Scottish Stroke Care Standards
Implemented 1st January 2013

Following review of NHS QIS Standards published in June 2009

Background:

The NHS Quality Improvement Scotland standards for stroke care (NHS QIS) were revised in June 2009 following publication of SIGN 108 in December 2008.

The NHS QIS standards continue to focus on those parameters which have the best evidence for having an effect on patient outcomes, e.g. stroke unit care, swallow screening, brain imaging, acute aspirin use, delays to assessment in specialist neurovascular clinics, delivery of thrombolysis and early carotid intervention.

The revisions outlined here will allow the standards to remain current for the foreseeable future while giving healthcare professionals in Scotland up-to-date advice and guidance to support the provision of high quality care for patients with stroke and Transient Ischaemic Attack (TIA).
While Healthcare Improvement Scotland (HIS) do not have a current commitment to review the content of the stroke standards, future work may be undertaken to ensure it remains fit for purpose and offers best value. The revised standards presented here will allow those working within stroke services the opportunity to implement the advice and guidance already available.

In 2012, as requested by the National Advisory Committee for Stroke (NACS) at the Scottish Government the Scottish Stroke Care Audit (SSCA) Steering Committee have reviewed the current NHS QIS Standards for Stroke Care (June 2009) in collaboration with Scottish Stroke Managed Clinical Networks (MCN) and colleagues in the wider Scottish stroke community.

At the SSCA Steering Committee meeting held on Tuesday 2nd October 2012 members agreed proposed Scottish Stroke Care Standards for presentation at a NACS meeting on Monday 8th October 2012.

At the NACS meeting on 8th October 2012 the proposed Scottish Stroke Care Standards were agreed, with minor revisions to the supporting text to be put in place.

Further discussion followed with colleagues from Healthcare Improvement Scotland and minor amendments were made to the supporting text.

The final versions of the **Scottish Stroke Care Standards, 2013** are detailed in this document.

Future plan:
Members of NACS agreed that once final amendments were made the standards should be distributed to the stroke MCNs and wider stroke community.

The Scottish Stroke Care Standards were implemented on 1st January 2013.

The group agreed that a further review of the standards would take place six months after implementation and thereafter on an annual basis. The initial six month review would focus particularly on changes to the stroke unit admission standard, i.e. removal of the 60% day of admission standard and the access to brain imaging standard, i.e. performance against new 24hr standard.

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Stroke Admission Standard

New standard:

90% of all patients admitted to hospital with a diagnosis of stroke are **admitted to the stroke unit on the day of admission, or the day following presentation** at hospital, and remain in specialist stroke care until in-hospital stroke-related needs are met.

Additional information:
The expectation is that, **where possible and safe, all patients** with a stroke will be admitted directly to the stroke unit on admission and at the latest by the day after admission.
This standard is in line with the 2011 Stroke admission HEAT target.

The revised standard has been developed from the NHS QIS Stroke Care Standards published in June 2009.

Changes made:

1. Removed standard - **60%** of all patients admitted to hospital with a diagnosis of stroke are **admitted to the stroke unit on the day of presentation**, and remain in specialist stroke care until in-hospital stroke-related needs are met.

Rationale for changes:

- Removing 60% standard
1. Not sure it adds anything to the HEAT target.
2. Tends to cause some confusion.
3. Don't want to drive potentially dangerous practices i.e. putting ill stroke patients on poorly staffed unit out of hours.

- 90% standard remaining
1. Cannot change this part way through the cycle of improvement.
2. By March 2013 aiming for all services to meet this standard.

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Access to brain imaging

New standard:

90% of patients have CT/ MRI imaging **within 24 hours** of admission

Additional information:
The expectation is that **all patients** with a suspected stroke will have CT/ MRI imaging as soon as possible after admission.
Members of NACS recognise that the revision to this standard is perhaps not as challenging as it should be, and there was a suggestion of a 12 hour standard. However, it has been agreed to change this standard to 90% within 24hrs in the first instance and review performance in six months time.

The revised standard has been developed from the NHS QIS Stroke Care Standards published in June 2009.

Changes made:

1. Standard increased from 80% to 90%
2. Access to imaging to be measured 'within 24 hours' and not 'on day of admission' as before.
3. Remove wording 'unless there is documented contraindication'

Rationale for changes:

1. We want to encourage brain scanning as soon as possible.
2. We acknowledge that very early scanning (e.g. over night) may often not alter management.
3. We can now measure delay in hours because of time of scan recorded electronically.
4. 80% would have been a lowering of the standard – therefore raised to 90%.
5. We now need to work together to reduce all sources of delay in the pathway to brain imaging, i.e. clinical triage, decision to request scan, request submitted, request received, carry out scan, reporting of scan.
6. There are few true contra-indications to CT scanning other than perhaps when the patient exceeds the weight limit, patients is unable to lie flat long enough for scan, patient is too agitated, patient is not for active treatment or the patient dies within a few hours. It was agreed by the group that setting the standard at 90% would account for those who were unable to have a CT scan for these reasons. There are no plans to document the reasons in the national audit.

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Swallow Screening

New standard:

90% of patients are screened by a standardised assessment method to identify any difficulty swallowing safely due to low conscious level and/ or the presence of signs of dysphagia **on the day of admission before the patient is given any food/ drink or oral medication.** The result of the screen/ test should be clearly documented in the patients' notes.

