

Supervised Exercise Plan - AAA-EXCEL – *Exercise and Lifestyle Change for Early-stage AAA*



The Newcastle upon Tyne Hospitals
NHS Foundation Trust



Healthworks
the community health charity



**Northumbria
University**
NEWCASTLE

Exercise Plan – Full description

Online home-based group exercise (up to 60 minutes twice a week): The program aims to develop muscular strength, aerobic fitness, and functional capacities. The exercise classes are separated into 4 phases. The program will be reviewed every four weeks, and the complexity of the exercise can be changed individually.

Phase 1 – Warm-up (5 min)- will consist of active and dynamic movements to prepare the body for exercise through two components: increasing heart rate or ‘pulse raiser’ and mobilising joints.

Phase 2 – Aerobic circuit training (15-20 min) -The circuit will consist of shuttle walking, side steps, hamstring curls, step-ups, and knee raises. The stimulus will be 30 sec to 1 min each exercise, followed by a 1 min passive interval. The intensity will be monitored using the Borg scale (from 6 to 20) with a target intensity zone from 12 to 14 (Somewhat hard to hard) (20).

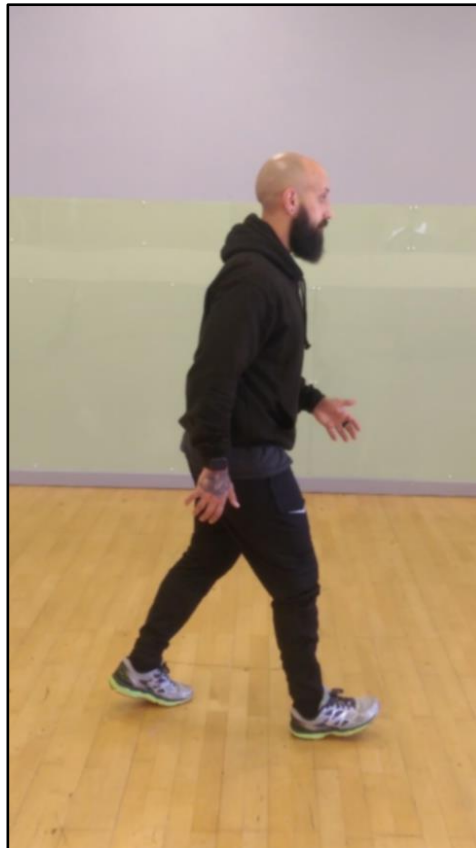
Phase 3 – Resistance training (10-15 min)- sit to stands/air squat, wall press up, wall support, calf raise, standing hip abduction, reverse lunge. All exercises will be performed with 2-3 sets of 8-10 repetitions with 2 min rest between sets.

Phase 4—Cool down (5 min)—This will consist of dynamic movements gradually reducing in intensity to lower heart rate to resting.

Table 1.0 Exercise 12-week exercise plan Week 1-4

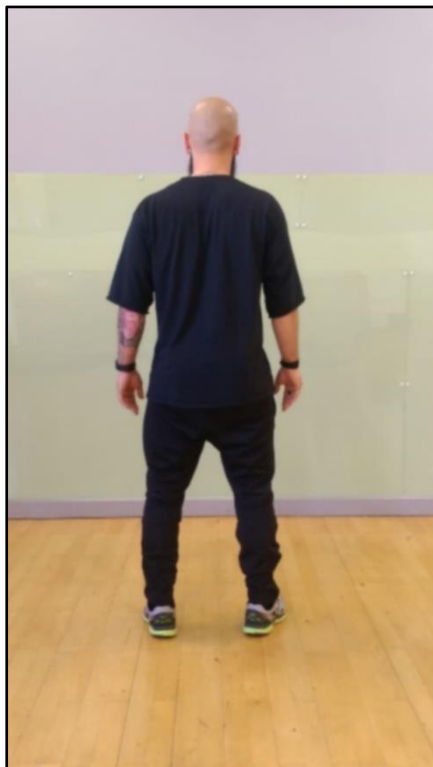
Warm up
<p>Active and dynamic movements aimed to prepare body for exercise through two components; increasing heart rate or 'pulse raiser' and mobilising joints.</p> <p>Mobility exercise aim to mobilise the following body parts:</p> <ul style="list-style-type: none">- Shoulders- Hips- Knees- Chest- Upper back- Calves / ankles- Hamstrings
Aerobic Circuit Training Exercise Plan
<p>Global exercises, involving large muscle groups focused on aerobic capacity.</p> <p>The circuit will consist of the following exercises, each exercise has 4 levels of intensity to ensure participant is exercising at the correct intensity.</p> <p>Stimulus 30-1min Passive Interval 1min</p> <p>Passive Interval will consist of seated rest.</p> <p>Complete each exercise for 30s-1min followed by 1min passive interval for example:</p> <p>Shuttle walk (Stimulus 30s-1min) Seated rest (Passive Interval 1min) Half Jack (Stimulus 30s-1min) etc.</p> <p>Aim to complete all exercise twice (2 rounds of circuit in total) which will last around 15-20mins.</p>

