The Scottish Government has set ambitious Health Service targets including the elimination of avoidable harm to patients. Education has an essential role to play which should not be overlooked just because it is difficult to quantify the impact of staff education on patient outcomes. Patient Safety education scenarios build on the established success of patient stories in using narrative and qualitative data as powerful levers for improvement. The scenarios in our portfolio demonstrate the impact of educational interventions on healthcare staff whilst caring for their patients.

Professor Philip Cachia
Chair, NES Patient Safety Multi-disciplinary Group,
Postgraduate Medical Dean
Chest, Heart and Stroke Scotland (CHSS) have been actively involved in traditional face to face stroke education and training initiatives, in partnership with NHSScotland and NHS Education for Scotland (NES) on a regional and national level for many years. **STARs (Stroke Training and Awareness Resources)** was developed to support a blended learning approach and offers equity of stroke training to all staff who may be caring for stroke patients throughout Scotland. STARS aligns with the NES Knowledge Management Strategy and Action Plan (NES 2010-2012) by offering case study-based scenarios that support clinical decision making and reflection.

According to the current national action plan on stroke there are currently too few nursing and AHP staff with the requisite skills to support acute stroke unit care, including stroke rehabilitation. Retaining experienced skilled staff within stroke units, and skillling up other staff in providing healthcare support to patients at risk of, or recovering from strokes is therefore extremely important to making care safer with better patient outcomes.

For many stroke patients, safety issues are linked to poor communications across healthcare teams, and with carers. It is important to raise healthcare professionals’ awareness of the impact stroke can have on communication, and - for example - the need for psychological support.

**STARs** promotes easy access to knowledge about stroke and enhances the translation of this into clinical practice, thereby improving patient care by nurses and allied health professionals (AHPs), as well as supporting stroke patients and their carers.

Stroke Core Competencies and STARs

In 2005, NES published a set of core competencies for health care professionals working with people affected by stroke. In 2007 these core competencies were translated into an e-learning training resource by NES, CHSS, the University of Edinburgh, and with input from a steering group of expert stroke clinicians. Members of acute health care teams from health boards across Scotland also contributed to this resource.

Core Competencies

(see them in full at: [www.strokecorecompetencies.org](http://www.strokecorecompetencies.org) )

1: Cause of Stroke
2: Effects of Stroke
3: Reducing the Risk of Stroke
4: Specialist Care
5: Common Effects of Stroke
6: Level of Consciousness
7: Limb Weakness
8 and 17: Moving, Handling and Safety
9: Activities of Daily Living
10: Loss of Feeling
11: Change in Vision
12: Communication
13: Swallowing
14: Preventing Pressure Sores
15: Incontinence
16 and 20: Thinking Processes and Behaviour
18: Emotions
19: Rehabilitation

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STARs is an excellent resource that is accessible to healthcare staff working with stroke patients. Ensuring staff have the appropriate knowledge and skills about stroke care will drive improvement in the care and treatment that people with stroke and their families expect from the NHS in Scotland.

Dorothy Armstrong, Programme Director, NHS Education for Scotland

The resulting website – STARs (Stroke Training and Awareness Resources) - was launched in May 2008. The website provides an interactive approach to learning stroke competencies, as well as providing support materials produced by CHSS such as ‘Understanding Transient Ischaemic Attacks (TIAs) and Minor Strokes’. The following are some examples of the modules and their relevance to promoting patient safety:

- ‘Reducing the Risk of Stroke’ explains how lifestyle modifications and medical treatments may reduce the risk of stroke.
- ‘Moving, handling and safety’ explains how the individual may be at risk due to inappropriate moving and handling following stroke, and ‘Limb weakness’ identifies potential risks associated with a weak arm following stroke.
- ‘Preventing pressure sores’ is designed to increase awareness of ways of reducing the risk of pressures sores. For example, the hospital porter might reduce the time the patient lies on a trolley and the carer may help optimise the patient’s food intake.

The website is therefore providing a highly successful route for extending the skills and knowledge of healthcare staff, in whatever capacity they are employed, enabling them to address the care and safety of patients at risk of, or recovering from, a stroke.

Completing the physiological monitoring module enhanced my knowledge by allowing me to reflect on what I already knew, but also identified areas where I needed to have a better understanding of physiological parameters to ensure that I identified changes in my patient that may be detrimental to them.

Registered Nurse

Having improved my knowledge around issues related to nutrition and hydration in the stroke patient I am more aware of the disastrous effect that poor nutrition and hydration can have on a person who has reduced appetite or difficulty swallowing.

Registered Nurse

STARs contributing to safer care

The STARs website receives between 500 and 700 hits a week. While most are from stroke units in Scotland or other parts of the UK, because access is free and the website is well publicised, there are a lot of users from Australia and America.

It is encouraging that most people are staying on for 25 minutes or more which suggests that they are completing a module rather than just dipping in, and 70% are deliberately going onto the site rather than finding the site by accident. In the first week of May 2011 there were 907 visits to the ‘Advancing Modules’, which are geared to the needs of nurses in stroke units.

Project Manager, STARs

Extending the reach of STARs

Another example of the value of the website is the scope to share the knowledge of physicians with other healthcare staff. As a result of ‘Thrombolysis Masterclass Modules’ for medical staff (delivered by CHSS in conjunction with the British Association of Stroke Physicians), scans of real stroke patients have been put onto the STARs website. There is also a specific module aimed at physicians and senior staff within the NHS which includes an ‘Ask an Expert’ section, in which different members of the British Association of Stroke Physicians give their views on what they would have done in relation to different patient case studies. This sharing of learning, and reflecting on practice, also contributes to improving patient safety.

Thrombolysis treatment in acute stroke management may be an initiative that is new to some healthcare professionals working in stroke care. By completing the STARs ‘Thrombolysis Module,’ healthcare staff can be supported to enhance their knowledge and skills related to thrombolysis management, thus allowing them to reflect on their practice and how it may affect patient outcome and safety.

Professor Martin Dennis, Stroke Consultant and Chair of the National Advisory Committee for Stroke

A new resource for carers

STARs is also a valuable resource to the general public, stroke patients and their carers. Through funding from the National Advisory Committee for Stroke (NACS) and the Big Lottery, NES launched a special on-line module for people caring for someone at home and for home care workers. This ensures that learning about prevention of risk within the hospital sector is shared with carers of patients recovering from strokes and with health staff in the community.

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Useful links

Stroke Core Competencies for Health and Social Care Staff developed by NES, Chest Heart and Stroke Scotland, and the University of Edinburgh:
http://www.strokecorecompetencies.org/node.asp?id=core

Stroke Training and Awareness Resources:
www.strokecorecompetencies.org

Stroke Competency Toolkit (SCoT):
http://www.chss.org.uk/education_and_training/stroke_competency_toolkit.php

Stroke Training for Health and Social Care Staff:
http://www.stroketraining.org/

Chest Heart and Stroke Scotland
http://www.chss.org.uk

3 University of Edinburgh. STARS Advancing Modules, Thrombolysis [online] Available at: http://www.strokeadvancingmodules.org/labyrinth_thrombo/