

---

## Volume 14 - Issue 1, 2014 - Cover Story: Emergency and Trauma

### Providing Specialist Emergency Care: A New Hospital

---

#### Interviewee



**Dr. Birju Rana**

*Executive Director*

*Northumbria Healthcare*

*NHS Foundation Trust*

*North Shields*

*Tyne and Wear, UK*

Northumbria Healthcare NHS Foundation Trust is building a 29,000m<sup>2</sup> specialist emergency care hospital, which will open in 2015. The new hospital will include 30-bed units for respiratory medicine, GI medicine, surgery, trauma, an acute medical unit, elderly/stroke care and cardiology. In addition it will provide an 18 bed critical care unit, ambulatory care unit, a maternity unit and a paediatric department as well as a full range of diagnostic services. HealthManagement Managing Editor, Claire Pillar, spoke to project lead Dr. Birju Rana.

#### What was the Thinking Behind Building a Hospital Just for Emergency Care?

Our healthcare Trust covers a population of 500,000 across a large geographical area, much of which is quite rural, from Berwick, on the borders of Scotland down to North Tyneside and Haltwhistle in West Northumberland. Currently we have three acute hospital sites and seven community hospital sites. The three acute sites, Hexham, Wansbeck and North Tyneside all take emergency admissions, with accident & emergency (A&E) departments on each site. The national evidence is that patients in an emergency situation who are seen by senior doctors early in their care pathway have better outcomes. Around 2006 we started thinking of how we could deliver this kind of service over all of our acute Trust sites. To provide specialty level, consultant cover, seven days a week over three sites would be extremely difficult to do. Our clinical teams believed that providing this level of medical cover was the right thing to do for our patient population, and so they looked at ways to try and provide this level of care. The clinical teams looked at a number of possibilities, but felt that the best solution was to combine the existing rotas into one emergency rota and to then separate emergency and elective work so that each had its own diagnostic and theatre provisions and its own rotas to deliver the emergency work. In addition, the separation of emergency and elective work and seven-day working for consultants (for emergency work) would provide excellent training opportunities for medical and nursing trainees. Furthermore the 24/7 presence of A&E consultants provides additional support for the clinical teams working into A&E, ensures senior decision-making at the earliest part of the patient pathway and also ensures that the department runs smoothly and efficiently.

The recently released proposals from Sir Bruce Keogh, Medical Director of NHS England (NHS England 2013a) include a number of clinical standards that Trusts will be required to deliver from 2016/17 onwards (these include patient experience, time to first consultant review, multidisciplinary team review, shift handovers, diagnostics, intervention/ key services), with a view that Trusts will start planning for these changes from 2014/15. We are in a position to feel confident that we will be able to deliver these targets (some of which we have already developed quite extensively) as we open the new hospital in 2015.

#### Is this the First Specialist Emergency Care Hospital in the UK?

From what we know, it's the first one that has been purpose built. Some trusts have existing sites where they have designated one site as 'hot', and another as the 'cold' site, and adapted existing infrastructure. The opportunity to build a new hospital has allowed clinical teams (in the broadest sense) to work closely with architects to design a building that meets their clinical requirements and an environment that would be good

for patients. This has meant that the clinical teams have determined the proximities and adjacencies of each of the departments. The hospital has been designed to ensure close clinical working and integration of services and to reduce 'travel time' within the hospital, both for the transferring of patients and for clinical teams moving around the hospital. For example, the radiology department is partly embedded within the A&E department as is the department of paediatrics. You can see from the image that it's an unusually shaped hospital. There are very few straight corridors. From a time efficiency point of view, travel time between departments is greatly reduced.

#### **What is Particularly Innovative About it?**

The hospital is innovative in the way it is built, how it will look and the way it will work. As a Trust we are really committed to providing excellent emergency and elective care. It is great that we are able to provide a new, purpose built hospital for specialist emergency care, which also offers us the opportunity to enhance our base sites so that the environment for our elective services is also improved. As a Trust we already provide seven day consultant cover for our acute emergency admissions, and extended working for A&E consultants over seven days, but the development of the new hospital will see us moving to seven-day specialty working. In the new hospital there will be 12 consultants working seven days a week. In addition there will also be a number of A&E consultants working into the emergency department seven days a week with one being present 24/7. The new hospital functions with specialty admission wards so that as patients come into A&E they are assessed and then transferred directly to their required specialty, as opposed to first going into a 'general admissions ward'. In this way, we are able to move the whole specialist intervention component of care earlier in the patient pathway. The patient is seen more quickly by the most appropriate senior person for their presenting condition. To have specialty consultants working seven days a week 12 hours a day will provide excellent quality of care, and ensure that required decisions are taken early and at an appropriate time within the patient pathway. As a Trust we are always looking to improve, and I personally believe that as a trust this new way of delivering emergency care will further enhance the care we are able to provide to our local population.



