WHIP - PREDICT

WHIPLASH RISK STRATIFICATION TOOL

The University Of Queensland
AUSTRALIA

RECOVER
Injury Research Centre

RECOVER is a joint initiative of the Motor Accident Insurance Commission and The University of Queensland.

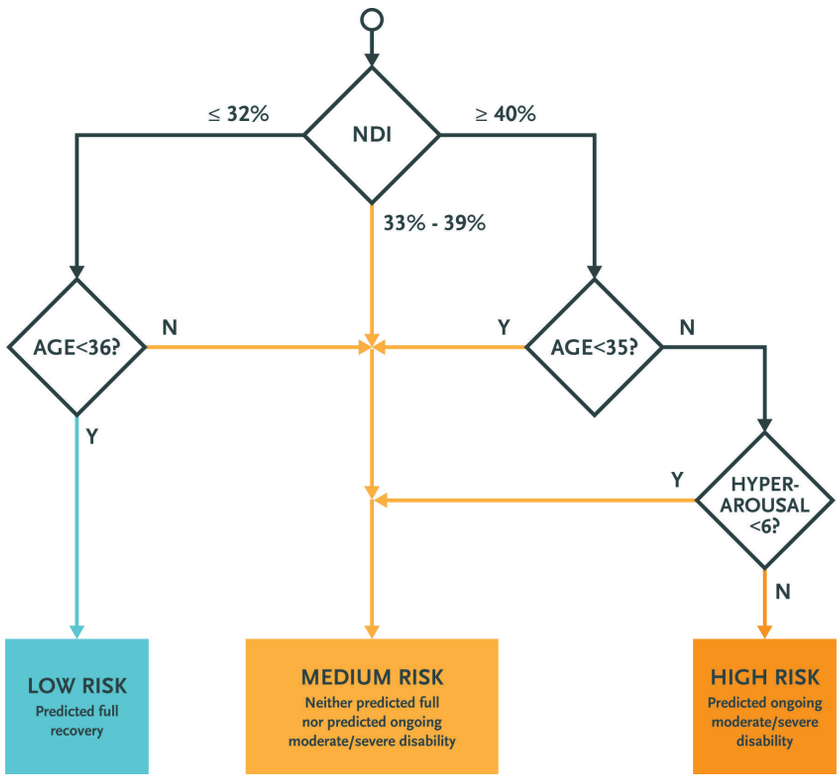
NHMRC CENTRE OF
RESEARCH EXCELLENCE
IN RECOVERY FOLLOWING
ROAD TRAFFIC INJURIES

MAIC
Motor Accident
Insurance Commission

The University Of Queensland
AUSTRALIA

Recovery following a whiplash injury is varied. While approximately 50% of individuals fully recover, 25% develop persistent moderate/severe pain and disability and 25% experience milder levels of disability.

A clinical prediction rule (CPR) is a research-generated tool used to predict outcomes such as likelihood of developing moderate/severe disability or experiencing full recovery from acute whiplash injury. In our studies we observed increased probability of developing chronic moderate/severe disability in the presence of older age and initially higher levels of NDI and hyperarousal symptoms (positive predictive value [PPV] = 71%) and increased probability of full recovery in younger individuals with initially lower levels of neck disability (PPV = 71%).



The forms in this pad will help you to judge the likelihood of recovery for patients with an acute whiplash injury using the whiplash clinical prediction rule. Once your patient has filled in the form and you have calculated the NDI and the hyperarousal symptoms (if applicable) scores, follow the diagram above for making a prediction about the likelihood of recovery.

WHAT THE RISK CLASSIFICATION MEANS FOR TREATMENT

We are currently undertaking a clinical trial where treatment is provided based on the risk classification of the patient. We are proposing that those classified as 'low risk' will need minimal intervention comprising of advice and simple exercises.

Patients classified as 'medium' or 'high risk' require further assessment of physical (movement and muscle control, kinaesthetic awareness, sensory examination) and psychological factors such as recovery expectations and post-traumatic stress symptoms. Treatment will depend upon findings from this more detailed assessment.

Further information about the whiplash clinical prediction rule is available on recover.centre.uq.edu.au
The current (2015) evidence based Clinical Practice Guidelines for Acute Whiplash is available on https://www.maa.nsw.gov.au/for-professionals/for-health-professionals/acute-whiplash

[1] Ritchie C, Hendrikz J, Jull G, Elliott J, Sterling M., External validation of a clinical prediction rule to predict full recovery and ongoing moderate/severe disability following acute whiplash injury, J Orthop Sports Phys Ther 2015 Apr;45(4):242–50

Ritchie C, Hendrikz J, Kenardy J, Sterling M., Derivation of a clinical prediction rule to identify both chronic moderate/severe disability and full recovery following whiplash injury, Pain 2013 Oct;154(10):2198–206.

RECOVER is a joint initiative of the Motor Accident Insurance Commission and The University of Queensland.

