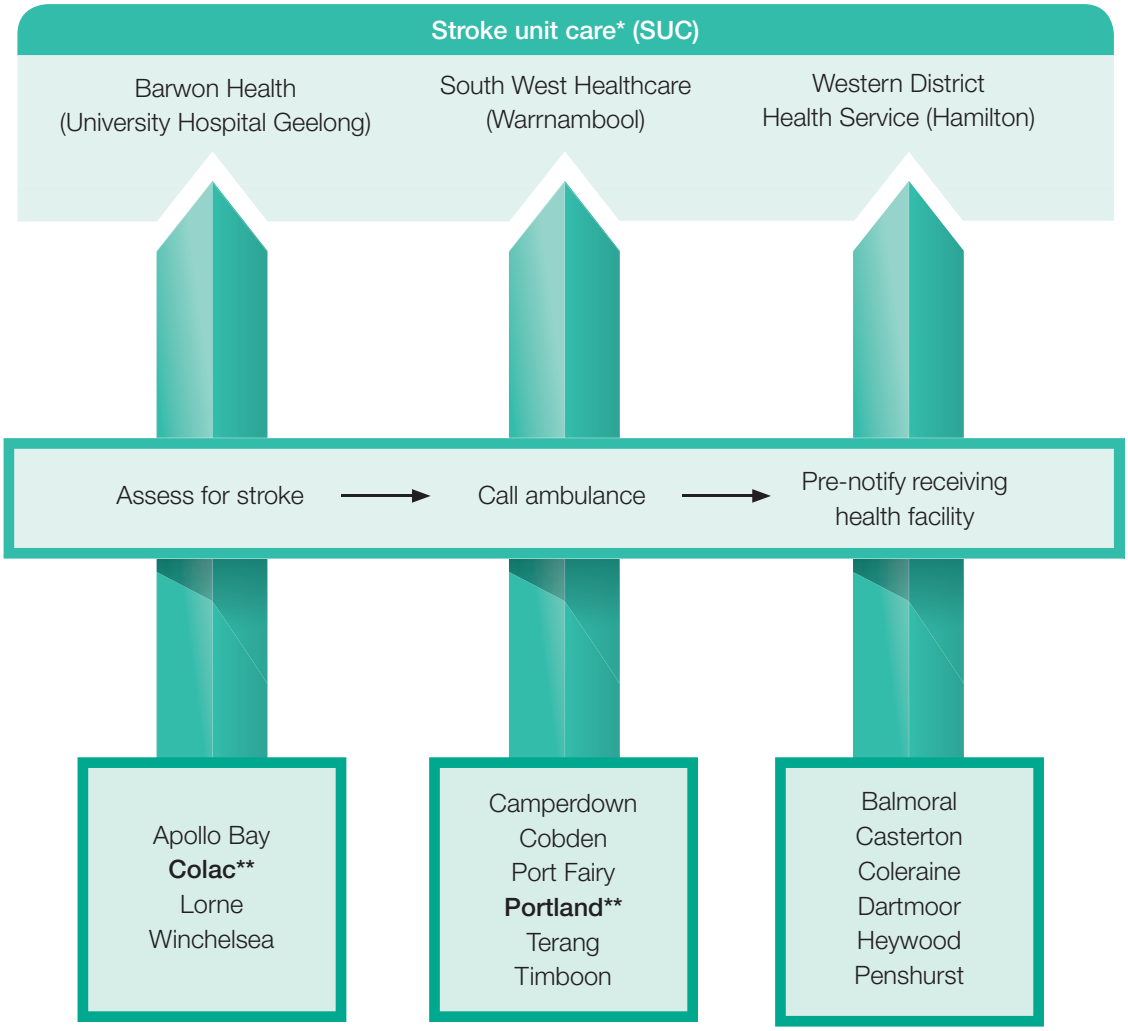
  It is also recommended that non-stroke units check Ambulance Victoria’s clinical practice guidelines for managing stroke/TIA prior to transfer. For more information google ‘Ambulance Victoria clinical practice guidelines’.
- To arrange transport with Ambulance Victoria, phone triple zero (000) and provide the required information. If asked for a timeframe, say ‘urgent transfer’.

The department and members of the Barwon-South Western Health Regional Transfers Working Party acknowledge emerging evidence supporting the practice of endovascular clot retrieval (ECR) therapy.

