

Simulation Modelling of Orthopaedics – A Better Way to Plan our Achievement of the NHS 18-Week Target

The North Cumbria Acute Hospitals NHS Trust was faced with the problem of what we should do in order to achieve the 18 Week GP to Theatre targets. We chose to address the most difficult speciality first – Orthopaedics. Along side this, we also chose to take a ‘helicopter view’ of General Surgery, ENT, and Gynaecology.

We realised the detailed planning necessary was beyond the scope of our existing tools and so we engaged Focused On Health to assist us with this work. I believe this was a correct decision.

As Chief Executive, the flow models gave me the crucial information needed to identify and measure the potentially de-stabilising effects that both of our hospitals would have suffered if we had been obliged to accept the introduction of Independent Sector providers on the terms that were being proposed.

The use of simulation modelling has allowed us to separate elective and emergency flows and to identify the process constraints quickly and easily. The modelling process has engaged our Clinicians who are now able to propose significant process improvement ideas and to test their preferred solutions which are now being implemented.

We now have new tools that lift our planning to a new level to support our improved strategies of care delivery. The resultant flow models enable us to explore different scenarios of staffing, theatre availability, bed provision, and the managed use of external service providers. We can test and see their impact on patients and Trust revenues. We have found that the technique of properly applied simulation to be a large help in constructing our business plans.

The competence and dedication of Focused On Health, when combined with their detailed knowledge of NHS processes and terms has enabled rapid progress to be made and excellent relationships to be forged with key clinicians.

I am confident we are now moving forwards as a stronger team with all of our partners understanding what needs to be done and agreeing why it should be done.

Not only have we avoided an inappropriate use of external service providers, this initial work has identified a number of other issues which need attention. The first of these will be a ‘ground up’ appraisal of Radiology and we certainly intend to use patient flow and simulation modelling from Focused On Health to get to our preferred development plan.



Marie Burnham
Chief Executive