

CLNE0026: Treatment (HASU and Service Delivery)

Old code : CLNEG056

View Online



1.

Stroke Series | ACNR | Online Neurology Journal [Internet]. Available from:
<http://www.acnr.co.uk/category/stroke-series/>

2.

Gates P. The rule of 4 of the brainstem: a simplified method for understanding brainstem anatomy and brainstem vascular syndromes for the non-neurologist. *Internal Medicine Journal*. 2005 Apr;35(4):263–266.

3.

Patten J. *Neurological differential diagnosis*. 2nd ed. London: Springer; 1996.

4.

H.J.M. Barnett. The classification of ischaemic stroke. *Stroke: pathophysiology, diagnosis and management* [Internet]. 3rd ed. New York ; Edinburgh: Churchill Livingstone; 1998. Available from:
<https://contentstore.cla.co.uk/secure/link?id=c75ce40f-f7bc-e911-80cd-005056af4099>

5.

Warlow C, van Gijn J, Dennis M, Wardlaw J, Bamford J, Hankey G, Sandercock P, Rinkel G, Langhorne P, Sudlow C, Rothwell P, editors. What Pathological Type of Stroke is it, Cerebral Ischaemia or Haemorrhage? *Stroke* [Internet]. Oxford, UK: Blackwell Publishing Ltd; 2008. p. 181–258. Available from: <http://doi.wiley.com/10.1002/9780470696361.ch5>

6.
Hemphill JC, Greenberg SM, Anderson CS, Becker K, Bendok BR, Cushman M, Fung GL, Goldstein JN, Macdonald RL, Mitchell PH, Scott PA, Selim MH, Woo D. Guidelines for the Management of Spontaneous Intracerebral Hemorrhage. *Stroke*. 2015 Jul;46(7):2032–2060.
7.
Bhogal P, Andersson T, Maus V, Mpotsaris A, Yeo L. Mechanical Thrombectomy—A Brief Review of a Revolutionary new Treatment for Thromboembolic Stroke. *Clinical Neuroradiology*. 2018 Sep;28(3):313–326.
8.
Bhogal P, Hellstern V, AlMatter M, Ganslandt O, Bätzner H, Aguilar Pérez M, Henkes H. Mechanical thrombectomy in children and adolescents: report of five cases and literature review. *Stroke and Vascular Neurology*. 2018 Nov 12;
9.
Bhogal P, Bücke P, AlMatter M, Ganslandt O, Bätzner H, Henkes H, Aguilar Pérez M. A Comparison of Mechanical Thrombectomy in the M1 and M2 Segments of the Middle Cerebral Artery: A Review of 585 Consecutive Patients. *Interventional Neurology*. 2017;6(3–4):191–198.
10.
Foerch C. Survival and quality of life outcome after mechanical ventilation in elderly stroke patients. *Journal of Neurology, Neurosurgery & Psychiatry*. 2004 Jul 1;75(7):988–993.
11.
Armstrong JR, Mosher BD. Aspiration Pneumonia After Stroke. *The Neurohospitalist*. 2011 Apr;1(2):85–93.
12.
Friedman PJ. Atrial fibrillation after stroke in the elderly. *Stroke*. 1991 Feb;22(2):209–214.

13.

Gastrointestinal bleeding in stroke. - PubMed - NCBI [Internet]. Available from: https://ovidsp.tx.ovid.com/sp-3.32.0a/ovidweb.cgi?&S=PEHDFPHICLDDJPAINCDKPAOBNHOKAA00&Link+Set=S.sh.22.23.27.31.38.44%7c7%7csl_10

14.

Ekker MS, Boot EM, Singhal AB, Tan KS, Debette S, Tuladhar AM, de Leeuw FE. Epidemiology, aetiology, and management of ischaemic stroke in young adults. *The Lancet Neurology*. 2018 Sep;17(9):790–801.

15.

Ferro JM, Massaro AR, Mas JL. Aetiological diagnosis of ischaemic stroke in young adults. *The Lancet Neurology*. 2010 Nov;9(11):1085–1096.

16.

Putala J, Metso AJ, Metso TM, Konkola N, Kraemer Y, Haapaniemi E, Kaste M, Tatlisumak T. Analysis of 1008 Consecutive Patients Aged 15 to 49 With First-Ever Ischemic Stroke. *Stroke*. 2009 Apr;40(4):1195–1203.

