Department of Respiratory Medicine
Nevill Hall Hospital
Brecon Road
Abergavenny
NP7 7EG

GIG CYMRU NHS WALES
Bwrdd Iechyd Prifysgol Aneurin Bevan University Health Board

Bronchoscopy information leaflet

A bronchoscopy has been arranged for you. Please read the information leaflets provided and follow the instructions below.

Please attend **Llanwenarth Suite (Day Surgical Unit), Nevill Hall Hospital, NP7 7EG**

On: …… At: ……

Preparation for the procedure

- Please ensure that you have informed the doctor arranging the test of all medication you take. Of particular relevance are any medications that thin your blood, such as Clopidogrel and Warfarin.
- Please do not wear any jewellery, make up or nail varnish as this may affect the monitoring equipment that we use.
- Please do not eat anything from 4 hours before your appointment time above. You may have clear fluids (e.g. water) up until 2 hours before your appointment time but nothing to eat or drink after this.
- Following your arrival in the Llanwenarth Suite you will be seen by a nurse who will run through pre-procedure checks.

The procedure itself

- Your bronchoscopy will be performed about an hour after your appointment time. Please be aware that there can be some delays, and expect to be in the department a few hours.
- The test itself takes 20 – 30 minutes to perform.
- Please read the attached information patient information leaflet for details of the test.

After the procedure

- You will be kept in the recovery area for about an hour after the procedure.
- Once your throat is no longer numb you will be given something to drink and then allowed home. You can then eat and drink normally.
- Because the sedative can affect your judgement and behaviour slightly, even if you are feeling fine in yourself you should not drive, operate any dangerous machinery or enter into any legally binding agreements for 24 hours after your bronchoscopy. Travelling by public transport or attempting to return to work is also not advised. You will require a responsible adult to accompany you home and remain with you for the night.

Results

- The doctor who arranged your test will make/have made arrangements to inform you of results of the bronchoscopy. You are unlikely to receive results on the day of the test.

Contact details

- If you are unable to attend the bronchoscopy, or would like to contact the department regarding the procedure, please contact us on 01873 732096.

Directions:

By car: Address for Sat Nav – Brecon Road, Abergavenny, NP7 7EG

Nevill Hall is situated on the western outskirts of Abergavenny on Brecon Road on the A40 and is clearly signposted on all incoming road links.

From the South / M4

From the M4 travelling east

1. Take junction 26, the A4051, to Cwmbran.
2. Continue North up Malpas Road, and take the right turn at the roundabout on the end onto the A4042 to Abergavenny. Follow the signs to Abergavenny.
3. Just South of Abergavenny (after about 18 miles) is a large roundabout (the Hardwick roundabout) take the first left off this, the A465, the Heads of the Valleys road.
4. Take the first left again and turn right at the "T" junction into Abergavenny.
5. Continue straight through the next roundabout by Waitrose and then straight-ahead at the next, ignoring the right exit into the town centre.
6. Continue straight on turning left at the next small roundabout. The hospital is on the left a few hundred yards along this road.

From the M4 travelling west

- Take junction 25A the A4042 to Abergavenny, then continue as from **No 3** above.

From the North

- The main road into Abergavenny from the north is the A4042 from Hereford.
- Follow this road to its junction with the A465 (The Hardwick Roundabout) and then continue as from **No 4** above, taking the fourth exit of the extended roundabout onto the A465.

From the East

- The main road east into Abergavenny is the A40/A449 linking with the M50 from the Midlands, and Chepstow.
- Follow this road until its' junction with the A4042 and A645 at the Hardwick Roundabout and then continue as from **No 4** above, taking the second exit onto the A465.

