

# Scope

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## Introduction

The scope of each edition of the National Clinical Guideline for Stroke is decided on by the Intercollegiate Stroke Working Party (ICSWP). ICSWP members were asked in January 2021 to confer with their professional groups, consult the literature and other guidelines, and report areas in their clinical practice where evidence had changed significantly since the fifth edition was published in 2016. The following organisations responded:

- Association of Chartered Physiotherapists in Neurology and Chartered Society of Physiotherapists
- Association of British Neurologists
- British and Irish Orthoptic Society
- British Association of Stroke Physicians
- British Dietetic Association
- British Psychological Society
- Royal College of Occupational Therapists
- Royal College of Radiologists
- Royal College of Speech and Language Therapists
- Stroke Association

Prof. Martin James, the GDG chair, used these responses and his own knowledge of developments in stroke care since 2016 to determine the 59 research questions for the 2023 edition. These research questions were reviewed and agreed by the guideline editors and the guideline development group (GDG) in October 2021. In addition, in three subject areas where formal literature searching of a narrowly defined research question would not adequately encompass the clinical implications of the topic, three consensus questions were agreed by the editors and the GDG in spring 2022.

The 2023 edition aims to align as far as possible with the NICE guidelines 'Stroke and transient ischaemic attack in over 16s: diagnosis and initial management' (NG128, 2019) and 'Stroke rehabilitation in adults' (in development, due to be published October 2023).

The scope of previous editions of the guideline has been limited to England, Wales and Northern Ireland. The scope of the 2023 edition will cover all of the UK (England, Scotland, Wales and Northern Ireland) and the Republic of Ireland.

**Legend:**

Chapter = subject of guideline chapter where the research question will be answered

Acute = acute care

LTM = long term management and secondary prevention

Org Serv = organisation of stroke services

R&R = recovery and rehabilitation

**Research questions for 2023 edition of National Clinical Guideline for Stroke**

Q. No.	Chapter	Topic Group	Question
1	Acute	Hyper-acute care (including thrombolysis)	Does thrombolysis improve functional outcomes in patients with ischaemic stroke with unknown (including wake up stroke) or late time of onset?
2	Acute	TIA management	Does the use of risk stratified prediction tools (using clinical parameters) in patients with suspected TIA compared to not using risk stratified prediction tools accurately identify patients who are at high early stroke risk?
3	Acute	Thrombectomy	For patients with ischaemic stroke with anterior circulation large vessel occlusion from 6-24 hours from last seen well, does mechanical thrombectomy plus best medical therapy improve functional outcome compared to best medical therapy alone?
4	Acute	ICH management	Which diagnostic investigations such as CT Angiography (CTA), MRI, MR Angiography (MRA) and Digital Subtraction Angiography (DSA), should be used and when in patients with acute intracerebral haemorrhage to detect a macrovascular abnormality?
5	LTM	LTM 1	Should the presence of cerebral microbleeds alter the approach to secondary prevention with antithrombotic drugs after ischaemic stroke or transient ischaemic attack?
6	LTM	LTM 2	Should a DOAC be preferred to a VKA in stroke prevention in AF?
7	LTM	LTM 2	What is the role of prolonged cardiac monitoring in the detection of AF in cryptogenic stroke of otherwise undetermined aetiology?
8	LTM	LTM 1	What is the best management of cerebral amyloid angiopathy? What is the optimal management for secondary stroke prevention after intracranial haemorrhage in cerebral amyloid angiopathy?
9	LTM	LTM 1	What is the best management of CADASIL? What is the optimal management for secondary stroke prevention in CADASIL?
10	Acute	Thrombectomy	For eligible patients with ischaemic stroke and large vessel occlusion, does proceeding direct to mechanical thrombectomy improve functional outcome compared to thrombectomy plus intravenous thrombolysis (IVT) before?

11	Acute	Thrombectomy	For patients with ischaemic stroke with basilar artery occlusion presenting either within 6 hours or between 6-24 hours of stroke onset, does mechanical thrombectomy in addition to best medical therapy improve functional outcome compared to best medical therapy alone?
12	Acute	Thrombectomy	For patients with ischaemic stroke and large vessel occlusion, does thrombectomy performed under general anaesthesia improve outcome compared to local anaesthesia and/or conscious sedation?
13	Acute	TIA management	What is the best short term antiplatelet regimen for vascular prevention after TIA or Minor Stroke?
14	Acute	ICH management	In patients with Direct Oral Anticoagulant (DOAC) related acute intracerebral haemorrhage, do reversal methods (prothrombin complex concentrate-PCC, fresh frozen plasma –FFP, idarucizumab, andexanet alfa, tranexamic acid and Factor VIIa) improve functional outcome, mortality, haematoma expansion and normalise coagulation testing?
15	Acute	Hyper-acute care (including thrombolysis)	Is tenecteplase at least as good as alteplase for stroke thrombolysis?
16	LTM	LTM 2	What is the best method to prevent recurrent stroke in patients with patent foramen ovale?
17	LTM	Lipid management	What lipid-lowering treatments should be used in people who cannot tolerate statins, or in whom statins do not sufficiently lower cholesterol, after stroke or TIA?
18	LTM	LTM 1	Should antiplatelet therapy be used for vascular prevention after ICH?
19	Acute	ICH management	Does intensive blood pressure reduction and the duration of blood pressure lowering compared to standard treatment improve outcomes in patients with acute intracerebral haemorrhage?
20	LTM	Lipid management	How low should LDL-C be lowered in secondary vascular prevention after stroke and TIA?
21	LTM	LTM 3	How should eating and drinking be managed towards the end of life after a stroke?
22	LTM	LTM 3	What is the best way to make decisions about artificial feeding and hydration after stroke?
23	R&R	Vision and upper limb	What is the effectiveness of interventions aimed at improving function in people with visual field defects?
24	Org Serv	Vision and upper limb	What are the staffing requirements for orthoptic services on acute stroke units?
25	R&R	Nutrition, hydration and language recovery	What is the best intensity, frequency and dose of therapy for language recovery in patients with post-stroke aphasia?
26	R&R	Nutrition, hydration and language recovery	What is the best treatment for dysphagia after stroke?
27	R&R	Nutrition, hydration and language recovery	What is the best method to improve oral health after stroke?
28	R&R	Motor recovery	Does arm functional electrical stimulation improve outcomes after stroke?
29	R&R	Motor recovery	Does functional electrical stimulation to the lower limb improve outcomes after stroke?

