

SOUTH WEST LONDON ELECTIVE ORTHOPAEDIC CENTRE: A CENTRE OF EXCELLENCE IN PATIENT-FOCUSED ELECTIVE ORTHOPAEDIC CARE

Summary

The South West London Elective Orthopaedic Centre was established as an informal joint venture between the four local acute trusts in 2004, in response to pressures on trauma and orthopaedic services and growing elective waiting lists. Despite an initial dip in financial performance, the SWLEOC today delivers a £3m surplus annually and is recognised nationally and internationally as a centre of excellence in its field. It is the largest hip and knee replacement centre in the UK by around 200 operations per year. Patient benefit is at the centre of the SWLEOC's specially designed pathway and by standardising process and focusing on continuous improvement they are able to deliver a patient experience that is widely recognised as exemplary.

Key facts

- Based at Epsom Hospital and run in partnership by four trusts – Epsom and St Helier University Hospitals, St George's Healthcare, Croydon Health Services and Kingston Hospital.
- The centre was set up to deliver strategic change in the provision of planned orthopaedic care to address a growing elective waiting list problem in south west London, with four year waits the norm.
- Joint largest hip and knee replacement centre in the UK and one of the largest in Europe, performing 5200 procedures, including 3000 joint replacements, every year.
- 71 beds (two 27-bed post op wards and a 17-bed recovery suite with high dependency and critical care facilities) and five orthopaedic operating theatres.
- Scale has allowed price negotiation, innovation and performance improvements.
- The SWLEOC has delivered a surplus for the four partner trusts since 2007.
- Achieves the 18 week target (2008) and low average length of stay (LOS).
- Managers attribute excellent performance to keeping the patient at the centre of all they do. Pathways designed from the ground up to meet modern expectations through a multidisciplinary, patient focused approach to care.
- The centralised computer system (Bluesprier) is instrumental to delivering the pathway. It allows all teams to see a single view of the patient journey and has helped the SWLEOC achieve an 80% paperless service.

The issue

In the early 2000s there was severe pressure on trauma and orthopaedic services in south west London. Trusts in the area were regularly unable to meet the 18 week referral to treatment (RTT) target and cancellation rates were high, with elective patients often waiting four to five years for an operation.

The trust boards of Epsom and St Helier University Hospitals, St George's Healthcare, Croydon Health Services and Kingston Hospital identified the option of separating elective orthopaedic services from trauma surgery to reduce the number of cancellations. The initiative came from the trusts' clinical teams, who felt strongly that this was the best way to address the shared waiting list problem and to deliver effective care for patients in south west London. The drive for strategic change coincided with the publication of the NHS plan in 2000, which provided the political impetus needed to forge consensus between the four trust boards and agree a way forward.

The proposed solution

The four acute trusts in the south west London area were united in their commitment to provide high quality, cost efficient elective orthopaedic services that would be subject to minimal interruption from non-elective activity. The busy acute hospitals were struggling to efficiently run elective services, leading to an annual loss of £13m across the local health authority area. A new approach was sought that would reduce some of these difficulties, cutting waiting lists and improving the service for patients.

The creation of an elective orthopaedic centre to deliver orthopaedic services for patients across the four trusts, independently from their emergency and other work, was identified as the best option for delivering these aims. The centre was envisaged as a separate entity that would be accountable to the four partner trusts. It would be hosted at Epsom Hospital, but run independently so that bed shortages would not spill over and affect the planned work of the SWLEOC. The proposal had the support of clinicians across the four trusts, who played a key role in its development.

The SWLEOC was set up in March 2004 as part of the NHS Diagnostic and Treatment Centre programme. The project received funding from the Department of Health and was fully supported by the south west London Health Authority. In spite of some financial challenges in the initial stages of implementation, by its third year, the SWLEOC was running a surplus and has continued to do so since.

