



**CRITICAL CARE
DIRECTORATE**

**VISITORS
INFORMATION**

PLEASE DO NOT REMOVE

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Visitors Information Folder

This folder has evolved in recognition of the importance of supporting **you** through this difficult time of having your “loved one” as a patient within the Critical Care Unit.

All patients within the Critical Care Unit have a nurse at their bedside throughout the day and night. The nurse is a registered nurse who has had further training, or is undergoing further training in Critical Care Nursing. Experienced nurses support those nurses who are undergoing their Critical Care training.

The nurse at the bedside will be able to update you regarding the patient’s condition and ongoing care. If at any time, however, you need to discuss the treatment your relative is receiving, or you are uncertain about anything regarding your relative’s condition, you can arrange to discuss this with a consultant at a convenient time for all parties.

This booklet is not meant as a substitute for information, but as a general introduction to some of the different aspects of the Critical Care Unit that you may come across during your period here. Copies of all topics covered in this booklet are available for your information. The nurse at your relative’s bedside will be able to arrange this for you.

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About you

How am I going to cope?

This is probably a very stressful time in your life. People can have a range of reactions. You may feel anxious, tearful, angry, sad, guilty, frightened, shocked, a feeling of numbness or nothingness. People often talk of feeling helpless and frustrated, wishing that there were more they could do. All these reactions are **NORMAL** responses to having a relative as a patient within Critical Care.

You may also find some feelings difficult to control – you might find that you cry easily and feel shaky. These can all be frightening reactions, especially if you are not used to these feelings. Remember, these are normal reactions not a sign of your inability to cope or of going mad. Talking to someone about how you feel may give you some relief.

It is not unusual for people to experience physical signs of stress. These might include: increased heart rate, dry mouth, difficulty in concentrating, dizziness, shaking, indigestion and muscular tension that may lead to pain such as headaches, neck ache etc. These are all reminders of the need to take care of yourself at this difficult time.

It is important that you take care of yourself.

There is no right or wrong way of coping. Here are some ideas that people have found helpful:

- What has helped you during difficult times in the past? It may be chatting to a friend, time on your own, asking for help, finding out more information. Are there any of these that would help you now?



- Give yourself breaks. Do not feel that you have to be at the hospital all the time.
- Take some time to relax, or at least to reduce tension. Even if you are unable to sleep, spend some time in the quiet. You may feel better following a soak in the bath.
- To help you sleep, try to have a relaxing bedtime routine. Don't just fall into bed and expect to sleep. Spend some time trying to wind down – have a bath, warm drink (but not coffee!)
- Use the support that is available to you, such as family and friends. You may want to ask someone to come with you to the hospital or to stay with you at this time. Ask them for what you feel you need. Friends often benefit from being told what they can best do to help you.
- Remember to eat – you may not feel hungry but you need to keep your energy levels up.

Support for you

It can really help not to bottle up how you are feeling. Your friends and family are often great sources of support – although they may need you to tell them how best to help.

If you have any questions, however silly you may think they may sound, please ask the nurse caring for your relative. We know that this is a confusing place and that you may feel better if you know what is happening.

The hospital chaplains are available if you would like someone to talk to. You do not need to be religious or go to church to speak to them. They



can be contacted by telephoning extension 3230 (029 20743230 if ringing from outside the hospital), or by calling in at the chapel, which is by the central lifts, on the fifth floor. The chapel is a very peaceful place to take a break, or have some quiet time. It is open 24hrs, 7 days a week.

Is there anything that I can do to help my relative?

Although your relative may not be conscious, it may be helpful, for both of you, if you continue to talk to them and to touch them. If you feel awkward about doing this, or unsure of the equipment, please ask the nurse to show you.

Some people find it helpful to get involved in the physical care of their relative. If you would like to work with the nurse to care for your relative, by helping to wash your relative, for example, they will be happy to show you the best ways to help.

Most patients have no memory of the time spent within Critical Care, and can sometimes find this frustrating. It may be helpful to keep a diary of what is happening to them. If they want to read it later, it may help them to fill in the gaps about what they have missed.

Taking care of yourself is probably one of the best ways of helping your relative. Try to make sure that you stay well and don't wear yourself out emotionally. It can be easy to expect yourself to be superhuman at stressful times.

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What about the children?

Children can be very confused when a relative is ill, particularly if it is a brother, sister or a parent. It is important to give them an opportunity to ask questions and to express how they feel.

