

Table S1 Patient and practice characteristics categorised by World Bank country income category: Cerebral infarct only

Category	Detail	World Bank Income category		Significance
		High	Low-or middle	
Patient characteristics	Number	2370	6881	N/A
Countries	Number	10	18	"
Centres (participants/centre)	Number	38 (62)	70 (98)	"
Age	Mean (SD)	66.2 (13.7)	62.4 (13.6)	p<0.0001
Sex	Male	1417 (60%)	4030 (59%)	p=0.15
Education	None/primary	413 (17%)	4308 (63%)	p<0.0001
	Senior & trade/ College & University	1957 (83%)	2573 (37%)	
Charleston Index	None	642 (27%)	2281 (33%)	p<0.0001
Comorbidity	One or more	1728 (73%)	4600 (67%)	
Independent Pre-stroke	Modified Rankin Scale 0-2	2276 (96%)	9802 (99%)	P<0.0001
Stroke classification	Infarct – Total Anterior Circulation	111 (5%)	488 (7%)	p<0.0001
	Infarct – Partial Anterior Circulation	1022 (43%)	3246 (47%)	
	Infarct – Posterior Circulation	406 (17%)	860 (12%)	
	Infarct – Lacunar	706 (30%)	1723 (25%)	
	Unclassified	70 (3%)	507 (7%)	
Level of consciousness	Reduced	153 (7%)	2095 (30%)	p<0.0001
Baseline dependency (modified Rankin scale; mRS)	Mild (mRS 0-2)	1499 (63%)	2577 (38%)	p<0.0001
	Moderate (mRS 3)	435 (18%)	1954 (28%)	
	Severe (mRS 4)	336 (14%)	1549 (23%)	
	Very severe (mRS 5)	99 (4%)	799 (12%)	
Services available				
Hospital type	Tertiary	1671 (72%)	4065 (59%)	p<0.0001
	Secondary or local	662 (28%)	2816 (41%)	
Stroke specialist availability	Any available	2206 (96%)	5287 (77%)	p<0.0001
	Capacity to look after >50% of patients admitted	2081 (90%)	4415 (64%)	p<0.0001

Stroke unit availability	Any available	2188 (92%)	2655 (39%)	p<0.0001
	Capacity to look after >50% of patients admitted	2062 (90%)	1931 (28%)	p<0.0001
	Meets all key characteristics ^(a)	1618 (90%)	1393 (25%)	p<0.0001
	Meets all staffing benchmarks ^(b)	451 (19%)	872 (13%)	p<0.0001
	Post-discharge rehabilitation	Any service available	2175 (92%)	2315 (34%)
Family training in rehabilitation	Any education of family in rehabilitation	2002 (84%)	4805 (70%)	p<0.0001
Investigations provided				
	CT scan on day 1	2261 (95%)	6337 (92%)	p<0.0001
	MRI scanning			
	Holter monitoring	598 (25%)	91 (1%)	p<0.0001
	Carotid Doppler ultrasound	1599 (68%)	1194 (17%)	p<0.0001
Treatments given in hospital				
	Antiplatelet for infarct	2138 (90%)	5555 (81%)	p<0.0001
	Lipid lowering for infarct	1659 (70%)	4480 (65%)	P<0.0001
	BP lowering for any stroke	1659 (70%)	4478 (65%)	P<0.0001
	Thrombolysis (iv) for infarct	463 (20%)	241 (4%)	p<0.0001
	Carotid intervention for infarct ^(c)	79 (3%)	18 (<1%)	p<0.0001
Length of stay in hospital	Mean (days)	9	11	p=0.34

The table summarises regional variations in the patient characteristics, services investigations and treatments available for participants with cerebral infarct recruited to INTERSTROKE and grouped according to World Bank Income Category.

Key: mRS = modified Rankin Scale a) The stroke unit characteristics included²⁶; discreet ward, staff specialise in stroke, regular multidisciplinary team (MDT) meetings, protocols for care, programmes of education and training for staff, information for patients and carers. b) Basic stroke unit staffing was benchmarked²⁶ at a staff complement (to cover all care shifts) of 1.0 whole time nurse per bed, 0.1 whole time therapist, and 0.1 whole time doctor. c) usually carotid endarterectomy (a small number had carotid stenting).

Table S2 Association of access to stroke unit care with patient outcomes at one month: Cerebral infarct only

Outcome	Stroke unit available		Univariate analysis OR (95%CI)	Multivariate analysis (i) OR (95% CI)	Multivariate analysis (ii) OR (95% CI)	Multivariate analysis (iii) OR (95% CI)
	Yes (n=4811)	No (n=4376)				
Alive without severe dependency (mRS 0-3)	4095 (85%)	3647 (83%)	1.14 (1.02-1.28) P=0.0200	1.42 (1.23-1.64) P<0.0001	1.39 (1.19-1.61) P<0.0001	1.24 (1.06-1.45) P=0.06
Alive (mRS 0-5)	4502 (94%)	4064 (93%)	1.12 (0.95-1.32) P=0.18	1.15 (0.96-1.39) p=0.14	1.03 (0.85-1.24) p=0.80	0.87 (0.71-1.06) P=0.16

The table shows the number (percent) of patients with cerebral infarction in both service groups in each category of outcome measure (degree of recovery at one month post-stroke). The multivariate analysis used multivariate regression to show case-mix adjusted outcomes that were adjusted for; i) participant age, sex, education, pre-stroke disability, stroke type (haemorrhage or Oxfordshire community stroke project category of infarct), number of comorbidities (Charleston comorbidity index); level of consciousness, and modified Rankin score at baseline (always recorded within 5 days of stroke onset), and ii) as i) plus World Bank Country Income category, iii) as ii) plus clustered by centre.

Key: mRS = modified Rankin Scale.