Simulation is the key to the approach of UK Endovascular Trainees (UKETS), a group that aims to improve the safety of minimally invasive procedures that access the body through blood vessels. Though widely used, says Sebastian Mafeld, a radiological registrar at Freeman Hospital in Newcastle upon Tyne, these procedures are not risk-free; nor is the training that supports them.

In 2011, South Eastern Health and Social Care Trust in Northern Ireland launched a training programme to build and develop skills and knowledge in continuous quality improvement. The programme is designed for people from all areas of health and social care and runs from October to June each year. It consists of three compulsory elements: classes in healthcare improvement, monthly sessions on specific topics (with talks presented by experienced professionals), and an opportunity to participate in a one-week training activity. The programme is open to all healthcare professionals and has been well-received, with high attendance rates and positive feedback from participants.

At University Hospital Bristol everybody gets involved in undergraduate education. The aim, says co-team leader Phil McElnay, is to encourage teaching by every level of doctor from foundation years to consultants. Students in their third and fifth year of medical school are taught by near peers, F1 and F2 doctors who not long before were in the same position themselves. While the role of senior doctors in teaching is vital, much younger ones have a valuable role to play.

Changing patterns of care, exemplified by the London stroke pathway, also need new teaching initiatives to sharpen skills. Once more simulation has come to the fore, in a programme across the hyperacute stroke units that form the core of the new pathway. So realistic is the set-up in a simulated suite tailored to look like a real stroke unit, says Jonathan Birns, a consultant in stroke medicine.

The BMJ award for education team recognises a project that shows outstanding innovation in educating UK healthcare professionals and improving performance. Nigel Hawkes meets the nominees.

The BMJ Awards are sponsored by MDDUS and the Education Team of the Year Award is sponsored by Unividis. The awards ceremony will take place on 8 May at the Park Plaza Hotel, Westminster. To find out more go to http://thebmjawards.bmj.com. Provenance and peer review: Commissioned; not externally peer reviewed.

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something valuable to pass on too. “They share what they themselves have learnt in the wards,” McElnay says, “nitty gritty things you need to know. Involvement has been very good.”

The sessions are backed up by an electronic logging system called TLog in which the young mentors—and, more recently, the students—can record the sessions they have completed, together with a few reflections. Most people use the system, unlike the paper based logs that preceded it. “Every quarter we print out the results so that doctors can see what they’ve done and feel rewarded,” McElnay says. On a scale of 1 to 10, where 1 is not very useful and 10 is very useful, the final year medical students rated the scheme 9.1. All of them would recommend it to the next year’s students, and all the mentors would participate again. “Everybody’s gained,” says McElnay.

“We try to simulate events that are quite common and that can threaten a baby’s life,” Alok Sharma, Southampton

The focus at University Hospital Southampton has been on team training in neonatal care. While care is delivered by multidisciplinary teams, teaching is not. Consultant neonatologist Alok Sharma says: “We all train separately, with different methods, then try to work together for the benefit of babies. Mistakes can be made.”

The solution was to introduce simulation, using manikins, in which the whole team can work together in a near real-life setting that reproduces the challenges of everyday care. “We try to simulate events that are quite common and that can threaten a baby’s life,” says Sharma. “It’s a fantastic learning experience.” One challenge has been to enthuse the nurses as much as the doctors, but this is being overcome. The manikins come in two varieties, a high tech variant that can simulate heart rate, blueness, and other characteristics of the newborn and a lower tech version that can simulate floppiness. “It’s amazing how realistic they are—right down to the teddy bears,” says Sharma.

Positive outcomes include reduced incidence of slipping endotracheal tubes and of leakage from umbilical vein catheters, which can be serious. In 2012 there were seven cases of such leakage, of which two were nearly fatal. In 2013, after the team training, there were only three minor cases and all were picked up early.

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training simple because the procedures may use radiation. The answer is to practise on simulators, which have been around for some time but have not been adequately exploited, in Mafeld’s opinion. Of trainees who have attended UKETS’ courses, 95% reported no previous access to or knowledge of their nearest simulator.

For those who have completed the course, says Julie Armstrong Wilson from the centre, the big changes have been the doubling in numbers of people registered for palliative care and better equity of access for non-cancer patients. Thomas adds: “The practices we have accredited say it is an amazing shift in the delivery of care and that they would never go back. More people die well, where they want to. The programme is also very relevant to ambitions for more integrated care, and for [the health secretary] Jeremy Hunt’s call for the over-75s to be allocated named GPs. We’ve demonstrated changes in practice that can meet this requirement.”

"Most programmes are aimed specifically at junior doctors or have been developed for online learning only. Participants in our programme enjoyed seeing outside their own area." Brenda Carson, project team leader, South Eastern HSC Trust

by participants and by outside guests), and participation in a mentored service improvement project. So far, some 47 projects have been undertaken and about 150 staff and mentors educated in quality improvement methodology, with 97% of them stating they would recommend the course to a colleague. Several of the projects have been shown to improve services and create efficiencies. One project included the use of an acute kidney injury checklist, which increased recognition of kidney injury from 30% to 80% and improved the identity checking process of theatre specimens from a baseline of 30% to 100%.