**Shuttle
Walking**

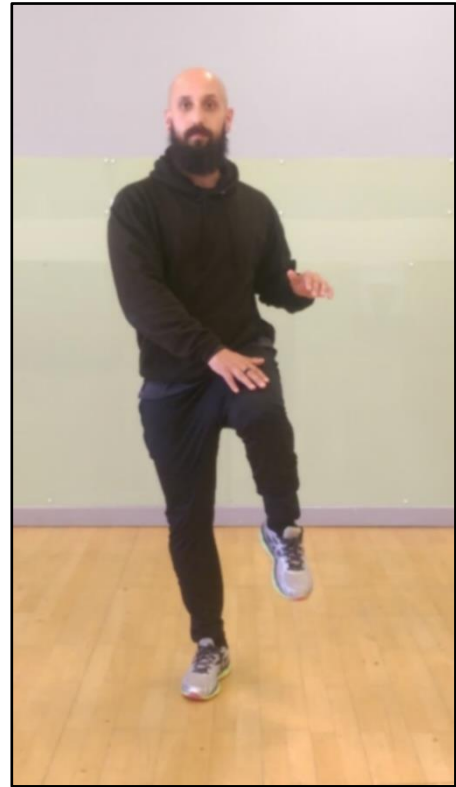


Side toe taps

*Add arm
lateral arm
raise to
increase
intensity.*



Knee Raises



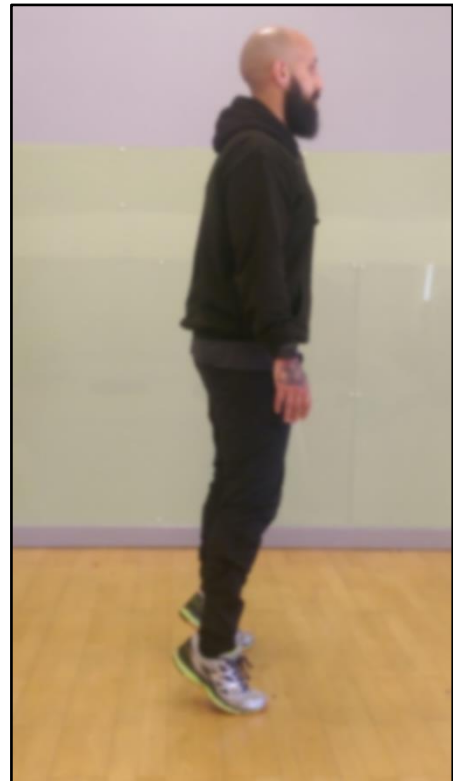
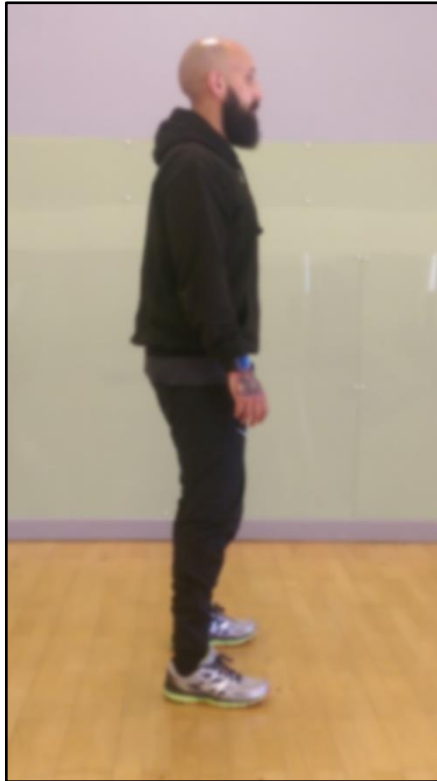
Sit to Stands



