Queen Alexandra Hospital was originally built in 1908, serving as a military hospital until the 1920s. In 1960, it became a District General Hospital, and in 2005 agreement was reached for a Private Finance Initiative (PFI) funded build, which was completed in 2009. Our new hospital currently provides acute and specialist healthcare to over 500 000 patients a year.

The current hand surgery team was formed approximately 9 years ago, during which time elective orthopaedic work was based at the Royal Hospital Haslar, eight miles from the base hospital. Subsequently, our work has evolved considerably: initially we were using mainly general anaesthetics for patients who were admitted for an overnight stay after surgery. The service is now predominantly same day practice, delivered by using awake regional and local anaesthetics techniques wherever possible. The military links remain, with the hand surgery unit incorporating two armed forces medics.

Since the move to our new PFI building in June 2009, we have found a new home in the day surgery unit. The ward, operating theatre and recovery are all in close proximity which allow us to continue to function efficiently and optimise and improve our service to patients.

The day surgery unit is housed within the main hospital complex, and delivers a wide variety of ambulatory services including orthopaedics, renal, gynaecology, general surgery, ear nose and throat surgery and ophthalmology. A separate facility houses paediatric surgical practice.

Since we have moved to our new clinical home, approximately 1500 hand surgery patients have been managed through the day surgery unit annually, with over 90% as day cases.

Initially, patients are seen in clinic by one of our team of hand surgeons. If they are over 60 years of age or have co morbidities, a telephone or face to face consultation is arranged with a nurse practitioner trained in pre operative assessment.

More difficult cases are discussed directly by the surgeon and anaesthetist.

The waiting list is managed by the hand surgery secretaries who reside within the orthopaedic department. Currently cases are booked to a specific surgeon wherever possible, with some overlap and pooling of patients. Excellent communication exists between the surgeons, theatre nurses and anaesthetists. This allows multidisciplinary planning for unusual technical problems or medically challenging patients from surgical, scrub team and anaesthetic perspectives.

The aim is to reduce same day cancellations.

Admissions are staggered throughout the day to reduce patient waiting times in hospital, improve throughput and avoid demand/capacity mismatch and queuing on the ward.
Patients are asked to arrive on the day of surgery at 0730 for the morning list, and 1200 for the afternoon.

Patients are reviewed before surgery by the senior medical team, and a final plan for anaesthesia and surgery agreed. Patients are then changed and sit in a special waiting area before being escorted to the block room by a member of the team. We most commonly perform a brachial plexus block under ultrasound guidance to provide surgical anaesthesia. Often this is in addition to more peripheral nerve blocks with longer lasting local anaesthetic for post operative analgesia.

Once a block has been undertaken, patients are either transferred straight into the operating theatre, or more commonly to the second stage recovery unit to allow the block to intensify. Once a block has been established, patients are moved into the operating theatre, and preparations for surgery commenced.

On completion, third stage recovery provides a drink and snack before a nurse led discharge process is followed. Patients are reviewed by medical staff whenever required.

Our achievements to date

We have established a designated hand surgery operating theatre within the busy day surgery unit of our new hospital, which took considerable negotiation to achieve. We no longer use anaesthetic rooms in Portsmouth, and have therefore established our local anaesthetic block room. We believe this to be one of the first in the UK. This is a separate room in which we house all the equipment needed to establish regional anaesthetic blocks, including a dedicated ultrasound machine and resuscitation equipment. The block room has on display detailed anatomical diagrams of the brachial plexus and nerve supply to the upper limb. They were produced in collaboration with our medical illustration department. The block room is also decorated with calming pictures and posters for our patients. Until this room was developed, we struggled to provide adequate staffing of a separate area further from theatre. As a result of the block room, safety, efficiency and patient experience have improved significantly.

We have developed patient information leaflets about awake hand surgery which are given during pre assessment. Information on the care of the numb arm is also supplied, including ‘warning’ labels which we routinely stick to wound dressings.

We developed this routine practice following a critical incident.

WARNING!
Numb arm
You may damage your arm on hot drinks and sharp objects

We were invited to speak about the development of our hand surgery service at the British Association of Day Surgery Annual scientific Meeting in Portsmouth, 2010.

The service has been hugely supported by local volunteer organisations. Following a successful bid, the League of Friends provided the money to purchase an ultrasound machine to be housed in the block room for hand surgery use. The Patient Experience Council have provided finance.
to purchase an iPod for patients, to entertain them with a wide variety of music, stories and comedy while waiting for their local anaesthetic blocks to take effect.

There is a good ‘hand surgery team spirit’ and we arrange regular team building events throughout the year, from impromptu afternoon tea and cakes to a regular curry evening at the end of a list.

Evolving the Service Further

We have developed pocket anatomy leaflets as a guide for anaesthetists to improve the management and post operative analgesia of hand surgery patients. These have been distributed around both the Wessex region and nationally.

We are establishing an upper limb regional anaesthesia master class primarily for the Wessex region, with a successful first course in January 2011. This course aims to teach all aspects of upper limb regional anaesthesia, with live scanning and observation of a wide variety of blocks.

We aim to continue to develop our local anaesthetic techniques, and are currently using a combination of short acting brachial plexus blocks for surgery and peripheral longer lasting blocks for post operative analgesia. We also continue to expand our use of brachial plexus catheters for longer lasting post operative analgesia.

For further information and to arrange a visit to the unit please contact:

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Figure 6 Photo of the team.