It is particularly important to listen to their questions and give them answers that are appropriate for their age. Their understanding of what is happening may be very different to yours. When a young child asks, for example, “what is wrong with Daddy?” to know that “he is poorly” or that “he has hurt his head” may be all that they are asking, and not the detail and uncertainty that may be dominating your thoughts.

You may feel that you are unable to listen to them and answer their questions at the moment. It might therefore be a good idea to ask someone else that your child is close to, to spend time with them and listen to their questions.

Encourage children to say how they are feeling. You can help them do this by getting them to draw pictures etc. Parents can find it a bit shocking when children’s’ games focus on hospital and illness. This is a common way for them to try and understand what is happening.

Make sure that the adults around your child, e.g. their teacher or nursery nurse, knows a little of what is happening. This will help them to understand any unusual behaviour or responses from your child.

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Visiting on the Critical Care Unit

Visiting on the Critical Care Unit is a very flexible arrangement in that there are no set visiting times. It is, however, at the discretion of the shift manager and the nurse assigned to the care of your relative.

We would, therefore, ask you to consider the following:

- Visiting is normally restricted to two visitors at a time at the bedside.
- Visiting is normally for families and close friends, or, at the request of the patient.
- Between the hours of 10:00 and 12:00 there is normally a lot of activity with doctors' rounds, X-rays, physiotherapy, washes, etc. It is therefore requested that you not visit during these hours.
- Together, patients and visitors can help staff to reduce the risk of infection or cross infection. **Hand washing** is one of the most important methods of avoiding infection within the Critical Care Unit. **In order to try and prevent the spread of infection, all visitors are requested to wash their hands before attending the bed area and also on leaving the area. We would also like to ask you to make use of the alcohol hand gel dispensers that are situated outside the doors of the unit and next to each washbasin.**
- The admission of children to the Critical Care Unit (as visitors) is at the discretion of the shift manager/nurse at the bedside.
- Sorry, but no flowers on the unit. They are an infection risk.
- Visiting late at night should be negotiated with the shift manager/nurse at the bedside. Not all patients within the Critical

Care Unit are sedated. It is essential, therefore, that they be allowed to rest and sleep.

- At different intervals throughout the day it may be necessary to carry out essential nursing and sometimes, medical procedures. You may be asked to leave the unit for a short period of time, or until the task is completed.
- Occasionally, some nursing and medical procedures can take longer than anticipated. This may result in you being kept waiting to see your relative. We apologise in advance for this, but hope that you will appreciate that the care of your relative is of the utmost importance.
- If you feel you are being kept waiting for too long, please don't hesitate to ask to speak to the shift manager to discuss this.
- A doctor will be available to discuss the medical care of your relative. This can be arranged through the nurse at the bedside, should you so wish.
- Should you wish to stay at the hospital, please inform the nurse at your relative's bedside, or the shift manager, to allow accommodation to be arranged. Accommodation on site is however, limited.
- This is a very stressful period for both yourself and your relative. Please take care of yourself by ensuring that you eat properly and have sufficient rest. Visiting can be a very tiring experience for both patients and relatives alike.
- The hospital operates a no smoking policy.

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Telephone Numbers

You will be able to speak to the nurse caring for your relative on the following direct telephone numbers.

We request, however, that each family appoint a **liaison person** to make these calls. This enables the nurse who is caring for your relative to spend the maximum amount of time at the bedside.

A3 South

Six Bedder: (029) 2074 4999 or (029) 2074 3429

Four Bedder: (029) 2074 3586

A3 North

(029) 2074 8384 or (029) 2074 8493

B3 South

(029) 2074 5327 or (029) 2074 5319

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Facilities for Visitors

There are two rest rooms for your use...

Along the **A3 South/A3 North corridor** is a room for the visitors of patients who are being cared for on the adult critical care unit. This room consists of chairs, a sofa, TV, coffee/tea machine, soft drinks machine and a floor lamp to provide dimmed lighting at night.

A second rest room is available along the **B3 corridor**. This room is for both the visitors of the adult critical care unit and the children's intensive care unit. This room consists of chairs, a sofa, TV, coffee/tea machine and a lamp.

A shower and toilet for visitors' use is located opposite the visitors' room on the B3 corridor.

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Car Parking

If your relative is likely to be a patient on the Critical Care Unit for more than a day you can obtain a **Long term visitor card (Alpha pass)**. The card is available to long term visitors that need to park for periods in excess of normal visiting hours.

A long term visitor card will be charged at the following rates:

2 to 14 days at £3.00 per 24 hours (£21 per week)

15 to 28 days at £2.00 per 24 hours (£14 per week)

The card can initially be credited with 7 consecutive days. After two weeks the lower tariff will apply.