Resistance Training Exercise Plan

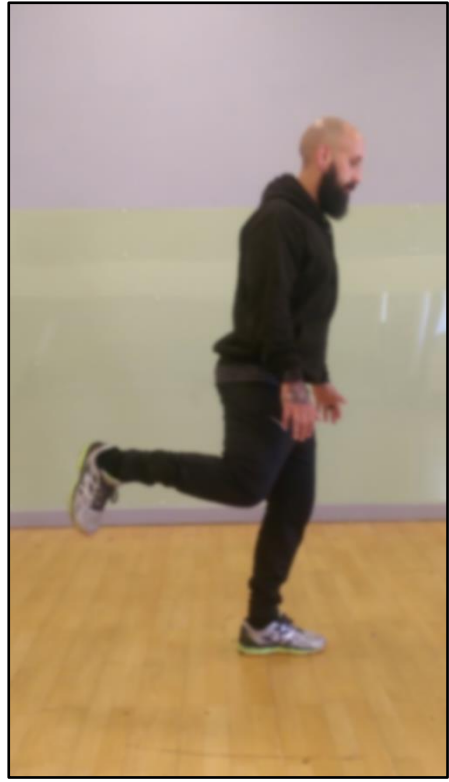
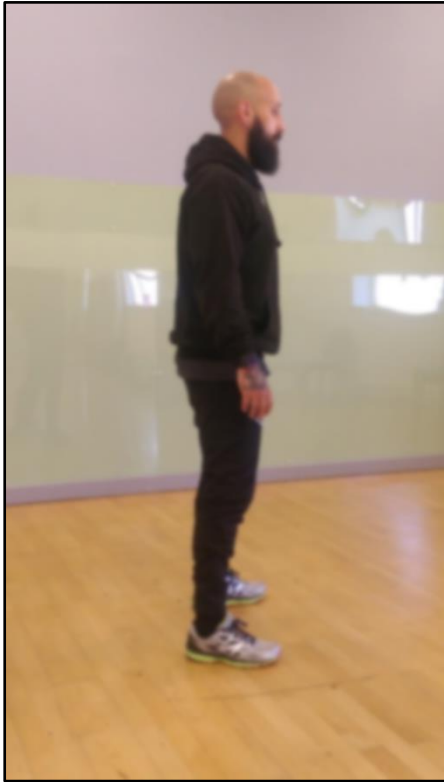
Resistance training for upper and lower limbs:
2-3 sets of 8 repetitions
90s – 2 min rest between sets.

Calf Raises



BLANK

**Hamstring
Curls**



**Hip
Abduction**



Seated Leg Extension



Cool Down and Flexibility

This will consist of dynamic movements gradually reducing in intensity to lower heart rate to resting. This will then follow static stretching combined with breathing techniques.

- Standing gastrocnemius stretch
- Standing or seated hamstring stretch
- Seated glutes and abductors stretch
- Standing Chest / shoulders stretch
- Standing or seated Adductor stretch
- Standing chair supported Quadricep Stretch

Each stretch will last 40s to 1min

Monitoring intensity

The Borg Scale will be used to monitor intensity and will be taken at the following intervals:

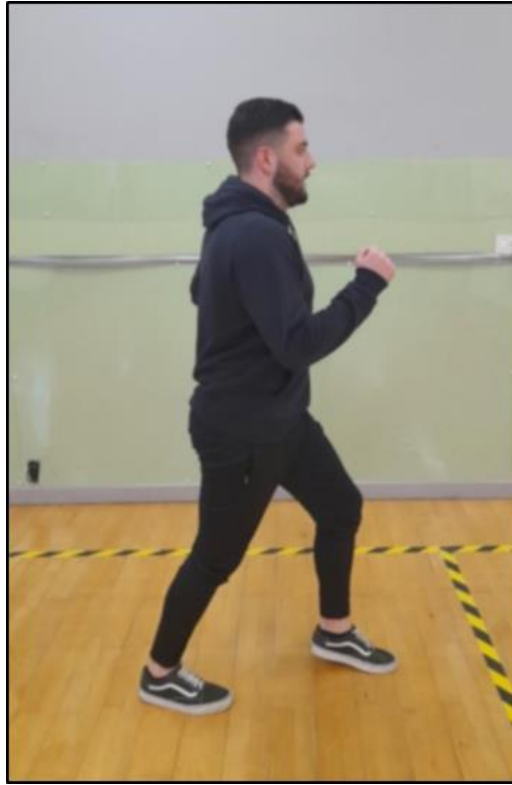
- End of warm up aiming for an intensity between *Very Light to fairly light 9-11*
- End of round 1 of circuit aiming for an intensity between *somewhat hard to hard 12-14*
- End of Round 2 of circuit aiming for an intensity between *somewhat hard to hard 12-14*
- End of cool down aiming for an intensity between *Very Light to fairly light 9-11*

