

**SHEPTON MALLET  
NHS TREATMENT CENTRE**

**OUTCOMES REPORT**

**2005/06**



## **OUTCOMES REPORT**

**18<sup>th</sup> July 2005 – 31st March 2006**

### **Executive Summary**

#### **Introduction**

UK Specialist Hospitals' flagship Treatment Centre at Shepton Mallet has achieved the milestone of (i) seeing over 10,000 patients and (ii) performing over 5,000 procedures including 500 joint replacements. It has done this with the help of the local NHS, led by Mendip Primary Care Trust.

In light of this achievement, UKSH has produced this report on the service being delivered at Shepton Mallet NHS Treatment Centre (SMTC). This report provides details on the innovative service delivery model, activity undertaken, the clinical outcomes achieved, and patient satisfaction.

The key results are:

- SMTC has produced over 100% of "contract value" for the NHS in the first quarter (January/ February/ March) of 2006.
- SMTC is now undertaking approximately 200 procedures per week, including 30 joint replacements in its 4 theatres and 1 procedure room.
- Clinical results indicate Shepton Mallet is providing a high quality service. Complication rates are lower than national norms (where these are available for comparison).
- There is zero MRSA to date.
- Advanced anaesthetic techniques and processes have been introduced to keep risk to patients minimal and improve day case rates and enhance the patient experience.
- 93% of all patients (not joint replacements) have been day cases.
- The average Length of Stay for primary joint replacements is 4 days (compared to an NHS average of 8.7 days).
- Patient satisfaction is high, with 98% saying they would "recommend us to a friend" and 99% saying the centre was "welcoming and clean".

UKSH is making these results public as part of its ongoing commitment to openness with commissioners, GPs and the public. In particular it recognises that patients should have access to this data from providers to enable them to make informed choices about where best to have their treatment.

GLENYS MANSFIELD  
REGISTERED MANAGER

DR PETER KIMME  
MEDICAL DIRECTOR

## Background

1. The Government started the Independent Sector Treatment Sector Programme in 2002, in line with its commitments in *The NHS Plan*. The ISTC programme let contracts to independent sector providers to build and run healthcare facilities primarily for NHS patients. Shepton Mallet NHS Treatment Centre (SMTC) was one of the “first wave” projects established under the ISTC programme.
2. The SMTC contract was awarded on 18<sup>th</sup> August 2004 to UK Specialist Hospitals. UKSH is a UK based company and is owned by a consortium of UK and US institutional investors – see [www.uk-sh.co.uk](http://www.uk-sh.co.uk) for full details on its ownership and management team. SMTC is UKSH’s first UK hospital.
3. SMTC is a 4,000 square metre surgical hospital. It was built in record time (a 42 week build and 6 weeks commissioning programme). It achieved registration by the Health Care Commission at its first attempt and opened its doors to patients on 18<sup>th</sup> July 2005.
4. The facility has staff who are “additional” to the NHS. The 20 doctors are all on the Specialist Register and come from Europe and the US. The UKSH Specialists are experienced doctors with proven track records in their own countries. Selection was rigorous eg surgeons were selected after in-theatre observations, with roughly 50% being rejected. UKSH recruited doctors who wanted to live in the UK permanently rather than have rotas of “flying doctors”. Nursing staff are a mix from the UK private sector and other parts of the world.
5. SMTC is a modern, purpose-built surgical hospital. It has 4 Operating Theatres, 1 endoscopy room, an on-site sterilisation department, 34 In Patient beds (IP) (mostly double rooms with en-suites), 8 Out Patient (OP) rooms, a Radiology Department (MRI, Ultrasound and x-ray), extensive “point of care” pathology testing, blood bank, as well as a kitchen and cafe.
6. SMTC focuses on a range of routine, elective surgical procedures:

Specialty	Procedures	Volume
Orthopaedics	Primary Joint Replacements	1200
Orthopaedics	Arthroscopies, Carpal Tunnels etc	3000
Ophthalmology	Cataracts (and eye lid procedures)	2500
General Surgery	Hernias, Cholecystectomies, Peri-anal	2500
Endoscopy	Colonoscopies, Gastroscopies	2500

7. SMTC can treat most types of patients. Its patient population is similar to normal NHS hospitals (eg it has provided a total joint replacement for a 96 year old and it can treat patients with a BMI of up to 40), although those with unstable co-morbidities or severe systemic disease need to be treated in an acute hospital with intensive care facilities.