Today, the SWLEOC provides high quality, cost efficient, elective orthopaedic services and is frequently cited as an example of good practice. Consultants from the four trusts do a proportion of their elective joint replacement surgery at the centre, allowing them to pool expertise from across south west London and supporting innovation and continuous improvement. The setup also delivers efficiency gains through conducting all orthopaedic surgery in the same location. The SWLEOC is the biggest unit of its kind in the NHS, carrying out 5,200 procedures each year, yet economies of scale have meant it has remained one of the few to turn a profit.

How it works: the patient pathway

Opening the new centre provided an opportunity to completely redesign the patient pathway. This has allowed the SWLEOC's teams to make best use of their resources by taking a patient-centred approach and focusing on pre-assessment to ensure the process runs smoothly. The pathway is continually being refined with the aim of providing the best possible patient experience, while maximising efficiency.

- 1 Most patients are referred in to the SWLEOC from the local hospitals; some come as direct referrals or via community-based outpatient clinics, or choose and book. New referrals are added to the Bluespier computer system
- 2 Pre-operative assessment takes place four weeks before treatment. Assessment is nurse-led but patients can be referred to an anaesthetist, Echo or ECG
- 3 The patient is then given an estimated date of discharge (EDD) and receives an information pack
- 4 The patient is referred back to primary care if they are not suitable for surgery
- 5 The patient receives a nurse-led phone call 48 hours before surgery, to check it is still required and that their health has not changed. The outcome of the call is added to the Bluespier system
- 6 Band 7 nurse support is used to actively manage the discharge process and ensure appropriate post-discharge support

7 Physiotherapy and pharmacy support are provided at the weekend, facilitating patient mobility and discharge¹

Implementation

The SWLEOC was established in 2004 as a strategic arm of Epsom and St Helier University Hospitals NHS Trust, to deliver elective orthopaedic services to patients of the four south west London acute trusts. This was a clinical initiative, designed with input from the NHS Modernisation Agency, which assisted in implementing the NHS Diagnostic and Treatment Centre programme at the time. The management team looked at best practice internationally, in particular the Hospital for Specialist Surgery in New York, in order to design an optimal model of service delivery.

The SWLEOC has its own corporate identity and is run from a dedicated site at Epsom General Hospital, independently from the rest of the trust's work. Separation from the host hospital meant that any shortage of capacity would not impact on the SWLEOC's ability to carry out its planned work. This has been the key factor in reducing waiting lists in south west London and allowing the local trusts to meet the 18 week referral to treatment target.

Staff, including managers but with the exception of surgeons, are employed by Epsom and St Helier, though they work solely at the SWLEOC. Senior nurses were recruited four months ahead of opening, which enabled them to become familiar with the vision for the SWLEOC and recruit their own teams. Surgeons are employed across the four partner trusts and undertake a proportion of their work at the SWLEOC. Management is accountable to the partnership board, as well as to the Epsom and St Helier trust board.

Deficit to surplus

In its first year of operation the SWLEOC ran a deficit of £4.2m. A downturn in the initial phase was expected to some extent, and the health authority was ready to offer support because of the expected savings to the local area in the longer term. In year one, was SWLEOC treated just over 2000 patients, which was on target but nonetheless below full capacity. There was still some difficulty getting patients through the door, and the operational efficiency which today makes the centre so successful had not reached its full potential.

Managers had committed to allowing surgeons to source prosthetics according to their preference, but this was reviewed in the early stages to identify potential savings. The original policy was maintained, but an analysis of the pricing structure and process allowed them to reach an agreement with suppliers based on what they could afford to pay. This process delivered a saving of £2m in the second year after opening and a further £500k the following year.