17.

Cheng YC, Ryan KA, Qadwai SA, Shah J, Sparks MJ, Wozniak MA, Stern BJ, Phipps MS, Cronin CA, Magder LS, Cole JW, Kittner SJ. Cocaine Use and Risk of Ischemic Stroke in Young Adults. *Stroke*. 2016 Apr;47(4):918–922.

18.

Mitchell AB, Cole JW, McArdle Patrick F, Cheng YC, Ryan KA, Sparks MJ, Mitchell BD, Kittner SJ. Obesity Increases Risk of Ischemic Stroke in Young Adults. *Stroke*. 2015 Jun;46(6):1690–1692.

19.

Roivainen R, Haapaniemi E, Putaala J, Kaste M, Tatlisumak T. Young adult ischaemic stroke related acute symptomatic and late seizures: risk factors. *European Journal of Neurology*. 2013 Sep;20(9):1247–1255.

20.

Jacobs BS, Boden-Albala B, Lin IF, Sacco RL. Stroke in the Young in the Northern Manhattan Stroke Study. *Stroke*. 2002 Dec;33(12):2789–2793.

21.

Towfighi A, Saver JL, Engelhardt R, Ovbiagele B. Factors Associated with the Steep Increase in Late Midlife Stroke Occurrence among US Men. *Journal of Stroke and Cerebrovascular Diseases*. 2008 Jul;17(4):165–168.

22.

Allen N. Racial/Ethnic Differences in Stroke in Young Adults. *Neuroepidemiology*. 2009;32(4):312–312.

23.

Arnold M, Halpern M, Meier N, Fischer U, Haefeli T, Kappeler L, Brekenfeld C, Mattle HP, Nedeltchev K. Age-dependent differences in demographics, risk factors, co-morbidity, etiology, management, and clinical outcome of acute ischemic stroke. *Journal of Neurology*. 2008 Oct;255(10):1503–1507.

24.

de Rooij NK, Linn FHH, van der Plas JA, Algra A, Rinkel GJE. Incidence of subarachnoid haemorrhage: a systematic review with emphasis on region, age, gender and time trends. *Journal of Neurology, Neurosurgery & Psychiatry*. 2007 Dec 1;78(12):1365–1372.

25.

By: Kissela, BM (Kissela, Brett M.) [1] ; Alwell, K (Alwell, Kathleen) [1] ;
Khoury, J (Khoury, Jane) [1] ; Moomaw, CJ (Moomaw, Charles J.) [1] ;

Woo, D (Woo, Daniel)[1] ; Adeoye, O (Adeoye, Opeolu)[1] ; Flaherty, ML (Flaherty, Matthew L.)[1] ; Khatri, P (Khatri, Pooja)[1] ; Ferioli, S (Ferioli, Simona)[1] ; Broderick, JP (Broderick, Joseph P.)[1] ; Kleindorfer, D (Kleindorfer, Dawn)[1] ...More...Less. Stroke in the Young is Increasing Over Time: Temporal Trends in the Age of Stroke Incidence in a Large, Bi-racial Population. *STROKE* [Internet]. 2010;41(4). Available from: http://apps.webofknowledge.com/full_record.do?product=WOS&search_mode=GeneralSearch&qid=16&SID=C6z6vLcdaNjwVoEfuT&page=1&doc=1

26.

Merwick A, Werring D. Posterior circulation ischaemic stroke. *BMJ*. 2014 May 19;348(may19 33):g3175-g3175.

27.

Treadwell SD, Thanvi B, Robinson TG. Stroke in pregnancy and the puerperium. *Postgraduate Medical Journal*. 2008 May 1;84(991):238-245.

28.

Wasay M, Kaul S, Menon B, Venketasubramanian N, Gunaratne P, Khalifa A, Pongvarin N, Saadatnia M, Gan RN, Dai A, Mehndiratta MM. Ischemic Stroke in Young Asian Women: Risk Factors, Subtypes and Outcome. *Cerebrovascular Diseases*. 2010;30(4):418-422.

29.

Pérez de la Ossa N, Carrera D, Gorchs M, Querol M, Millán M, Gomis M, Dorado L, López-Cancio E, Hernández-Pérez M, Chicharro V, Escalada X, Jiménez X, Dávalos A. Design and Validation of a Prehospital Stroke Scale to Predict Large Arterial Occlusion. *Stroke*. 2014 Jan;45(1):87-91.