## Activity

1. SMTC undertook a “ramp up” between July – December 2005. During this phase, SMTC initially only saw Out Patients (July), followed by day case surgery (August), then major IP surgery ie primary joint replacements (September onwards). This achieved the safe start of new services according to plan. During this “ramp up”, SMTC saw 4,755 new OP appointments, and provided 2,648 surgical or endoscopic procedures.
2. Since January 2006, SMTC has been running at normal “steady state” operating levels. SMTC has been achieving consistent results monthly:

	January	February	March
<b>Total new OPs</b>	<b>868</b>	<b>703</b>	<b>825</b>
Total Joint Replacement	100	115	115
General Orthopaedics	212	189	199
Ophthalmology	170	157	207
General Surgery	179	175	181
Endoscopy	184	163	190
<b>Total Procedures</b>	<b>845</b>	<b>799</b>	<b>892</b>

3. In undertaking this “steady state” activity, SMTC has achieved:
  - 100% of “contract value” is being delivered on a month by month basis. This means the above number of OPs and procedures equates to fulfilling the contract agreed with the NHS.
  - A 4 day Length of Stay (LOS) for primary hip and primary knee replacements. This is based on 330 cases, roughly 50% hips and 50% knees. A 4 day LOS is a significant national achievement. The NHS average is 8.7 days (HES data 2004/5 – HRGs: HO4, H80, H81).
  - 93% of all procedures (excluding hip and knee replacements) have been undertaken as day cases. This is much better than national NHS rates for these procedures (see [www.hesonline.nhs.uk](http://www.hesonline.nhs.uk)).
  - The wait for treatment (mode time) is 3 weeks for an OP appointment and 11 weeks for the procedure, as measured from the date of referral. This already exceeds the new target of 18 weeks (for OPs and procedure) that the NHS is aiming to achieve by December 2008.
4. SMTC is currently delivering a significant number of procedures – equivalent to a small hospital’s elective surgical caseload. Undertaking nearly 200 procedures per week, including 30 primary joint replacements, is a significant achievement in 4 theatres and 1 procedure room. It represents high productivity per theatre as compared to other UK healthcare facilities. Referrals remain high and SMTC is already ready for “Choose and Book” due to start in December. SMTC is on track to achieve its full contract value later this year (projected August 06)

## Service Delivery and Innovation

1. As a new organisation and facility, SMTC has provided an opportunity to develop a new service delivery model. The philosophy has been to bring together the best elements of the NHS, the US and other countries. The ability to design this model afresh has enabled the development of complete and coherent care pathways. The key elements of this are:
  - Patients are referred from primary care or from NHS “waiting lists” according to a pre-agreed referral process and set of criteria.
  - Patients are asked to telephone the “SMTC booking centre” where they are offered a choice of dates and times for their OP assessment.
  - Patients are sent a health care questionnaire in advance of attending for OPs, which determines the level of “pre-assessment” they receive at OPs. Patients are given individual timed slots for OPs and the average waiting time is 10 minutes.
  - Patients attend on the day of surgery in individually timed slots, ie one hour before their procedure, rather than in “batches”. Virtually all patients are discharged on the day of surgery. All these patients are telephoned the following day to check their status and are followed up in OPs, depending on clinician orders.
2. SMTC has been inclusive in its approach. It takes all patients except those with unstable co-morbidities. It has for example undertaken a hip replacement on a 96 year old patient and has treated people with a BMI of 40. Of those referred, less than 2% are rejected for surgery at OPs, and this decision is purely on clinical grounds.
3. SMTC has also taken great care to run a safe, high quality service. There is a resident medical officer on-duty in the hospital 24/7. During the day, SMTC has a Physician in the ward with access to a Cardiologist. There is also a 24/7 rota of Specialists (surgeons and anaesthetists) who are able to assist. SMTC also has agreed urgent transfer protocols to local acute hospitals for the rare times when a patient needs access to higher levels of care.
4. There have also been a number of clinical innovations. For example, the anaesthetic team (Dr Peter Kimme, Dr Robert Rapcan, Dr Jerzi Minecki, Dr Nils Askelof, Dr Hans Sonderlin) have introduced the following:
  - All Cataract patients have been prepared for surgery with topical anaesthesia (ie eye drops) rather than peribulbar injections or General Anaesthesia. This eliminates the risk associated with periocular needle injections and has permitted operating without stopping blood thinning agents.

