Purpose Statement
The purpose of this information sheet is to answer some questions the general public often have about the medical treatment known as Cardiopulmonary Resuscitation (CPR). The following facts are intended to apply to CPR given in a hospital setting. It includes a description of CPR and other key points to help you think about whether CPR is something you would want. Whatever you decide, it is helpful to consult with your own doctor to get more facts relevant to your personal health. It may also help you to talk your views over with trusted family and friends.

What is CPR and when is it used?
CPR is a term for the interventions used to try and restart a person’s heart and restore their breathing. Cessation of heart beat and breathing is known as cardiac arrest. It may be a natural and expected end to terminal illness, advanced disease or old age. However in some patients cardiac arrest may be premature and occur as a result of very severe illness or a sudden heart attack. Cardiac arrest happens when electrical impulses in the heart become rapid or chaotic, which causes the heart to suddenly stop beating. A heart attack can cause cardiac arrest. A heart attack occurs when the blood supply to part of the heart muscle is blocked, often due to coronary artery disease.

What happens if CPR is not started?
When a person’s heart stops beating, they become unconscious within a few seconds because there is not enough blood to carry oxygen to the brain. The person is not aware of what is happening and does not experience pain. Death will follow within 5 to 10 minutes if CPR is not started quickly.

What happens during CPR?
In the hospital or ambulance setting CPR is usually given by health professionals trained in advanced life support techniques. Typically this goes on for about 15-30 mins and involves the following:

- Pressing hard and fast on the breastbone to manually pump blood through the heart to the body
- Pushing air into the lungs to try and get oxygen to the brain
- Putting a breathing tube through the mouth into the windpipe to get air into the lungs more easily
- Inserting a needle into one or more veins to inject strong medications that help restart the heart
- Applying a controlled electric shock called defibrillation to try and get the heart pumping again

What happens after CPR?
If the heart can be restarted then the person is usually transferred to a hospital intensive care unit for the extra care necessary to aid recovery. Treatments often include intravenous fluids and drugs, cardiac monitoring and a ventilator machine to assist with breathing. This is commonly referred to as being put on life support. Follow up treatment in the acute hospital ward is usually necessary after this for survivors of CPR.

Who gets CPR?
CPR has become a standard procedure for hospitalised patients who have a cardiac arrest. Our health care system operates on the assumption that everyone would want all available life-saving treatments. In acute care hospitals and most other healthcare settings, nurses and doctors automatically start CPR as an emergency response to a cardiac arrest. This happens unless a clear decision to withhold CPR was made and written down beforehand.

How effective is CPR?
Many scientific studies have been done on the effectiveness of CPR in the last few decades. Unfortunately the results are not as successful as those often shown in television dramas. Survival rates vary and depend on a range of factors. How well CPR works largely depends on the person’s pre-existing medical condition before the cardiac arrest. Results are usually worse if the cardiac arrest is unwitnessed and starting CPR is delayed or the duration of the cardiac arrest exceeds 30 minutes.
How effective is CPR? (continued)
Studies show that overall about 18 out of 100 hospitalised adults from the general population will survive long enough after CPR to leave the hospital. This means that on average 82 out of 100 people will die shortly after cardiac arrest. About 5 of the 18 survivors will be discharged to another care setting for long term care like a rehabilitation unit or nursing home.

People who come to hospital with more severe medical conditions are less likely to survive after CPR. On average only 10 out of 100 people in this situation will survive cardiac arrest. This means that 90 out of 100 patients will die despite receiving CPR.

Older people with advanced disease of any kind and those with metastatic cancer are more likely to die if their heart stops. On average only 6 out of 100 people in this situation will survive after CPR. This means 94 out of 100 people in this situation will die. CPR offers a less than 2% chance of survival for frail patients of advanced age or with multiple medical problems. This means 98 out of 100 people like this will die despite receiving CPR.

What are the benefits of having CPR?
When cardiac arrest occurs in young or otherwise healthy people, CPR may be life saving. CPR may prolong the length of time lived for a person with a serious medical condition.

What are the risks of having CPR?
The vigorous chest compressions needed to effectively perform CPR can cause painful bruising to the breastbone, broken ribs, punctured lungs and damage to other internal organs. Brain damage can also occur despite having CPR if the brain doesn’t get enough oxygen during the cardiac arrest.

Will CPR make me better?
It is important to understand that CPR cannot improve the illness that caused the person’s heart to stop in the first place. CPR may simply delay the inevitable and keep the person from having a natural and peaceful death. At best, CPR may return the person to how they were before their heart stopped. It may be necessary to have more uncomfortable and intrusive treatment to try and correct the underlying cause of the cardiac arrest. A lengthy period of hospitalisation may be needed. Some people do not return to the life they had beforehand. Nursing home care may become necessary due to a decline in health and function after CPR. Other survivors may only live for a few more months once they have left hospital after receiving CPR and follow up treatment.

Do I have a choice?
CPR involves medical treatment that can be accepted or refused in advance. You have the right to decide not to have CPR if you don’t want it. If you do want CPR there is nothing specific you need to do. CPR is routine practice in most healthcare settings. If your doctor doesn’t think CPR will be of any benefit to you it may not be provided. If this is the case your doctor will normally discuss it with you first before writing a medical order to withhold CPR.

If you do not want CPR you should clearly indicate this to your doctor and family and document your choice in yourAdvance Care Directive. This is a document that clearly records your medical treatment preferences. It is used if you lose the ability to make or express health care decisions at any point in the future. Doing so will help any treating doctor to know your preference to avoid CPR and be confident to write medical orders that uphold your wishes.

If I choose to avoid CPR will I miss out on other treatment?
Saying no to CPR does not mean you are opting to receive no treatment at all. It simply means you do not want to undergo this specific type of medical treatment. Other helpful care and treatment will still be provided to you.