Table 2.0 Exercise 12-week exercise plan Week 4-8

Warm up
<p>Active and dynamic movements aimed to prepare body for exercise through two components; increasing heart rate or 'pulse raiser' and mobilising joints.</p> <p>Mobility exercise aim to mobilise the following body parts:</p> <ul style="list-style-type: none">- Shoulders- Hips- Knees- Chest- Upper back- Calves / ankles- Hamstrings
Aerobic Circuit Training Exercise Plan
<p>Global exercises, involving large muscle groups focused on aerobic capacity.</p> <p>The circuit will consist of the following exercises, each exercise has 4 levels of intensity to ensure participant is exercising at the correct intensity.</p> <p>Stimulus 30-1min Passive Interval 1min</p> <p>Passive Interval will consist of seated rest.</p> <p>Complete each exercise for 30s-1min followed by 1min passive interval for example:</p> <p>Shuttle walk (Stimulus 30s-1min) Seated rest (Passive Interval 1min) Half Jack (Stimulus 30s-1min) etc.</p> <p>Aim to complete all exercise twice (2 rounds of circuit in total) which will last around 15-20mins.</p>

Power walk

Using arms movements and walking at increased speed to increase Intensity



Side Steps

Add arm movements to increase intensity.



Knee Raises

To increase intensity increase range of motion and speed.



Sit to Stand



Resistance Training Exercise Plan

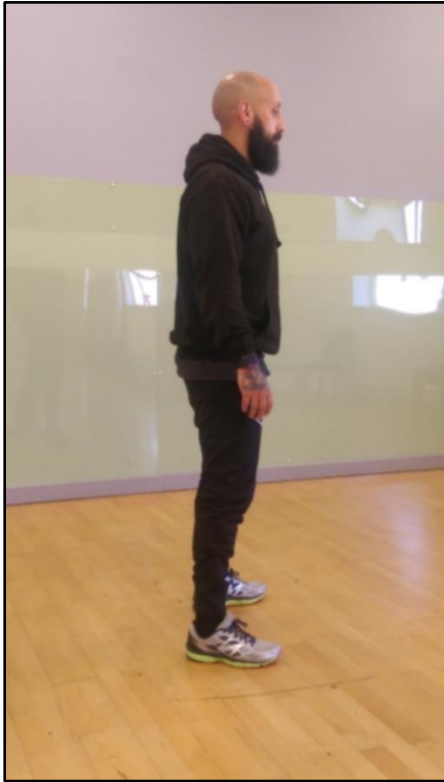
Resistance training for upper and lower limbs:
2 sets of 10 repetitions
90s – 2 min rest between sets.

Calf Raise



Blank

**Hamstring
Curl**



**Hip
Abduction**



Seated Leg Extension



Cool Down and Flexibility

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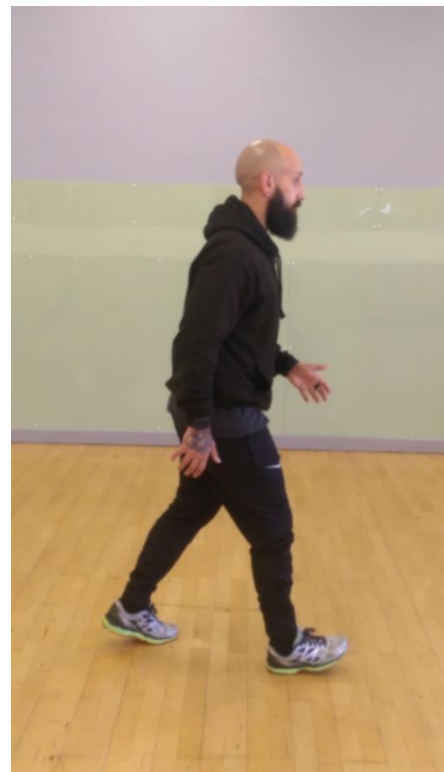
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- End of Round 2 of circuit aiming for an intensity between *somewhat hard to hard 12-14*
- End of cool down aiming for an intensity between *Very Light to fairly light 9-11*

Table 3.0 Exercise 12-week exercise plan Week 8-12

Warm up
<p>Active and dynamic movements aimed to prepare body for exercise through two components; increasing heart rate or 'pulse raiser' and mobilising joints.</p> <p>Mobility exercise aim to mobilise the following body parts:</p> <ul style="list-style-type: none">- Shoulders- Hips- Knees- Chest- Upper back- Calves / ankles- Hamstrings
Aerobic Circuit Training Exercise Plan
<p>Global exercises, involving large muscle groups focused on aerobic capacity.</p> <p>The circuit will consist of the following exercises, each exercise has 4 levels of intensity to ensure participant is exercising at the correct intensity.</p> <p>Stimulus 30-1min Passive Interval 1min</p> <p>Passive Interval will consist of seated rest.</p> <p>Complete each exercise for 30s-1min followed by 1min passive interval for example:</p> <p>Shuttle walk (Stimulus 30s-1min) Seated rest (Passive Interval 1min) Half Jack (Stimulus 30s-1min) etc.</p> <p>Aim to complete all exercise twice (2 rounds of circuit in total) which will last around 15-20mins.</p>

Get up and Go

This time start in seated position, standing up and power walk.