30.

Goyal M, Menon BK, van Zwam WH, Dippel DWJ, Mitchell PJ, Demchuk AM, Dávalos A, Majoie CBLM, van der Lugt A, de Miquel MA, Donnan GA, Roos YBWEM, Bonafe A, Jahan R, Diener HC, van den Berg LA, Levy EI, Berkhemer OA, Pereira VM, Rempel J, Millán M, Davis SM, Roy D, Thornton J, Román LS, Ribó M, Beumer D, Stouch B, Brown S, Campbell BCV, van Oostenbrugge RJ, Saver JL, Hill MD, Jovin TG. Endovascular thrombectomy after large-vessel ischaemic stroke: a meta-analysis of individual patient data from five randomised trials. *The Lancet*. 2016 Apr;387(10029):1723-1731.

31.

Saver JL, Goyal M, van der Lugt A, Menon BK, Majoie CBLM, Dippel DW, Campbell BC, Nogueira RG, Demchuk AM, Tomasello A, Cardona P, Devlin TG, Frei DF, du Mesnil de Rochemont R, Berkhemer OA, Jovin TG, Siddiqui AH, van Zwam WH, Davis SM, Castaño C, Sapkota BL, Franssen PS, Molina C, van Oostenbrugge RJ, Chamorro Á, Lingsma H, Silver FL, Donnan GA, Shuaib A, Brown S, Stouch B, Mitchell PJ, Davalos A, Roos YBWEM, Hill MD. Time to Treatment With Endovascular Thrombectomy and Outcomes From Ischemic Stroke: A Meta-analysis. *JAMA*. 2016 Sep 27;316(12).

32.

Stone J. Functional neurological disorders: the neurological assessment as treatment. *Practical Neurology*. 2016 Feb;16(1):7-17.

33.

Carson A, Lehn A, Ludwig L, Stone J. Explaining functional disorders in the neurology clinic: a photo story. *Practical Neurology*. 2016 Feb;16(1):56-61.

34.

Edwards MJ, Bhatia KP. Functional (psychogenic) movement disorders: merging mind and brain. *The Lancet Neurology*. 2012 Mar;11(3):250-260.

35.

Edwards MJ, Adams RA, Brown H, Parees I, Friston KJ. A Bayesian account of 'hysteria'. *Brain*. 2012 Nov 1;135(11):3495-3512.

36.

Stone J. Functional weakness and sensory disturbance. *Journal of Neurology, Neurosurgery & Psychiatry*. 2002 Sep 1;73(3):241-245.

37.

Habib G, Lancellotti P, Antunes MJ, Bongiorno MG, Casalta JP, Del Zotti F, Dulgheru R, El Khoury G, Erba PA, Iung B, Miro JM, Mulder BJ, Plonska-Gosciniak E, Price S, Roos-Hesselink J, Snygg-Martin U, Thuny F, Tornos Mas P, Vilacosta I, Zamorano JL. 2015 ESC Guidelines for the management of infective endocarditis. *European Heart Journal*. 2015 Nov 21;36(44):3075–3128.

38.

Ferro JM, Canhão P. Cerebral Venous Sinus Thrombosis: Update on Diagnosis and Management. *Current Cardiology Reports*. 2014 Sep;16(9).

39.

Robertson CE, Brown RD, Wijdicks EFM, Rabinstein AA. Recovery after spinal cord infarcts: Long-term outcome in 115 patients. *Neurology*. 2012 Jan 10;78(2):114–121.

40.

Smithard DG, Smeeton NC, Wolfe CDA. Long-term outcome after stroke: does dysphagia matter? *Age and Ageing*. 2006 Nov 17;36(1):90–94.

41.

Ekberg O, Hamdy S, Woisard V, Wuttge-Hannig A, Ortega P. Social and Psychological Burden of Dysphagia: Its Impact on Diagnosis and Treatment. *Dysphagia*. 2002 Apr 1;17(2):139–146.

42.

HAMDY S, ROTHWELL JC, AZIZ Q, THOMPSON DG. Organization and reorganization of human swallowing motor cortex: implications for recovery after stroke*. *Clinical Science*. 2000 Aug 1;99(2):151–157.

43.