The card will allow you to use either levels 1 to 3 of the multi-storey car park and/or any visitor surface car park and will take place of a Pay and Display ticket. The card, when purchased will be topped up with the required car park credits for your use and will be debited each time you use it.

The long term visitors card can be obtained from the **Parking Shop** in the **Multi-storey card park, level 1a**. It is open 24 hours a day and/or press the buzzer outside the parking shop for attention.

Car Parking

UNIVERSITY HOSPITAL OF WALES, CARDIFF

- Hospital Site
- Yellow Visitor & Patient Car Parks
- Drop Zone 20 Minutes Only
- Staff Blue Essential Users Car Parks
- Disabled Parking Areas
- Staff Free to Roam Car Parks

Pay & Display
Please find a space before purchasing a ticket. Place ticket visibly in windscreen.

Pay on Foot
Please keep your ticket with you and pay at the pay station before returning to your vehicle.

Ensure that you are parking in the appropriate car park.

Park within the marked bays. Do not park on the roadways or yellow lines.

Disabled bays are available throughout the site, please refer to the adjacent map.

Staff must display their permit at all times.

Failure to pay the required parking charge will result in a fine. Vehicles causing obstruction may be towed away.

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Food and refreshments

Heathfields Restaurant is situated on the upper ground floor, adjacent to 'A' block. The opening hours are:

- 07:30 – 19:45
- 21:15 – 02:00

Sandwiches, hot meals, cold snacks, hot and cold drinks are readily available during these times. For **hot meals**, catering times are:

- 07:30 – 10:30 Breakfast
- 12:00 – 14:00 Lunch
- 17:00 – 19:00 Evening Meal
- 21:30 – 01:30 Supper

The **Bun Room** is situated on the upper ground floor, adjacent to 'C' block. This room is open 24hrs and the facilities are vending machines and microwaves. You will usually need the correct change for the vending machines.

The Concourse

There are several facilities where food and drink can be purchased:

Street Cafe

- 08:00 – 20:00 Monday – Thursday
- 08:00 – 18:00 Friday
- 09:00 – 18:00 Saturday
- 10:00 – 17:00 Sunday

Boots

- 08:00 – 18:00 Monday - Friday
- 09:00 – 18:00 Saturday
- 11:30 – 17:00 Sunday

WHSmiths

- 07:30 – 20:00 Monday - Friday
- 09:00 – 17:00 Saturday
- 10:00 – 18:00 Sunday

Café Express

- 08:00 – 17:00 Monday – Friday

(Hours of trading may differ over public and hospital holidays)

In addition to these facilities, the Concourse has a bookshop, a National Westminster bank (with cash point facility), a Post Office, a jeweller, and a boutique.

Books Plus

- 09:30 – 18:30 Monday – Friday
- 11:00 - 17:30 Saturday

The National Westminster Bank

- 10:00 – 16:00 Monday – Friday

Post office

- 09:00 – 17:30 Monday – Friday
- 11:00 – 16:00 Saturday

Events Jewellery

- 09:00 – 17:30 Monday – Friday
- 10:30 – 16:00 Saturday
- 12:00 – 16:00 Sunday

The Stock Shop

- 09:00 – 18:00 Monday – Friday
- 13:00 – 18:00 Saturday
- 12:00 – 17:00 Sunday

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Patient's Property

We are restricted for storage space within each bed area and would therefore request that all property be taken home. Valuables and money should also be taken home or may be deposited in the hospital safe.

Some necessary items that your relative may require are:

- Brush or comb.
- Toothbrush and toothpaste.
- Soap or shower gel.
- Talcum powder (if normally used).
- Any toiletries that your relative likes to use normally.
- Slippers (when your relative starts sitting out of bed).
- Night-dress or pyjamas (if your relative would prefer)
- Battery operated tape recorders/Walkman and tapes/CDs, although not essential, may be quite therapeutic during the recovery period. Electrical equipment would need to be tested by one of the hospital engineers.
- A photograph of your relative prior to their illness is always nice to have at the bedside. This is not essential.
- Gowns, towels and flannels are provided.

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Critical Care Services

University Hospital of Wales, Cardiff



A **Critical Care Unit** looks after patients with potentially life-threatening illnesses.

A critically ill patient will need close monitoring and support from different equipment and medication to maintain body functions.

The different equipment in a critical care area can at first seem frightening. It may therefore help you to understand what the various pieces of equipment are used for.