From the West

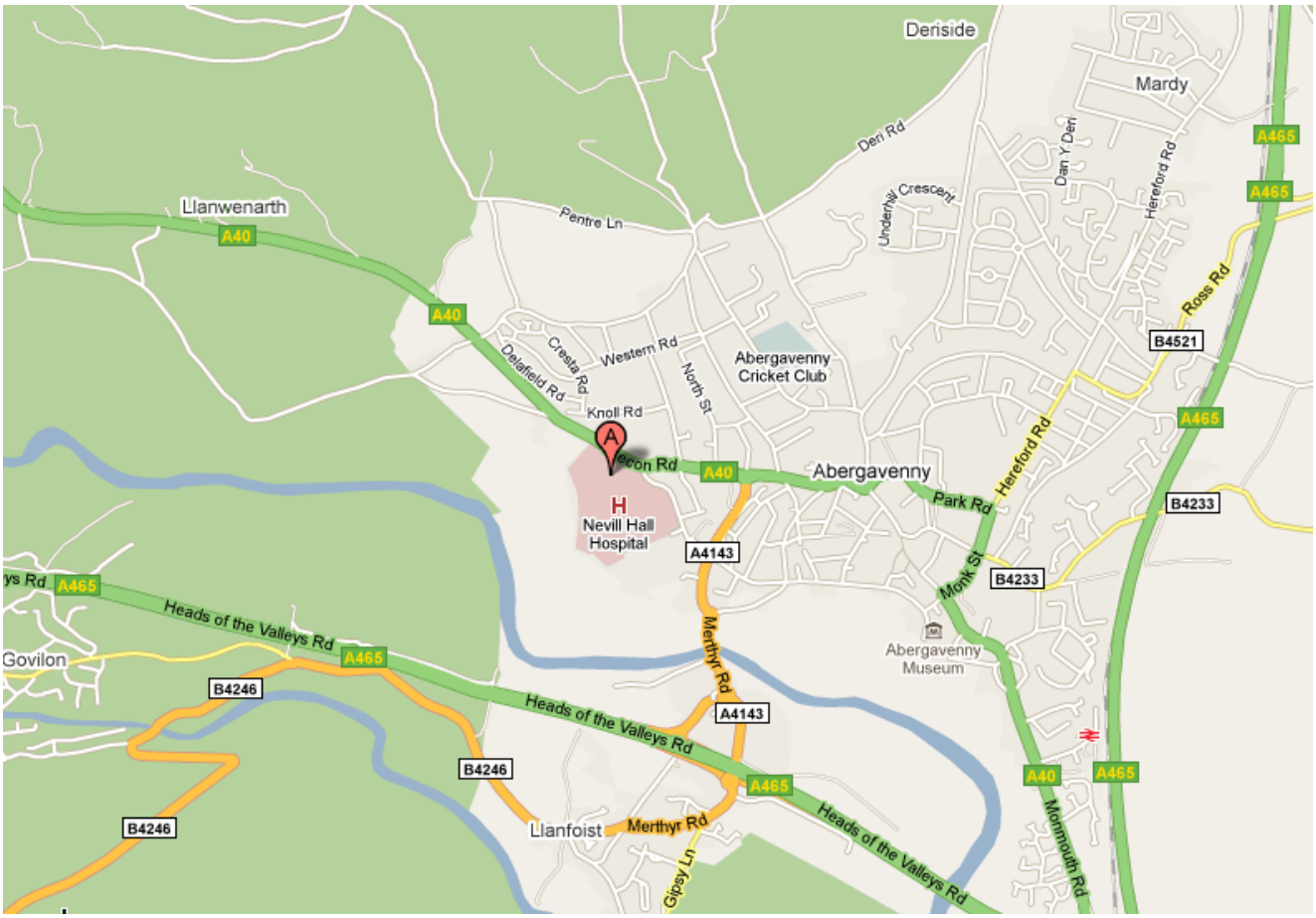
- The hospital is situated on the A40 the main Brecon / Abergavenny road on the right as you enter the town.

- **By public transport.**

  Abergavenny is on the main west coast train line from Swansea and Cardiff to Hereford and beyond. The train station is about a mile from the hospital, on the other side of the town, and a taxi will be needed.

