

# SPECIAL REPORT

## INNOVATION

# SMALL STEPS, GIANT LEAPS

Once considered an impossible dream and the holy grail of orthopaedic surgery, knee replacement in a single day is now a reality as increasing numbers of surgeons and hospitals adopt enhanced recovery principles. By Jennifer Trueland

Having undergone a knee replacement four years ago, Roger North thought he knew what to expect when getting the other one done. The heating engineer from West Sussex had been anticipating a lengthy hospital stay followed by several weeks with a stick – and he was not looking forward to it.

In the event, however, he was up and about within hours of the morning surgery, and was allowed home that same afternoon. “It wasn’t so much walk-in, walk-out as limp-in, walk-out,” he laughs. “It was absolutely brilliant.”

The day case total knee replacement has for some time been a holy grail of orthopaedic surgery. Ten years ago, when a hospital stay of a week or so was the norm, or even three years ago, when pioneers had brought length of stay down to two or three nights for a few selected patients, the idea that people would be in and out in one day seemed an impossible dream.

Major improvements have been made in length of stay and outcomes by taking an enhanced recovery approach, in which every part of the patient journey is focused on the speediest possible recuperation.

Enhanced recovery is a perfect reminder that the big steps forward in healthcare can be incremental, rather than big bang. Championed by the former NHS Institute for Innovation and Improvement, the process concentrates on making small changes that add up to big change.

According to the institute, enhanced recovery leads to better outcomes and length of stay; increased numbers of patients being treated (where there is demand) or reduced level of resources necessary; and a better staffing environment.

Peter Kay, council member of the Royal

College of Surgeons and national clinical director for musculoskeletal services at NHS England, says it is having a positive impact. “Increasing numbers of surgeons and hospitals are incorporating the principles of enhanced recovery after surgery. Such programmes have been shown to be effective in reducing lengths of stay and post-operative complications, as well as helping patients recover more quickly after surgery.

“Enhanced recovery programmes are a great example of how innovations do not just arrive through technological developments, but from delivering care through different approaches and models.”

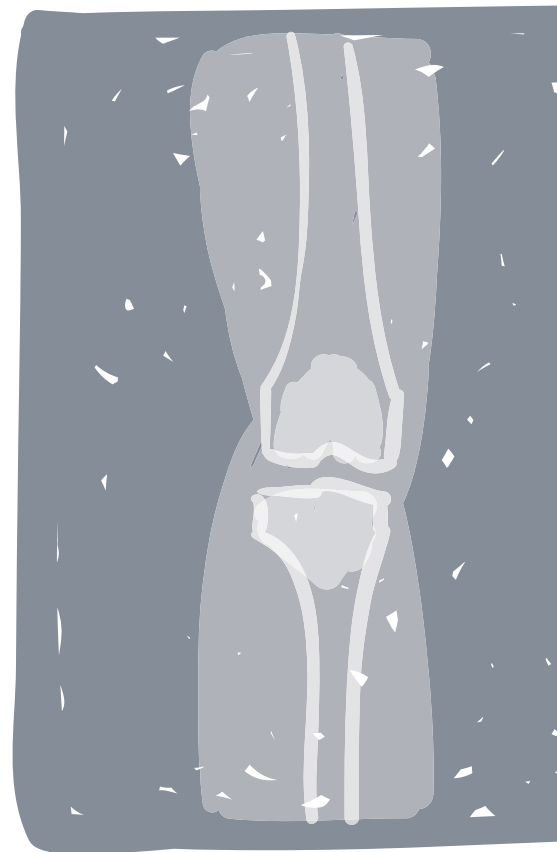
The four main elements are pre-operative assessment and planning; reducing the physical stress of the operation; a structured approach to peri- and post-operative management, including pain relief; and early mobilisation.

According to James Lewis, the consultant orthopaedic surgeon who treated Mr North, it is not unlike working with a top athlete, where a team of experts tweak different elements to optimise performance.

He and his colleagues at BMI Goring Hall Hospital use a particular enhanced recovery process that looks at every part of the patient experience – from outpatient appointment and pre-op education, through to the surgery itself and beyond.

Everything from the type of prosthesis used, surgical technique, anaesthesia, and importantly, psychological approach, has been honed and refined to get the best result possible for each patient. And for some, like Mr North, that means that they can walk in and out of hospital in a matter of a few hours, new knee in place.

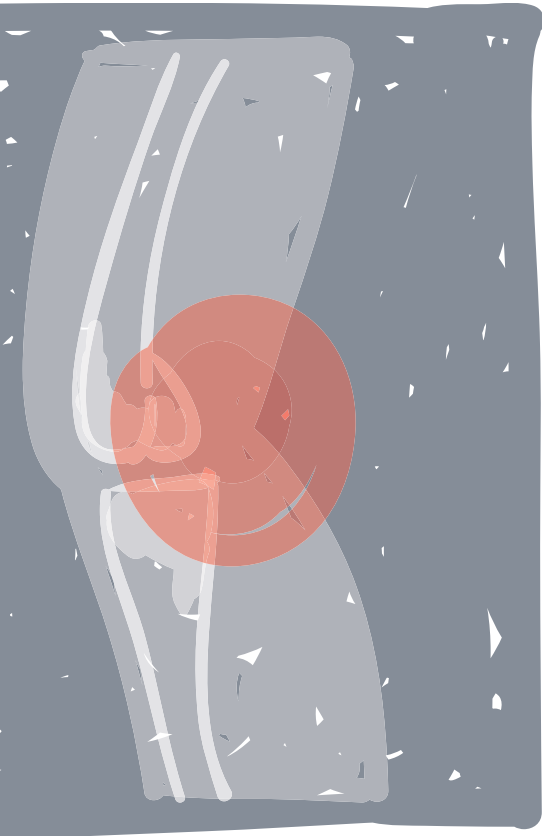
This is cutting length of stay, but is also