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The Bedside Monitor



A **monitor** by the patient's bedside allows the doctors and nurses to obtain continuous readings of the patient's heart rate and rhythm, their blood pressure, their heart function, their breathing and the amount of oxygen in their blood stream.

Your loved one will be connected to this via a number of leads. The monitor will occasionally alarm, drawing the nurse's attention to the patient's changing condition.

We hope that the following information will help you to understand some of the traces you are likely to see on the monitor in the bed area. These are routinely monitored on every patient who is admitted to the Critical Care Unit to help us to care for and monitor the patient.

1. The Green trace (usually at the top of the screen) is the electrocardiograph (ECG) and shows the heart's rate and rhythm.
2. The red trace is an indication of the patient's blood pressure (BP) and is similar, but a more accurate recording than that normally taken by your GP at your local doctor's surgery.
3. The yellow trace is a beat-by-beat measure of the patient's oxygen concentration and is displayed as a percentage.

All of the above measurements are likely to change during the course of a day and are also individual to each patient. Comparisons should not be made with other patient's values. Each of the waveforms has limits set on them, which sounds an audible alarm when exceeded. These alarms should not worry you and are there to inform the medical and nursing staff of any changes.

There may well be other waveforms on the monitor, depending on the individual needs of the patient. These just provide extra information and are also alarmed in the same manner as above. Don't hesitate to ask the nurse caring for your relative if there is something you are unsure of.

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The Ventilator



A **ventilator** is a machine that delivers oxygen to a patient's lungs in order to help with their breathing. It is used to support the patient's breathing until such time that the patient's lungs get better.

An **endotracheal tube** is a tube that is inserted into the windpipe through the nose or mouth to provide a passageway for the air.

A **tracheostomy tube** is a tube that is inserted into the windpipe through the front of the neck to provide a passageway for the air.

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The Oscillator



An **oscillator** is a special type of ventilator. It is used for patients who may require more help with their breathing than a conventional ventilator can provide.

You may notice that not only does it look different to a conventional ventilator but it is also much louder when in use.

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Artificial Ventilation

When a patient is having problems with their breathing, it is likely that they will require some assistance by means of a ventilator (breathing machine).

This measure is taken for a number of reasons e.g. chronic lung problems, respiratory infections, after certain types of surgery, head injury, altered blood chemistry, etc.

If you suffer with asthma, or know someone who is a sufferer, you will have some idea of how frightening the experience of not being able to breathe properly can be. When this situation occurs, the extreme effort of trying to breathe is not only frightening and stressful to the patient, but also extremely tiring. The more tired a patient becomes through having to work so hard, the more difficult it is to breathe. If the amount of oxygen going to the lungs is reduced in this way, all the other important organs in the body will gradually become deprived of oxygen also.

The anaesthetist will pass a breathing tube through either the mouth or the nose and advance it into the patient's lungs. This procedure will be carried out under sedation. The tube is secured with tapes and attached to the breathing machine. There are many different types of ventilators that perform many functions to assist with breathing. Your relative's ventilator will be selected according to his or her individual needs.

The ventilator...

- Gives a certain number of breaths each minute.
- Can co-ordinate with the patient's breaths allowing them to breathe also.
- Gives the patient a little extra support with their own breaths when their lungs aren't strong enough to take sufficient breaths.

Weaning from the ventilator

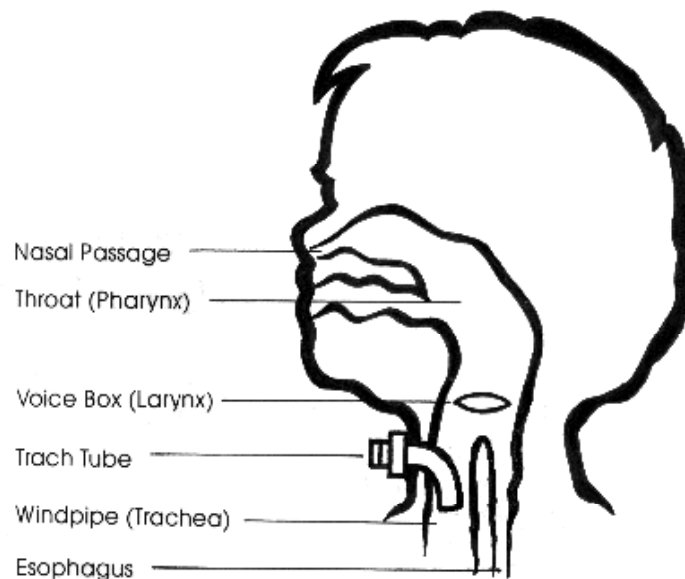
This process will vary in the time it takes according to the individual patient. If a patient has required mechanical ventilation for a prolonged period, it is likely that, their weaning process will take longer than the patient who has been ventilated for a short period of time. In some cases, it can sometimes be a case of two steps forward and one step back, but your relative's needs will be assessed and a programme established until such time that their lungs become strong enough to withdraw the support of the ventilator.