This work, together with advances in operational efficiency, contributed to reduce the deficit in year two to just £400k. In the third year, they succeeded in delivering a further £500k of efficiencies, and the SWLEOC has made a surplus for its partner trusts every year since. Currently the SWLEOC saves the local area £3m annually within trauma

¹ This description is adapted from an in depth analysis of good practice undertaken by the Specialist Orthopaedic Alliance, 18 January 2013, available at <https://www.rjah.nhs.uk/RJAHNHS/files/d0/d0ec4623-a01d-42dd-9982-b2523a821dd8.pdf>

and orthopaedic services. The opportunity to realise economies of scale maximises return on investment (ROI), meaning that while tariff is supposed to deliver a 1 per cent surplus, the SWLEOC runs a surplus closer to 10 per cent. Directors Steve Thomas and Sue King hope to be able to share their expertise to help others avoid a similar early downturn by applying the lessons learned from the outset.

What makes it work?

The SWLEOC's staff are committed to continually monitoring performance and reviewing the patient pathway to identify opportunities for improvement. Clinicians are highly motivated to deliver innovation and increase the variety and complexity of services they provide. There is a strong focus on being operationally efficient and ensuring that the centre runs as close as possible to capacity. The SWLEOC does not "cherry pick" cases, so this can involve detailed planning for patients with complex needs, to ensure their experience is optimal and they do not have to stay longer than necessary.

Key factors that have contributed to the success of the SWLEOC include:

- Clinicians look abroad for innovative techniques to help improve efficiency and patient experience. For example, they have introduced techniques developed in the Netherlands to reduce blood transfusion rates, and the use of wound infiltration, as seen in Denmark, to reduce discomfort for patients and LOS.
- They provide a taxi service, at an average cost of £41 per journey, to ensure surgery starts on time in the morning and to help patients home once they have recovered. This enables them to manage the whole theatre pathway and is particularly valuable for their many elderly patients, who often have mobility issues. The relatively small investment helps save up to £6000 in lost revenue per operation by avoiding cancellations.
- The SWLEOC was an early adopter of the monthly scorecard for outcomes, which is now primarily clinically-focused and presents performance against the previous year. Anomalies are picked up and investigated as priority. Any instances of excessive LOS not in line with patients' EDD are investigated on a monthly basis.
- Ward areas are nurse-led and there is an intensivist onsite at all times. Post-operative medical support is provided by staff with medical, rather than surgical, backgrounds. This has contributed to a positive culture and enhanced experience for patients.
- There is a strong focus on nurse-led pre-operative assessment to prepare the patient for surgery to ensure that it is fully planned, everybody knows what to expect and the process runs smoothly. Patients are discharged in accordance with their EDD in 80 per cent of cases.
- Patients receive a phone call 48 hours in advance of their surgery. This allows scheduling teams to ensure any spaces resulting from cancellations can be filled. Staff work actively to fill empty theatre spaces to ensure the SWLEOC runs at 95% theatre utilisation at all times.
- The nurse-led discharge team works with patients to ensure they are able to go home at the earliest possibility. Physiotherapy and pharmacy support are provided at the weekend to facilitate this. Staff follow up with all patients for two years after surgery and investigate any problems, which allows the SWLEOC to demonstrate to commissioners the savings delivered as a result of fewer complications.
- The same IT system (Bluesprier) is used across the clinical pathway to provide a single view for all staff – as a scheduling tool, to organise operating lists, for post-op notes. This has helped the SWLEOC become 80 per cent paperless.

Outcomes: quantitative benefits

Since it was set up in 2004, the SWLEOC has delivered a range of measurable benefits for the partner trusts and has exceeded expectations in many respects. Its staff have pioneered techniques now in common use across elective orthopaedics, and hold some of the best records in the field across a range of outcome measures. The SWLEOC is now considered an example to follow for organisations contemplating similar initiatives, and was included in the Dalton Review of organisational forms to deliver strategic change.

