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Promoting stroke-specific education

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Abstract

Stroke is the most common cause of adult neurological disability in the UK. This article describes the reasons for the establishment of the UK Forum for Stroke Training and the Stroke-Specific Education Framework. It illustrates how these initiatives can be used to access a range of endorsed, stroke-specific courses to develop excellence in stroke care and multidisciplinary teamwork, as demanded by the Department of Health's *National Stroke Strategy*.

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STROKE IS THE third most common cause of death and the commonest cause of adult neurological disability in the UK (National Audit Office 2010), with an estimated cost to the NHS and the economy of £8.3 billion annually (Scarborough *et al* 2010). Prompt access to specialist stroke unit care, as described in the *National Stroke Strategy* (Department of Health (DH) 2007) improves patient outcomes (Stroke Unit Trialists' Collaboration 2007) and is cost-effective (Kalra 2005). Most UK hospitals now have a designated stroke unit, with dedicated stroke staff, and have a clearly defined stroke pathway (DH 2007). However, staffing numbers and skill mix profiles are insufficient to deliver the required input in stroke care pathways (DH 2007) and the infrastructure for local service provision varies significantly (Intercollegiate Stroke Working Party 2010).

For the best possible patient outcome, stroke specialist staff should work as part of co-ordinated teams to deliver stroke care (Stroke Unit Trialists' Collaboration 2007). Stroke specialist nurses are the cornerstone of hospital care and stroke unit teams; moreover, any nurse who is part of the stroke team, or who works with patients who have had a stroke, provides important input throughout the stroke pathway, including rehabilitation and community care. It is documented that patients treated by stroke specialists and others with relevant stroke-specific knowledge and skills on a specialist unit are more likely to survive stroke, return home and become independent (National Institute for Health and Clinical Excellence (NICE) 2008, National Audit Office 2010). Therefore, it is imperative that stroke unit staff members are well trained, knowledgeable and competent (Watkins *et al* 2001, Gibbon *et al* 2002).

While there is an acknowledged need for stroke-specific education, there are neither clearly defined UK-wide education and training programmes, nor clearly defined career pathways for stroke specialist and stroke-relevant staff. Assessing training needs, at service and individual levels, requires a mechanism for establishing a benchmark against which those needs may be measured; only then can appropriate stroke-specific training be developed and accessed.

UK Forum for Stroke Training

The *National Stroke Strategy* (DH 2007) was set up to improve all aspects of stroke care through a series of quality markers. Two of these markers related to workforce skills. As a result, the DH funded the creation of the UK Forum for Stroke Training (UKFST) to develop an educational framework for stroke to ensure nationally recognised, transferable and quality assured stroke-specific training. The UKFST comprised a steering group and four task groups. UKFST membership was UK-wide and included staff across the whole of the stroke pathway (DH 2007), health professional organisations (such as the Royal College of Nursing), social services, voluntary services, education and service

users. Following internal development of the Stroke-Specific Education Framework (SSEF) by the task groups of the UKFST, and input from external stakeholders (staff working on the stroke pathway), a final version of the SSEF (DH 2009) was agreed.

The SSEF consists of 16 elements of care (Box 1) that reflect quality markers, standards and recommendations found in the stroke strategies of the four UK countries; all are aligned to the patient pathway (Scottish Intercollegiate Guidelines Network 2002, 2008; Welsh Assembly Government 2006, 2007; DH 2007, Department of Health, Social Services and Public Safety 2007; NHS Quality Improvement Scotland 2009). Each SSEF element contains a list of competency-based items in which practitioners should be skilled in order to work effectively with patients affected by stroke.

In 2009, a new UKFST was launched, funded through the UK Stroke Forum (the original UKFST was funded for a finite period by the DH) and hosted by the Stroke Association. The new UKFST, run by a steering committee, maintains UK-wide representation from a range of professional organisations, social and voluntary services, education, service users and stroke networks. The new UKFST uses the SSEF to underpin its endorsement of stroke-specific training and provides access to information about stroke-specific educational opportunities (<http://ukfst.org/courses/search>).