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Tracheostomy

A tracheostomy is an incision into the trachea (windpipe) that forms a temporary opening, which is called a tracheostomy. A plastic tube is inserted through the opening to allow the passage of air and removal of secretions. Instead of breathing through the nose and mouth, the patient will subsequently breathe through the tracheostomy tube.



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There are a number of reasons why a tracheostomy may be needed:

- If artificial ventilation is anticipated to be needed for long periods.
- If weaning from the ventilator is anticipated to be a slow process.
- If there are lots of secretions on the lungs.
- If there is a problem with swallowing.
- If there is an injury or surgery to the head and/or neck.
- If there is an obstruction of the airway.

A tracheostomy is either performed on the unit or in the operating theatre. It can be performed with minimal discomfort to the patient.

A tracheostomy is much more comfortable for the patient. The original breathing tube, which is usually inserted in through the mouth, can be removed once the tracheostomy is performed.

The sedation used to keep the patient comfortable whilst the oral tube was in position may be stopped enabling the patient to become more awake.

Brushing teeth and mouth care will become an easier and more comfortable procedure for the patient.

Once swallowing reflexes return to normal, the patient will be able to start with sips of water and, eventually, progress to a soft diet, if their condition allows.

When the patient's cough reflexes are strong enough to clear their secretions from their lungs, the tracheostomy tube can be removed. The incision site usually heals quickly. Until such time, however, a dry dressing will be used to cover up the incision.

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Blood Gas Measurement

A blood gas is a routine investigation that is carried out several times a day. It involves taking a small amount of blood from your relative.

Usually, it is obtained from an arterial line in the patient's wrist or groin.

This is a line that a doctor will have inserted into an artery to allow the patient's blood pressure to be continuously monitored.

The blood sample is tested on the unit and the result printed within minutes. The results obtained inform the medical and nursing staff of the patient's progress. The main information that the results reveal concern the oxygen, carbon dioxide, glucose and potassium levels in the patient's blood stream.

Information is provided, for example, about how much oxygen is present in the patient's blood. This is important as oxygen is vital for the function of all body cells. It also provides information about certain waste products, such as carbon dioxide, which is produced once body cells have used up their oxygen.

The result obtained also informs the medical and nursing staff if the patient's blood is becoming too acidic or alkali. If there is too little oxygen, too much carbon dioxide and too much acid in the patient's blood, for example, it may mean that the doctor will need to adjust the settings on the ventilator and/or adopt some other necessary treatment.

This simple blood test also informs the medical and nursing staff of the glucose levels in the patient's blood. This is important as glucose



provides the body with energy. If the levels are high, a drug called insulin is given. If there is too little glucose present, however, it is also possible to administer glucose to increase the levels in the body.

A blood gas is thus a simple but useful test that helps the medical and nursing staff to adjust the treatment that you relative may receive.

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The Filter



A **filter** or an **artificial kidney machine** is a machine that takes over the work of the kidneys when they are not working as well as they should. It is used to help rest and support the kidneys until such time that the patient's kidneys get better.

It removes blood from the patient, purifies it by dialysis, and adds vital substances to the patient's blood, before returning it into a vein.

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Infusions

You may notice a number of tubes and drips attached to your loved one. These are used for a variety of purposes including taking blood samples, providing water and liquid food, giving fluid or medication, and draining waste.



An **infusion pump** may be used to deliver the exact amount of fluid or medication into the patient's bloodstream.



A **feeding pump** may be used to deliver the exact amount of liquid nutrition into the patient. Most commonly, a feeding tube is inserted into the patient's stomach via the nasal passage or through the wall of the abdomen into the small intestine.

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Nutrition

Nutritional health is a crucial factor in the ability of the individual to fight infection and recover from illness or surgery. Nutrients are required by the body to provide energy to facilitate normal body functions, in order to maintain optimum brain function, body temperature, body mass, muscle strength and tissue viability.

