

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'

Moran RW,^{1,4} Mason J,¹ Schneiders AG,² Major K,³ Sullivan SJ.⁴

1. Health Care (Osteopathy), Unitec Institute of Technology
2. Discipline of Physiotherapy, Central Queensland University
3. Private Practice, Osteopathy
4. Centre for Health, Activity, and Rehabilitation. University of Otago



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...

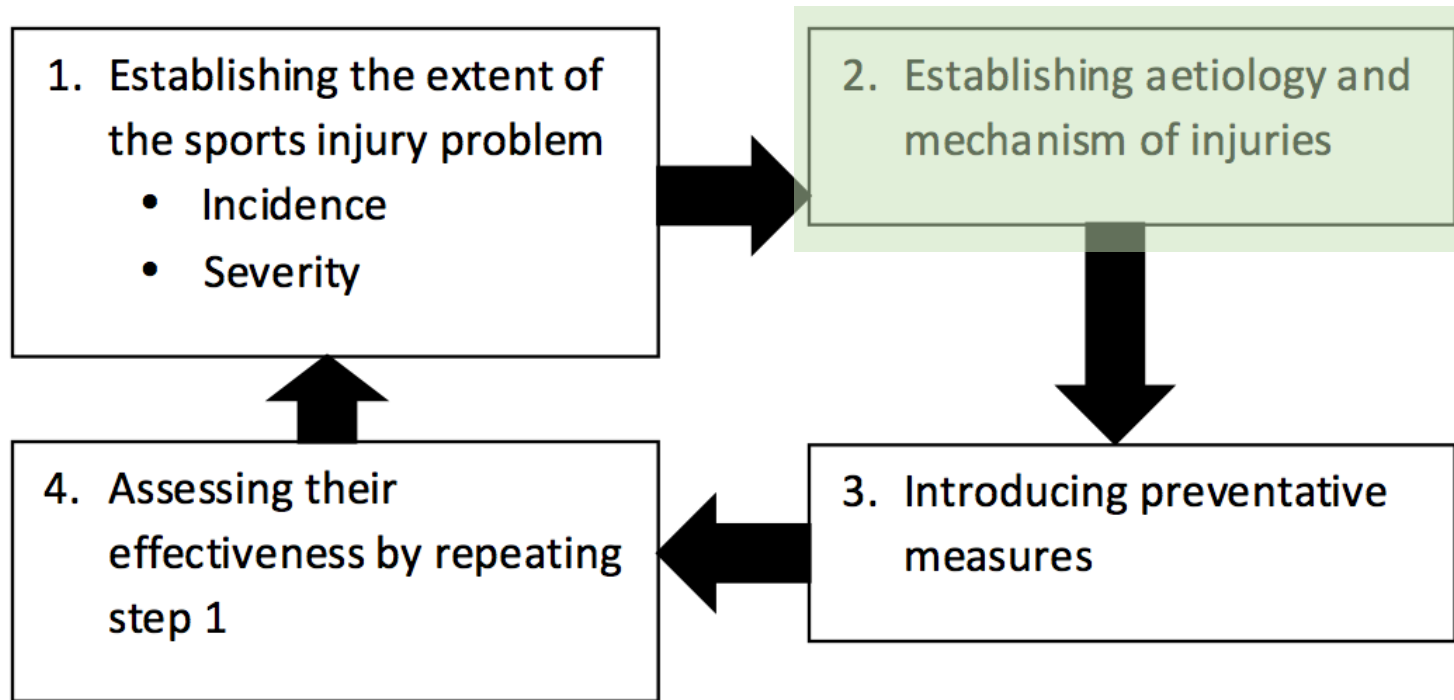
Background

- 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



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