**Picture.** Aerial View of Specialist Emergency Care Hospital (computer-generated)

#### **What has been the Hardest 'Sell' for the Project?**

We have engaged extensively with the staff, and continue to do so as we move closer to the opening date of Spring 2015. We are down to the micro-detail in engaging with staff, and what it will actually mean to them as an individual. From a staff point of view, because this has been a project led by the Chief Executive and our clinical teams, they were 'sold' on the wider vision from its inception. The wider clinical body bought into it as they knew and believed it was the right thing to do, so it was all about how and when we do it, rather than whether we do it. With the public, we did a lot of preengagement work, before we went out to consultation with the public. This involved being able to explain the model and find out from the public what they didn't understand about the model. We went back till we had covered all the areas they had concerns about or didn't understand before we went out to public consultation. A number of Trusts have talked to us about how we did it, and one thing we advise is not to underestimate the time and effort you need to put into consultation and engagement. The more you do beforehand, the better it will be in the long term. It will feel really difficult, but it will be worth it. We continue to track our public perception towards the new hospital. Our communications strategy will gain momentum from mid 2014, as we need to ensure that everyone's clear about the model and how to self-direct to the appropriate care. The new hospital will take all acute emergencies, but we also maintain what we term 'base' hospitals at Hexham, North Tyneside and Wansbeck, which will provide elective care, outpatients, diagnostics, and walk-in A&E services. We want to make sure that the public are very clear about how to direct themselves to the appropriate service. There are a number of focus groups that have tested the public's knowledge about their understanding of both the current and future local healthcare service plans. We have been pleased to note the level of awareness of the proposed changes already, and how people have been able to establish the best place to go, based on their understanding of a number of clinical conditions. We propose to build on this communication and understanding further as we move closer to the opening of the new hospital.

#### **Please Tell Us More About the Clinical Strategy for the New Hospital. Where do You Expect to be 3 Years After it's Opened?**

From an emergency point of view we expect to be a leader in the field. We'll be measuring a number of outcomes and efficiency measures through an outcome framework that has been devised by the project group. As an organisation we do believe that seeing a consultant early in the pathway leads to better patient outcomes, and will also lead to a number of efficiencies in the patient journey. As per the Keogh report (NHS England 2013c), having consultant presence seven days a week will improve outcomes and services for patients. The Trust is confident that its new specialist emergency care centre will help it to fulfill these requirements and deliver the expected improved outcomes as outlined in the report.

#### **You are Already Implementing Seven-Day Working. Could You Tell Us More About How this has been Achieved?**

We moved a few years ago to a model of working that allowed us to provide seven-day consultant cover into our acute admission wards. Over time our A&E consultants have also moved to extended days and seven day cover. This ensures that all our emergency admitted patients are seen by a consultant. All our emergency admissions come in through A&E and are moved to the medical admissions unit (MAU). The MAU is covered seven days a week by consultants from 8am until 10pm. Every emergency that comes in is seen by a consultant. The change has been

a gradual one over time and has been led by the clinical body. The model of working at the new hospital (specialty admission wards) builds on our current model of working and is really viewed as the natural next step in delivering emergency care.

#### **What has been the Multidisciplinary Involvement in Designing the New Hospital?**

Each department met with the architect to design their area. The architect had quite an interesting way of teasing out what was important to the people that were in the room. It was always multidisciplinary, as each member of the team had something to offer in terms of designing the space that they would be working in. When the meetings were organised, it wasn't just consultants who came along, it was the full multidisciplinary team, including allied health professions and healthcare assistants. They were heavily involved in designing the shape of the departments, and ensured that their needs were met in terms of the duties that they needed to undertake on a daily basis so that they were able to meet the needs of their patients. The overall result was a hospital design that was able to fulfill the needs of both those working in the hospital and the patients that they were looking after.

#### **How will Radiology Services be Configured in the New Hospital?**

The new hospital will have two CT scanners, an MRI scanner, ultrasound and x-ray equipment. This equipment will be situated in close proximity to the A&E department as the radiology department is embedded and situated partly within the A&E department. There will be a radiologist presence seven days a week. There has been a commitment to provide fast access to diagnostic services as this is a key part of emergency services. This has required some capital investment as these services will also continue to be provided on the base sites for our elective work load so transfer of all radiology equipment has not been feasible. The separation of emergency and elective work will ensure that both streams of work are not disrupted or delayed by new emergency cases coming in through the department. If a patient attends the new emergency department by ambulance, they will be seen quicker, and, if admitted, be seen by the appropriate consultant for their condition. If a patient needs walk-in care, for example needs bandaging up or needs medication, they will get seen quickly on the base sites as there will not be any emergencies that will divert resources in the department. It's win-win for everybody. We have good patient satisfaction now, so it will be interesting to see what happens with the development of the new hospital and the reconfiguration of our services.

#### **What IT Systems will be Used to Manage Bed Demand/ Admissions Across the Community Hospitals and the New Specialist Emergency Care Hospital?**

We can transfer our existing systems into the new hospital. However, we have just been successful with a technology bid, and we are hoping to implement a ward information management system. Our clinical teams have been looking at a couple of systems that are out in the market to see if we can implement those in advance of us moving. These systems are more electronic, more visual, and allow us to do additional things – not just bed management, but at the ward level, for example, ensuring that tests have been undertaken on individual patients, including discharge information, rather than being paper-based.

#### **What are the Financial Implications of the New Emergency Care Hospital?**

The Trust did not develop this clinical model to save money. The model was developed as it was believed that we would be able to further improve the care we were able to deliver and was in line with national and international evidence – our clinical teams were ready to take this step and drive any clinical improvements that would provide excellent care to our local population. We do believe that seeing a consultant early in a patient's pathway, and on a daily basis, will lead to natural efficiencies. The model isn't based on achieving these efficiencies, but we do expect it to be a natural by-product of the new system. We've modelled various scenarios, particularly around length of stay. For example, if we cut length of stay by X days what will that do to the bed base, etc. Our main driver has always been about improving patient care.

Published on : Sat, 8 Mar 2014