Whilst your relative is ill, they will be unable to take food in the normal way. Therefore, their nutritional requirements need to be met via other means. Within Critical Care, we aim to start feeding within the first few hours of admission. There are two ways of doing this. One is via the gut. The other, by a vein (total parenteral nutrition TPN). Today, most patients are fed via the gut unless there are exceptional circumstances, and then TPN is used instead.

All critically ill patients will have a tube going either through their nose or mouth. This is used to prevent the patient from being sick, as it empties the stomach. This can also be used to feed the patient. The tube is aspirated every four hours to assess whether the feed is being absorbed or not. Two other ways of feeding via the gut are, firstly through a gastrostomy tube (directly into the stomach) and secondly, through a jejunostomy tube (directly into the lower gut). Both these tubes are inserted through the abdomen.

There are many types of feed available. To decide what your relative's requirements are, the critical care team has the support of a dietician.

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Intracranial Pressure (ICP) Monitoring



A patient who has sustained a head injury may require close monitoring of the pressures within and around their brain.

A machine known as an **intracranial pressure monitor** is used for this purpose.

To monitor the pressures within the skull, a neurosurgeon will place a small tube into the patient's head, the tip of which lies just beneath the skull. The nurse assigned to care for your relative will monitor this tube and any significant changes will be reported back to the medical staff.

Other observations carried out can also give an indication of what the pressure within the skull is. Therefore, you may see the nurses and

doctors shining torches into the eyes and testing for movements in the arms and legs of your relative.

Many different things – change of position, coughing, touch or a familiar voice – can affect ICP. This type of change may be for a brief period of time and usually settles down to what it was before. If the ICP rises, and remains elevated, despite measures taken to reduce it, the neurosurgeons may decide to take your relative for a CT scan.

As with all aspects of your relative's care whilst on the Critical Care Unit, you will be informed of any significant changes by the nurse/doctor.

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Hand Washing

Hand washing is one of the most important methods of avoiding the spread of infection on the Critical Care Unit.

All Critical Care patients are vulnerable to the development of infection. This can cause deterioration in their condition and could lead to delay in their recovery.

In order to try and prevent the spread of infection, all visitors are requested to wash their hands before attending the bed area and also on leaving the area. This activity will also protect you and other family members (particularly those at risk e.g. the elderly, babies, young children and the chronically ill).

We would also like to ask you to make use of the alcohol hand gel dispensers that are situated outside the doors of the unit and next to each washbasin.

You may be asked to put on an apron if the patient you are visiting has a particular type of infection. Aprons should also be worn if you are participating in any aspect of nursing care, such as bed bathing. This is primarily for your own protection.

Please feel free to use any sink area on the unit and, if you have any questions, do not hesitate to ask the nurse at the bedside or any other member of staff.

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Meticillin-resistant *Staphylococcus Aureus* (MRSA)



Staphylococcus aureus is a bacterium that is commonly found on people's skin and is found in the noses of 20-30% of normally healthy people (Association of Medical Microbiologists, 1995). Most strains of this bacterium are sensitive to many antibiotics and infections can be effectively treated.

Staphylococcus aureus that are resistant to an antibiotic called methicillin are referred to as methicillin-resistant *Staphylococcus aureus* or MRSA (Association of Medical Microbiologists, 1995).

Colonisation with MRSA in the absence of illness or clinical evidence of infection may be treated with topical preparations. These measures will help reduce the possibility of the patient becoming infected or spreading the bacterium to another patient. (Association of Medical Microbiologists, 1995). Where infection is present the patient will require treatment with antibiotics such as vancomycin or teicoplanin.

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Infection prevention and control...

It is very important to prevent the spread of infection within the hospital.

Scrupulous hand washing by hospital staff before and after contact with patients is the single most important infection control measure.

Upon admission all patients undergo the following investigations:

- Catheter specimen of urine (CSU)
- Non-directed bronchial lavage (NBL)
- MRSA screen:
 - Nose
 - Throat
 - Groin

By ensuring that these investigations are performed upon a patient's admission it will enable us, as a directorate, to determine whether a patient was colonised or infected with MRSA prior to their admission. It will also enable us to determine the acquisition rate of infection within the Critical Care Directorate.

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The Role of the Microbiology Service

The microbiology department provides a support service to the Critical Care Unit. Microbiologists specialise in infections.

Many of the patients admitted to Critical Care have complicated medical or surgical problems. Infections can either be the reason for an individual's admission to Critical Care, or can sometimes subsequently develop.

The microbiologists help the staff on the unit in the diagnoses and management of patients with infections. This requires close liaison between the staff in both departments.

