



## **Supporting Information**

### **Supplementary tables and acknowledgements**

**This appendix was part of the submitted manuscript and has been peer reviewed.  
It is posted as supplied by the authors.**

Appendix to: Bladin C, Kim J, Bagot KL, et al. Improving acute stroke care in regional hospitals: clinical evaluation of the Victorian Stroke Telemedicine program. *Med J Aust* 2020; doi: 10.5694/mja2.50570.

**Table 1. Hospital human research ethics committees (HRECs) that approved collection of Victorian Stroke Telemedicine program data**

Human research ethics committee	Approvals
National ethics application forms (NEAFs) upon which HREC approvals and : site specific agreements (SSAs) were based	NEAF AU/1/5FC418 (3/10/13) NEAF AU/1/B3B6115 (7/2/14) NEAF AU/1/E77B110 (3/11/14)
Bendigo Health Care Group HREC	Bendigo SSA Number SSA/13/BCHG35 Approval HREC/13/B/BHCG/31 Echuca SSA Number SSA/13/BHCG/32 Approval HREC/13/B/BHCG/31 Swan Hill SSA Number SSA/13/BHCG35 Approval HREC/13/B/BHCG/31
Mildura Base Hospital HREC	SSA not required Approval number 20131001 Amendments pending (no meeting since October 2015)
Albury/Wodonga HREC (covers Albury Hospital, Wodonga Hospital)	SSA not required Approval 394-14-3
Goulburn Valley (Shepparton) HREC	SSA GVH08/14 Approval GVH 08/14
Northeast Health Wangaratta HREC	SSA AU/5/9E97112 Approval 137
La Trobe Regional Hospital (LRH) HREC	La Trobe AU/5/3D69119 Approval 2014-23 Central Gippsland Hospital (Sale) AU/5/C3FB19 Approval 2014-23 (amendment of additional site to the LRH application) Bass Coast Health (Wonthaggi) SSA not required Accepted authorised HREC approvals (provided Latrobe HREC) on 08/06/2016
Ballarat Hospital	SSA14/BHSSJOG/47 Approval HREC/14/BHSSJOG/47
West Gippsland Hospital (Warragul)	AU/5/47BB111 No approval number (approval date 10/12/2014)
Bairnsdale Regional Health Service	AU/5/81DE18 Approval 2014-23 (amendment of additional site to the LRH application)
Wimmera Health Care Group	AU/5/81DE18 Approval CRC Ref No 15/6
Western District Health Service (Hamilton Base Hospital)	SSA not required Approval 14/2015
Southwest Healthcare (Warrnambool)	SSA not required Project number 04/2016; Approval date 06 June 2016

**Table 2. Factors associated with receiving thrombolysis: multivariable logistic regression with clustering by hospital**

	Thrombolysis OR (95% CI)	Door-to-needle time under 60 minutes* OR (95% CI)	Intracerebral haemorrhage after thrombolysis OR (95% CI)
Patients with outcome	854	291	292
VST period v control period <sup>†</sup>	1.27 (0.86–1.88)	<b>3.00 (1.21–7.44)</b>	<b>0.22 (0.07–0.71)</b>
Age (years), per year	<b>0.97 (0.96–0.98)</b>	1.00 (0.98–1.01)	<b>1.04 (1.01–1.07)</b>
Sex (men)	0.91 (0.69–1.20)	1.34 (0.79–2.27)	1.04 (0.37–2.97)
First ever stroke	<b>1.71 (1.14–2.56)</b>	<b>2.12 (1.09–4.11)</b>	2.23 (0.74–6.71)
Unable to walk on admission <sup>‡</sup>	<b>3.26 (1.95–5.46)</b>	1.58 (0.68–3.64)	0.83 (0.25–2.69)
Hospital size (number of stroke admissions per year)			
< 75 (Reference category)	1	1	1
75–199	1.34 (0.69–2.65)	2.81 (0.72–11.05)	1.28 (0.17–9.73)
≥ 200	1.04 (0.51–2.10)	1.34 (0.37–4.81)	0.69 (0.08–5.92)

OR = odds ratio, CI = confidence interval.

