A world class resource for the ambulance service: the NARU Education Centre

David Bull, head of education, National Ambulance Resilience Unit (NARU). Email for correspondence: dave.bull@nhs.net

A truly world class facility
Since 2008, the National Ambulance Resilience Unit’s (NARU) Education Centre has been dedicated to the improvement of specialist pre-hospital patient care delivered in especially challenging or particularly hazardous environments.

It is best known for its role in maintaining and delivering the national core training for Hazardous Area Response Teams (HART), although its remit and range of courses has grown significantly in recent years.

The Centre was awarded the prestigious Skills for Health Quality Mark in 2014 and has recently been reassessed, which is provided by the Sector Skills Council for Health and demonstrates that an organisation has met the unique health sector quality framework for learning and training—and the high standards expected by healthcare employers. The Centre is the only ambulance organisation to hold this accreditation.

Preparing ambulance personnel for some of the most difficult and dangerous responses they may ever have to make requires a special blend of good facilities, robust yet creative teaching courses, highly realistic training scenarios and above all, extremely dedicated training staff.

NARU has worked tirelessly to get all of these key ingredients in place and today, after 8 years of continuous improvement, the NARU Education Centre is increasingly being recognised as a world-class facility and a genuine standard-bearer for the rest of the NHS.

It is the only facility of its kind in Europe and regularly welcomes international observers from all over the world—including from some of the highest profile emergency response and counter terror agencies in the world—all of whom are keen to benchmark their own training against the NARU standard.

Head of training, David Bull QAM, says:

‘Our international profile is growing because we are the only organisation doing this type of training at this level. We are preparing NHS ambulance staff for the worst—not simply the response to terrorism or firearms attacks but also for wider serious potential public health issues such as pandemic flu or Ebola.

‘We continually modify our courses using information gleaned from the latest high profile mass-casualty events, from research and from
new data we collect on an ongoing basis and this is why we have carved such a high profile reputation among the international community.’

Leading the way
The NARU Education Centre’s various training modules (which can be viewed at www.narueducationcentre.org.uk) all support the NHS response to major incidents such as incident command and control, marauding terrorist firearms attacks (MTFAs), urban search and rescue (USAR), inland water operations (IWO) and chemical, biological, radiological and nuclear (CBRN) incidents. These courses were delivered to 968 delegates in 2015–16 alone.

According to David Bull:

‘A big part of what we do is about changing the culture of responders, organisations, commanders and partner agencies through highly effective education and extremely realistic practical exercises. It is vital that they can communicate with each other in a meaningful way that will help save lives when something major happens.’

Using the right facilities
The facilities at the NARU Education Centre (based at Winterbourne Gunner, a military installation just outside Salisbury in Wiltshire) reflect the reality of incidents, including a collapsed scaffold, a train carriage, a bus and even a small aircraft! This shows a clear link with operational experiences and the learning environment and adds to the realism of the training.

Dedicated instructors, a blended team and delegate feedback
The training faculty work long hours and work away from home, this provides challenges but is also rewarding. The whole team works together to deliver the best courses possible. The admin and logistics team undertake a key role in coordinating courses, joining instructions, maintaining equipment and facilities. Over the last year this has expanded to casualty simulation, all self-taught. NARU training coordinator, Nancy Woolley, says:

‘We started to learn the specialist make up skills, to make live casualties more realistic. Rather than reading what’s wrong with the patient from a card, paramedics can see the injuries and treat them. Some of the exercises that involve many casualties we play a key role in the casualty preparation, this all benefits the learning.’

Tom Lock, who has recently joined the team from London Ambulance Service NHS Trust, notes the challenges of being part of the team:

‘It’s really important to be able to put the subject knowledge across to the delegates and incorporate experiences into the learning. It’s a privilege to be part of such a dedicated team; it’s certainly not easy and a lot goes on behind the scenes to make a course a success. Delivering practical sessions in all weathers is hard work and we do our best to make the exercises challenging and progressively build on the learning.’

The work behind the scenes is vital, courses place a huge demand on facilities and the equipment. Nick Cavill is the NARU logistics and stores coordinator, and maintains the training equipment:
Career Development

Box 1. Five secrets to the NARU Education Centre’s success

- **Focus on the patient:** Design and deliver patient-focused training modules, including on and off-site learning aligned to best practice and standard operating principles. This inevitably improves clinical response and thereby directly affects clinical outcomes.

- **Use innovation and technology where possible:** Develop training solutions such as train-station (a piece of software that allows course delegates to share and learn from each other simultaneously during classroom exercises), human patient simulators (that have already helped change triage algorithms for patients) and immersive exercise DVDs (including residential learning and distance-based learning which has reduced staff abstraction).

- **Keep it real:** Realism is fundamental in ensuring staff are prepared and confident to deliver patient care in areas that are inherently dangerous, such as a marauding terrorist firearms attack. Enabling staff through confidence in their procedures, equipment and colleagues is essential to performing their role.

