WHAT IS ANGINA PECTORIS:
A constriction or blockage of the coronary arteries results in the heart muscles not getting enough blood and the supply of oxygen is thus reduced. This can result in pain (angina pectoris), particularly in connection with physical effort.

INFORMATION ON BYPASS – AND HEART VALVE OPERATIONS:

BYPASS-OPERATION:
New arteries are operated in that lead blood past the constriction or stoppage in the coronary arteries.

VALVE OPERATION:
The replacement of the faulty valve with a mechanical or biological valve. Valves can sometimes be repaired.

BYPASS –OPERATION PROCEDURE:
You are given a general anaesthetic. The surgeon takes out vein from your leg to use as the bypass. Your chest cavity is opened by splitting the breastbone vertically. The surgeon loosens the main artery on the inside of your chest. You are then connected to a Cardiopulmonary bypass pump – heart-lung machine – that takes over the functions of both your heart and your lungs during the time the surgeon sews in the new veins.

THE DAY BEFORE THE OPERATION:
- You will be given information by the surgeon, anaesthetist, physiotherapist and the nurse.
- If you have a beard this must be shaved off to alleviate the risk of infection.
- Remove any nail polish/lacquer from finger and toenails. Nails must be cut short and cleaned.
- Shower with an anti-bacterial soap before going to bed.
- Fast from 24.00, you must not eat or drink after this time.
- You will be offered a sleeping pill if you feel the need.
OPERATION DAY:

IN THE WARD:
- You will be given medication by the nurse. Do not take your own medicines.
- The areas that will be operated on; chest leg and groin, will be shaved by the nurse.
- You will then take another shower with antibacterial soap.
- You will be given a sedative one hour before the start of the operation.

IN THE SURGICAL WARD:
The operation takes between 2-2½ hours from start to finish.

IN THE INTENSIVE CARE UNIT:
- You will be placed in the intensive care unit for the first 24 hours.
- When you are fully awake and can breathe unaided, the tube in your trachea (windpipe) will be removed and the ventilator is disconnected.
- Two drains are inserted under the breastbone to drain of blood from the heart area. These will be removed early the day after.
If your heartbeat is too slow or irregular, a temporary pacemaker will be attached to thin metal wires attached to the heart and lead out through the skin.
THE NEXT FEW DAYS AFTER THE OPERATION UNDER NORMAL CIRCUMSTANCES

Day 1
- Standard procedure is that you are taken back to the ward on the day after the operation
- The main aim will be that you sit in a chair in connection with meals and physiotherapy.
- You will participate in physiotherapy twice today while still in your room.
- You will receive pain-relieving medicines at regular intervals. It’s normal to experience some discomfort and pain from the surgical wounds, and to feel stiff and sore. Pain can increase through coughing and physical activity. It is therefore important to be well prepared with pain-relief medication in order to be able to breath in deeply and expectorate mucus and to be able to move sufficiently well. To alleviate pain from the surgical wounds when active or when coughing, it is important that you support your breastbone quite firmly.
- PEP exhalation tube must be used every hour when awake from morning to night while in the clinic. Breathe in deeply and slowly, breathe out. The aim is 10 breaths x 3 each time. Cough or sharply expel breath (exhale with as much force as possible) after every tenth blow.
- It’s important that you drink plenty, about 2 litres per day for the next few days.
Day 2
- The urine catheter will in most cases be removed today.
- You will be weighed daily to check that you are losing weight due to loss off bodily fluid.
- You will be equipped with a wireless heart monitor
- You will probably feel like being up a bit more and can sit in your chair and talk walks in the corridor.
- Physiotherapy 1-2 times today, after this as required until you are discharged.
- The Physiotherapist (assisted by the nurse) helps you out of bed and shows you how to get up unaided without supporting yourself with or placing a load on your arms. Your breastbone has been split vertically, and must be treated in the same way as you would a fracture.
- Compression stockings must be worn during the day while you are at the clinic to avoid swelling. The nurse will remove these in the evenings prior to bedtime.

Day 3
- You will be able to take a shower.
- Your wounds are checked and dressings replaced.
- Training and own activities continue.
- You walk up/downstairs together with the Physiotherapist.
NEXT STEPS:
It is expected that your level will increase. You will be expected to take the initiative and participate in activities and exercises.

FOR HEART VALVE PATIENTS:
- After undergoing a mechanical heart valve operation you will be require to use MAREVAN. You will be taking this for the rest of your life. It is quite normal to hear clicking noises. These will diminish as time passes. Biological valves do not normally require treatment with MAREVAN.

DENTISTRY FOR HEART VALVE PATIENTS:
Patients that have had new cardiac valves implanted must undergo pre-treatment with antibiotics before major dental work/surgery. Discuss this with your doctor/dentist.

PACEMAKER WIRES:
- Pacemaker wires will be removed by the Doctor on the day before you are discharged to go home.