30	R&R	Vision and upper limb	Does robot-assisted training improve arm function after a stroke?
31	R&R	Vision and upper limb	Does mirror therapy improve arm function after a stroke?
32	R&R	Vision and upper limb	Does mental practice/guided imagery improve arm function after a stroke?
33	R&R	Motor recovery	Does treadmill training (with or without body weight support) improve outcome and how should it be delivered?
34	R&R	Vision and upper Limb	Does constraint-induced movement therapy improve arm function after a stroke?
35	R&R	Motor recovery	Does repetitive task training improve outcomes and how should it be delivered?
36	R&R	Motor recovery	Does exercise improve outcomes after stroke? How should it be delivered?
37	R&R	Psychology and patient directed therapy	Is remotely-delivered therapy as effective as face-to-face therapy after a stroke? Are patients as satisfied with remote therapy as with face-to-face?
38	LTM	LTM 4	What is the best blood pressure treatment target for vascular prevention after stroke?
39	LTM	LTM 4	What is the role of home blood pressure monitoring in managing vascular risk after a stroke?
40	LTM	LTM 5	What is the effectiveness of extended rehabilitation at the end of formal therapy or treatment after a stroke?
41	Org Serv	Vision and upper limb	What staffing levels in post-acute care deliver the best outcomes for people with stroke?
42	Acute	Hyper-acute care (including thrombolysis)	Does assessment and treatment in Mobile Stroke Units (MSU) for suspected acute stroke patients in the out of hospital setting prior to arrival in hospital lead to better functional outcomes, improved thrombolysis and thrombectomy treatment rates with process times and improved survival compared with routine care?
43	Org Serv	Thrombectomy	Does transporting people with suspected acute stroke directly to a thrombectomy centre improve outcomes compared to being taken to the patient's nearest acute stroke centre?
44	Acute	TIA management	Is the use of MRI with DWI cost effective in identifying patients at high stroke risk compared with standard CT brain imaging in patients with suspected TIA?
45	LTM	LTM 4	What is the best antithrombotic treatment to prevent short-term vascular events and stroke after cervical artery dissection?
46	Acute	Hyper-acute care (including thrombolysis)	What should be the first-line imaging for acute stroke?
47	R&R	Psychology and patient directed therapy	What is the best treatment for post-stroke depression?
48	R&R	Psychology and patient directed therapy	What is the best method to prevent post-stroke depression?

49	R&R	Psychology and patient directed therapy	Do interventions aimed at treating anxiety after stroke improve outcomes?
50	R&R	Psychology and patient directed therapy	Do interventions aimed at treating post-stroke apathy improve outcomes?
51	LTM	LTM 5	What are the effects of different management strategies for post-stroke fatigue?
52	LTM	LTM 5	What is the best way to support people with stroke to return to work?
53	R&R	Motor recovery	What is the effectiveness of vagal nerve stimulation on recovery of arm function after stroke?
54	R&R	Motor recovery	What is the effectiveness of intensive arm recovery programmes after stroke?
55	R&R	Nutrition, hydration and language recovery	What is the effectiveness of technological methods for the treatment of post-stroke aphasia?
56	LTM	Psychology and patient directed therapy	Does person-centred self-directed rehabilitation reduce dependency after stroke?
57	R&R	Nutrition, hydration and language recovery	For nutritionally vulnerable stroke patients, does nutritional support or meal time interventions result in improved outcomes?
58	R&R	Nutrition, hydration and language recovery	For acute stroke patients receiving nutrition via a nasoenteric feeding tube, does a nasal bridle, mittens or other restraining device improve outcomes compared with not using any device?
59	R&R	Nutrition, hydration and language recovery	For patients after a stroke with an unsafe swallow, does eating and drinking with acknowledged risks (EDAR) or approaches that support this, improve outcomes, care or patient experience?

### Consensus questions for 2023 edition of National Clinical Guideline for Stroke

Q. No.	Chapter	Topic group	Question
Consensus i	R&R	Cognitive screening	How and when should cognitive screening take place?
Consensus ii	R&R	Rehabilitation potential	What do we mean by the term rehab potential and how should (or shouldn't) this impact provision of stroke rehabilitation?
Consensus iii	Org Serv	Editors	What is the appropriate staffing and skill mix for an inpatient stroke service?