Steinhagen V, Grossmann A, Benecke R, Walter U. Swallowing Disturbance Pattern Relates to Brain Lesion Location in Acute Stroke Patients. *Stroke*. 2009 May;40(5):1903–1906.

44.

Hinchey JA, Shephard T, Furie K, Smith D, Wang D, Tonn S. Formal Dysphagia Screening Protocols Prevent Pneumonia. *Stroke* [Internet]. 2005;36(9):1972-1976. Available from: https://www.ahajournals.org/doi/full/10.1161/01.STR.0000177529.86868.8d?url_ver=Z39.88-2003&rfr_id=ori%3Arid%3Acrossref.org&rfr_dat=cr_pub%3Dpubmed

45.

Leder SB. Videofluoroscopic Evaluation of Aspiration with Visual Examination of the Gag Reflex and Velar Movement. *Dysphagia*. 1997 Jan;12(1):21-23.

46.

Warnecke T, Teismann I, Oelenberg S, Hamacher C, Ringelstein EB, Scha

bitz WR, Dziewas R. The Safety of Fiberoptic Endoscopic Evaluation of Swallowing in Acute Stroke Patients. *Stroke*. 2009 Feb;40(2):482-486.

47.

Reilly, S., Douglas, J., Oates J. The evidence base for the management of dysphagia. Evidence-based practice in speech pathology [Internet]. London: Whurr; 2004. Available from: <https://contentstore.cla.co.uk/secure/link?id=c19574b4-dd02-e911-80cd-005056af4099>

48.

Broadley S, Croser D, Cottrell J, Creevy M, Teo E, Yiu D, Pathi R, Taylor J, Thompson PD. Predictors of prolonged dysphagia following acute stroke. *Journal of Clinical Neuroscience*. 2003 May;10(3):300-305.

49.

Toyoda K, Koga M, Sato S. What are the next breakthroughs in the management of acute intracerebral hemorrhage? *International Journal of Stroke*. 2016 Jun;11(4):386-388.

50.

Mendelow AD, Gregson BA, Rowan EN, Murray GD, Gholkar A, Mitchell PM. Early surgery versus initial conservative treatment in patients with spontaneous supratentorial lobar intracerebral haematomas (STICH II): a randomised trial. *The Lancet*. 2013 Aug;382(9890):397–408.

51.

STICH investigators Mendelow, A David Gregson, Barbara A Fernandes, Helen M Murray, Gordon D. Early surgery versus initial conservative treatment in patients with spontaneous supratentorial intracerebral haematomas in the International Surgical Trial in Intracerebral Haemorrhage (STICH): a randomised trial. *The Lancet* [Internet]. 365(5):387–97. Available from: https://search.proquest.com/docview/198997243?rfr_id=info%3Axri%2Fsid%3Aprimo

52.

Fiorella D, Arthur A, Bain M, Mocco J. Minimally Invasive Surgery for Intracerebral and Intraventricular Hemorrhage. *Stroke*. 2016 May;47(5):1399–1406.

53.

Bushnell C, McCullough LD, Awad IA, Chireau MV, Fedder WN, Furie KL, Howard VJ, Lichtman JH, Lisabeth LD, Piña IL, Reeves MJ, Rexrode KM, Saposnik G, Singh V, Towfighi A, Vaccarino V, Walters MR. Guidelines for the Prevention of Stroke in Women. *Stroke*. 2014 May;45(5):1545–1588.

54.

Treadwell SD, Thanvi B, Robinson TG. Stroke in pregnancy and the puerperium. *Postgraduate Medical Journal*. 2008 May 1;84(991):238–245.

55.

Moatti Z, Gupta M, Yadava R, Thamban S. A review of stroke and pregnancy: incidence, management and prevention. *European Journal of Obstetrics & Gynecology and Reproductive Biology*. 2014 Oct;181:20–27.

56.

Del Zotto E, Giossi A, Volonghi I, Costa P, Padovani A, Pezzini A. Ischemic Stroke during Pregnancy and Puerperium. *Stroke Research and Treatment*. 2011;2011:1-13.

57.

O'Neal MA, Feske SK. Stroke in pregnancy: a case-oriented review. *Practical Neurology*. 2016 Feb;16(1):23-34.

58.

van Alebeek ME, de Heus R, Tuladhar AM, de Leeuw FE. Pregnancy and ischemic stroke. *Current Opinion in Neurology*. 2017 Nov;

59.