DISCHARGE AND TRAVEL:
- You will move to your local hospital after your treatment at the Feiring Clinic.
- The clinic will arrange transport for you and your next of kin.
- You travel home by taxi, health bus, ambulance or by air.
- You will be given a medical report (patient journal) showing details of what has been done and instructions for continued treatment.
POSSIBLE SIDE EFFECTS AND COMPLICATIONS:
- On rare occasions it is necessary open the wound again during the first 24 hours in order to stop any persistent bleeding.
- It is not unusual that blood fluids gather around the heart and lungs, and this must be drained off.
- If you pulse is slow or irregular, it may be necessary to continue using a pacemaker for a while, perhaps a permanent pacemaker.
- In very rare cases infections may arise in the surgical wounds in the chest or leg.
- The majority of complications and side effects can be treated at your local hospital. It may however be necessary for you to return to the Feiring Clinic for treatment.

ON RETURNING HOME:

THE LUNGS:
- Mucus and fluids in the lungs may make you feel that breathing is laboured or that you are short of breath when engaged in activities.
- You must continue with your breathing and coughing exercises for as long as you feel these are beneficial or necessary.

PAIN/BREASTBONE:
- Chest pains will normally start to diminish and disappear after 2-4 weeks.
- You can feel pain in the breastbone, neck/shoulders and ribs.
- Take pain relief medicines as required. It is important that you can breathe freely and deeply.
- Your breastbone will mend during a period of 8 weeks. With risk factors such as advanced years, diabetes, osteoporoses, overweight or smoking, it can take up to 12 weeks for the breastbone to mend. During this period you should avoid sudden/sharp movements and avoid lifting anything heavier than 5 kilograms in one lift.
- If you have a sudden and continuous incurrence of chest pains, contact your doctor immediately.

PULSE:
- A few patients experience atrium flutter (arterial fluttering), i.e. fast and irregular pulse. If this incurs while you are at the Clinic, medication will be given. If the condition incurs after you back at home, contact your doctor.
WOUNDS/STITCHES:
- Closure of the surgical wounds is done with a surgical thread that dissolves and
does not need removing.
- The steel wires in the breastbone are not removed.
- There is a thread in the area where drains were placed under the breastbone that
must be removed after 10-12 days.
  Contact your doctor to arrange for this to be done.
- If the edges of your wounds swell up and become warm, and if there is redness
in the area around the wounds this can indicate that there is an infection. Contact
your doctor immediately!

THE LEG FROM WHICH THE VEIN WAS TAKEN:
- If the leg is swollen you must continue to use compression stockings during
the day.
- It helps to sit with your leg elevated
- Avoid sitting with your legs crossed
- Use your leg as you normally would.

FEVER:
If you have a fever that lasts for more than 24 hours contact your doctor.

EMOTIONAL REACTIONS:
You may experience mood changes, but it is quite normal to feel depressed during
the re-training stage, and you may also find that you lose patience more easily
and are irritable. This will stop as time passes. If you feel more depressed and
melancholy for a long period - contact your doctor.
SEXUAL ACTIVITY:
- You can resume a normal sex life as soon as feel you can and want to.
Remember to protect your breastbone during the first 8 weeks.

BATHING AND SAUNA:
- You can shower as normal
- Wait with bathing (bathtub) and swimming until your breastbone has completely healed (8 weeks)
- You can start taking saunas when your wounds have healed

RECREATION AND REHABILITATION:
- If you would like to book a recreational stay after your operation we can help you to write an application during your stay with us. The Feiring Clinic has its own heart rehabilitation department that you apply for via your doctor.

MEDICAL CERTIFICATE – SICK LEAVE:
It is normal to be on sick leave for from 6 weeks to 3 months.

MEDICINES:
- Although some of the medicines you were taking before your operation for angina can often be reduced in dosage after the operation, many patients will continue to take medication for their heart ailments. Any changes must be made by your doctor – do not change anything yourself.

DRIVING:
You should not drive for the first six weeks. Always use the seat belt!

CHECKS AND FOLLOW UP
In most cases you will be called in by your local hospital for checks and follow up. If you feel you need following up in addition to this, contact your own doctor.
ADVICE CONCERNING SHOWERS

SHOWERING IN THE EVENING BEFORE AND MORNING ON THE DAY OF YOUR OPERATION

DESCUTAN is a sponge that has been treated with an antibacterial soap used for showering prior to your operation.

IMPORTANT! Do NOT use to wash your face with.

First wash your hair and face as usual. Shower off thoroughly.

Open the packet and fill with water.

Wash thoroughly all over starting from the neck and working down. First your upper body, then your legs and then the groin region. Be particularly thorough with your armpits and groin area. Wait for 3 minutes before showering thoroughly all over. Pay special attention to your navel!

Pat yourself dry with a clean towel. Wait with the groin area until last.

IMPORTANT! Do NOT use body lotion/skin cream.

Don clean underwear and shirt.

If you have a rash, sore or similar about your body you must inform the nurse!

Do not walk around barefoot. WEAR CLEAN SLIPPERS!

Remember to thoroughly clean your teeth!