Orthopaedic services

- Now the second largest hip and knee replacement centre in the UK (for many years the largest) and one of the largest in Europe. SWLEOC surgeons carry out 5200 procedures each year, including 3000 joint replacements.
- 71 dedicated beds for elective orthopaedic surgery and conducts 95% of the area's spine, foot, ankle, hip, knee and shoulder work
- In 2013, no MRSA cross-contamination despite treating patients with MRSA
- Consistently achieves the 18 week target and fulfils capacity, with theatre utilisation consistently at 95%
- Average length of stay is 4.5 days, compared with 5 days on average in elective orthopaedics. Plans to extend the use of wound infiltration are expected to bring this down to 2-3 days.
- The SWLEOC has shown an impressive and consistent performance in relation to its inpatient pathway:
 - 100% received pre-operative phone calls
 - Cancellation rate 1.86%. The Specialist Orthopaedic Alliance (SOA) average is 4.3%
 - 90% achieved EDD (SOA average 50%)

Financial benefits

- Conducting all orthopaedic surgery in the same location has made it possible to negotiate with suppliers on price and make significant savings (£2.5m in first three years). This has hugely increased ROI.
- Consistently delivers a substantial surplus (close to 10 per cent, or £3m annually for the last three years) for the four partner trusts. Philip Mitchell, the SWLEOC's director of surgery, has described it as "the most efficient unit in the NHS with a bigger volume of work than anywhere else"².
- Saved £3m across the local health authority area in trauma and orthopaedics, and able to demonstrate this to commissioners through extensive follow-up work with all patients
- Some reduction in back-office spend, though not being formally constituted as a joint venture means there is still some duplication
- 80 per cent paperless service

Outcomes: qualitative benefits

In addition to these quantitative benefits, the SWLEOC has pioneered innovations and streamlined processes, while continuously working to improve services. It is recognised internationally as a leading institution in the field of orthopaedics and enjoys the universal support of staff, patients, local health economy partners and board members at the partner trusts.

² Epsom Guardian. Available at http://www.epsomguardian.co.uk/news/10999252.Inside_Britain_s_biggest_orthopaedic_centre/?ref=mr

Qualitative benefits that the SWLEOC has delivered for service users and the local health economy include:

- Recognised as a centre of excellence nationally and internationally for hip and knee replacement and research and development
- Standardisation of processes for every patient increases efficiency and ensures services are delivered in a timely way. It also improves the quality of services by reducing the scope for errors.
- A wide range of expertise is concentrated in the SWLEOC through uniting surgeons from across south west London. This has allowed them to deliver innovations and performance improvements for the partner trusts.
- The SWLEOC's permanent surgeon has done pioneering work on young adult hip pain and correcting issues early to avoid the need for hip replacement in future
- A major centre for shoulder surgery and hip arthroscopies. The president of the national hip arthroscopy society is an SWLEOC surgeon.
- The consolidation of all elective orthopaedic services to a single site has freed up space at the local hospitals for other surgical priorities

Some examples of positive comments from service users and local stakeholders:

- "The treatment I received throughout has been excellent from all levels at Epsom Hospital and physio...there is now a 100 per cent improvement in my knee." – patient
- "I could not have asked for better attention...the team of staff that looked after me were polite, respectful and could not do enough for me whilst I was staying...I would 100 per cent recommend the hospital." – patient
- "My patients who have gone through the centre have seen and experienced the best care they can get for either hip or knee surgery and there has never been an episode where the patient has come back to me and complained about the service as they used to before the Elective Orthopaedic Centre. The centre has revolutionised the management of joint surgery and has reduced the waiting time enormously." – local GP

Lessons learned

in spite of the swleoc's achievements in the decade since it opened, it now faces a number of challenges as staff work to continue growing and improving. the management team have also learned some helpful lessons and encountered a range of practical and strategic enablers that have helped progress the project, as well as a number of barriers they have had to overcome.

Practical enablers

- consultants from the partner trusts do a proportion of their work at the swleoc – this pooling of expertise supports innovation and improvement.
- extensive pre-operative assessment and planning, including edd, information packs and pre-op phone calls, reduce cancellations and speed up the process.
- bluespier it system provides a single view across the patient pathway
- nurse-led discharge team and weekend supporting services support early discharge wherever possible
- the physical separation of elective services from trauma surgery allows uninterrupted activity and associated savings through better surgery planning and management of the pathway, reducing cancellations.

