Can a pre-participation test of movement quality predict injury in sport and exercise?

Systematic reviews of reliability and validity for the ‘Functional Movement Screen’

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Background

- Participation in physical activity is critical for the health of *individuals* and *communities*
- Compelling evidence that physical activity affords *wide ranging health benefits* [1-5]

However...
Background

- Increasing participation in sport and exercise is inevitably associated with increasing exposure to risk of injury [6]

- A large proportion of injuries (especially in overuse) are preventable [7]
Impact of injury

- Sport – lower injury rates predict team success in professional sport [8-9]
- Military (‘tactical athletes’) – injury impacts on operational readiness [10]
- Society – injury associated with disability, suffering, economic burden (direct costs of treatment, indirect costs of lost productivity) [11]

When people are injured, they lose the many benefits of participating in exercise...sometimes they don’t return to pre-injury levels of participation
1. Establishing the extent of the sports injury problem
   - Incidence
   - Severity

2. Establishing aetiology and mechanism of injuries

3. Introducing preventative measures

4. Assessing their effectiveness by repeating step 1

Sequence of prevention model. Reproduced from van Mechelen et al. (1992).