The “GALS” is an objective and quick screen both for locomotor abnormality and functional disability.

If muscles and joints look normal and move normal they are normal.

The GALS screen aims to find out the following:
- Are any of the joints abnormal?
- What is the nature of the joint abnormality?
- What is the extent (distribution) of the joint involvement?
- Are any other features of diagnostic importance present?

The key questions
- Have you any pain or stiffness in your muscles, joints, neck or back?
- Can you dress yourself completely without any difficulty? (dressing involves all joints)
- Can you walk up and down stairs without any difficulty? (lower limb function)

The GALS examination (G=gait, A=arms, L=legs, S=spine)

1. Gait
   - observe patient walking, turning and walking back
   - look for:
     - smoothness and symmetry of leg, pelvis and arm movements
     - normal stride length
     - ability to turn quickly
   NB: Parkinsonian patients have poor arm swing and cannot turn quickly.

2. Arms
   *Inspect from the front:*
   - Ask patient to stand in the anatomical position
   - Check normal girdle muscle bulk and symmetry (check also the symmetry and bulk of the quadriceps, knee deformity, midfoot and forefoot deformity)
   - Check that elbows are straight and in full extension
   - Attempt to place both hands behind the head, then push elbows back (look for glenohumeral, sternoclavicular, acromioclavicular joint, rotator cuff disease, shoulder abduction, external rotation, elbow flexion,)
   - Inspect palm and back of the hands (with straight fingers) - muscle bulk, joint swelling, deformity
   - Observe normal supination and pronation - musculoskeletal dysfunction
   - Observe normal grip (reduced grip - arthritis)
   - Place tip of each finger on to the tip of the thumb to assess normal dexterity and precision grip
   - Squeeze across 2nd to 5th metacarpophalangeal joints (metacarpal ‘squeeze’ test) - discomfort suggests synovitis
3. Legs
- Observe any knee or foot deformity
- Assess flexion of hip and knee, whilst supporting the knee
- Passively internally rotation of each hip, in flexion
- Examine each knee for presence of fluid - press patella down (‘bulge’ sign)
- Squeeze the metatarsophalangeal joints to detect any synovitis
- Inspect soles of the feet for rashes and/or callosities (common in rheumatoid arthritis)

4. Spine
   Inspection from behind:
   - Check paraspinal and shoulder girdle muscle bulk and symmetry
   - Look at straightness of spine (look for scoliosis)
   - Check levels of iliac crest (look for hip pathology)
   - Look for abnormal gluteal muscle bulk (look for hip pathology)
   - Check for popliteal swellings (behind the knee)
   - Check Achilles tendons (look for enthesopathy)
   - Press over mid-point of each supraspinatus muscle and squeeze the skin over each trapezius muscle - tenderness suggests fibromyalgia.

   Inspection from the side:
   - Note normal spine curvatures, any hip or knee deformity (flexion contractures, knee hyperextension) when standing, then ask patient to bend forward and assess lumbar spinal and hip flexion – a straight spine and loss of lumbar flexion suggests ankylosing spondylitis

   Inspect from the front:
   - Try to place ear on the shoulder each side - tests lateral cervical flexion.
   - (Ask the patient to open mouth wide, move jaw from side to side – test temporomandibular joints)