Additional information:
The expectation is that **all patients** with a suspected stroke will have a swallow screen **before being given food/ drink/ oral medication.**
The reduction to 90% is to accommodate those admitted in the evening or late at night. It should also be noted that awaiting swallow screen should not delay administering of medication, oral fluid or food.
It is recommended that as a measure of good practice the date and time of swallow screening should be documented. It may then be possible to measure this standard in the future over a 24hour period.
It is suggested that Boards could use a User Defined Field in eSSCA to monitor recording of time to swallow screen in the meantime.

The revised standard has been developed from the NHS QIS Stroke Care Standards published in June 2009.

Changes made:

1. Standard changed from 100% to 90%.

Rationale for changes:

1. Important that all patients should have their swallow assessed prior to being given anything orally.
2. Important not to delay oral intake of medication, food and fluid unnecessarily.
3. Cannot accurately extract time of swallow screen from notes.
4. Cannot accurately extract time of first oral intake.
5. All is not achievable because some patients admitted late evening and will not be given by mouth till next day – therefore **90%.**

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Aspirin

New standard:

Aspirin is given on the day of admission or the following day for all patients in whom a haemorrhagic stroke, or other contraindication, as specified in the national audit, has been excluded.
(NB: 'continued' has been removed from wording)

Additional information:
To avoid unnecessary changing of medication where patients are already prescribed an alternative antiplatelet an additional contraindication to aspirin will be added to eSSCA, i.e. 'Patient admitted on alternative antiplatelet'.
Note however that patients commenced on alternative antiplatelet, e.g. clopidogrel instead of aspirin on admission will still fail the standard.
Also note that the aspirin standard is measured against patients with initial/ final diagnosis of stroke and not TIA.

The revised standard has been developed from the NHS QIS Stroke Care Standards published in June 2009.

Changes made:

1. Removal of the word 'continued' from the standard.
2. 'Aspirin treatment is initiated' is changed to 'Aspirin is given'
3. Provision of exclusion for those patients who are already receiving an alternative antiplatelet, e.g. clopidogrel on admission.

Rationale for changes:

1. Evidence base supports initiation or continuation of aspirin in acute ischaemic stroke within 48 hours.
2. No direct evidence initiating alternative antiplatelet drugs instead.
3. No direct evidence for the safety of adding aspirin to those already on clopidogrel or other alternative antiplatelets drugs.
4. Continued prescribing/ administration of aspirin has never been measured and due to changes in protocols for prescribing antiplatelets following the acute phase of stroke, this will not be measured in the future.
5. The audit is measuring when patients are given aspirin and not when it is prescribed.

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Outpatient referral to seen at clinic

New standard:

80% of new patients with a stroke or TIA are seen within **4 days of receipt of referral** to the neurovascular clinic.

Additional information:
Note that the day of referral is calculated as Day 0, this therefore allows 4 days following receipt of referral to being seen in the neurovascular clinic, and i.e. the standard will be measured from Day 0 to Day 4.

The revised standard has been developed from the NHS QIS Stroke Care Standards published in June 2009.

Changes made:

1. Access to neurovascular clinic measured 'within 5 days' and not '7 days'.

Rationale for changes:

1. The risk of recurrence is highest in the first day or two.
2. The earlier secondary prevention can be started the more strokes will be avoided.
3. Most services are exceeding existing standard.
4. Don't believe that same day clinics are necessary – alternative models can provide equivalent access to early treatment, e.g. telephone hotlines and support to A&E.

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Thrombolysis

New standard:

The MCN monitors the delay between arrival at the first hospital and administration of the bolus of recombinant plasminogen activator. **80%** of patients **receive the bolus within one hour of arrival.**

The revised standard has been developed from the NHS QIS Stroke Care Standards published in June 2009.

Changes made:

1. Removed standard - The MCN monitors the **use of thrombolysis** for acute ischaemic stroke and will administer this according to current SIGN guidelines to at least **five patients per 100 000 population each year.**

Rationale for changes:

- Removing use of thrombolysis standard
1. All health boards (except Orkney) are exceeding this minimum level of activity.
2. The standard has achieved its purpose, i.e. to encourage development of services.
3. We do not want to encourage services to chase a target and to potentially be giving thrombolysis to inappropriate patients.
4. It is difficult to objectively monitor appropriateness of treatment.
5. It may be possible to monitor the percentage of patients' thrombolysed who arrive at hospital within 4.5 hours but who do not receive thrombolysis and the reasons why. However we do not plan to set this standard at this stage. Analysis of the data is underway to determine the current position and this will be reported in the 2013 National Report.

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Carotid Intervention

New standard:

80% of patients undergoing carotid endarterectomy for symptomatic carotid stenosis have the **operation within 14 days of the stroke event**.

The revised standard has been developed from the NHS QIS Stroke Care Standards published in June 2009.

Changes made:

1. Removed standard - All patients with carotid artery territory TIA or ischaemic stroke who are candidates for carotid endarterectomy have carotid duplex (or non-invasive imaging technique) unless there is a documented contraindication.

Rationale for changes:

1. Difficult to measure 'all candidates for carotid endarterectomy'.