\* One person with missing time to thrombolysis.

† Includes all patients presenting during the VST period, regardless of whether they had a VST consultation.

‡ Proxy for stroke severity.

**Table 3. Factors associated with time to diagnosis and treatment: multivariable median regression with clustering by hospital**

	Onset-to-arrival time β (95% CI)	Door-to-review time β (95% CI)	Door-to-scan time β (95% CI)	Door-to-needle time* β (95% CI)
Patients with outcome	1024	830	991	291
VST period v control period <sup>†</sup>	–8.07 (–17.5 to 1.34)	<b>–5.48</b> <b>(–6.93 to 4.02)</b>	<b>–9.88</b> <b>(–15.0 to –4.73)</b>	<b>–25.9</b> <b>(–39.4 to –12.4)</b>
Age (years), per year	<b>0.51</b> <b>(0.16 to 0.86)</b>	<b>0.06</b> <b>(0.02 to 0.10)</b>	<b>0.22</b> <b>(0.07 to 0.37)</b>	0.12 (–0.32 to 0.56)
Sex (men)	2.32 (–6.90 to 11.5)	0.53 (–0.55 to 1.61)	1.76 (–2.56 to 6.08)	1.92 (–8.07 to 11.9)
First ever stroke	4.16 (–6.27 to 14.6)	0.21 (–1.07 to 1.49)	–2.65 (–8.13 to 2.82)	–13.7 (–30.0 to 2.61)
Unable to walk on admission <sup>‡</sup>	–2.24 (–13.3 to 8.79)	<b>–2.19</b> <b>(–3.69 to –0.69)</b>	<b>–8.64</b> <b>(–13.9 to –3.35)</b>	–13.4 (–28.9 to 2.18)
Hospital size (number of stroke admissions per year)				
< 75 (reference)	1	1	1	1
75–199	9.06 (–9.67 to 27.8)	1.53 (–3.89 to 0.84)	<b>–16.4</b> <b>(–30.8 to –1.97)</b>	–1.58 (–19.3 to 16.1)
≥ 200	14.7 (–4.60 to 33.9)	1.92 (–0.66 to 4.50)	–5.76 (–20.5 to –8.96)	9.18 (–10.21 to 28.6)

CI = confidence interval.

β coefficient: median difference in time (in minutes) between groups.

\* One person with missing time to thrombolysis.

† Includes all patients presenting during the VST period, regardless of whether they had a VST consultation.

‡ Proxy for stroke severity.

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### **Steering Committee**

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### **Management Committee**

Christopher Bladin (Chair), Dominique Cadilhac, Sonia Denisenko, Sonia Thomas, Mark Savage, Kathy Wright, Lauren Arthurson, Alison Walker, Jackie Plunkett, Jennifer Jones, Anne Robinson, Jonelle Hill-Uebergang, Ian Aldrich, Vanessa Crosby, Thomas Kraemer, Peter Disler

### **Members of the VST Working Groups**

#### **Medical**

Christopher Bladin (Chair), Dominique Cadilhac, Helen Dewey, Richard Gerraty, Peter Hand, Simon Smith, Diana Badcock, John Britten, Glen Howlett, Vasant Mani, Arup Bhattacharya, Penelope Smith, Les Bolitho, Alison Walker, Thomas Kraemer

#### **Information Technology**

Christopher Bladin (Chair), Tiffany Waugh, Roger Coleman-Bock, Patrick Testa, Terry Atkinson, Terry Mounsey, Brent Colbert, Greg Orr, Luke Maskell, Tom Niderle, Nigel Phipps, Chris Reeve, Mark Atkin, Neil Irving-Dusting, John Miller, Andres Haas, Mathew Oakley, Adrian Shearer

#### **Research & Evaluation**

Dominique Cadilhac (Chair), Christopher Bladin, George Braitberg, Geoffrey Donnan, Brenda Grabsch, Helen Dewey, Marj Moodie, Tori Wade, Monique Kilkenny, Cameron Crampton, Rene Stolwyk

#### **Information Technology Procurement**

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