Swartz RH, Ladhani NNN, Foley N, Nerenberg K, Bal S, Barrett J, Bushnell C, Chan WS, Chari R, Dowlathshahi D, Amrani ME, Gandhi S, Gubitz G, Hill MD, James A, Jeerakathil T, Jin A, Kirton A, Lanthier S, Lausman A, Leffert LR, Mandzia J, Menon B, Pikula A, Poppe A, Potts J, Ray J, Saposnik G, Sharma M, Smith EE, Bhogal S, Smitko E, Lindsay MP. Canadian stroke best practice consensus statement: Secondary stroke prevention during pregnancy. *International Journal of Stroke*. 2018 Jun;13(4):406-419.

60.

Stroke rehabilitation in adults | Guidance and guidelines | NICE. NICE; Available from: <https://www.nice.org.uk/guidance/cg162>

61.

Langhorne P, Baylan S. Early supported discharge services for people with acute stroke. *Cochrane Database of Systematic Reviews*. 2017 Jul 13;

62.

Fisher RJ, Cobley CS, Potgieter I, Moody A, Nouri F, Gaynor C, Byrne A, Walker MF. Is Stroke Early Supported Discharge still effective in practice? A prospective comparative study. *Clinical Rehabilitation*. 2016 Mar;30(3):268-276.

63.

Reimagining community services | The King's Fund [Internet]. Available from:
<https://www.kingsfund.org.uk/publications/community-services-assets>

64.

The key principles of effective discharge planning | Clinical | Nursing Times [Internet].
Available from:
<https://www.nursingtimes.net/roles/nurse-managers/the-key-principles-of-effective-discharge-planning/5053740.article>

65.

Transition between inpatient hospital settings and community or care home settings for
adults with social care needs | Guidance and guidelines | NICE. NICE; Available from:
<https://www.nice.org.uk/guidance/ng27>

66.

Organised inpatient (stroke unit) care for stroke. Cochrane Database of Systematic
Reviews. 2013 Sep 11;

67.

Bray BD, Ayis S, Campbell J, Hoffman A, Roughton M, Tyrrell PJ, Wolfe CDA, Rudd AG.
Associations between the organisation of stroke services, process of care, and mortality in
England: prospective cohort study. *BMJ*. 2013 May 10;346(may10 1):f2827-f2827.

68.

Hunter RM, Davie C, Rudd A, Thompson A, Walker H, Thomson N, Mountford J, Schwamm L,
Deanfield J, Thompson K, Dewan B, Mistry M, Quoraishi S, Morris S. Impact on Clinical and
Cost Outcomes of a Centralized Approach to Acute Stroke Care in London: A Comparative
Effectiveness Before and After Model. *PLoS ONE*. 2013 Aug 1;8(8).

69.

Morris S, Hunter RM, Ramsay AIG, Boaden R, McKeivitt C, Perry C, Pursani N, Rudd AG, Schwamm LH, Turner SJ, Tyrrell PJ, Wolfe CDA, Fulop NJ. Impact of centralising acute stroke services in English metropolitan areas on mortality and length of hospital stay: difference-in-differences analysis. *BMJ*. 2014 Aug 5;349(aug04 4):g4757-g4757.

70.

Neuropsychological assessment. *Journal of Neurology, Neurosurgery, and Psychiatry* [Internet]. BMJ Publishing Group; 1995;58(6). Available from: <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC1073539/>

71.

Sachdev PS, Lipnicki DM, Crawford JD, Wen W, Brodaty H. Progression of cognitive impairment in stroke/TIA patients over 3 years. *Journal of Neurology, Neurosurgery & Psychiatry*. 2014 Dec;85(12):1324-1330.

72.

Nys GMS, van Zandvoort MJE, de Kort PLM, van der Worp HB, Jansen BPW, Algra A, de Haan EHF, Kappelle LJ. The prognostic value of domain-specific cognitive abilities in acute first-ever stroke. *Neurology*. 2005 Mar 8;64(5):821-827.

73.

Hurford R, Charidimou A, Fox Z, Cipolotti L, Werring DJ. Domain-specific trends in cognitive impairment after acute ischaemic stroke. *Journal of Neurology*. 2013 Jan;260(1):237-241.

74.