The department is currently undertaking further work on access and referral mechanisms, with a focus on assessment and transfer protocols of people who may be suitable for ECR. Information regarding this therapy and a corresponding service model will be incorporated when the framework is due for review.

The region’s recommended stroke transfer pathway is depicted in Figure 2.

Figure 2: Barwon-South Western Health region recommended stroke transfer pathway



* To ensure consistency across Australia, definition and minimum criteria for stroke care units have been provided in the *National acute stroke services framework 2015* report. For details, visit the Stroke Foundation's website at <www.strokefoundation.com.au> and search for 'national stroke services frameworks'.

** For people who have clinical signs and symptoms of stroke, Colac and Portland facilities may proceed to CT scan if this **does not cause delay** in transfer.

Note: More information about the recommended stroke transfer pathway is provided at Appendix 3.

Transfer exceptions

- In some circumstances, the person with stroke may make an informed choice to be treated at a local general hospital service rather than be transferred to a primary or comprehensive stroke centre. This choice should be clearly documented in the medical record.
- People with stroke who are palliative due to other disease processes, or who have clear advance care plans, may choose, or their agent(s) may choose, not to be transferred away from their community supports. This choice should be clearly documented in the medical record.
- People with stroke for whom further acute management is deemed to be of no benefit by the local treating clinical team may be admitted to an inpatient ward for supportive or palliative care at the local health facility.
- All people with stroke and their family/carers should be given information about the availability and potential benefits of a local stroke support group and other sources of peer support before leaving hospital and when returning to their community.

Role of general practitioners

The framework acknowledges the role that general practitioners (GPs) play in the various phases of managing people with stroke across the continuum of care. To support and provide coordinated care at all stages of the process, the NSF published a quick reference guide containing key recommendations for GPs to consider and adapt to local needs, resources and individual circumstances. For more information visit the Stroke Foundation's website at <www.strokefoundation.com.au>, search 'concise guidelines' and select 'Concise Guidelines General Practitioners'.

- In the event where the first presentation is in the clinic, GPs are expected to assess the person with suspected stroke and follow local guidelines and protocols. For NSF best practice on early assessment and management, visit the Stroke Foundation's website at <www.strokefoundation.com.au>, search 'concise guidelines' and select 'Concise Guidelines General Practitioners'.
- If referral to a stroke unit is required, it is expected that GPs follow transfer recommendations contained in this framework.
- Secondary prevention of stroke remains the backbone of general practice. To prevent further episodes of stroke from occurring, GPs are expected to regularly monitor the person with stroke to ensure optimal control of the disease that caused the stroke, encourage adherence to medication, and manage any new symptoms that may require referral to a specialist as part of ongoing treatment.
- GPs also play a key role in supporting the person with stroke and their family in managing any long-term disability, including mental health concerns such as fatigue and depression associated with stroke, as well as collaborating with the wider community in delivering coordinated multidisciplinary care that improves quality of life after stroke.

Back transfer/repatriation

When the acute treatment is completed and the person with stroke is medically stable, transfer for further care and rehabilitation at a health facility closer to home may be required. It is recommended that a person-centred management care plan be developed in collaboration with the patient and their family to harness and optimise self-management skills.

- Health services in the Barwon-South Western Health region should have a locally developed protocol in place that facilitates and supports timely acceptance of stroke survivors from comprehensive and primary stroke centres including those from metropolitan health services.
- The person with stroke must be accepted by a dedicated medical lead from the receiving hospital prior to being allocated an inpatient bed or residential place. It is expected that a formal and written notification process is followed.
- The receiving facility's bed access management team must confirm acceptance prior to transfer.
- The receiving facility's medical lead must acknowledge the transfer/repatriation request in writing either as an email or faxed response to the referring clinician.
- Prior to transfer, it is expected that referring stroke centres provide receiving facilities with the following documents to ensure continuity of quality care:
  - completed transfer form
  - comprehensive discharge documentation with care plan or medical discharge summary, including the results of investigations, medication prescribed and follow-up process
  - allied health therapy summaries including current therapies and future goals
  - nursing summary including current care needs
  - contact details of the treating team and inpatient ward.
- Where it is the wish of the person with stroke, carers should be actively involved in the recovery process by assisting with goal setting, therapy sessions, discharge planning and planning long-term activities.

