

Surgical breakthrough could save NHS up to £500m a year

By Nigel Hawkes
Health Editor

THE National Health Service could save at least £500 million a year by adopting techniques that could halve the recovery time of patients after surgery.

A new trial at the Freeman Hospital in Newcastle-upon-Tyne has shown that bowel surgery patients were ready to be discharged in just seven days, rather than 14.

The surgeons told a conference in Lisbon yesterday that better preparation and education of patients, greater use of keyhole surgery, and a technique for improving fluid balance and blood circulation during and after surgery could greatly reduce the recovery period.

The trial was the latest evidence of the effectiveness of CardioQ, a blood monitoring device developed by a British company, Deltex Medical.

If repeated across the country, the savings to the health service would exceed last year's NHS deficit of £500 million. However, the device was used

in fewer than 5 per cent of possible NHS procedures, reflecting the difficulty of getting new devices used by the service.

Alan Horgan, Consultant Colorectal Surgeon at the Freeman Hospital and leader of the study, said: "These results are remarkable. Everyone involved in surgery and NHS management should read this study."

"Fluid-balance during and after surgery is incredibly important to patient wellbeing. Our surgical recovery programme means the Freeman Hospital is already a leader in recovery times, but the CardioQ has allowed us to get even better. We have proven that it is possible to save the NHS both time and money, while also enhancing patient care."

CardioQ works by monitoring how much blood the heart is pumping. Blood lost during operations is "topped up" by using a colloidal solution that mimics the behaviour of blood. Getting the volume exactly right is critical to ensuring that

sufficient oxygen is delivered to the organs. Too little can lead to organ failure and even death. But too much can cause heart failure, so doctors had to have to tread a fine line between the two.

CardioQ monitors blood volume using an ultrasound probe inserted down the throat. The probe measures blood flow by bouncing ultrasound waves off blood cells flowing through the aorta, the main blood vessel.

The trial covered 108 patients. Half were given fluid at the discretion of the anaesthetist, while the other half had their fluid levels monitored by CardioQ.

The national average recovery time for bowel surgery is 14 days. But at the Freeman, discharge took an average of only seven days. The largest part of the improvement was the result of the recovery programme, which included the use of keyhole surgery.

But CardioQ also contributed another two days, and

patients treated with it also had far fewer post-operative complications — 2 per cent rather than 15 per cent. None needed an unplanned admission to the critical care unit, compared with 11 per cent of patients not treated using CardioQ.

Every day in a general or surgical ward costs £400 per patient. The CardioQ monitor costs £7,000 and the probes used in the trial £55 each, meaning that the monitor could pay for itself in days. It could be used for a range of operations, not just those on the bowel.

The National Institute for health and Clinical Excellence described CardioQ as "standard clinical practice". Yet such is the reluctance of the NHS to adopt new approaches that it is used in fewer than one in twenty operations in which it could provide benefits.

Ewan Phillips, managing director of Deltex Medical, said: "Embracing this technology should be a no-brainer."