The types of samples from the patients that are processed by the microbiology laboratory include secretions from the respiratory tract, blood samples and various other types of samples where appropriate. These are collected from the patients and transported to the laboratory where they can be processed. Here the samples are cultured (or set up so that any bacteria can grow), sometimes other techniques are used. The aim of this is to try and establish if a micro-organism may be contributing to an individual's current condition and, if so, which antibiotics are most likely to help in the treatment of the infection.

The principal point of contact between the departments is the combined ward rounds that occur twice a week. During these ward rounds, each patient's clinical progress is discussed. The microbiologists bring with them information from the laboratory on samples that have been collected

from each patient. In the light of all this information, decisions are then made as to whether an individual is likely to have an infection, further tests that may be necessary and any appropriate antibiotic treatment.

The microbiologists also give guidance to all staff on the unit on measures such as hand washing etc. Although the most obvious input from the microbiology department is during the combined ward rounds, the department provides a 24-hour service, both for the processing of appropriate samples and clinical advice.

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Sepsis – what is it?

Sepsis, or septicaemia, is also known as blood poisoning. It is caused by either a bacterial or viral infection of the blood.

Risk factors

Every patient in hospital can be at risk of septicaemia but there are individuals who are more at risk than others:

- People who are either very young or very old are at most risk.
- People who are malnourished.
- People who are generally unwell.
- People who suffer from a chronic illness.
- People who have had surgery or suffered trauma.

Signs and symptoms of sepsis

There are many indications that sepsis may be present. These may include any of the following:

- A rash – any thing from tiny red spots to large, blotchy bruises.
- Pale and clammy skin despite having a high temperature.
- Unacceptably low blood pressure (which can lead to other problems).
- Swelling of the face, hands, etc.

Treatment of sepsis

Treatment needs to be commenced quickly to improve the outcome of the septic patient:

- Large volumes of fluids are given to enable an adequate blood pressure.



- Commencement of appropriate antibiotics.
- Identification of the bug/bugs causing the infection.
- Trying to reduce the spread of the sepsis that may cause multi-system organ failure.

This list, and the information contained, is provided for general treatment. Each patient's treatment will be different. If you have any questions, please ask.

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Acute Respiratory Distress Syndrome

Acute Respiratory Distress Syndrome (ARDS) is an illness that your relative may be diagnosed with whilst they are on the Critical Care Unit. They may develop this following trauma or surgery, as a result of an infection or as a result of long-term artificial respiration.

What happens in this Syndrome?

The blood vessels in the lungs (called capillaries) become damaged due to a blood borne toxin or poison. This damage allows fluid to move from the capillaries into the interstitial space, the space between the capillaries and the pockets of the lung, called alveoli. The toxins then attack the alveoli causing areas of the lung to collapse. As a result, the lungs become very stiff and it makes it very difficult for the patient to breathe. The fluid makes it more difficult for the fresh air taken in by the lungs, into the alveoli, to be exchanged with the used air in the capillaries. The result of this is that your relative will not be carrying as much oxygen in their blood as they need.

How can we treat this?

Treatment is aimed at supporting the lungs with artificial ventilation until the patient gets rid of these toxins. You may hear the word PEEP used. This is a pressure we give to your relative, through the ventilator, which re-inflates the alveoli that have collapsed as a result of the ARDS. We may turn your relative prone (lying them on their tummy) and/or we may use a special type of ventilator, called an oscillator. We will also start anti-biotic therapy if an infection is identified.

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The Role of the Physiotherapist

As a member of the multi-disciplinary team (MDT) physiotherapists provide a holistic approach to care of patients on the Critical Care Unit. The specific roles the physiotherapist has comprise of chest care, positioning of patients, rehabilitation and education...

Chest care: physiotherapists assess and treat the patients on a regular basis throughout the day and evening. They also offer an on-call service and will treat patients whenever the nursing or medical staff feel it is required. They use a variety of physiotherapy techniques to assist the clearing of secretions.

Positioning: physiotherapists also advise the nursing staff and assist them to position the patients in bed according to their specific needs e.g. patients may need to lie on a particular side to facilitate drainage of secretions.

Rehabilitation: whilst patients are immobile in bed, physiotherapists perform daily, passive movements of arms and legs to reduce the risk of joint stiffening. They also assist the nursing staff to sit patients out of bed when it is appropriate to do so. They assess patients on an individual basis and plan exercise programmes to meet their needs. They also stand patients and walk with them when this is indicated.

Education: physiotherapists also work closely with the other members of the MDT to ensure that their specialist knowledge is used to optimise patient care.