Escalation process

Ideally, back transfers should be made during business hours to ensure continuity of care. If a transfer is delayed or planned outside business hours, it is recommended that an interim care plan (case-specific) is arranged and put in place. Health services are expected to have an escalation process with site-specific protocols to enable and support decision making.

The *National acute stroke services framework 2015* recommends coordination of care between sites. This should be facilitated by staff with a dedicated stroke coordinator role. In addition, it is recommended that all health facilities have a key staff member responsible for managing bed capacity. This person may be known by any of the following titles:

- bed access manager
- access and flow manager
- bed manager
- hospital supervisor
- after hours coordinator.

Staffing levels are likely to vary, especially in rural and regional settings, depending on local considerations. In recognition of this, the department recommends that health services consider how and what support is provided to staff when people with stroke who are medically stable are not transferred within 48 hours of acceptance. It is essential that both the stroke coordinator and the bed manager are made aware of any issues arising from delayed transfers.

It is best practice to begin discharge planning with the local health service prior to transfer. Discharge planning is crucial for successful reintegration to the community. The Victorian Stroke Clinical Network (VSCN) recommends back transfer, when clinically appropriate, to settings close to home because this optimises access to available family, social and cultural support for the person with stroke.

Quality and safety monitoring

To deliver optimal stroke care, a continuous quality and safety improvement process for the Barwon-South Western Health region will incorporate the following.

- Stroke coordinators
  - Staff with dedicated stroke coordinator roles from Barwon Health (University Hospital Geelong) and South West Healthcare (Warrnambool) are responsible for integrated and collaborative stroke management care across the region.
  - Responsibilities include effectively and efficiently managing stroke care and treatment through data collection, education, reporting and monitoring of quality improvement initiatives.
- Responsibility
  - All Barwon-South Western health services will participate in ongoing quality improvement programs to improve healthcare delivery and person-centred outcomes.
  - All Barwon-South Western health services will participate in, and support the planning and implementation of, a regional approach to delivering a stroke service.
  - All Barwon-South Western health services will provide stroke and stroke-related data to the department. As a minimum, VAED and VEMD data will be submitted to the department.
  - It is an expectation that comprehensive and primary stroke services are routinely involved in detailed stroke data collection and clinical audits.
  - It is strongly recommended that health services providing stroke unit care submit data to the Australian Stroke Clinical Registry (AuSCR). Health services providing exported data from their hospital's patient information system are advised to submit monthly. For health services that utilise the AuSCR web tool for direct manual data entry, more frequent submissions are encouraged.
  - It is also recommended that the *Australian stroke data tool* (AusDaT) be used to enable efficient data entry across various collection activities.
  - Ambulance Victoria will assist in confirming stroke/TIA separations and transfers.
- Stroke datasets – as per the *National acute stroke services framework 2015* recommendation – should be used. These include:
  - VAED and VEMD data provided to the department
  - Victorian Ambulance Clinical Information System (VACIS) data provided by Ambulance Victoria
  - four process indicators provided to AuSCR
  - the National Performance Indicator Set
  - Acute Stroke Clinical Standard Indicator Set by the Australian Commission on Safety and Quality in Health Care.
  - For more information visit the Stroke Foundation's website at <www.strokefoundation.com.au> and search for 'national stroke services frameworks'.

- Process
  - All reported data will be reviewed and analysed quarterly by the Barwon-South Western Health Stroke Coalition (composed of representatives of health services that have endorsed/approved this framework).
  - Reports from local inter-professional team meetings will be reviewed and actioned as appropriate.
  - All clinical and near-miss incidents relating to stroke care in the region reported to the Victorian Health Incident Management System (VHIMS) will be included in the review and analysis.
  - Data indicating that stroke care is not being provided in accordance with the *Stroke care strategy for Victoria* (2007) and the NSF *Clinical guidelines for stroke management* (2010) will be highlighted and actioned as appropriate.
  - The Barwon Health stroke service coordinator and the South West Healthcare stroke liaison nurse will lead discussions to address any processes that are identified as causal of data reflecting suboptimal stroke care.
- Reporting and data should be disseminated to:
  - Barwon-South Western Health Stroke Coalition
  - VSCN
  - bed access/flow managers
  - Ambulance Victoria
  - other key staff such as the stroke unit director, in relevant regional facilities.

Review and evaluation

A review of this framework will be completed in 2017 and/or whenever there is a change to best practice acute stroke care. The review will include all data reported and collected as well as an evaluation of the monitoring tools incorporated in the framework.

