RightCare Pathways provide a national case for change and a set of resources to support Local Health Economies to concentrate their improvement efforts where there is greatest opportunity to address variation and improve population health.

Commissioners responsible for Stroke for their population should:

☑ focus on the key components for stroke care across a system:
  • Ensuring rapid diagnosis and treatment
  • Prompt and ongoing rehabilitation and secondary prevention

☑ work across their system to ensure that schemes to deliver the priorities for optimisation are in place:
  • a pathway from 999 call to optimal treatment
  • admission to a hyperacute stroke unit and a swallow screening within four hours
  • stroke unit and early supported discharge delivered as seven day specialist stroke rehabilitation
  • individualised assessment for all patients and carers and delivery of a treatment plan
  • six month review and annual follow-up with access to appropriate interventions

☑ implement the RightCare CVD prevention pathway to help prevent strokes

Relevant links to support implementation are included throughout this resource.
# NHS RightCare Pathways: Stroke

## The National Challenge

<table>
<thead>
<tr>
<th>42% don’t get to a stroke unit within four hours</th>
<th>Less than 10% of Trusts get an ‘A’ on all three SSNAP therapy measures</th>
<th>20% of CCGs don’t commission Early Supported Discharge</th>
<th>1 in 3 areas in England, Wales and NI don’t commission ongoing support services for patients and carers</th>
<th>70% don’t receive a six month follow-up review. 30% of CCGs don’t commission any follow-up review</th>
</tr>
</thead>
<tbody>
<tr>
<td>NICE Quality Statement 1</td>
<td>NICE Quality Statement 2</td>
<td>NICE Quality Statement 4</td>
<td>NICE Quality Statement 6</td>
<td>NICE Quality Statement 7</td>
</tr>
</tbody>
</table>

## The RightCare Opportunity

- **3,800 more people** would be admitted to a hyper acute stroke unit and **2,200 would be admitted** within four hours of arrival at hospital if CCGs had the rate of their best 5 peers.
- **£51m could be saved** on emergency admissions and over **600 lives saved** if CCGs achieved the rate of their best 5 peers.
- **5,200 more people** would be on treatment to prevent another stroke if CCGs had the same rate as their best 5 peers.
- **6,200 more people** would return to their usual place of residence if CCGs had the same rate as their best 5 peers.

## System Enablers

**Whole system approach:** single aim with shared accountability and responsibility
- Full use of assets from across the system, including third sector
- Full system-wide participation in SSNAP audit
- Effective implementation of CVD Prevention Pathway

## Key Components

**First 72 hours**
- Rapid diagnosis and treatment

**First Six Months**
- Prompt and ongoing rehabilitation and support and secondary prevention

**Beyond Six Months**
- Individualised ongoing assessment and delivery of treatment plan including physical, psychological, practical and social support for all patients and carers

## Priorities for optimisation & key messages

**Admission to hyper acute stroke unit and swallow screening within 4 hours of arrival at hospital for all patients**

**Stroke unit and ESD delivered as 7 day specialist stroke rehabilitation in accordance with national clinical guidelines**

**Six month review then annual follow-up in all settings using validated tool with timely access to further interventions**

**Strokes cost the economy £9 billion each year**

**Back to priorities slide**
## The RightCare Opportunity: references

<table>
<thead>
<tr>
<th>Opportunity</th>
<th>Reference</th>
</tr>
</thead>
<tbody>
<tr>
<td>Stroke costs the economy £9 billion pounds per year</td>
<td>Stroke Association (2017) State of the Nation (accessed 4 June 2017)</td>
</tr>
<tr>
<td>42% don’t get to stroke unit within four hours</td>
<td>SSNAP Stroke National Results - Clinical</td>
</tr>
<tr>
<td>1 in 3 areas in England, Wales and NI don’t commission ongoing support services for patients and carers</td>
<td>SSNAP Post-acute Stroke Service Commissioning Audit 2015</td>
</tr>
<tr>
<td>Less than 10% of Trusts get an ‘A’ on all three SSNAP therapy measures</td>
<td>SSNAP Portfolio for December 2016 - January 2017 admissions and discharges</td>
</tr>
<tr>
<td>20% of CCGs don’t commission Early Supported Discharge</td>
<td>SSNAP Post-acute Stroke Service Commissioning Audit 2015</td>
</tr>
<tr>
<td>20% of CCGs don’t commission Early Supported Discharge</td>
<td>Stroke Association (2017) State of the Nation (accessed 4 June 2017)</td>
</tr>
<tr>
<td>85% of post-acute services don’t commission vocational rehabilitation</td>
<td>Stroke Association (2017) State of the Nation (accessed 4 June 2017)</td>
</tr>
</tbody>
</table>
# Pathway for 999 call to optimal treatment