- Hip and Knee Joint Replacements have been undertaken with spinal anaesthesia and epidurals. This has promoted faster recovery. Patients are given high levels of intensive physiotherapy – enabling us to achieve the 4 day Length of Stay.
  - Most general orthopaedics (eg hand, feet cases) has been performed with regional or local anaesthesia, reducing the risk to patients, providing greater patient comfort and satisfaction and facilitating earlier discharge.
5. SMTC has been careful to introduce this new model so that it is safe and can assure patients of a high quality service. SMTC will continue to deliver innovation, based on evidence of effectiveness and benefit to patients.

## Clinical Outcomes

1. SMTC aims to provide a high quality clinical service. To achieve this it relies on high quality staff, implementing evidence-based protocols, using the latest equipment and techniques. SMTC underpins this with a robust clinical governance process. This ensures there is systematic collection of clinical data as well as regular reviews of processes and adverse events with the aim of reducing clinical risk.
2. All efforts have been made to collect comprehensive data. Patients, SMTC staff, GPs and local acute hospitals have been encouraged to inform SMTC and refer patients back to SMTC where any problem has arisen. SMTC's policy is to deal with all complications it can do so safely. All patients are given the SMTC 24 hour "help line" telephone number and encouraged to ring if they have any queries or problems. All patients are given a survey on discharge, providing an opportunity to capture data on any subsequent complications.
3. Based on the above collection methods, the overall results for SMTC (18<sup>th</sup> July 2005 – 31 March 2006) from over 5,000 procedures are set out below. Please note that some patients (indicated by \*) refer to multiple events. For example, one of the patients with a PE is the same patient who was transferred to another provider for IP care.

Measure	Number
Unplanned return to theatre during inpatient stay	3
Transfer of patient to another provider for IP care	5*
Deep Vein Thromboses	3
Pulmonary Embolism (PE)	5*
Hospital Acquired Infection (including MRSA)	0
Post Discharge Wound Infection Needing Treatment	6*
Mortality	1

NB: The patient death was an 89 year lady with a total hip replacement who had an acute myocardial infarction on the day she was being discharged.

4. These high level measures provide an indication of the service overall. However, such clinical measures only make sense when looked at in terms of the specialties and the procedures being provided. Attached is therefore a section each on (a) total joint replacements (b) general orthopaedics (c) ophthalmology; (d) general surgery/ endoscopy.
5. SMTC and district general hospitals (DGHs) mostly see the same type of patients ie ASA scores 1-3 (stable). However, DGHs also see a small number of patients with more severe co-morbidities, which makes it hard to compare results directly. With that caveat in mind, SMTC's results (both above and in subsequent pages) nevertheless seem to indicate a good, safe clinical service that is working within and exceeding expected clinical norms.

## Total Joint Replacements

### Surgeons:

The Orthopaedic Team is led by Dr Per Sandquist, one of the leading joint replacement surgeons in Sweden. The team also includes, Mr Klaudiusz Kosowski (UK and Poland), and Dr Frederik Ammitzboell (Denmark).

### Approach:

All patients are seen pre-operatively by the operating surgeon, by a nurse and by a physiotherapist, and are encouraged to attend an extra group education session. Patients are admitted on the day of surgery. Prostheses used are *Zimmer's "Next Gen" knee*, *Stryker's Exeter* (cemented) and with the Trident Cup (Hybrid) and *Depuy's Corail stem and Pinnacle cup* (uncemented). All patients are reviewed at 6-8 weeks in OPs.

