Patello Femoral Syndrome (Anterior knee pain or Chondromalacia Patella)
Patello Femoral Syndrome is an irritation of the kneecap (patella) and the underlying bone (femur). The irritation is caused by the patella not moving on the femur correctly when you bend and straighten your knee. It should stay centred and move up and down in a groove. If it is off-centre, it will be pulled to one side in the groove and cause excessive stress to one part of the underside of the kneecap. The cartilage here may become inflamed, or you may hear or feel 'crunching sensations' or pressure behind your kneecap. You will probably experience pain with movements that involve bending the knee or with prolonged sitting.

Some or all of the following factors can contribute to the knee pain:

- Tight muscles or ligaments pulling the patella sideways
- Weak muscles not holding the patella in place
- Biomechanics i.e. altered position of the patella due to flat feet/ overpronation. Special insoles (orthotics) may be recommended.

The exercises in this leaflet are designed to help address these factors. Your physiotherapist will advise which ones are suitable for you.

1. Step-ups
Stand facing a step with the foot of your affected knee resting on the step. Step up, straightening the knee and then lower back down slowly. Ensure that you control the alignment by keeping the middle of your kneecap over your second toe.
Repeat _____ times.

2. Single leg dips
Stand on one leg, bend and straighten the standing knee, keeping your hip, knee and foot in alignment.
Repeat _____ times.

9. Hip flexor stretch
In half kneeling with the leg to be stretched behind you, push your hip forward until you feel a stretch in the front of your thigh. Rotate your pelvis backwards to increase the stretch.
Hold for 20 seconds.
Repeat _____ times.

Contacts
Please contact our reception on 01223 216633 to leave a message for your physiotherapist, or to enquire about appointments.

Pain relief
To help us optimise your treatment, it is important that you have adequate pain relief. If you are suffering high levels of pain please seek advice from your pharmacist or GP.

Information
Please be aware that this handout is to be used as a guide. If you find these exercises painful please seek advice from your physiotherapist or GP.

This information has been compiled by the physiotherapy team at Addenbrooke’s Hospital. You may receive this information during an appointment with a physiotherapist, from your GP or via our website at www.cuh.org.uk/outpatient-physiotherapy
7. Tracking control:
Stand leaning with your back against
a wall and your feet about five inches
from the wall. Slowly slide down the
wall until your hips and knees are at
right angles. Make sure that your
knees are in alignment with your
second toes.
Hold for ____ seconds.
Return to starting position.
Repeat ____ times.

8. Vastus Medialis Oblique (VMO)
activation:
(1) As above but with a ball or towel
between your knees, squeeze the ball
gently 10 times without letting the
knees come together and then return to
starting position.
Repeat ____ times.

(2) Sit with ball between your knees.
Activate the inner knee muscle by
pushing down through the feet and
gently squeezing the ball. Maintain
this activation as you stand up and
then sit back down slowly on the
chair. Begin on a higher seating
surface and progress to lower
heights to make it more difficult.
Repeat ____ times.

3. Lunges
Stand with one leg slightly forward and
both knees bent. Lunge forward
ensuring that you control the alignment
by keeping the middle of your kneecap
over your second toe.
Repeat ____ times.

4. Patellar Mobilisations
Sit with your leg straight or slightly bent
and toes pointing forwards. Using the heel of
your hand or your thumb, push the knee cap
towards your opposite leg. Hold for a few
seconds.
Repeat ____ times.

5. Iliotibial Band (ITB) stretch
Stand holding on to a wall.
Start with your body, knees and feet
straight forward. Place your closest leg to
the wall behind the other leg and then
lean your hip towards the wall until you
can feel the stretch on the outside of your
hip and thigh. Hold for 20 seconds.
Repeat ____ times.

6. Quadriceps stretch:
Lie on your stomach. Bend one
knee and take hold of the ankle
or use a towel around the ankle
to assist and draw your heel
towards your buttock.
Hold this position for 20 seconds.
Repeat ____ times.