| Implementation Resources and Practice examples | Stroke Services: Configuration Decision Support guide  
Stroke Strategy for London with implementation guide for urban hyper-acute stroke unit (Helen Cutting doc) |
|-----------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------|
| NICE Guidance                                 | NICE Clinical Guideline (CG68) Stroke and transient ischaemic attack in over 16s: diagnosis and initial management  
Sections  
• 1.1 rapid recognition of symptoms and diagnosis  
• 1.3 specialist care for acute stroke  
• 1.4 pharmacological treatments for people with acute stroke  
Stroke and transient ischaemic attack in over 16s: diagnosis and initial management  
Stroke Quality standard 2016: Stroke in adults |
| Other Guidance                                | National Clinical Guideline for Stroke 2016 |
Admission to hyper acute stroke unit and swallow screening within 4 hours of arrival at hospital

| NICE Guidance | NICE Clinical Guideline (CG68) Stroke and transient ischaemic attack in over 16s: diagnosis and initial management  
Section 1.6 Nutrition and Hydration  
Stroke Quality standard 2016: Stroke in Adults |
|---------------|-------------------------------------------------------------------------------------------|
| Other Guidance | National Clinical Guideline for Stroke 2016  
Stroke Services: Configuration Decision Support guide |
## Admission to hyper acute stroke unit and swallow screening within 4 hours of arrival at hospital (continued)

<table>
<thead>
<tr>
<th>Useful links</th>
<th>Cochrane Reviews</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Interventions for dysphagia and nutritional support in acute and subacute stroke</td>
</tr>
<tr>
<td></td>
<td>Screening for aspiration risk associated with dysphagia in acute stroke</td>
</tr>
<tr>
<td></td>
<td>Boaden et al. (2017)</td>
</tr>
<tr>
<td></td>
<td>Other</td>
</tr>
<tr>
<td></td>
<td>The association between delays in screening for and assessing dysphagia after acute stroke, and the risk of stroke-associated pneumonia</td>
</tr>
<tr>
<td></td>
<td>Bray et al. (2016)</td>
</tr>
<tr>
<td></td>
<td>Recent overseas work RCSLT is currently reviewing</td>
</tr>
<tr>
<td></td>
<td>Dysphagia therapy post stroke: An exploration of the practices and clinical decision-making of speech-language pathologists in Australia</td>
</tr>
<tr>
<td></td>
<td>Jones et al. (2017)</td>
</tr>
<tr>
<td></td>
<td>Implications of Variability in Clinical Bedside Swallowing Assessment Practices by Speech Language Pathologists</td>
</tr>
<tr>
<td></td>
<td>McAllister et al (2016)</td>
</tr>
</tbody>
</table>
## Individualised ongoing assessment and ongoing delivery of treatment plan

| Implementation resources and practice examples | Integrated service with support for patients and carers  
National projects demonstrate effective improvement in organisation and delivery of psychological care after stroke.  
<table>
<thead>
<tr>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>NICE Guidance</td>
<td>NICE (CG162) Stroke rehabilitation guideline: Long term rehabilitation after stroke (2013) Long-term health and Social Support (Section 1.11.5) Stroke Quality standard 2016: Stroke in adults</td>
</tr>
<tr>
<td>Other Guidance</td>
<td>RCP National Clinical Guidelines for stroke 2016</td>
</tr>
</tbody>
</table>
# Stroke unit and ESD delivered as 7 day specialist stroke rehabilitation

| Implementation resources and practice examples | Commissioning a new ESD service that would deliver the best possible care for stroke patients  
NHS St Helens CCG. (2016) How working collaboratively is improving supported discharge for stroke patients. NHS England Managed Learning Environment  
Service Specification and implementation support for a 7 day ESD service – East Midlands Academic Health Science Network  
Specialist interdisciplinary team completes the discharge of patients post stroke, within 24 hours (sometimes same day) from receipt of referral. The community rehabilitation team provides intensive help at home.  
NHS Camden (2012) Management of patients with Stroke: REDS (Reach Early Discharge Scheme) NICE Shared Learning |
|---|---|
| NICE Guidance | NICE guidance  
NICE (CG162) Stroke rehabilitation guideline: Long term rehabilitation after stroke (2013) Long-term health and Social Support (Section 1.11.5)  
NICE stroke rehabilitation pathway |
| Other Guidance | RCP National Clinical Guidelines for stroke 2016 (see section 2.7) |
## Six month review then annual follow-up in all settings