Implementation and agreement

The framework will be disseminated to:

- Ambulance Victoria
- Barwon-South Western Health region public health services
- GPs in the Barwon-South Western Health region
- relevant private services in the Barwon-South Western Health region.

Framework receipt and sign-off

Health services represented below confirm agreement and support of:

- the principles articulated in this framework
- participation in providing evidence-based stroke care
- an ongoing commitment to establishing a region-wide approach to improve stroke care delivery and person-centred outcomes through timely access and transfers of people with stroke.

Appendix 1: Elements of stroke services in the region

Elements of service	Comprehensive stroke service	Primary stroke service	BH	SWH	WDHS
Organised pre-hospital services (includes use of validated screening tools by paramedics and appropriate pre-notification systems)	√	√	√	√	√
Coordinated emergency department systems (includes use of validated screening tools, agreed triage categories, protocols for tissue plasminogen activator (tPA) intervention (such as 'Code Stroke') and pathways to facilitate urgent access to imaging)	√	√	√	√	√
Coordinated regional stroke systems (includes protocols for hospital bypass, transfer from non-stroke hospital to primary (PSS) or comprehensive stroke service (CSS), and between a PSS and CSS)	√	√	√	√	√
Stroke unit	√	√	√	√	√
On-site CT brain (24/7) including CT angiography	√	√ *	√	√	√
Carotid imaging	√	√	√	√	√
Advanced imaging capability (for example, MRI/MRA, catheter angiography)	√	Optional	√	√	X
On-site endovascular stroke therapy	√ 24/7	X	X	X	X
On-site neurosurgical services (for example, for hemicraniectomy due to large middle cerebral artery infarcts)	√	Optional ¥	X	X	X
Delivery of intravenous tPA	√ 24/7	√ #	√	√	√
Ability to provide acute monitoring (telemetry and other physiological monitoring) for at least 72 hours	√	√	√	√	√
Acute stroke team (minimum team consists of medical, nursing and allied health)	√	√	√	√	√
Dedicated stroke coordinator position	√	√	√	√	√**
Dedicated medical lead whose primary focus is stroke (stroke service director)	√	√	√	√	√
Access to HDU/ICU (for complex cases)	√	√	√	√	√
Rapid (within 48 hours) transient ischaemic attack (TIA) assessment clinics/services	√	√	√	√	√
Provision of telehealth services for acute assessment and treatment	√	Optional	√	X	√
Coordination with rehabilitation service providers (this should include a standardised process – and/or a person – used to assess suitability for further rehabilitation)	√	√	√	√	√
Early assessment using standardised tools to determine individual rehabilitation needs and goals (ideally within 24–48 hours). There should also be standardised processes that ensure all people with stroke are assessed for rehabilitation	√	√	√	√	√

Elements of service	Comprehensive stroke service	Primary stroke service	BH	SWH	WDHS
Routine involvement of carers in the rehabilitation process	√	√	√	√	√
Routine use of guidelines, care plans and protocols	√	√	√	√	√
Regular data collection and stroke-specific quality improvement activities	√	√	√	√	√
Access and collaboration with other specialist services (cardiology, palliative care, vascular)	√	Optional	√	√	√
Regional responsibility (for example, coordination across a local health district)	Commonly	Optional	√	√	√

\# tPA provided at least during business hours (on site including via telehealth).

¥ Requires clear transfer arrangements to services with this capacity if not available on site.

√ * CTA should be at least available during business hours for PSS with non-contrast CT 24/7.

√ ** Refer to Appendix 2: Stroke management at WDHS.

Appendix 2: Stroke management at Western District Health Service

On presentation at the emergency department, stroke algorithm, assessment and protocols reflective of the National Stroke Foundation framework are commenced. WDHS has the capacity to provide CT brain 24 hours a day, carotid ultrasound during working hours and administer thrombolysis as required.