- **Change the culture:** Delivering realistic competency-assessed incident command courses at operational and tactical level has already changed the culture of ambulance service commanders, enabling them to oversee major incidents much more effectively.

- **Look after the team:** The NARU Education Centre is comprised of a range of highly experienced paramedics and other ambulance service professionals—many of whom live on-site away from home. Keeping them motivated has contributed to a positive learning environment that is consistently praised in course feedback forms.

‘I can’t say it’s the most glamorous of roles, the PPE [personal protective equipment] all needs washing and clinical consumables need replacing. After each course there is a lot to get through to be ready for the next. This includes conducting minor repairs. I also assist in setting out exercises. Helping with the final exercises and seeing the achievements of the delegates is, however, very rewarding.’

The feedback from delegates is essential and NARU conducts internal and external course evaluations. Parsyab Khan, the training manager, notes that it’s commonplace to receive comments such as ‘this is the best course I have attended in my NHS career’ and ‘fantastic and dedicated instructors.’ Khan goes on to say:

‘Evaluation is important to us, as is introducing new methods of teaching. Keeping courses current and relevant is key to success.’

**Helping the wider NHS manage the Ebola threat**

Demonstrating flexibility and the ability to adapt to challenges, the NARU Education Centre played an instrumental part in the design, development and delivery of Ebola personal protective equipment training procedures. This was rolled out to key parts of the NHS.

The Centre produced training packages for NHS organisations including DVDs and posters, and conducted face-to-face training with NARU staff as the core.

In a further sign of the high regard the NARU Education Centre is held in, its staff were asked to deliver training to NHS and military staff deploying overseas who may come into contact with Ebola patients.

Materials were designed at an incredibly fast pace, and significant challenges were overcome quickly, with the result that NHS staff from across the UK attended courses where the required procedures were taught by NARU staff alongside colleagues from Public Health England. The number of staff attending workshops or training events totaled over 1 000.

**Simulators and actors enhance the realism**

Human patient simulators are predominantly used within the hospital environment. The NARU Education Centre has taken this to the next level, with simulators exposed to collapsed buildings, chemical attack, fire and gunshot wounds.
Having visited the NARU Education Centre in June to witness the final exercise for delegates on the HART Incident Response Unit course, there is no denying it is delivering first-class training.

Key to the success of the Education Centre is its emphasis on realistic, patient-focused training. The facilities are second-to-none and by creating believable scenarios, trainers are able to disempower delegates by putting them out of their comfort zone and forcing them to think quickly under pressure. The combination of actors and human patient simulators mean that delegates have to illustrate good critical thinking and decision-making skills, as well as the ability to adequately treat and triage patients. Post-exercise debriefing allows delegates to recognise where they went wrong and how to avoid the same thing occurring in a real-life situation.

The exercise itself highlighted the importance of following procedure and protocol in difficult situations. While a delegate could outline in a classroom exactly how they would act in a particular situation, it is remarkable to see how difficult it is to actually put this understanding into practice, as it requires a definite clear-headedness and ability to cope with pressure.

Variety is key in simulation, and by having the capability to create any number of different scenarios, managers can ensure that delegates complete training confident in their ability to tackle all manner of complex incidents were they to occur in the real world.

Michelle Ping QVRM, who leads on the human patient simulators, says:

“These mannequins really make a difference, they test delegates and make people think about patient care. We can change the patient’s signs and symptoms wirelessly to respond to treatment, which tests the delegate’s clinical decision-making.”

Delegates assess, triage and treat the simulator as they would a seriously injured patient. The key outcome is enhanced learning, leading to a change in the triage process used when working within such environments. The simulators are robust and can be used in realistic settings, under the train or in a collapsed building.

Casualties are also provided by the local college, where the public services course attends exercises. The students then get to see the ambulance service in action, this also helps with their knowledge of the emergency services.

Similarly, the use of specialist amputee actors adds to such realism, delegate feedback when performing wound care highlights the benefits. Modules are bespoke to the requirements of the delegate’s operational role performed at an incident. The use of casualty actors was pioneered by our team in the pre-hospital environment, overcoming ethical challenges. The feedback provided to delegates by actors, regarding the care received is invaluable.

As David Bull says:

“We must recognise and value the special commitment that NHS ambulance staff are making when they prepare to respond to devastating incidents such as the terrorist attacks in Paris in November 2015 that claimed 130 lives. As volunteers, these ambulance staff deserve the very best in terms of preparation and training, so they can operate as safely as possible in the most realistic setting possible, in order to deliver the care that patients will expect on-scene.

‘Patients often recall the first care that they receive during these major incidents and our staff are proud to train the responders who will deliver that care. That care is clinical and emotional, it’s vital, and it’s the first interaction that a patient in potentially terrible circumstances will have of the NHS, so it is vital we get it right.’

Further information

To see all NARU Education Centre courses and for details of how to book, please visit: www.narueducationcentre.org.uk.
Telephone the NARU Education Centre on: 01980 619568.
Email dave.bull@nhs.net