BOX 1

Elements of care on the stroke pathway

1. Awareness raising: stroke as a medical emergency.
2. Managing risk: primary and secondary prevention.
3. Information, advice and support to those affected by stroke.
4. User involvement in care and service planning.
5. Assessment (TIA*): assessment and management at time of event.
6. Treatment (TIA): assessment and management at follow-up.
7. Urgent response: pre-hospital assessment and management.
8. Assessment (stroke): emergency assessment and management.
9. Treatment (stroke): early assessment and management.
10. High-quality specialist rehabilitation.
11. End of life care.
12. Seamless transfer of care.
13. Long-term care and support.
14. Review.
15. Participation in community life.
16. Return to work.

*Transient ischaemic attack

(Department of Health 2009)

UKFST endorsement of training

Stroke-specific training can now be endorsed by the UKFST if the training is SSEF compliant and meets the criteria set by the UKFST. The course content is compared with the elements of care in the SSEF (Box 1), and the individual competence-like items in the elements, to ensure it is relevant. In order for a training course to be endorsed, information about the course must be submitted via the UKFST website. Three reviewers subsequently compare submitted information with the SSEF. Submitted information must include:

- ▶ Programme content.
- ▶ Method of delivery.
- ▶ Target audience.
- ▶ Level of delivery (as outlined in the SSEF).

The endorsement process is not prescriptive about course content and method of delivery, but does require that the course content is consistent with the SSEF. Provided this is the case, the course will be endorsed and the course provider will be able to use a unique UKFST quality mark on its course literature.

Online application for endorsement can take up to two hours to complete, but familiarisation with the SSEF elements of care relating to the course will reduce the application time. Cost of endorsement is dependent on the type of institution providing the training (for example, NHS or educational) and the nature of the course (for example, online or in-house). Full details of costs can be found on the UKFST website (www.ukfst.org). Endorsement lasts for three years. This process ensures that the stroke-specific training is clinically up to date and at an appropriate level, enabling healthcare organisations and those who commission or purchase services to see the level and type of training that should be provided for different staff members delivering care at different points on the stroke pathway.

Healthcare workers searching for stroke-specific training may be faced with a choice of courses or providers. It is important for individuals to know that the training they undertake is clinically up to date, relevant and appropriate for their needs in terms of content and level. Those seeking SSEF compliant, stroke-specific training should visit the UKFST website where they will find courses that have been compared against a range of criteria to ensure courses provide their purported level of training. The UKFST website allows individuals to enter their training requirements in terms of:

- ▶ Course type, for example single module or workshop.
- ▶ Course category, for example pre-registration or post-registration.
- ▶ Eligibility, for example nurse, doctor, paramedic.
- ▶ Method of delivery, for example distance learning or classroom-based.
- ▶ Element of care to be studied, for example element 10 – specialist rehabilitation.

A range of courses, tailored to the individual's need, is then produced, together with course and contact information. Conference training days, such as the 'nurses' day' at the UK Stroke Forum conference, may be endorsed if the training provided meets UKFST criteria. The UKFST enables anyone involved in stroke care – wherever they are on their career pathway and whatever their discipline – to find appropriate training to develop their stroke-specific skills.

Value of the Stroke-Specific Education Forum

In addition to its use in the development of standardised education and training material for people who work with those affected by stroke, the SSEF is also used in the development of SSEF

role profiles (UK Forum for Stroke Training 2012). For example, a nurse whose role involves assessment of stroke (element 8 of the SSEF) will need to know what knowledge and skills are required to fulfil that role. Examination of the SSEF list of competency-based items would enable the nurse to determine which element 8 competences are required for his or her practice. However, in order to create an accurate profile, it is necessary to ascertain at what level the nurse requires knowledge and skill. Definitions provided by Skills for Health (www.skillsforhealth.org.uk) define five levels of knowledge:

- ▶ Basic.
- ▶ Factual.
- ▶ Working.
- ▶ In-depth.
- ▶ Critical.

A description of each level can be found in the SSEF (DH 2009).

The final piece of information required to build a job role profile is the band of the nurse. While it seems self-evident that the level of knowledge needed by a nurse at band 5 is likely to be less than that needed by a nurse working at band 8, it is necessary to understand the specific education requirements for each band to assess training needs. For some aspects of care, for example delivering thrombolysis, a band 5 nurse may need a higher level of understanding than a band 8 nurse who may not be directly involved in this aspect of care.

A newly qualified nurse may be expected to know less than a qualified nurse who has been working in a stroke unit for a number of years. However, the onus may be on the newly qualified nurse (for example at band 5 or 6) to develop stroke-specific knowledge to an agreed working level within a few months of starting work.

