How can I help to reduce healthcare associated infections?
Infection control is important to the well-being of our patients and for that reason we have infection control procedures in place. Keeping your hands clean is an effective way of preventing the spread of infections. We ask that you, and anyone visiting you, use the hand sanitiser available at the entrance to every ward before coming into and after leaving the ward. In some situations hands may need to be washed at the sink using soap and water rather than using the hand sanitiser. Staff will let you know if this is the case.

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Laparoscopic (Keyhole) Surgery

If you want to read this leaflet in another language please call Ward 16B on 01296 414111/
What is Laparoscopic Surgery?
Laparoscopic or keyhole surgery is a method of performing surgical procedures (operations) through very small incisions through the abdomen (tummy) using a thin telescope called a laparoscope under a general anaesthetic in theatre. The advantages of performing laparoscopic surgery are that no large cut needs to be made through the abdominal wall (as with conventional surgery) and because there is less handling of the abdominal organs and tissues, they are less traumatised. Also, because the abdominal incisions are small, the time spent in hospital after surgery is usually only 24-48 hours and the recovery period is usually much shorter, between 2-4 weeks. Other benefits of laparoscopic surgery are:

- less wound complications including infection and gaping of the wound;
- generally patients have less postoperative pain and less risk of blood clots in the legs as getting mobile again after keyhole surgery is usually quicker.

What happens before the operation?
You will have discussed the need for your operation with your gynaecologist before the procedure. An appointment will be made for you to attend a pre-assessment clinic at least a week before your inpatient operation. This appointment will give us an opportunity to check you are fit for the operation. We will carry out routine blood investigations and possibly other tests such as a chest X-ray if required. If necessary you may be asked to take some medication a day or two before the operation to help clear the bowel, particularly if the surgery involves the bowel. The pre-assessment appointment will give you an opportunity to discuss your operation further and may take about an hour.

You will be admitted to the ward the day of your operation and your gynaecologist will explain the operation again to you in

Follow up
After you have been discharged home from the ward a follow up appointment may be made for you to see your gynaecologist or your GP.

Please Note:
This leaflet explains some of the most common side-effects that some people may experience. However, it is not comprehensive. Please also read the leaflet ‘Going Home after Laparoscopic Surgery’. If you experience other side-effects and want to ask anything else related to your treatment please speak to Ward 16B at Stoke Mandeville Hospital on 01296 418110/418111 or Day Surgery at Wycombe Hospital on 01494 526161.

Useful Contact Numbers
Stoke Mandeville Hospital (SMH)
Consultant Gynaecologists: 01296 316239/316548
Wycombe Hospital (WH)
Consultant Gynaecologists: 01494 425009/425724

We are always trying to improve the quality of information given to patients. If you have any comments or suggestions regarding this information booklet, please contact:

Division of Women, Children & Sexual Health Services
Buckinghamshire Healthcare NHS Trust
Stoke Mandeville Hospital
Mandeville Road
Aylesbury
Buckinghamshire
HP21 8AL
When can I eat and drink after surgery?
After the surgery you will be able to drink fluids when you are ready. If you do not feel sick you may have something light to eat quite soon after the operation.

What will happen to my wounds?
You will usually have 3 or 4 incisions in your abdomen. These will have been closed with dissolvable stitches. However, if, after 5 days your stitches have not dissolved, please make an appointment to be seen by the Practice Nurse at your doctors (GP) surgery for the stitches to be removed.

When can I drive?
You should be able to return to driving about a week after your operation, though for some patients it can be more than a week before they are ready. You should only resume driving when you feel comfortable at the controls and are always in full control of the vehicle.

When can I resume normal activities?
You may begin gentle activities 48 hours after the operation, but will need to wait longer to start more strenuous activity. Your recovery will generally be quicker if you remain active after your operation. This also helps to prevent complications of immobility.

When can I return to work?
Laparoscopic surgery usually allows patients to return to work quicker than for the same operation performed by conventional surgery. Generally patients should be able to return to work after 2-4 weeks and sometimes before this depending on how you feel.

detail, discuss any further worries that you have and will ask you to sign a consent form if you have not done so. An anaesthetist will also see you to explain in detail the anaesthesia for the operation.