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paying dividends in terms of positive patient experience feedback. “I’ve always had a drive to do things better, and little details do add up to make a difference,” says Mr Lewis. “We’ve taken the best bits from everyone: positive psychology, modern medicine, modern surgical techniques and modern prostheses. But it’s also involved teamwork, and that’s been the beauty of working in a small team here: everyone is on board and working to the same end.”

Torbay Hospital, part of South Devon



Healthcare Foundation Trust, was an early adopter of enhanced recovery, and now uses the approach across a number of clinical areas, including patients admitted as medical emergencies.

Again, principles include early mobilisation, and a focus on keeping the patient as well as possible, for example, with good hydration, involving patients in their care, and a focus on privacy and dignity. Planning for discharge starts at the earliest point possible.

Arguably, however, it is in elective surgery that the hardest outcome benefits of enhanced recovery are most obvious.

“We’ve really embraced enhanced recovery over the last three years,” explains Una Palmer, executive director of BMI Goring Hall, which holds CCG contracts as well as treating purely private patients.

### Falling length of stay

She can point to hard statistics to back the approach: average length of stay for knee replacements fell from 3.5 days in 2013 to 2.8 days in 2014 (and is expected to fall again this year). This compares with a national average of 3-5 days, according to NHS Choices. What is more, 98.5 per cent of

patients questioned have said they would be likely or extremely likely to recommend the hospital to family or friends.

Consultant anaesthetist Gavin Allan says there are opportunities for all providers to reduce length of stay by using enhanced recovery methods. “A united approach is really important, with everyone singing from the same song sheet,” he says.

“The boundaries are really being pushed. We’ve been doing partial knee replacements as a day case for some time now, but I think that even a few years ago we wouldn’t have thought we could do a total knee replacement and see the patient go home the same day. But now we can see what the possibilities are.”

Inevitably this approach of essentially offering patients the chance to go to “recovery school” pre-operatively means a more intensive use of staff time before surgery. But Mr Lewis says it pays off.

“My initial outpatient consultation takes 30-40 minutes, but that time is important because it makes sure the patient is really prepared and knows what to expect. Putting in that resource early in the process saves resource afterwards – it’s saving expensive nights in hospital for one thing,” he says.

According to Mr Kay, enhanced recovery is a good example of how different parts of the system can work together to bring improvement. “Such programmes have been driven not only through local clinical and managerial leaders, but through the involvement of the Department of Health, which helped to codify the principles and practices. The Royal College of Surgeons fully supports enhanced recovery and we encourage more hospitals across the country to adopt such programmes.” ●

“Evidence based initiatives that optimise the patient journey and clinical outcome will be of great interest to commissioners in future. Enhanced recovery programmes (ERPs) have been at the forefront of the healthcare landscape since at least 2000.

Patients are assessed and “optimised” before surgery so that their recovery period post-surgery is faster, meaning they can often leave hospital quicker. ERP type initiatives have been adopted by the NHS and most healthcare providers in the UK, but to differing degrees and standards.

ERPs, great infection control rates, exceptional standards when delivering government led initiatives and other programmes such as venous thromboembolism exemplar status, should be seen as important kitemarks for clinical commissioning groups when commissioning patient services. They are proof of providing evidence based exceptional patient care while demonstrating economic value.

ERP is an evolving initiative, from implementation in joint surgery to newly developed programmes in other treatment areas including colorectal surgery. Healthcare providers in the public and private sector are constantly looking for ways to improve and develop these programmes, while keeping the patient at the core. Historically, obstacles have included trying to retain consistent levels of quality patient pathways across large networks of hospitals. Hospitals and clinics that have implemented ERP schemes have seen improved efficiencies, improved patient satisfaction and significant reductions in length of stay.

We have developed our programme to include carbohydrate loading of patients, where it prepares the body with energy for quick recovery post-surgery, and is continuing its development with optimisation of haemoglobin levels prior to surgery. We offer CCGs a high quality care pathway for patients requiring elective surgery, and provide reassurance that patients are going into surgery in the ideal condition.

ERP integrates all aspects of the patient journey and allows the patient and their carers to feel a part of the whole care process, from physiotherapy training before their operation, to ensuring they have the required level of support at home post-surgery.

The patient remains at the centre of the process and patient satisfaction and empowerment are vital to its success. This approach to care allows CCGs to make decisions based on quality of care and patient need.

*Liz Sharp is national director of clinical services for BMI Healthcare.*

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