Strategic enablers

- reconfiguring the service to a new site provided the opportunity to re-design the patient pathway from the ground up

- continual performance monitoring and early investigation of issues allow staff to identify potential improvements and take prompt action
- multidisciplinary, patient focused approach with permanently employed teams, including nursing and physiotherapy
- learning lessons from international experience
- development of in-house specialisms and adoption of new techniques
- strong focus on operational efficiency with extensive pre-assessment process and stringent follow up
- open and honest recruitment process ensures staff share the swleoc's values and are open to continual improvement and change

Practical challenges

- lack of qualified theatre staff causes difficulty in recruitment
- 27 visiting surgeons, but only one permanently employed at the swleoc. this makes it harder to realise the potential benefits of having specialists together on one site.
- lack of theatre and ward space. the site was purpose built for elderly care and more theatres are needed, but there is currently no possibility of expanding outside of the original site. a large number of specialists would like to work at the swleoc, but they lack the capacity to accommodate them.
- lack of storage space

Strategic challenges

- The SWLEOC has long been a leader in its field, but innovations have now been widely adopted and others are catching up. This is viewed as a challenge to keep reinventing themselves.
- Though operating from Epsom and St Helier, SWLEOC managers are accountable to the partnership board comprising directors from all four partner trusts. This presents a challenge when attempting to set a strategic direction as the partner trusts have differing priorities and visions for the future of the SWLEOC. 20 different chief executives have been involved in the decade since the centre opened.
- Epsom and St Helier carries the governance, operational and financial risk and any breach of the 18 week RTT target goes on its books (though it may have occurred before the referral reached the SWLEOC) . This can understandably impact on the executive's willingness to take risks.
- Having more control over consultant job plans, through permanently employing surgeons at the SWLEOC, would allow better planning and efficiency.
- No easy access to capital. The SWLEOC's surplus returns to the partner trusts, and only a small proportion can be reinvested directly into the service due to the NHS capital limit. This hampers attempts to make larger changes such as in infrastructure or IT.
- Clinical drive to grow the variety and complexity of services is complicated by the need for all four trusts to agree to any developments. There is a natural concern about any potential risk to the reputation and financial efficiency of the centre.

Lessons learnt

- From a governance perspective, strategic oversight, planning and service development would be simplified if the centre were set up as a formal joint venture. Clinicians would have more freedom to grow the variety and complexity of services, which would attract more top specialists and improve recruitment and retention.

- Ideally, the centre would be based on a purpose built site with room to grow capacity and add new theatres as demand increases.
- It is critical to ensure all parties are clear on the aims and objectives of this kind of initiative prior to implementation, and that expectations are aligned. It is also important to manage expectations about the initial financial dip after setting up.
- Successful services have the potential to implement a franchise model to work alongside new sites and help avoid the initial downturn. Though many have visited the SWLEOC, success does not always translate easily in a different setting.
- The first consideration should be “what is right for quality?” Financial issues should be secondary –high quality services can often deliver financial benefits.
- The patient must be at the centre of every decision made about the service and everything the service does.

Conclusion

The SWLEOC is an outstanding example of a reconfiguration of a struggling service that has delivered demonstrable benefits for the whole health economy. It could be seen a forerunner of the type of strategic approach to delivering models of care advocated in the Five Year Forward View, and holds valuable lessons for other organisations who might now be considering adopting new models of service delivery.

The success of the SWLEOC stems from the commitment of the partner trusts, centre management and dedicated staff to delivering high quality services and actively seeking improvements. The motivation to be at the top of their game and the policy of continually reviewing processes and refining the pathway are fundamental to delivering a consistently high quality of care and experience for all patients.

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