### Procedures: (Total = 561)

Primary Hip Replacements (un-cemented):	110
Primary Hip Replacements (cemented):	177
Primary Knee Replacements:	274

### Results

Measure	Total	%
Unplanned return to theatre during IP stay	2*	0.36
Transfer of patient to another provider for IP treatment	5*	0.89
Unplanned re-admission within 29 days of discharge	0	0
Unplanned revision surgery within 5 years	3*	0.53
Mortality	1*	0.18
Acute Myocardial Infarction	1*	0.18
Pulmonary Embolism	5*	0.89
Deep Vein Thrombosis	3	0.53
Cerebral Vascular Event	1*	0.18
Hospital Acquired Infection (including MRSA)	0	0
Post Discharge Wound Infection needing treatment	1*	0.18
Dislocation	2*	0.36

NB: SMTc is also measuring improvement according to the Oxford hip / knee score. These are more long term measures and not yet reportable.

## General Orhtopaedics

### Surgeons:

The Orthopaedic Team includes, Dr Marteinn Magnusson (Hand and Foot Specialist – Iceland); Mr Klaudiusz Kosowski (UK and Poland), Dr Frederik Ammitzboell (Denmark).

### Approach:

All patients are seen pre-operatively by the operating surgeon. Patients are usually seen by a nurse for pre-assessment for surgery. Patients are admitted on the day of surgery, with the expectation that all will be day cases. On discharge, patients are given contact information and encouraged to ring if they have any queries. All patients are telephoned the day after surgery. Most patients are called back for review at OPs at 4 weeks.

### Procedures: (Total 1,276)

Arthroscopies	489
Foot Procedures	271
Hand procedures	492
Other soft bone/ tissue	24

### Results

Measure	Total	%
Unplanned return to theatre during IP stay	0	0
Conversion from day case to overnight stay	2	0.16
Transfer of patient to another provider for IP treatment	0	0
Unplanned re-admission within 29 days of discharge	0	0
Unplanned revision surgery within 5 years	2	0.16
Mortality	0	0
Acute Myocardial Infarction	0	0
Pulmonary Embolism	0	0
Deep Vein Thrombosis	0	0
Cerebral Vascular Event	0	0
Hospital Acquired Infection (including MRSA)	0	0
Post Discharge wound infection needing treatment	0	0
Haematoma needing evacuation	0	0

## General Surgery

### Surgeons:

The General Surgical Team includes: Dr Ben Mak (Holland), Dr Wojciech Czyz (Poland). Three UKSH Hospitalists (all of whom are on the UK Specialist Register) also undertake minor general surgical procedures.

### Approach:

Patients are seen at OPs by the operating surgeon and usually by a nurse. Endoscopies and minor skin procedures are booked directly. All procedures are expected to be day cases except cholecystectomies, which may be day case or IP depending on the patient's recovery. Hernias are undertaken by mesh repair. All cholecystectomies are given ultrasound and Liver Function Tests to determine whether they are laparoscopic or open. Patients return to OPs at 4 weeks, depending to clinician request.

### Procedures: (Total: 2227)

Hernia repair	637
Peri-anal	68
Cholecystectomies	143
Minor GS (skin excisions)	344
Gastrosopies	614
Colonoscopies	421

### Results

Procedure	Measure	Total	%
All	Unplanned return to theatre during IP stay	1*	0.04
	Conversion from day case to overnight stay	4	0.18
	Transfer of patient to another provider for IP treatment	0	0
	Unplanned re-admission within 29 days of discharge	2*	0.09
	Unplanned revision surgery within 5 years	1*	0.04
	Mortality	0	0
	Acute Myocardial Infarction	0	0
	Pulmonary Embolism	0	0
	Deep Vein Thrombosis	0	0
	Cerebral Vascular Event	0	0
	Hospital Acquired Infection (including MRSA)	0	0
	Post Discharge Wound Infection needing treat.	5*	0.22
	Haematoma needing evacuation	1*	0.04
Cholecyst.	Duct Injury	0	0
	Bile leak	2	1.4
	Retained common bile duct stones	0	0
	Bowel injury	0	0
Endoscopy	Significant bleeds	0	0
	Perforation	0	0

## Ophthalmology

### Surgeons:

The Ophthalmic team is led by Dr Melki (The Massachusetts Eye and Ear Infirmary), Dr Moayedi (Sweden), and Dr Molander (Sweden).