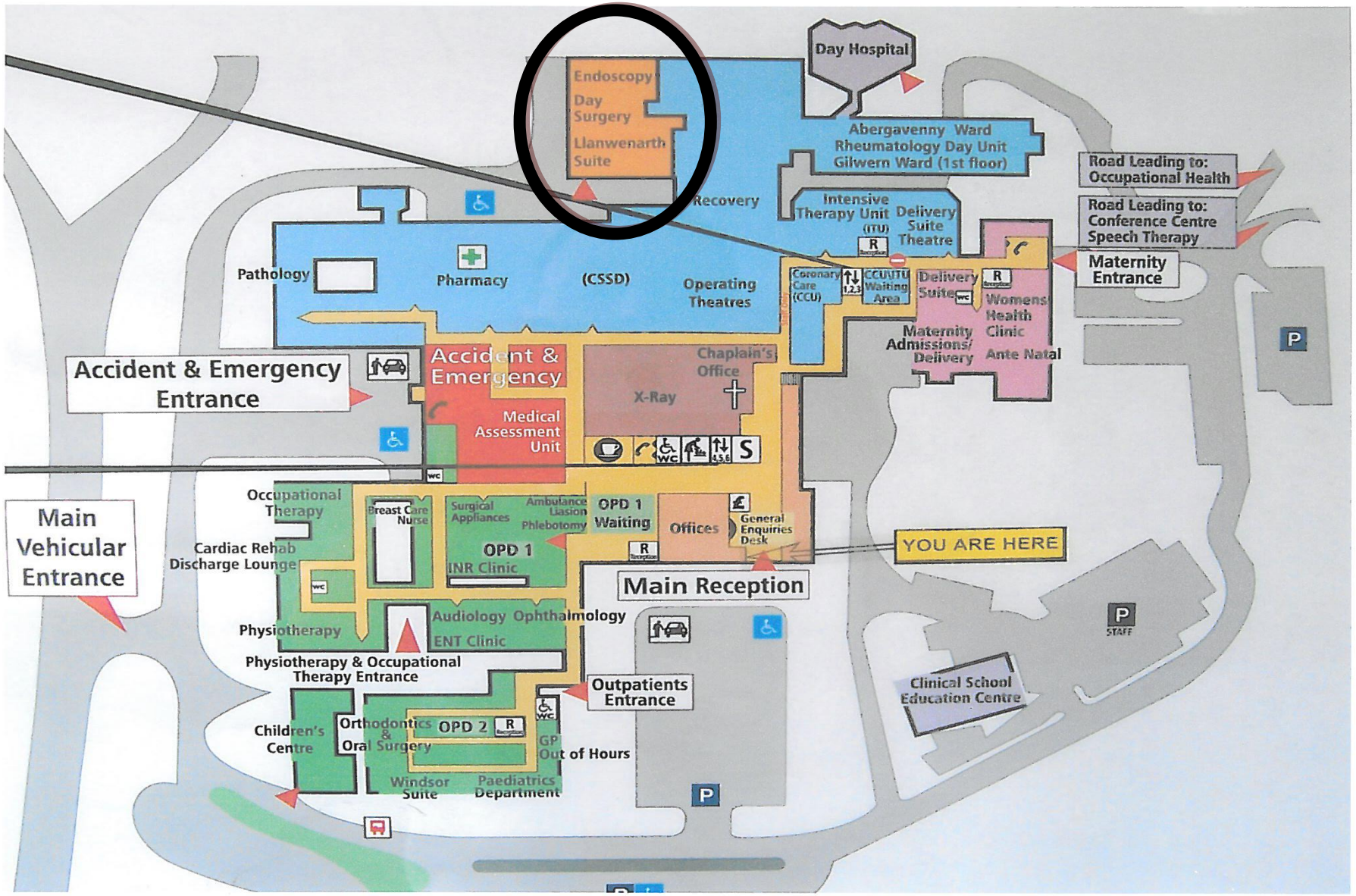
  The number 40 bus runs from the bus station in the town centre to the hospital starting at 7:30am, and then hourly from 8:00am until 6:00pm.

  The bus from Abergavenny to Cardiff via Merthyr, also runs hourly from 07:35am to 20:35pm, through the hospital grounds. (*Please note, the bus timetable is subject to change*).



- **Parking**

  Parking is free on the hospital site, However, parking spaces are often limited due to the number of patients and visitors attending the hopsital. We suggest that you arrive early in order to secure a parking space well in time for the procedure.



