THE 3 MINUTE PRIMARY CARE LOW BACK EXAMINATION

Principle of examination:

- Observe movement of the patient in walking, sitting and changing of positions
- Have the patient appropriately undress to observe back movement
- Effective communication with the patient AND positive reinforcement

Observation of the patient:

• Alignment: level pelvis, lateral deviation, asymmetrical skin folds, scars and /or boney deformity

Questions:

- "Show me where your pain is?" "Is there any pain in your leg(s)?"
- Inquire about possible bowel or bladder dysfunction (Cauda Equina).

Examination sequence: Does the following movement produce a change in pain?

• STANDING

- o Flexion /extension of the lumbar spine
 - Look for asymmetry, and smooth reversal on movement
- o Walk on toes Strength of S1
- o Walk on Heels- Strength of L5
- o Full Squat -Test of proximal weakness Integrity of hips and knees

• SITTING ON TABLE

- o Test reflexes of L4 (patellar), and S1 (Achilles).
- o Tripod test straighten knee while sitting (compare with SLR in supine) -Positive is a reproduction of leg pain

• SUPINE

- o Light touch:
 - L4, antromedial leg
 - L5, webspace between 1st and 2nd toe
 - S1, lateral foot
- o Strength test of L5- extension of the great toes (Exterior Hallicus Longus)
- o Straight Leg Raise:-Reproduction of leg pain between 30-70 ° indicates radiculopathy -Compare with Tripod test in sitting
- o Hip internal, external rotation

• PRONE

- o Gentle pressure on each spinous process of lumbar vertebra
 - Significant increase in pain may indicate infection, fracture or tumour
- o Strength of S1 squeeze buttocks palpitate firmness compare sides
- o Femoral nerve stretch knee flexed passively extend hip, positive is reproduction of anterior thigh pain (L3, L4)

Reference: Bombardier, Claire, Division of Rheumatology, et.al., <u>The 3 Minute Primary Care Low Back</u> <u>Examination</u>, University of Toronto, and the Institute for Work and Health..