

Biting back at the bed bugs

MRSA Action UK Chair Derek Butler asks if managing high bed occupancy can be balanced to ensure the delivery of appropriate care – at the right time, and in a safe setting...

When the NHS was formed in 1948, the annual budget to provide healthcare for the population of the UK was just under £240m. In 2010, the annual budget for the NHS will reach a peak of £110bn. Over recent months, there has been a flurry of activity on health, including the Health Select Committee report on Patient Safety. The third National Audit Office report on healthcare infections was followed by the Public Accounts Committee report on the increasing risk from infections that go unreported and unmonitored, and most recently, the debacle involving regulation and standards at the Mid Staffordshire Hospital, Basildon and Thurrock and Colchester NHS Foundation Trusts.

Over the years, there has been much debate on the state of our NHS. Discussions have taken place on the future path of healthcare provision and its regulation in the UK. There has been much merit in these discussions; however, for the NHS to survive in its present form well into the 21st Century, fundamental changes will have to take place to ensure that the essentials of care, ensuring quality and safety, can match the skills and technological advances to provide the best outcomes for patients.

‘...can we sustain high bed occupancy rates of 90% plus, as well as reducing avoidable healthcare infections and untoward incidents?’

The reports and incidents cited here all touch on patient safety and quality of care, or the lack of the essentials of care. One or two referred to bed occupancy rates in the NHS and how this influences patient outcome and the rise in healthcare infections and untoward incidents.

If we consider bed occupancy rates in 1948, the year the NHS was founded, there were some 480,000 beds in the newly formed health service. The population of the country at that time stood at a little over 49.5 million. Today the number of beds available in the NHS is around 160,000, with a population of just over 61.5 million. Whilst some of this reduction in beds per population

ratio increase can be put down to advances in medical science and treatment, the underlying reason for this disparity is that our elected representatives over the last few decades have wanted more patients through the system for less money. This is in contrast to the northern Scandinavian countries, where their bed occupancy rates are much lower.

If we look at the number of beds available from 1948 onwards up to the present date, the figures make very interesting reading. The number of beds increased from the original 480,000 in 1948 to a peak of 550,000 in 1959; from then on, the number of beds decreased at an ever accelerating rate. By 1979, they had fallen to 450,000. By 1999, they were down to 250,000, and five years later in 2004, they were below 150,000. Bed numbers have increased slightly since that lowest figure. Therefore, with the increase in the population, it is not surprising that we hear of bed occupancy rates of over 90%; however, this does bring drawbacks in that to sustain this high level of bed occupancy, there is a correlating increase in avoidable healthcare infections and untoward incidents. The question asked on many occasions is: can we sustain high bed occupancy rates of 90% plus, as well as reducing avoidable healthcare infections and untoward incidents?

As chair of the charity MRSA Action UK, I would say it's possible, but not probable with the current methodologies used within the NHS. You cannot use the same methodologies and practices that were used when there were three times as many beds available, admitting patients with more complex needs through treating ailments and conditions that couldn't have been treated in the past, and expect to keep infection rates low. A hospital's ability to optimise capacity is largely determined by how efficiently their processes and operations are managed. Patient throughput can be defined as delivering the appropriate care to a patient at the right time and in the right setting.

Modern organisations can improve their production methods with less staff using modern methodologies. If the NHS was to adopt these modern practices and adapt them for high patient throughput, it could then be

possible to sustain high bed occupancy rates and to reduce healthcare infections and other adverse events.

The NHS has just celebrated its 60th birthday, yet as someone whose family has had cause to use the NHS extensively over the last 12 months, I have witnessed some of the practices within the NHS first-hand, and I am of the strong opinion that these systems will have to change very rapidly within the near future. I make this statement because with the NHS budget set to peak at £110bn next year, and with any incoming government after the general election to be held in June 2010, the public finances and the debt associated with it will overhang the NHS for 10 years or more. Therefore, high bed occupancy rates are likely to be the norm, irrespective of how much we may wish them to reduce. This will mean that existing bed management systems will have pressures placed upon them and will have to be more efficient. This will impact severely on patients unless the NHS can introduce a bed management system that does not impact on patient safety or the contraction of avoidable healthcare infections. Having been in hospitals around the country, each trust uses varying forms of bed management.

‘...high bed occupancy rates are likely to be the norm, irrespective of how much we may wish them to reduce. This will mean that existing bed management systems will have pressures placed upon them and will have to be more efficient.’

Using new technologies such as computer software to track patients in beds, where they are in wards, highlighting infection status could help to keep infections under control, even if sometimes it is necessary to move the patient to another ward. Modern industry uses such tracking systems to ensure products and parts are available and are easily traceable back to their origins. This ensures quality and safety with their retailers, suppliers and customers, using systems like lean, Six Sigma and ISO 14001.

Care pathways for patients and the care they receive can be used as traceability on their treatments and outcomes throughout their journey through the health and social care system.

Even in well managed hospitals, patients have been discharged from a ward and from a bed, only for the bed to be occupied within an hour of it being vacated. The area around that bed has not had an opportunity to be

decontaminated or checked before the next patient is allotted the bed space, and while cleaners may clean around the bed space, one would not think that they clean the bed whilst the patient occupies it. For a system of high bed occupancy, the decontaminating of the area would have to be done before the next patient is admitted and while patients are at either side of that space. It would make sense, however, in not only using modern technologies, but to have a bed ready that is pre-decontaminated to be put into that bed space. This would include bedside cabinets, over-bed tray tables and patient's chair that are designed for ease of cleaning; it would mean, however, carrying some spare capacity of these items. Such technologies are already available. The Design Council has asked the companies and manufacturers to design bugs out, for ease of cleaning and decontamination.

If we are to tackle healthcare infections head-on and to have high bed occupancy rates, future governments will have to look at what kind of service the NHS provides. It will also need to look at the design of isolation rooms, materials used and the technologies available. Whilst there will be an optimum level of bed occupancy at which it cannot be sustained for long periods without having an adverse effect on patients unless the present systems are changed.

The years ahead will be challenging times for the NHS, with an ageing population placing greater demand on limited resources and staff; however, if the NHS is to make the £20bn savings cited in the recent McKinsey Report, the NHS would lose 137,000 staff, that is the equivalent of 10% of the workforce.

Maintaining high bed occupancy rates is a way of maintaining efficiencies. The challenge is, unless the staff remaining in the NHS learn to work smarter, supported by essential technologies, it is my belief that patient safety will be compromised with increasing infection rates and higher untoward incidents, such as those at Mid Staffordshire, Basildon and Thurrock, Colchester and others.



Derek Butler
Chair
MRSA Action UK
Tel: +44 (0)7762 741114
derek.butler@mrsaactionuk.net
www.mrsaactionuk.net