The rapid development of higher levels of knowledge and skills in practice can be seen in Scotland where a three-month time frame exists for newly qualified staff members to undertake training in core competencies of stroke care. There is a guideline of six months to incorporate that core knowledge into clinical practice using the Stroke Competency Toolkit (SCoT) (Chest Heart and Stroke Scotland 2011) or the specialist Stroke Nursing Toolkit (www.stroketraining.org). A newly qualified staff member is expected to complete a Stroke Training and Awareness Resources (STARs) module (NHS Education for Scotland, Chest Heart and Stroke Scotland and The University of Edinburgh 2012) and to provide evidence of learning by completing reflective accounts, shadowing another staff member and attending further study in the form of self-directed or peer-supported learning. Stroke Managed

Clinical Network/NHS Boards (equivalent to primary care and acute trusts in England) must monitor and report on the clinical standard achieved in each organisation.

Team working

The specialist knowledge required by individual nurses depends on their general role and their role in the stroke care pathway, as well as their seniority, where they work and with whom. By identifying individual knowledge and skill levels, teams can be developed with the optimum skill set to provide the highest level of care for each patient. Box 2 shows examples of knowledge and skills necessary for the provision of effective stroke care and the means by which this knowledge may be shared between disciplines.

Training needs

In stroke rehabilitation settings nurses lead and co-ordinate the patient's rehabilitation programme

and are the only member of the team to support the patient 24 hours a day, seven days a week (Burton 2000, Stroke Unit Trialists' Collaboration 2007). The importance of a co-ordinated approach to teamwork has also been highlighted (Watkins *et al* 2001). An example of this in practice is the multidisciplinary team meeting. To maximise the effectiveness of such meetings, each member is required to review and debate patient management and agree amendments to the rehabilitation programme. Nurses are in a unique position to present knowledge about the patient and their family to which other team members may not have access. However, it has been reported that nurses' input during such meetings is minimal, which may be due to lack of confidence with, for example, technical language (Gibbon 1999). To ensure nurses participate fully, it is important to conduct a training needs analysis using the SSEF. Completing the individual SSEF role profile allows any staff member to compare his or her existing knowledge and skill level with that defined by the SSEF. The staff member is guided to relevant training that will strengthen and broaden his or her knowledge and skills within the elements of care related to rehabilitation. Topics such as continence, nutrition, sleep and rest, medication management and pain assessment are the domain of stroke specialist nursing. Increasing competencies will enable nurses to participate confidently in team meetings, which should translate to enhanced patient rehabilitation. Debate between team members may in theory produce a holistic approach to care.

Use of the SSEF role profiles allows different bands of nurses to understand their training needs and develop their knowledge and skills in a way that is relevant to their working practice and career progression in a stroke specialist environment. Without the systematic comparison of the content of modules via the detailed content of the SSEF, it would be difficult to demonstrate if training modules delivered are comprehensively SSEF compliant or contain all aspects recommended in the SSEF. All training courses endorsed by the UKFST meet the requirements of the SSEF. Therefore, users can be assured that their chosen course is likely to meet their particular training need.

Improving specialist stroke care

Why should staff engage with the UKFST?

The UKFST can be used by staff members to identify required stroke-specific knowledge and skills relevant to their role on the stroke pathway, as well as the knowledge and skills required to work in another area of stroke care. In addition,

BOX 2

Examples of knowledge and skills necessary for effective stroke care

Example 1

Assessment for, and delivery of, thrombolysis requires partnership between medical and nursing staff. The advent of telemedicine for medical diagnosis and patient care (Currell *et al* 2010) to support thrombolysis in stroke care will rely on the ability of expert stroke nurses to lead the clinical assessment and report results to a clinician who will be remote from the patient. A common, interdisciplinary training programme, endorsed by the UK Forum for Stroke Training (UKFST) as appropriate for all staff working within teams delivering thrombolysis, will encourage nurses and medical staff to share experiences and develop knowledge and skills together. This will promote trust and confidence in each other's abilities and the development of a shared competency set. One such shared competency set is STAT – Stroke and TIA Assessment Training (Garside 2009).