How is laparoscopic surgery done?
You will be given a general anaesthetic for the operation. In order to perform laparoscopic surgery a small cut is made within the umbilicus (belly button) and the abdomen filled with a gas (carbon dioxide). The gas creates a space in which the surgeon can operate. A laparoscope is then passed through a small hollow tube inserted into the umbilical incision. The laparoscope is connected to a small camera system and linked to a video monitor screen. This allows the surgeon carrying out the operation to see inside the abdomen while undertaking the surgery. Due to the magnification of the laparoscope the precision of surgery is increased.

Generally two or three more small incisions are made in the lower part of the abdomen, and long narrow instruments are inserted through further small hollow tubes to aid in performing the actual surgery.

All surgery can result in some adhesions (scarring) within the abdomen though this is generally less with laparoscopic surgery. Adhesions may cause organs within the abdomen to stick to each other or the peritoneum (the skin covering the inside of the abdomen). Formation of adhesions may be reduced by leaving a small amount of fluid in your abdomen after your surgery. This fluid will be absorbed over 1-2 days.

Once the operation is completed your surgeon will release the gas from your tummy, remove the hollow tubes and then stitch up the incisions with absorbable stitches.

You will usually be given a dose of antibiotics whilst you are unconscious.
What operations can be done by laparoscopic (keyhole) surgery?
Many of the operations that are performed by ‘open’ or conventional surgery can be carried out by laparoscopic surgery. These include:

- Treatment of endometriosis – by excision, laser or diathermy (heat treatment);
- Ovarian cystectomy – removing cysts from the ovary;
- Oophrectomy - removal of the ovary;
- Salpingectomy - removal of the fallopian tube;
- Salpingo-oophrectomy – removal of the fallopian tube and ovary;
- Ovarian drilling - treatment for polycystic ovaries;
- Tubal surgery - treatment for tubal infertility;
- Laparoscopic assisted vaginal hysterectomy, laparoscopic hysterectomy – removal of the uterus (womb), laparoscopic subtotal hysterectomy—removal of the womb but retention of the cervix.
- Treatment of ectopic pregnancy;
- Adhesiolysis - separating scar tissue around the abdominal organs;

Recovery after the operation
After the operation you will wake up in the recovery room and usually have a drip of fluid in one of your arms (to provide nourishment until you can eat) and an oxygen mask on your face. A nurse will monitor your pulse and blood pressure regularly. When you are ready you will be taken back to the ward.

What are the possible risks and complications of laparoscopic surgery?
All operative procedures have an element of risk though, by and large, the risks from laparoscopic surgery are less than those of open surgery. The main risks from laparoscopic surgery are potential damage to the internal organs - bowel, bladder, vessels and ureters (the tubes carrying urine from the kidneys to the bladder). These risks are of the order of 1-3 per 1,000 operations. One woman in every 12,000 undergoing laparoscopic surgery may die as a result of complications.

Other potential complications from the operation are bruising and shoulder tip pain due to some residual gas used during the procedure.

If there are problems during the surgery, such as bleeding, this can usually be treated using the laparoscopic instruments. However if this is not possible then a longer incision may need to be made in the abdomen (usually at the bikini line) and the operation can then be completed. This would mean a longer stay in hospital (approximately 3-5 nights) and a longer recovery time of 4-6 weeks.

Risk occurs in all forms of surgery, including laparoscopic surgery, and tends to be increased by coexisting medical problems such as diabetes, high blood pressure or certain drugs, as well as previous abdominal surgery. Being overweight makes the procedure more difficult and therefore increases overall risk. If you have any medical problems or are overweight, do discuss these fully with your doctor before your operation.

Are there any alternatives to laparoscopic surgery?
All operations carried out as laparoscopic surgery can also be performed using conventional (open) surgery.

Will I have pain after the operation?
Any patient who has surgery will have some pain afterwards and this includes patients who have laparoscopic surgery. However pain will be less than for open or conventional surgery. You may also have some discomfort under your ribs and around the shoulder blades which should subside after a