| Implementation resources and practice examples | A case study of six month review service  
Richmond Group Untapped potential report:  
Full report  
Case study |
|-----------------------------------------------|--------------------------------------------------------------------------------------------------|
| NICE Guidance | NICE (CG162) Stroke rehabilitation guideline: Long term rehabilitation after stroke (2013) Long-term health and Social Support (Section 1.11.5)  
NICE stroke rehabilitation pathway |
| Other Guidance | RCP National Clinical Guidelines for stroke 2016  
Clinical Standards Committee Recommendations for providing six month follow-up assessment post stroke  
Six month review commissioning guide  
Stroke six month reviews Commissioning Information pack  
GM Sat – six month review tool |

[Back to top](#)
Commissioning organisations should ensure that their commissioning portfolio includes the whole stroke pathway from prevention (including neurovascular services) through acute care, early rehabilitation, secondary prevention, early supported discharge, community rehabilitation, systematic follow-up, palliative care and long-term support.

Commissioners should commission a public education and professional training strategy to ensure that the public and emergency personnel (e.g. staff in emergency call centres) can recognise when a person has a suspected stroke or TIA and respond appropriately. This should be commissioned in such a way that it can be formally evaluated.

Patients with suspected stroke should be admitted directly to a specialist stroke unit and have their swallowing screened within 4 hours of admission by a specially trained professional before being given oral food, fluid or medication, and have a plan for the provision of adequate nutrition.

Commissioners should require that all those caring for people with stroke have the knowledge, skills and attitudes to provide safe, compassionate and effective care, especially for vulnerable people with restricted mobility, sensory loss, impaired communication and cognition and neuropsychological problems.
Key Messages for Commissioners: Things to do (continued)

Commissioners should ensure that there is sufficient information provided to people with stroke and their family/carers about which services are available and how to access them at all stages of the pathway of care. All information should be provided in a format accessible to those with communication disability.

In commissioning services for people with stroke along the whole pathway of care, commissioners should ensure that there are:

- protocols between healthcare providers and social services that enable seamless and safe transfers of care without delay;
- protocols in place that enable rapid assessment and provision of all equipment, aids (including communication aids) and structural adaptations needed by people with disabilities after stroke.

Commissioners should require the stroke services they commission to participate in national audit, auditing practice against the recommendations made in this guideline.

Commissioners should require the stroke services they commission to regularly seek the views of those who use their services, and use the findings to design services around the needs of the person with stroke.
Do not give heparin (in any dose) for the prevention of DVT and PE in patients who are immobile after acute stroke, and do not attempt to select those patients in whom the risk of VTE is sufficiently high to warrant the use of heparin. Do use intermittent pneumatic compression instead.

Do not treat recurrent TIA in patients in sinus rhythm with anticoagulants. Do use antiplatelet treatment and investigate for carotid stenosis and paroxysmal atrial fibrillation before considering unusual causes of TIA or an alternative diagnosis.

Do not routinely perform echocardiography in people with stroke or TIA. Do select those patients in whom an echocardiogram may be appropriate according to a history of structural cardiac disease or abnormal physical or ECG findings.

Do not routinely use a urinary catheter or continence pads as first line management for people with continence problems after a stroke. Do use behavioural interventions such as timed toileting and prompted voiding first.

Do not routinely offer oral nutritional supplements to patients with acute stroke who are adequately nourished on admission. Do assess hydration and risk of malnutrition in patients admitted to hospital with acute stroke.
Key Messages for Commissioners: Do Not Do (continued)
(Taken direct from RCP stroke guideline 2016)

Do not use overhead arm slings and pulleys in people with stroke who have functional loss in the arm. Do ensure careful positioning of the affected arm and that carers and family handle the arm correctly.

Do not assess driving eligibility with cognitive tests if the person’s language impairment would invalidate the results. Do refer for an on-road assessment if there is uncertainty about eligibility for driving.

Do not routinely provide specialist occupational therapy for people who have reached the end of their stroke rehabilitation and are now living in a care home. Do offer assessment and activities that might improve quality of life.

Do not routinely close a patent foramen ovale in a patient with stroke. Do offer antiplatelet treatment for the prevention of recurrent stroke.

Do not use fibrates, ezetimibe, bile acid sequestrants, nicotinic acid or omega-3 fatty acids for cholesterol-lowering after stroke if the patient is unable to tolerate a statin. Do try alternative methods to improve the tolerability of a statin such as a reduced dose, alternate day dosing or a lower-intensity statin.