Example 2

Urinary continence assessment and management is a pivotal aspect of stroke care. Delivering effective continence care requires interdisciplinary teamwork. The use of a care pathway to promote urinary continence will outline the knowledge and skills required by all team members in achieving that aim. Registered nurses working within a stroke unit should be able to take a continence history, undertake patient assessment, including bladder scanning, and plan continence rehabilitation programmes. All therapists will need knowledge of the importance of functional contributions (such as the ability to walk) to incontinence episodes, as well as the need to avoid the use of urinary catheters, as this increases the risk of infection without any evidence of therapeutic benefit. They must also manage urinary retention and promote continence. Developing Stroke-Specific Education Framework role profiles for individual staff members enables groups of practitioners to identify training requirements and to develop general or specific, role-dependent knowledge and skills to work on post-stroke problems.

staff can search for endorsed courses that meet their training needs.

How will the UKFST benefit patients?

Patients need to be cared for by a range of staff members with requisite specialist skills to achieve the best possible outcome following a stroke. Appropriate training for everyone involved in the care of stroke patients – from paramedics to community services – will increase the likelihood of patients accessing specialist assessment at an early stage, thus increasing the likelihood of an independent life after stroke (National Audit Office 2005).

Patients and carers may also access SSEF role profiles to understand the knowledge and skills needed by different members of the care team. For example, they might wish to ascertain the level of knowledge required of GPs regarding blood pressure management. Knowing this information may make them feel empowered to request further information or clarification of treatment.

Will the UKFST benefit stroke services?

Retention and development of staff members is a key aspect of the successful delivery of stroke services. Well qualified staff, with a clearly defined career pathway, will be more likely to remain committed to the service. Furthermore, where funding for training is limited and there are restrictions on the amount of time staff members can be released from clinical care to participate in training, the UKFST/SSEF can assist in choosing courses that are worthwhile in terms of investment of time and money.

What is the benefit of the UKFST for commissioners or purchasers of services?

Commissioners of services need information about required skills and the skill mix available to draw up successful service specifications and make appropriate plans for the future. Using the SSEF role profiles equips them to request from the team leader or service provider a suitable team profile with representation of the right staff members to deliver effective stroke specialist care.

UKFST and the SSEF: proving their worth

In times of intense pressure on cost and increasing staff shortages, training must prove its worth in terms of:

- ▶ Quality – will the training be appropriate and deliver the desired outcomes?
- ▶ Desirability – will it bring demonstrable benefits to the stroke service?

- ▶ Time – how much time will staff members require away from clinical practice to complete the training?
- ▶ Cost – what are the training costs? Will staff members need to be replaced while undertaking the training?
- ▶ Accessibility – is the training easy to access and delivered in ways that make completion more likely?

The future of the SSEF

While the development of SSEF role profiles for nurses has begun, it is at an early stage. Further iterations will take account of service location on the stroke pathway. For example, examining the items in element 8 (stroke assessment) a nurse working in an acute stroke unit would be expected to have a higher level of knowledge of the features of atypical stroke presentation than a nurse at the same band working in rehabilitation. SSEF role profiles are dynamic and will need to be adjusted to take account of the particular service model and expected role of the staff.

The ongoing review of the competences across all disciplines working in stroke by stroke practitioners will ensure that the competences required at each level are always clinically up to date and relevant. As knowledge increases and new practices become embedded in services, the SSEF will remain flexible enough to reflect clinical practice informed by the highest level evidence.

The assessment of personal competency can be undertaken with the staff member's supervisor, as a part of a formal appraisal process, and could be used to prepare a training needs analysis or to inform a personal development plan. Individual competences can be mapped against departmental need allowing service managers to develop teams of staff members with the highest clinical competences. Using the SSEF to develop training packages will enable educators to provide a practical approach to learning and provide mentors with assessment structures.

Conclusion

The SSEF role profiles enable anyone working in stroke care to compare their own level of knowledge and skill against competency items in 16 elements of care. They will be able to see at a glance where they may have a training need and what knowledge and skill is required to advance their careers. Appropriate training courses, already endorsed by the UKFST, can

be found by searching the UKFST website, where details about these courses can be obtained.

The UKFST and the SSEF form a robust base from which a skilled stroke workforce can emerge. Stroke-specific knowledge acquired from education and training can subsequently be applied in clinical practice so that staff members develop stroke specialist clinical competence. By promoting stroke-specific education within a wide range of disciplines allied to stroke services, all stroke workers can share a vision of excellence through multidisciplinary working and a commitment to the development of stroke services that offer the very best in clinical care to patients and their families **NS**

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