### Approach:

All Cataract patients are seen pre-operatively by the operating surgeon and ophthalmic nurse. Complete eye exams including fundoscopy are performed. Biometry is via optical coherence biometry (IOL Master) or via immersion ultrasonic measurement (in cases where the IOL Master measurements are unreliable). All patients are routinely brought back at 4 weeks for follow up.

### Procedures: (Total 1,123)

Cataracts: 760  
Minor Ophthalmic: 363

### Results (Cataracts)

Measure	UKSH Total	UKSH %	UK Nat Audit	AAO PPP
Choroidal expulsive haemorrhage	0	0%	0.10%	NA
Anterior vitrectomy	5	0.66%	4.40%	NA
Corneal oedema	2	0.26%	NA	0.30%
Hyphaema	1	0.13%	0.50%	0.40%
Iris damage from Phaco	1	0.13%	0.70%	0.70%
PC Rupture with vitreous loss	4	0.53%	4.40%	2.68%
Cystoid macular oedema	5	0.66%	0.60%	2.30%
Hypopyon/ Endophthalmitis	0	0%	0.03%	0.73%
Raised IOP	1	0.13%	0.28%	1%
Uveitis	2	0.26%	5.60%	3.10%
Would leak/ Rupture	0	0%	0.25%	0.20%

AAO: American Association of Ophthalmologists

One patient suffered an acute angle closure glaucoma attack the day after her pupils were dilated pre-operatively. The patient was transferred immediately to a local ophthalmology department for further treatment.

There were 2 cases of retinal vascular occlusion (one total and one partial) presumably occurring postoperatively. There is no known clinical correlation between such an event and uncomplicated cataract surgery.

There are still 5 patients with a suboptimal outcome being tested in the NHS. One case is possibly intraocular antibiotic toxicity. The others are still undergoing clinical investigations.

## Patient Satisfaction

1. SMTC has put in place the UKSH patient satisfaction programme with the aim of ensuring a high quality patient experience. This programme encompasses staff selection, staff training as well as regular feedback to staff on the patient satisfaction results, partly to motivate but also to ensure any weaknesses are addressed.
2. The service delivery is designed to support this programme:
  - good travel directions with easy and ample car parking,
  - one-stop OP visits (ie all diagnostics taken on the same day),
  - timed visits so patients do not wait for OPs or surgery,
  - on-site kitchen preparing healthy cuisine with fresh ingredients,
  - double rooms with en-suite facilities.
3. All surgical patients are provided with a patient satisfaction questionnaire which they can return in the post subsequent to their treatment. The response rate is approximately 40%.
4. Patients reply to 10 questions according to a scale of 1 (bad) to 5 (excellent). SMTC measures satisfaction as including all responses graded 4 and 5. Replies to date (2010) indicate the following:

Question	%
Q1-How long did you wait after you had chosen to come to the Treatment Centre?	85
Q2-Were our booking staff helpful and efficient?	97
Q3-Was it easy for you to get to and park at the Treatment Centre?	78
Q4-How long did you have to wait before you were seen at Out Patients?	87
Q5-Did the Out Patient staff meet your expectations?	94
Q6-How long did you wait on the day of surgery?	82
Q7-Did the surgical staff meet all your expectations?	97
Q8-Did the ward staff (nurses, physios) meet your expectations?	94
Q9-Did the catering meet your expectations?	69
Q10-Was the Treatment Centre welcoming and clean?	99
<b>Would you recommend the Treatment Centre to a friend?</b>	<b>(Yes) 98</b>

6. The overall ratings are high in all areas. Of particular note is that 98% of patients would "recommend SMTC to a friend". This is a question also used by other healthcare organisations enabling comparisons to be made between providers.

### Contact Points

SMTC would welcome feedback on this report. It actively encourages feedback and comments. The following people would be keen to hear from you if you have comments on this report.

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Further details on SMTC and UK Specialist Hospitals are available on its website: [www.uk-sh.co.uk](http://www.uk-sh.co.uk).