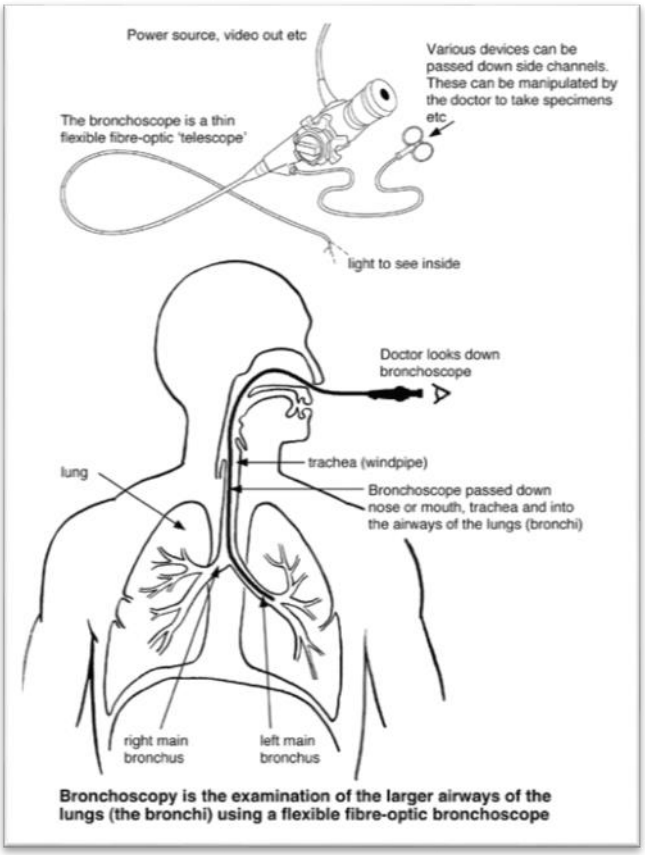
Llanwenarth Suite [Venue for bronchoscopy]
Circled in black

Patient information leaflet
Bronchoscopy including endobronchial ultrasound (EBUS)

Bwrdd Iechyd Prifysgol Aneurin Bevan University Health Board

Your doctor has suggested you have a bronchoscopy, what is it?

A bronchoscopy is an examination of the breathing passages/tubes (airways) of your lungs. The bronchoscopy is done with a thin tube-like instrument with a mini camera at its tip, called a bronchoscope. The bronchoscope enables your doctor to see inside the breathing passages of your lungs and if needed take samples of mucus (phlegm) or tissue from inside your lungs.



Bronchoscopy is the examination of the larger airways of the lungs (the bronchi) using a flexible fibre-optic bronchoscope

With EBUS, a small ultrasound probe on the end of the camera allows the doctor to see the glands in the centre of the chest (mediastinum) and take samples under direct vision.

Why do I need this test?

Some of the common reasons why bronchoscopies are done include:

- **Infection:** Specific samples from your lungs can help your doctor to find the causes of infections and give you appropriate treatment. Your doctor can also use the bronchoscope to clear some of the mucus from your breathing passages.
- **Bleeding**: Your doctor can look inside your airways to determine where the blood is coming from that you are coughing up.
- **An abnormal CT scan**: There may be abnormalities in the airways, lung or centre of the chest (mediastinum), for which a bronchoscopy allows us to take small samples to find the cause.

Is there an alternative test that I can have instead of the bronchoscopy?

Other tests such as x-rays may give some information about the lungs, but only a bronchoscope can allow the doctor to see inside the airways and take samples.

What happens during the procedure?

This test may be done under sedation. If so, a combination of two sedatives is given, one of these also helps reduce coughing. To administer these medications a needle will be inserted into your hand/arm. Some patients go off to sleep more or less completely, others simply find that they feel comfortable and relaxed. Following sedation you may not remember anything about the test.

Some anaesthetic gel may be applied into your nose and anaesthetic spray will be gently put in the back of your throat – there may be a taste similar to bitter bananas. There will be a different sensation to breathing and swallowing as the throat becomes temporarily "frozen" (very much like the tooth at the dentist when an anaesthetic is injected) but you will be able to breathe and swallow normally (it may just feel a little different). If you have secretions in your mouth or throat, it is easiest just to swallow them down normally. It is also fine to cough, which will subside later during the procedure.

The doctor will then pass the bronchoscope through your nose or mouth and spray more local anaesthetic, if required, on your throat and voice box through a small channel in the bronchoscope. This may cause you to cough. When your throat is numb, the doctor will pass the bronchoscope into the airways and inspect these passages (this can cause a tickling sensation and you may cough a little). Do not worry if this happens - more local anaesthetic may be put into the airways to prevent further coughing.