Positioning of patients

Throughout the course of your relative's stay, they will be repositioned or turned many times. This basically means that they will be moved from the position they were in into another. This will be done in a comfortable and safe way, ensuring no harm or distress is brought to them.

In order for this to occur, you will be asked to leave for approximately 15 – 30 minutes. The curtains will be drawn to ensure that the patient's privacy and dignity are maintained.

Why do we reposition patients?

The process of turning patients will be for a number of reasons:

- Comfort.
- Pressure area care
- Improve breathing
- Aid drainage of the secretions/fluid off their chest

Comfort and pressure area care is important. If your relative was left in the same position for long periods of time, the areas of skin they lie on will become sore. For this reason, patients are turned on a regular basis (anything from 2-4 hourly) and depending on how well or stable they are at the time.

In order to breathe well, we need a good air supply and a good blood supply. By turning patients, we alter which parts of the lungs get more air and which get more blood. The aim of turning is to match both good air supply and good blood supply. If this is achieved, your relative's



breathing may be improved. If your relative is very ill and not breathing well, they may be turned on their stomachs i.e. they will be lying face down. This is known as the “prone” position. The aim here is to get a good match of both air and blood to help your relative’s breathing.

Your relative might also be placed on a bed that automatically turns them without the nurses needing to do this as often. This is known as “Rotational Therapy”. This is done when your relative needs constant turning to help maintain a good air and a good blood supply, to assist their breathing.

By turning your relative, it may be possible to help drain off the secretions from their chest. By suctioning the secretions off their chest their breathing may improve.

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Pain Control

Ensuring that our patients are comfortable and pain free is an essential part of our nursing care.

Critically ill patients may experience pain for a number of reasons, for example, after an operation, after an accident or due to the nature of their illness. Pain often feels a lot worse to the patient who is frightened. They may be unable to talk due to their need for a breathing tube and so, are unable to communicate their discomfort.

The presence of pain can be very stressful for patients and, if not properly controlled, could contribute to other problems. The nurses at the bedside therefore assess their patients on a regular basis to ensure that maximum comfort is maintained at all times. It is normal practice for patients to have an infusion to which pain killing drugs have been added. This usually runs continuously. Sometimes, we may stop the infusion and give painkillers as and when they are needed. Where it is anticipated that a certain procedure is likely to cause discomfort, it is usually possible to give extra painkiller prior to performing the task.

If you are concerned about your relative's pain, please don't hesitate to discuss it with the nurse at the bedside.

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Some useful numbers...

Diabetes UK Cymru

Helpline (029) 2066 8276

wales@diabetes.org.uk

Mind Cymru

Helpline (0345) 660163

British Heart Foundation

Cardiac Care Officers

Helpline (020) 7487 7125

www.ghf.org.uk

Cruise Bereavement Care

Helpline (0345) 585565

Compassionate Friends

Helpline (0117) 966 5202

(029) 2088 3536

British Lung Foundation

Helpline (020) 7831 5831

www.lunguk.org

Samaritans

Helpline (029) 2034 4022

National Kidney Research Fund

Helpline (0845) 300 1499

www.nkrf.org.uk

Cancer BACUP

Helpline 080 88 00 1234

www.cancerbacup.org.uk

Headway Cardiff

Helpline (029) 2057 7707

www.headway.org.uk

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Accommodation

It is sometimes necessary or desirable for relatives to stay near the hospital site. Unfortunately, the Adult Critical Care Unit has no accommodation facilities within the hospital grounds.

A list of Bed and Breakfasts and Local Hotels, however, is provided here.

David and Cheryl Walker
B&B Pontprennau
Separate TV Lounge for guests
029 20540149 or 0781 4745262

Forte Post
Pentwyn Road
Pentwyn
Cardiff
029 20731212

IBIS Hotel
Malthouse Avenue
Cardiff Gatehouse Business Park
029 20733222

Travel Lodge East
Circle Way East
Llanederyn
Cardiff

Holiday Inn
North Pentwyn Road
Cardiff
0870 4008141

0870 0850950

Cardiff Moat House
Circle Way East
Llanederyn
Cardiff
029 20589988

Beeches Hotel
73 Ninian Road
Roath Park
Cardiff
029 20491803

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Your View Are Important To Us

Cardiff and Vale NHS Trust want to ensure that your experience with us is a positive one.

If you are concerned with any aspect of your care – we are happy to receive **suggestions, comments, complaints or compliments.**

For further information please ask a member of staff.

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