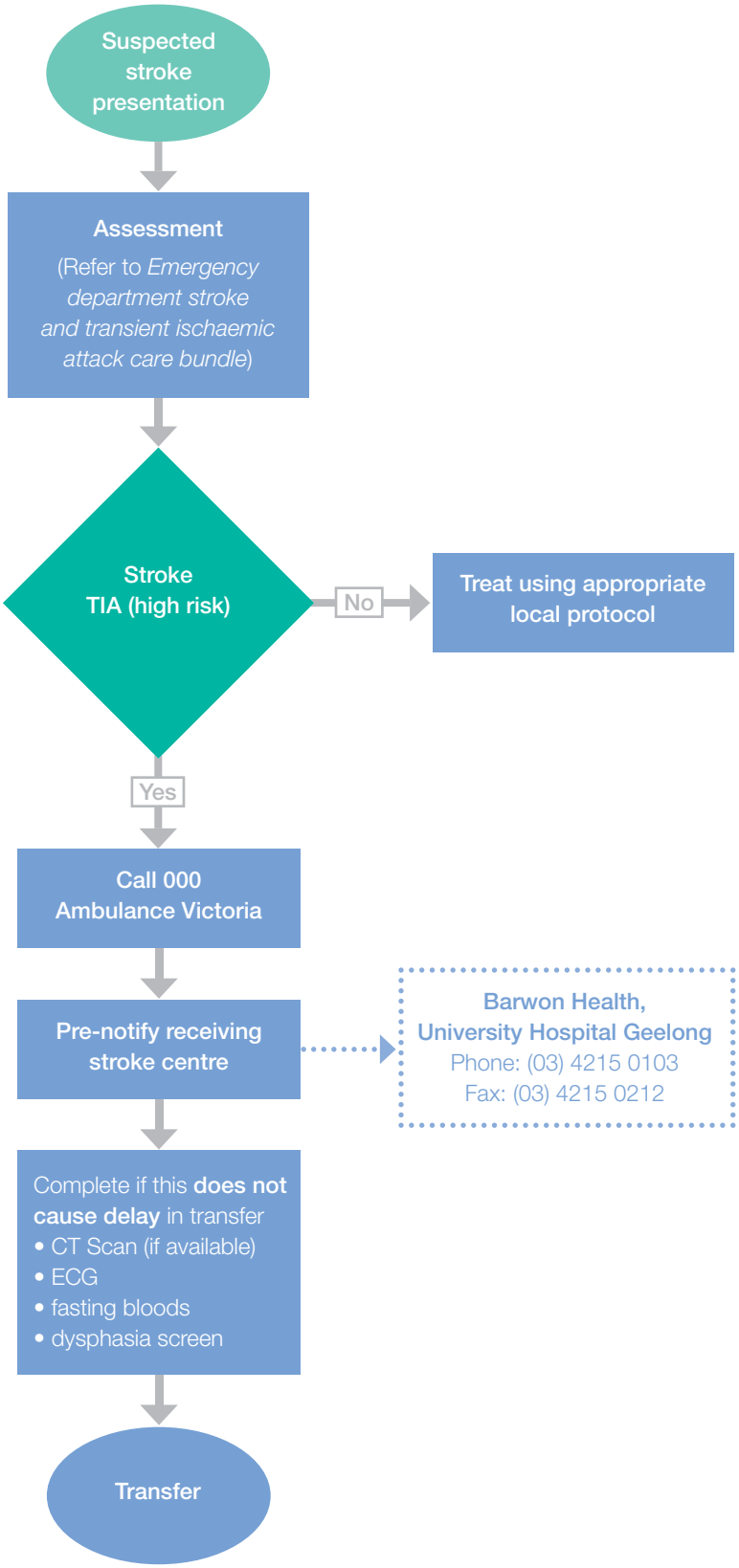
WDHS provides a multidisciplinary team approach in the care of people with stroke. Medical and nursing personnel who have comprehensive knowledge and skills in the management and provision of stroke care, as well as allied health professionals such as physiotherapists, occupational therapists and speech pathologists, collaborate to ensure quality and person-centred care is provided.

Although WDHS does not have a dedicated stroke coordinator, the medical unit / intensive care unit associate nurse unit manager has the responsibility of stroke coordination incorporated into their portfolio. Responsibilities of this portfolio include:

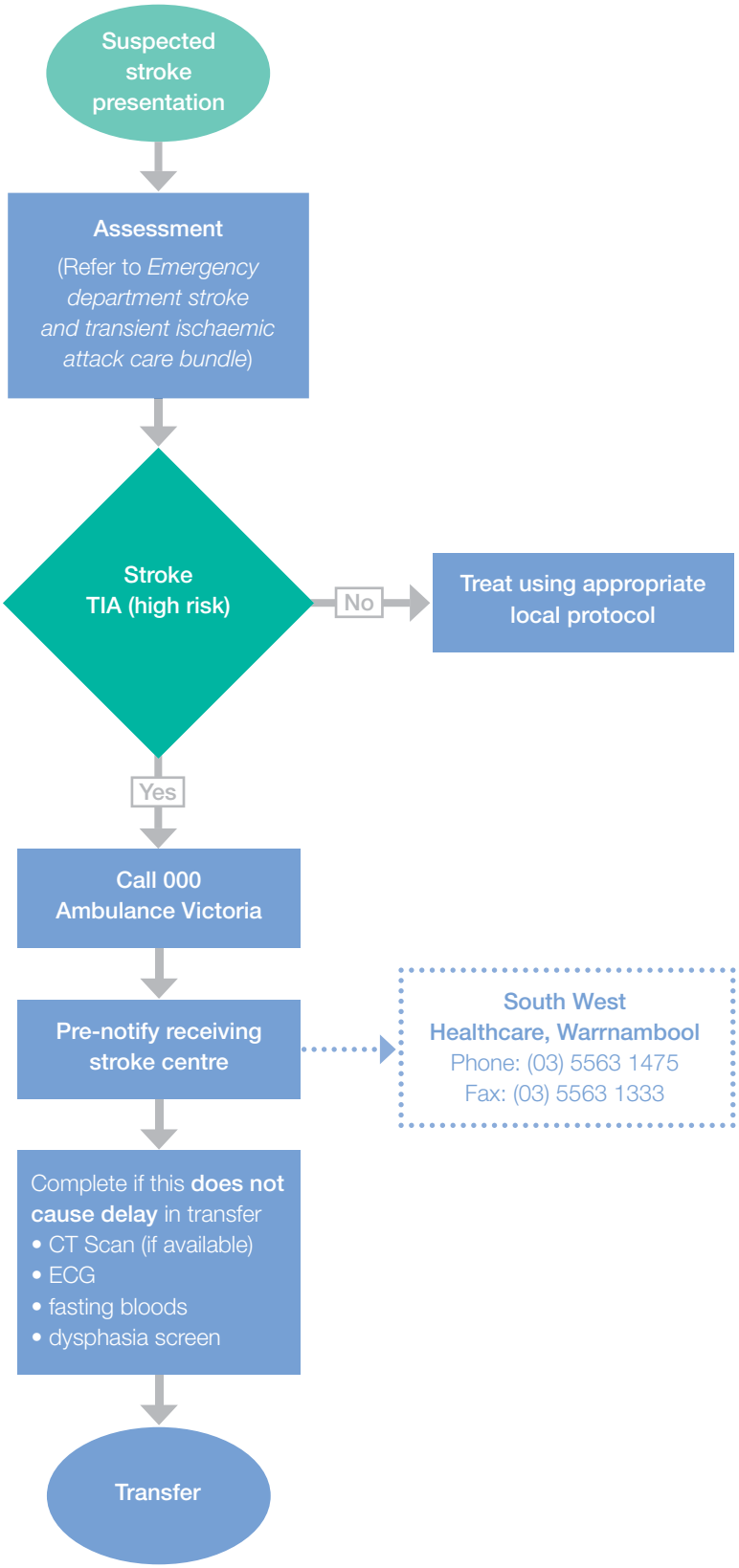
- monitoring stroke performance measures
- monitoring compliance with documentation and protocols
- reporting of stroke data
- coordinating integrated stroke care.

