Despite clearly defined criteria, more than half still reported heel pain due to heel pain, with 25% reporting sick leave due to heel pain. During follow-up, 18% changed their work assignments.

Inter-rater reliability, using the group consensus as the gold standard for comparison.

Conclusion Video-analysis is an underused tool for capturing suspected injury/concussion events. When undertaken using clearly operationalised definitions and in consultation with medical experts, vital information can be acquired to inform prevention strategies. The implications of this are wide-ranging.

Introduction Local neuromuscular deficits have been reported in people with patellofemoral pain. To help identify interventional targets, we synthesized the neuromuscular characteristics associated with patellofemoral pain persistence.

Materials and Methods Five databases were searched for case-control studies. Muscle electromyography, flexibility, performance, and cross-sectional data were extracted from reports of functional or isolated tasks and synthesized. An evidence gap map was constructed.

Results Sixty-seven studies were retained. In functional tasks, electromyographic investigations showed moderate evidence of small effect for vastus medialis onset-delays relative to vastus lateralis (0.44 [0.03, 0.83]) during stepping/stair negotiation tasks, and higher biceps femoris mean excitation amplitudes (0.55 [0.06, 1.04]) in single-leg triple-hop tests. In isolated tasks, we found moderate evidence of medium effect for lower Hoffman-reflex amplitude of vastus medialis (-1.12 [-1.56, -0.67]). Muscle performance investigations showed: strong evidence with medium and small effects for lower extensors concentric (-0.61 [-0.81, -0.40]) and eccentric (-0.56 [-0.79, -0.33]) strength; and moderate evidence of medium effect of lower isometric (-0.64 [-0.87, -0.41]) strength; moderate evidence with small effect for rate of force development to 30% (-0.55 [-0.89, -0.21]), 60% (-0.57 [-0.90, -0.25]) and medium effect to 90% (-0.76 [-1.43, -0.10]) of maximum voluntary contraction; and small effect for lower flexors concentric strength (-0.46 [-0.74, -0.19]) and extensors total work (-0.48 [-0.90, -0.07]). Flexibility investigations showed tighter hamstrings (-0.57 [-0.99, -0.14]).

Conclusion Quadriceps and hamstring motor-control, flexibility and weakness are robustly associated with patellofemoral pain, so these parameters should be used to guide investigations of treatment effect mechanisms.