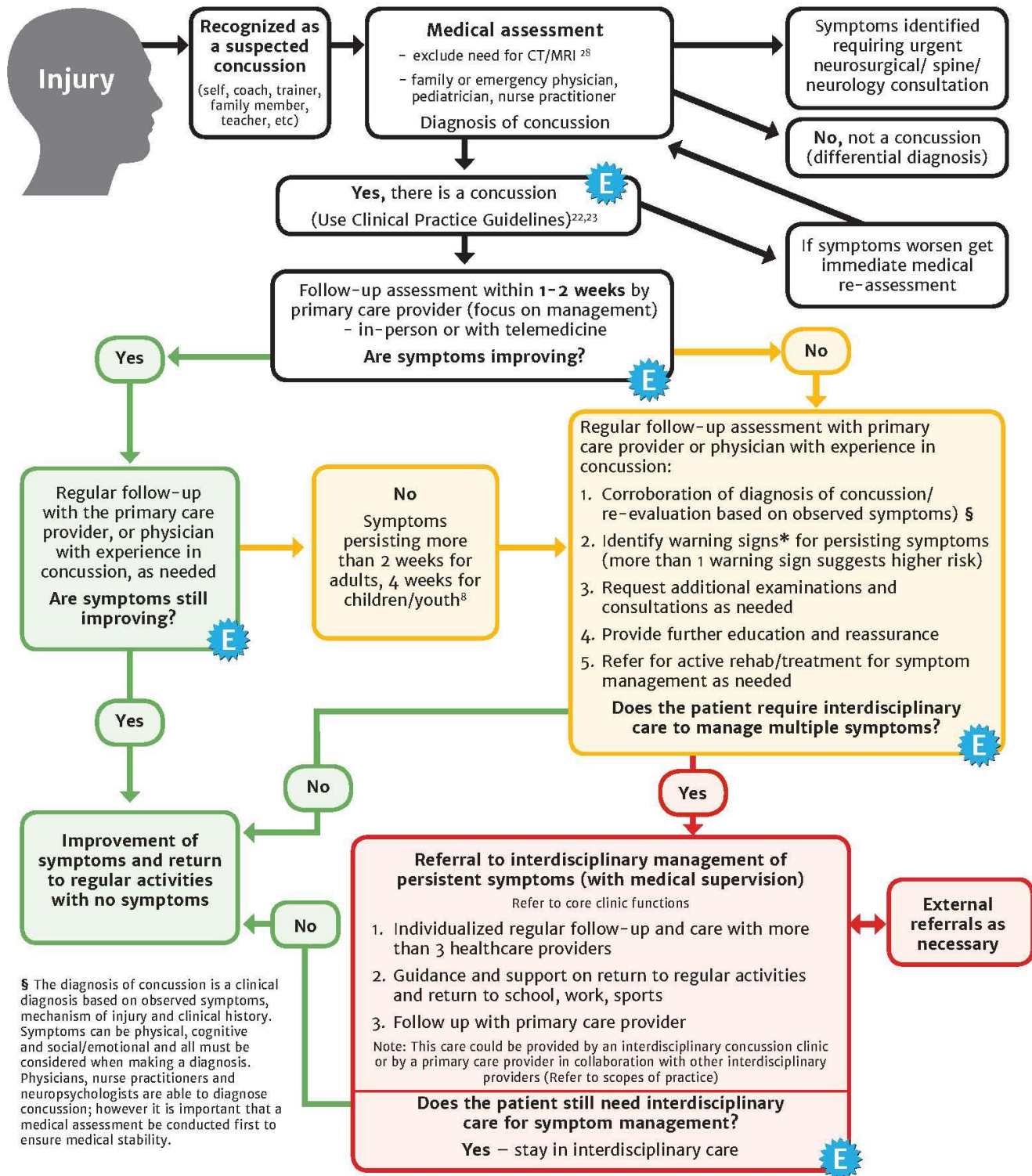


Post-Concussion Care Pathway[†]



Legend:



Provide education (written and verbal), and where appropriate, reassurance



Patient has risk factors identified, or is experiencing persistent symptoms that aren't resolving and require specialized care



Warning sign that, while the patient was expected to recover, there is some persistence of symptoms that may need specialized care



Patient is improving towards recovery



Research suggests about 15%-20% of patients will take this pathway



Research suggests about 30% of patients will take this pathway



Research suggests about 55% of patients will take this pathway

† A patient can enter this pathway immediately, shortly following injury, or after a period of time when it is recognized that concussion-like symptoms are not resolving. It is necessary that all patients be properly assessed and diagnosed. Patients suspected of having had an earlier concussion should enter the pathway from the beginning so that they can be assessed and diagnosed by the appropriate professional.

*** Warning Signs (risk factors) for poor prognosis**

- High score on the Post-Concussion Symptom Scale (PCSS) >40^{4,25}, OR on the Rivermead Post-Concussion Questionnaire¹⁵
- Previous Concussion History^{5,12,19,27}
- Persistent post –traumatic headache and migraine^{19,32}
- Depression/Anxiety^{2,16,19,21,24,26,27}
- Symptoms/signs of vestibulo-ocular abnormalities (problems maintaining visual stability during head movements)^{7,9,12}
- Signs/symptoms of cognitive difficulties (problems with perception, memory, judgment, and reasoning)^{5,12,18,26}
- Pre-injury history of sleep disturbance and/or post-injury changes in sleep patterns, difficulty sleeping^{2,29,31}
- Increased symptoms with return to school, work, or exercise⁹
- Returning to a contact/risk of contact sport activity^{8,21}

Note:

1. Research has found that being female seems to be a risk factor for prolonged recovery and this should be considered along with the other risk factors when determining if multidisciplinary care is required^{3,4,6,14,26,32}
2. The impact that any single risk factor or combination of risk factors will have on a person's care must be assessed on an individual basis. Presence of one or more risk factors should be identified in care plans and referrals.
3. A recent pediatric study conducted in the emergency department indicates a risk profile with a combination of these factors that results in a risk factor score³². Research has not yet connected this risk score to long term prognosis.