Van Heugten CM, Walton L, Hentschel U. Can we forget the Mini-Mental State Examination? A systematic review of the validity of cognitive screening instruments within one month after stroke. *Clinical Rehabilitation*. 2015 Jul;29(7):694-704.

75.

Burton L, Tyson S. Screening for cognitive impairment after stroke: A systematic review of psychometric properties and clinical utility. *Journal of Rehabilitation Medicine*.

2015;47(3):193–203.

76.

Chan E, Altendorff S, Healy C, Werring DJ, Cipolotti L. The test accuracy of the Montreal Cognitive Assessment (MoCA) by stroke lateralisation. *Journal of the Neurological Sciences*. 2017 Feb;373:100–104.

77.

Chan E, Khan S, Oliver R, Gill SK, Werring DJ, Cipolotti L. Underestimation of cognitive impairments by the Montreal Cognitive Assessment (MoCA) in an acute stroke unit population. *Journal of the Neurological Sciences*. 2014 Aug;343(1–2):176–179.

78.

Ng FC, Low E, Andrew E, Smith K, Campbell BCV, Hand PJ, Crompton DE, Wijeratne T, Dewey HM, Choi PM. Deconstruction of Interhospital Transfer Workflow in Large Vessel Occlusion. *Stroke*. 2017 Jul;48(7):1976–1979.

79.

Kamal N, Smith EE, Jeerakathil T, Hill MD. Thrombolysis: Improving door-to-needle times for ischemic stroke treatment – A narrative review. *International Journal of Stroke*. 2018 Apr;13(3):268–276.

80.

Kamal N, Benavente O, Boyle K, Buck B, Butcher K, Casaubon LK, Côté R, Demchuk AM, Deschaintre Y, Dowlathshahi D, Gubitz GJ, Hunter G, Jeerakathil T, Jin A, Lang E, Lanthier S, Lindsay P, Newcommon N, Mandzia J, Norris CM, Oczkowski W, Odier C, Phillips S, Poppe AY, Saposnik G, Selchen D, Shuaib A, Silver F, Smith EE, Stotts G, Suddes M, Swartz RH, Teal P, Watson T, Hill MD. Good is not Good Enough: The Benchmark Stroke Door-to-Needle Time Should be 30 Minutes. *Canadian Journal of Neurological Sciences / Journal Canadien des Sciences Neurologiques*. 2014 Nov;41(06):694–696.

81.

Salter K, Hellings C, Foley N, Teasell R. The experience of living with stroke: a qualitative

meta-synthesis. *Journal of Rehabilitation Medicine*. 2008;40(8):595–602.

82.

Simeone S, Savini S, Cohen MZ, Alvaro R, Vellone E. The experience of stroke survivors three months after being discharged home: A phenomenological investigation. *European Journal of Cardiovascular Nursing*. 2015 Apr;14(2):162–169.

83.

Norrving B, Bray BD, Asplund K, Heuschmann P, Langhorne P, Rudd AG, Wagner M, Wiedmann S, Wolfe CDA. Cross-National Key Performance Measures of the Quality of Acute Stroke Care in Western Europe. *Stroke*. 2015 Oct;46(10):2891–2895.

84.

Quality improvement made simple | The Health Foundation [Internet]. Available from: <https://www.health.org.uk/publications/quality-improvement-made-simple>

85.

Mind the Gap! Third SSNAP Annual Report [Internet]. Available from: https://kingsfund.blogs.com/health_management/2016/11/mind-the-gap-the-third-ssnap-annual-report-care-received-between-april-2015-to-march-2016.html

86.

Lindsay P, Furie KL, Davis SM, Donnan GA, Norrving B. World Stroke Organization Global Stroke Services Guidelines and Action Plan. *International Journal of Stroke*. 2014 Oct;9(SA100):4–13.

87.

Bray BD, Ayis S, Campbell J, Hoffman A, Roughton M, Tyrrell PJ, Wolfe CDA, Rudd AG. Associations between the organisation of stroke services, process of care, and mortality in England: prospective cohort study. *BMJ*. 2013 May 10;346(may10 1):f2827–f2827.

88.

Sentinel Stroke National Audit Programme (SSNAP) [Internet]. Available from:
<https://www.strokeaudit.org/>

89.

Scottish Stroke Care Audit (SSCA) [Internet]. Available from:
<https://www.strokeaudit.scot.nhs.uk/index.html>