Samples can then be taken during the bronchoscopy to provide further information. These may include:

- **Biopsies:** The painless removal of a small piece of tissue using tiny forceps passed through the bronchoscope.
- **Brushings:** A tiny brush passed into the airways to collect samples of tissue.
- **Washings:** Fluid is run into the lungs and sucked back into a collection pot.
- **Transbronchial lung biopsies**: A sample of lung tissue taken from deep within the lungs.
- **Fine needle aspiration**: EBUS is used to guide the passage of a tiny needle through the airway wall into tissues beyond.

You may be given oxygen via a small foam padded tube placed just inside your nostril during, and for a short time after, the procedure. Your oxygen levels and pulse will be monitored continuously by a probe attached to your finger and sometimes a heart monitor (ECG) might be used. The whole procedure takes about 20-40 minutes depending on how many samples are taken. The doctor and nursing team will support and reassure you throughout.

Are there any after effects?

It is common for patients to have a minor sore throat which settles down quickly. You may cough up a little blood after the examination and this should not alarm you. You may also feel a bit feverish after the procedure. This does not mean you have an infection, and should respond to paracetamol. All these symptoms usually settle within 24 hours. If they are severe or prolonged you should seek medical attention.

Can anything go wrong?

Bronchoscopy is a safe procedure with little risk and complications are relatively rare. Minor complications can occur up to one in 100 procedures and can include:

- Reduced depth of breathing due to sedation
- Spasm of the vocal cords due to the local anaesthetic
- Feeling faint or nauseated
- Wheezing and breathlessness
- Air leakage outside the lung (pneumothorax) which can be left to settle or sometimes requires tube drainage

Major complications can occur up to one in 800 bronchoscopies and can include:

- More severe breathing difficulties
- Unusual heart rhythms (arrhythmias)
- Chest infection (pneumonia)
- Fluid on the lung (oedema)
- Significant bleeding

If you have a transbronchial lung biopsy there is a one in 25 risk of pneumothorax (deflation of the lung) which may be left to settle or require tube drainage. If you require this particular test (most patients do not) you will be warned in advance of this risk, and you will be have an X-ray after the test to check that the lung is fully inflated

The risk of death is extremely low (from 0 to 1 in 5000 cases).

Your feedback is encouraged.

We are keen to make bronchoscopy as straight forward and as comfortable as we possibly can. Please feel free to make any suggestions for improvements to your doctors or nurses.

Aneurin Bevan Health Board
Consent Form: BRONCHOSCOPY

Patient identifier/label

Patient Agreement
To Investigation or Treatment

Summary of procedure: A camera is passed through the nose or mouth into the lungs. After inspection of the airways various samples may be taken. These include: washings or lavage, a sterile solution is injected into the lungs and then sucked back up; brushings, a brush is passed over an area of abnormality; mucosal biopsies, small pieces of tissues are taken from the airways; transbronchial lung biopsies, pieces of tissue from deep within the lung are taken; and transbronchial needle aspirates, a needle is passed into a gland or tumour on the other side of an airway.

1) Statement of patient/parent (You have a right to change your mind at any time, even after you have signed this form).

I have read and understand the information in the attached booklet, including the benefits and any risks.

I agree to the procedure described in this booklet and on the form. **I understand** that you cannot give me a guarantee that a particular person will perform the procedure. The person will, however have appropriate experience. When a trainee performs the examination it will be undertaken under the supervision of a fully qualified practitioner. I **understand t**hat I will have the opportunity to discuss the details of anaesthesia with an anaesthetist before the procedure, unless the urgency of my situation prevents this. (This only applies to patients having general or regional anaesthesia.)

If you would like to ask any further questions please do not sign the form now. Bring it with you and you can sign it after you have talked with a healthcare professional.

Signature ..... Name (print) ..... Date .....

2) 2) Statement of health professional (to be filled in by health professional with appropriate knowledge of proposed procedure, as specified in consent policy). In response to a request for further information I have explained the procedure to the patient/parent. In particular I have explained:

The intended benefits:

- Diagnose your symptoms or lung abnormality.

Significant, unavoidable or frequently occurring risks:

- It is not uncommon to experience a sore throat, sense of fever or cough up small amounts of blood after the procedure. These will normally settle down over a few hours.
- Complications are generally rare (occurring in less than 1 in 500 to 1000 procedures). These include problems with breathing: wheeze, spasm of vocal cords, lung infection or fluid on the lung; problems with heart function and circulation: feeling faint due to low blood pressure or unusual heart rhythms; and severe bleeding.
- With transbronchial lung biopsies there is a greater risk of bleeding (1 in 50) and of pneumothorax or air leak (1 in 25) rarely would this require a tube to be inserted to drain the air from the chest.
- Serious complication resulting in death (very rare, less than 1 in 5000).