Double Side Step

This time side step 2 steps one way and 2 steps with additional arm movement to increase intensity.



Walking Knee Raises

Perform knee raises while walking around room.



Air Squat

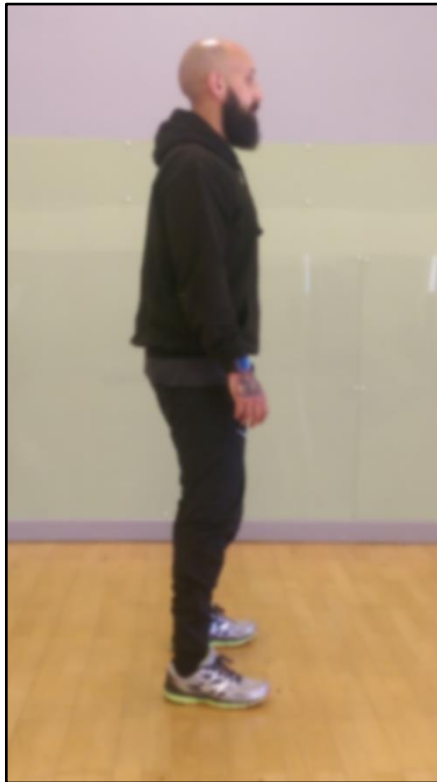
Perform sit to stand stopping just before making contact with chair



Resistance Training Exercise Plan

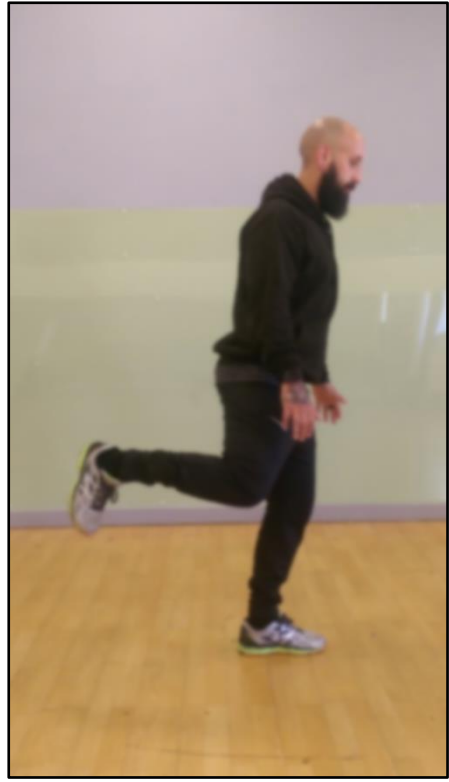
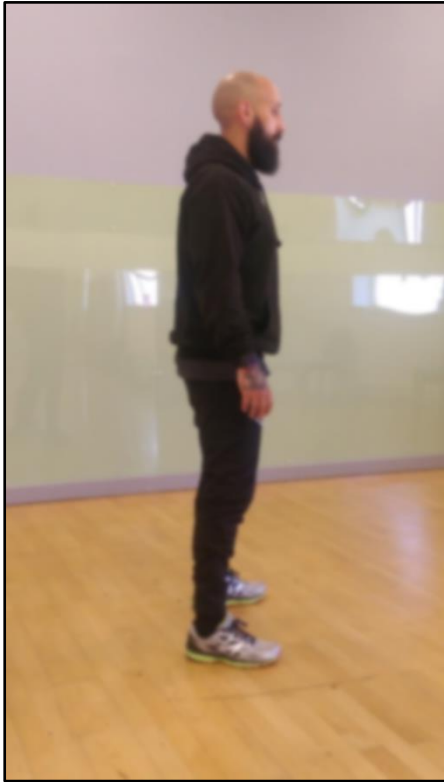
Resistance training for upper and lower limbs:
3 sets of 10 repetitions
90s – 2 min rest between sets.

Calf Raise



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**Hamstring
Curl**



**Hip
Abduction**



Seated Leg Extension



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- End of Round 2 of circuit aiming for an intensity between *somewhat hard to hard 12-14*
- End of cool down aiming for an intensity between *Very Light to fairly light 9-11*