Appendix 3: Barwon-South Western Health region stroke transfer pathway

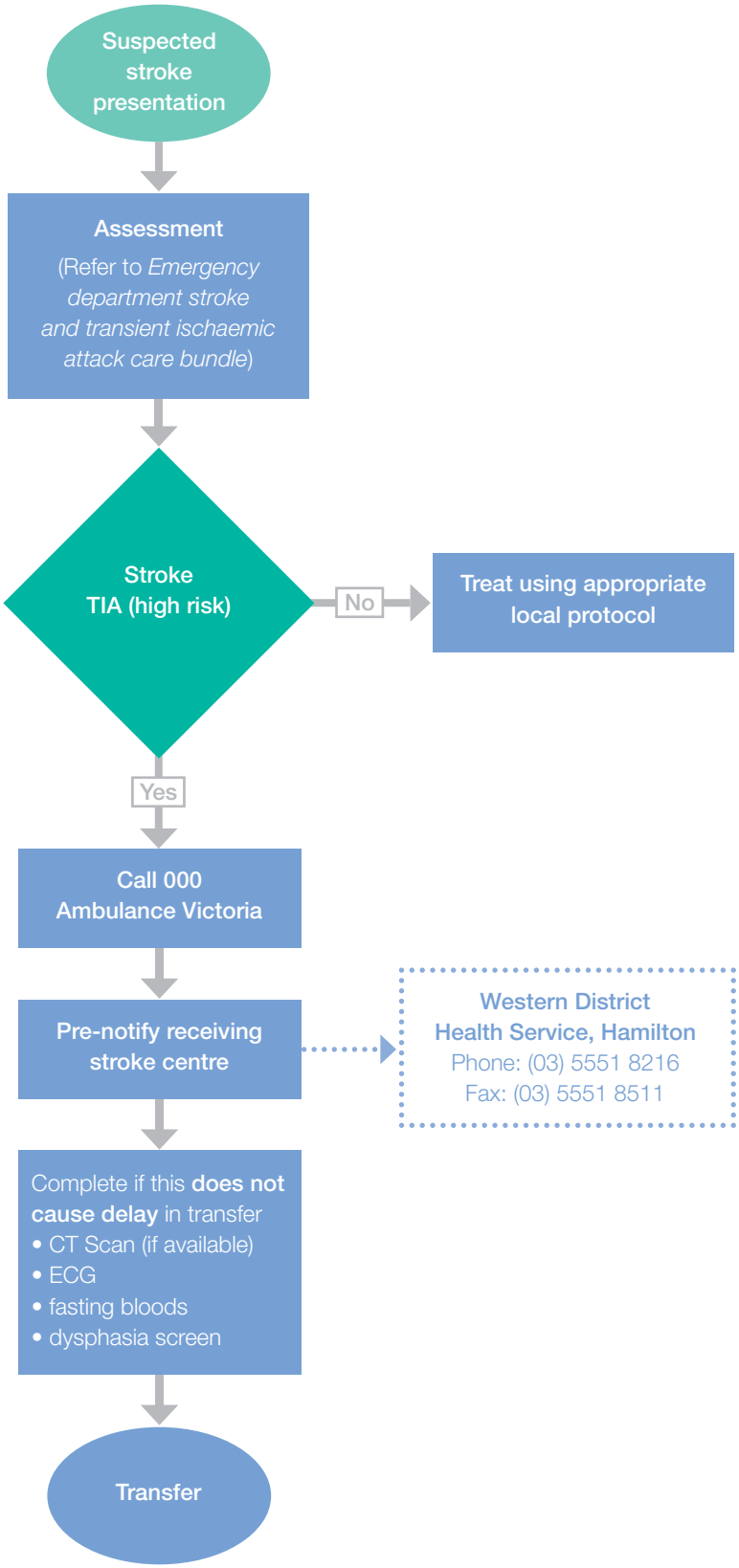
Appendix 3.1: Transfer pathway for Apollo Bay, Colac, Lorne and Winchelsea



Appendix 3.2: Transfer pathway for Camperdown, Cobden, Port Fairy, Portland, Terang and Timboon



Appendix 3.3: Transfer pathway for Balmoral, Casterton, Coleraine, Dartmoor, Heywood and Penshurst



Abbreviations

ABCD²	Age, Blood pressure, Clinical features, Duration and Diabetes
AuSCR	Australian Stroke Clinical Registry
CT	computed tomography
CTA	computed tomography angiography
ECR	endovascular clot retrieval
GP	general practitioner
NSF	National Stroke Foundation
rt-PA	recombinant tissue plasminogen activator
TIA	transient ischaemic attack
VACIS	Victorian Ambulance Clinical Information System
VAED	Victorian Admitted Episodes Dataset
VEMD	Victorian Emergency Minimum Dataset
VHIMS	Victorian Health Incident Management System
VSCN	Victorian Stroke Clinical Network
WDHS	Western District Health Service

References and further reading

Ambulance Victoria 2014, *Clinical practice guidelines for ambulance and MICA paramedics*, viewed 11 September 2015, <http://www.ambulance.vic.gov.au/Media/docs/cpgs-april2015-a1cf1e77-4205-4175-97c1-22a98fdfcf98-0.pdf>.

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