I have also discussed what the procedure is likely to involve, the benefits and risks of any available alternative treatments (including no treatment) and any particular concerns of those involved.

This procedure will involve: ☐ general and/or regional anaesthesia ☐ local anaesthesia ☐ sedation

Signed ..... Date .....

Name (print) ..... Job Title .....

3) Statement of interpreter (where appropriate) I have interpreted the information above to the patient/parent to the best of my ability and in a way which I believe s/he/they can understand.

Signed ..... Date .....

Name (print) .....

4) Confirmation of consent (to be completed by a health professional when the patient is admitted for the procedure, if the patient/parent has signed the form in advance). I have confirmed that the patient/parent understands what the procedure involves, including the benefits and any risks. He/she has no further questions and wishes the procedure to go ahead.

Signed ..... Date .....

Name (print) ..... Job Title .....

5) Important Notes: (Tick if applicable)

☐ See also advance directive/living will (eg Jehovah's Witness form).

☐ Patient/Parent has withdrawn consent (ask patient/parent to sign/date here) .....

Guidance to Health Professionals (to be red in conjunction with ABHB 0004 policy on consent)

What a consent form is for
This form documents the patient's agreement to go ahead with the investigation or treatment you have proposed. It is not a legal waiver – if patients, for example, do not receive enough information on which to base their decision, then the consent may not be valid, even though the form has been signed. Patients are also entitled to change their mind after signing the form, if they retain capacity to do so. The form should act as an aide-memoire to health professionals and patients, by providing a check-list of the kind of information patients should be offered, and by enabling the patient to have a written record of the main points discussed. In no way, however, should the written information provided for the patient be regarded as a substitute for face-to-face discussions with the patient.

The law on consent
See the Department of Health's *Reference guide to consent for examination of treatment* for a comprehensive summary of the law on consent (also available at www.doh.gov.uk/consent or http://www.wales.gov.uk/subihealth/toc-e.htm).

Who can give consent
Everyone aged 16 or more is presumed to be competent to give consent for themselves, unless the opposite is demonstrated. If a child under the age of 16 has "sufficient understanding and intelligence to enable him or her to understand fully what is proposed", then he or she will be competent to give consent for himself or herself. Young people aged 16 and 17, and legally 'competent' younger children, may therefore sign this form for themselves, but may like a parent to countersign as well. If the child is not able to give consent for himself or herself, someone with parental responsibility may do so on their behalf and a separate form is available for this purpose. Even where a child is able to give consent for himself or herself, you should always involve those with parental responsibility in the child's care, unless the child specifically asks you not to do so. If a patient is mentally competent to give consent but is physically unable to sign a form, you should complete this form as usual, and ask an independent witness to confirm that the patient has given consent orally or non-verbally.

When NOT to use this form
If the patient is 18 or over and is not legally competent to give consent, you should use form 4 (form for adults who are unable to consent to investigation or treatment) instead of this form. A patient will not be legally competent to give consent if:

- They are unable to comprehend and retain information material to the decision and/or
- They are unable to believe, weigh and use this information in coming to a decision.

You should always take all reasonable steps (for example involving more specialist colleagues) to support a patient in making their own decision, before concluding that they are unable to do so. Relatives **cannot** be asked to sign this form on behalf of an adult who is not legally competent to consent for himself or herself.

Information
Information about what the treatment will involve, its benefits and risks (including side-effects and complications) and the alternatives to the particular procedure proposed, is crucial for patients when making up their minds. The courts have stated that patient should be told about 'significant risks which would affect the judgement of a reasonable patient'. 'Significant' has not been legally defined, but the GMC requires doctors to tell patients about 'serious or frequently occurring' risks. In addition if patients make clear they have particular concerns about certain kinds of risk, you should make sure they are informed about these risks, even if they are very small or rare. You should always answer questions honestly. Sometimes, patients may make it clear that they do not want to have any information about the options, but want you to decide on their behalf. In such circumstances, you should do your best to ensure that the patient receives at least very basic information about what is proposed. Where information is refused, you should document this on the form or in the patient's notes.