It is estimated that every year 110,000 people in England have a stroke, 20–30% of whom die within a month. The condition is the single largest cause of disability in adults and there are over 900,000 people living in England who have had a stroke. The annual cost to the NHS and the economy is estimated at around £7bn (National Audit Office, 2005).

Nurses can play a key role in improving services for people who have had a stroke, following publication of the Department of Health’s new stroke strategy for England (DH, 2007). This sets out a framework of quality markers to improve prevention, treatment, care and support over the next decade. Its key features are summarised as a 10-point action plan (see box).

The aim of the strategy is to reduce the huge impact of stroke on patients, their families, health and social services, and the economy by ensuring patients receive prompt treatment in specialist settings, followed by early rehabilitation or tailored end-of-life care.

EMERGENCY RESPONSE TO STROKE
Outcomes of stroke care in the UK compare poorly with those in other developed countries, with unnecessarily long hospital stays and high levels of avoidable disability and mortality. This is despite our services being among the most expensive (Leal et al, 2006). A significant reason for these poor outcomes is that many patients do not receive the urgent treatment they need because they are not dealt with as a medical emergency. This stems largely from a lack of recognition among health professionals that stroke is a medical emergency and poor understanding of the condition among members of the general public.

One study found that only just over half of GPs said they would refer a patient with a suspected stroke immediately, while nearly one in five would not refer around a fifth of cases of stroke or transient ischaemic attack (TIA), which is recognised as a significant risk factor for stroke (NAO, 2005). A MORI poll undertaken in 2005 found that only 40% of respondents could name three symptoms of stroke, 60% would contact their GP or NHS Direct rather than call an ambulance and a quarter did not believe specialised treatment could make a difference. In fact, an urgent response to stroke and TIA saves lives and reduces long-term disability.

Response to minor stroke and TIA
The strategy calls for all patients with TIA or minor stroke to be assessed by a specialist and treated within 24 hours, while those in the community assessed as an emergency should be taken by ambulance to an acute stroke service. Assessment should be undertaken using the ABCD2 system:

- Age (≥80 = one point);
- Blood pressure (≥140/90mmHg = one point);
- Clinical features (unilateral weakness = two points; speech disturbance without weakness = one point);
- Duration of symptoms (≥60 minutes = two points; 10–59 minutes = one point);
- Diabetes (one point if present).

A score of 0–3 is classified as low risk, 4–5 is moderate and 6–7 is high risk. Those at high risk may justify immediate hospital admission, while those at low risk should be investigated within seven days of the event. Non-urgent referral is only appropriate for patients at very low risk, who present with events that occurred weeks or months earlier.

All patients should be followed up in primary or acute care a month after the event in order to assess medication and risk-factor modification.

Response to acute stroke
All patients with suspected acute stroke should be immediately transferred by ambulance to a hospital providing hyper-acute stroke services including stroke triage, expert clinical assessment, timely imaging and the ability to deliver intravenous thrombolysis throughout the 24-hour period.

It is estimated that if only 10% of patients with acute stroke received thrombolysis, 1,000 people per year would regain independence rather than die or be dependent in the long term (DH, 2006). The treatment should therefore be provided within three hours of the onset of symptoms after imaging has excluded intracranial haemorrhage. It may be more appropriate to transfer those who delay calling for professional help to the nearest hospital with an acute stroke unit if this will enable them to receive thrombolysis earlier than travelling to a hyper-acute stroke unit.

Patients should also receive urgent brain imaging, if needed, and a multidisciplinary assessment within 24 hours – this should include swallow screening and identification of cognitive and perceptual problems.

TREATMENT
All patients who have had a stroke should have prompt access to an acute stroke unit that provides high-dependency care including physiological and neurological monitoring and rapid treatment of stroke and its associated complications, as well as early rehabilitation and palliative care. They should spend the majority of their stay in a hospital in a stroke unit, which should be designed or adapted appropriately to meet their specialist needs. Those who would benefit from it should be referred to a hyper-acute stroke service, which – as a minimum – should provide 24-hour access to brain imaging, expert interpretation and the opinion of a consultant stroke specialist, as well as thrombolytic therapy.

Patients should be monitored by nurses with specialist training in stroke care, observing neurological function, blood pressure, cardiac rhythm, respiratory function,
1. Awareness – improving awareness of the symptoms of stroke among professionals and members of the general public

2. Prevention – supporting healthier lifestyles and tackling vascular risk, such as hypertension, atrial fibrillation and high cholesterol

3. Involvement – ensuring people who have had a stroke are involved in planning their care and evaluating local services

4. Warnings – responding quickly to transient ischaemic attacks (TIAs)

5. Emergency referral – ensuring stroke is treated as a medical emergency and that patients are transferred to an acute stroke centre with access to 24-hour scans and specialist care

6. Stroke units – ensuring stroke units are staffed by multidisciplinary teams with specialist stroke skills

7. Rehabilitation and community support – providing intensive rehabilitation immediately after stroke, which should be available seven days a week; continue after discharge from hospital; and involve health, social and voluntary services

8. Participation – helping people to overcome physical, communication and psychological barriers after having a stroke so that they can lead more autonomous lives

9. Workforce – undertaking a needs assessment to plan for a skilled and competent workforce to care for people who have had a stroke

10. Service improvement – creating care networks looking at all aspects of the care pathway, undertaking regular local and national audits or services and increasing participation in clinical trials

LONG-TERM CARE

The impact of stroke is variable, so long-term care must be tailored to individuals. For those assessed as eligible for social care support from the local authority, direct payments enable them to control their care budget and buy what is most appropriate to them. Some may also qualify for a Disabled Facilities Grant to fund adaptations to their home.

Stroke can have a huge emotional impact on patients and their carers, and both groups are at risk of depression, isolation and coping difficulties. While specialist stroke teams can and do provide emotional support in the early stages after stroke, referral to mental health services may be necessary in the longer term. Care providers should also consider how people with communication and cognitive difficulties can be supported in accessing these services.

CONCLUSION

As the professionals who have the greatest contact with patients in the early stages after stroke, nurses play an essential role in monitoring their recovery and ensuring they receive prompt and appropriate responses to changes in their condition. Many patients may present to primary care services with stroke symptoms so nurses in these settings also need an awareness of the symptoms of stroke and TIA, and of the importance of urgent referral for emergency care.

As a greater understanding of stroke and TIA among members of the general public would help reduce delays in stroke patients receiving treatment, nurses in primary care can also have a role in health promotion and patient education.

REFERENCES


