Operating Theatres: Information for visitors and work experience students

The operating theatres are a very important part of a hospital. Some operations need a large amount of equipment and a large number of trained staff. Each operating theatre specialises in a particular surgical specialty. During your work experience you may be invited to watch and learn about how theatres work, and how patients are cared for within the theatre complex. Think about the patient and the process: How is safety maintained? How does this operation fit into the patient’s life?

• **Beforehand**
  - Work experience students need to complete the appropriate application process and forms from the Human Resources department before starting. You need to check with the process before starting your work experience.
  - Many Trusts have a minimum age of 17 for anyone (except patients) in the operating department.
  - Remember that you should respect each patient’s right to confidentiality and dignity.
  - Some people feel faint when they watch an operation – remember to have breakfast.
  - Bring any snacks you want during the shift – it is difficult to leave the theatre suite during the shift.
  - No wrist watches
  - No dangly earrings
  - Don’t bring valuables in
  - You might want to bring in a notebook to write down questions you want to ask
  - Visitors/students may want to bring in a book/magazine. Some operations go on for a very long time, and you can take a break without missing much.
  - If you are also going to wards or clinics, you should dress according to the Trust Uniform policy, including “bare below the elbows”

• **On arrival**
  - Visitors should sign in with the theatre reception. You will be shown where to change:
    - top and theatre bottoms (different sizes are available)
    - Keep your underwear on. (Socks too, if you want.)
    - Theatre cap (to cover all hair)
    - Theatre shoes
    - Please wash your hands before starting, and between patients.
  - Name badge / identification badge should be worn at all times
  - Keep any valuables with you, or ask if there is a locker
  - Most people leave their snacks in the kitchen area of the theatre suite
  - Remember – you can go back to the changing room and toilets at any time.

• **During your time in the operating theatre**
  - Staff will show you how to put on your mask, and remove it afterwards
  - Do not do anything you have not been trained to do
  - You can leave at any time
  - You can go to the toilet / changing room
  - You can go to the coffee room (please wash up your cup afterwards)
  - If you feel sick or faint: tell someone and sit down; leaving the theatre may be necessary.
  - Do not touch anything “sterile”
  - Many staff (not just your supervisor) will be happy to answer your questions most of the time. Be sensitive that some times of the operation/anaesthetic get a bit tense.
Organisation of operations
It makes best use of the skilled team to put similar operations together. The list of patients to be operated on, with all their details, is called an “operating list”.

There are many considerations planning a list – you may want to think about these: Where should specialist equipment go? Are X-rays needed during the operation? How does the team cope with co-ordinating operations that take longer or shorter than planned or where unpredicted things happen?

Trained staff in theatres include nurses, doctors and Operating Department Practitioners (O.D.P.s) who are registered with the Health Professions Council (H.P.C.).

What is an anaesthetic?
Anaesthesia is a whole specialty in medicine, which looks after patients’ physiology (bodily functions) while they are unable to look after themselves. Sometimes different medications are used to reduce pain or reduce consciousness (awareness). An Anaesthetist is a doctor who has had extra specialist training in anaesthesia. Most anaesthetics are administered in a separate room – the “anaesthetic room”, and the patient is wheeled into the adjacent operating theatre after this. There are several types of anaesthetic:

"G.A." = General Anaesthetic
The patient is unconscious. The patient is put into a medically induced coma, which is reversed at the end of the operation.

Regional anaesthetic
Only a part of the patient is affected. The Anaesthetist puts injections around the nerves that supply one part of the body.

An Epidural is when a needle is put in the back, to numb the lower half of the body. It may be used when a woman is having a Caesarean Section for delivery of her baby.

"L.A." = Local Anaesthetic
Injections are put around the part to be operated on to make that area go numb. The patient stays awake.
**Stages of an operation**

All operations are slightly different.

<table>
<thead>
<tr>
<th>Typical stages</th>
<th>Explanation</th>
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<tr>
<td>Positioning</td>
<td>Of the patient, exposing the operation site and protecting other parts</td>
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<tr>
<td>Tourniquet</td>
<td>If an arm or leg is being operated on, this squeezes out some blood</td>
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<tr>
<td>Prepping of patient</td>
<td>Painting the operation site with antiseptic solution</td>
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<tr>
<td>Draping of patient</td>
<td>Covering the whole patient with sterile towels, leaving only the operation site exposed.</td>
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<tr>
<td>Incision</td>
<td>Cutting the skin</td>
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<tr>
<td>Approach</td>
<td>Moving through the layers of muscle, avoiding nerves and blood vessels</td>
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<tr>
<td>Findings</td>
<td>Locating the abnormality, and checking it is as the tests before suggested.</td>
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<tr>
<td>Procedure</td>
<td>Taking something out or rearranging the anatomy, testing it will work, fixing everything, etc. This is the main part of the operation.</td>
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<td>Drains</td>
<td>Putting in temporary plastic tubes to drain away any excess fluid/blood.</td>
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<tr>
<td>Closure</td>
<td>Using stitches or staples to close the layers of muscle, fat and skin.</td>
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<td>Splints</td>
<td>Sometimes if the surgery is a little delicate, it has to be protected until the patient is strong again. (Eg after repairing a tendon.)</td>
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**Adjuncts**

You might see some things being used:

**Endoscopic surgery**

Many operations can be done using telescopes. The telescope is put into a space (eg knee joint or abdomen) and another "portal" is put in, so the surgeon can move instruments around.

**Diathermy**

This is an electric current that seals off the ends of blood vessels, to stop bleeding. It makes a "buzzing" sound when in use.

**Suction**

This is a plastic tube to suck fluid or blood out of the operation site, so the surgeon can see all the structures.

**Lights**

These have to be in the right place, and focussed, so the surgeon can see what s/he is doing.

**Xray**

Some operations use Xrays, to check positions of bones or implants.

**Magnification**

Some surgeons operate using microscopes (eg for eye surgery)