NHMRC CENTRE OF RESEARCH EXCELLENCE IN RECOVERY FOLLOWING ROAD TRAFFIC INJURIES

MAIC Motor Accident Insurance Commission

THE UNIVERSITY OF QUEENSLAND
AUSTRALIA

The University Of Queensland AUSTRALIA | RECOVER Injury Research Centre

NHMRC CENTRE OF RESEARCH EXCELLENCE IN RECOVERY FOLLOWING ROAD TRAFFIC INJURIES

Name: _____ ID: _____ Age: _____ Date: / /

Practitioner: _____

This questionnaire has been designed to give us information as to how your neck pain has affected your ability to manage in everyday life. Please answer every section and mark in each section only the one box that applies to you. We realise you may consider that two or more statements in any one section relate to you, but please just mark the box that most closely describes your problem right now.

Pain intensity	☐I have no pain at the moment.	☐The pain is mild at the moment.	☐The pain comes and goes and is moderate.	☐The pain is moderate and does not vary much.	☐The pain is severe but comes and goes.	☐The pain is severe and does not vary much.
Personal care	☐I can look after myself without causing extra pain.	☐I can look after myself normally but it causes extra pain.	☐It is painful to look after myself and I am slow and careful.	☐I need some help, but manage most of my personal care.	☐I need help every day in most aspects of self-care.	☐I do not get dressed, I wash with difficulty and stay in bed.
Lifting	☐I can lift heavy objects without extra pain.	☐I can lift heavy objects but it causes extra pain.	☐Pain prevents me from lifting heavy objects off the floor, but I can if they are conveniently positioned, for example on a table.	☐Pain prevents me from lifting heavy objects, but I can manage light to medium weights if they are conveniently positioned.	☐I can lift very light weights.	☐I cannot lift or carry anything at all.
Reading	☐I can read as much as I want to with no pain in my neck.	☐I can read as much as I want with slight pain in my neck.	☐I can read as much as I want with moderate pain in my neck.	☐I cannot read as much as I want because of moderate pain in my neck.	☐I cannot read as much as I want because of severe pain in my neck.	☐I cannot read at all.
Headache	☐I have no headaches at all.	☐I have slight headaches which come infrequently.	☐I have moderate headaches which come infrequently.	☐I have moderate headaches which come frequently.	☐I have severe headaches which come frequently.	☐I have headaches almost all the time.
Concentration	☐I can concentrate fully when I want to with no difficulty.	☐I can concentrate fully when I want to with slight difficulty.	☐I have a fair degree of difficulty concentrating when I want to.	☐I have a lot of difficulty concentrating when I want to.	☐I have a great deal of difficulty concentrating when I want to.	☐I cannot concentrate at all.
Work	☐I can do as much work as I want to.	☐I can only do my usual work, but no more.	☐I can do most of my usual work, but no more.	☐I cannot do my usual work.	☐I can hardly do any work at all.	☐I cannot do any work at all.
Driving	☐I can drive my car without neck pain.	☐I can drive my car as long as I want with slight pain in my neck.	☐I can drive my car as long as I want with moderate pain in my neck.	☐I cannot drive my car as long as I want because of moderate pain in my neck.	☐I can hardly drive my car at all because of severe pain in my neck.	☐I cannot drive my car at all.
Neck pain and sleeping	☐I have no trouble sleeping.	☐My sleep is slightly disturbed (less than 1 hour sleepless).	☐My sleep is mildly disturbed (1-2 hours sleepless).	☐My sleep is moderately disturbed (2-3 hours sleepless).	☐My sleep is greatly disturbed (3-5 hours sleepless).	☐My sleep is completely disturbed (5-7 hours sleepless).
Recreation	☐I am able to engage in all recreational activities with no pain in my neck at all.	☐I am able to engage in all recreational activities with some pain in my neck.	☐I am able to engage in most, but not all recreational activities because of pain in my neck.	☐I am able to engage in a few of my usual recreational activities because of pain in my neck.	☐I can hardly do any recreational activities because of pain in my neck.	☐I cannot do any recreational activities at all.

If your age is 35 or above, please fill the section on the next page, otherwise please return this form

OFFICE USE ONLY	0	____×1=____	____×2=____	____×3=____	____×4=____	____×5=____
	NDI (Neck Disability Index)		[total] ____ / ____ [5 × total number of answers]		×100 =	____%

Below is a list of difficulties people sometimes have after stressful life events. Please read each item, and then indicate how distressing each difficulty has been for you DURING THE PAST SEVEN DAYS with respect to the motor vehicle accident. How much were you distressed or bothered by these difficulties?

	Not at all or only one time	Once a week or less / once in a while	2 to 4 times a week / half of the time	5 or more times a week / almost always
Do you feel irritable or are you prone to getting angry easily?	☐	☐	☐	☐
Do you have difficulty falling asleep or staying asleep?	☐	☐	☐	☐
Do you have difficulty concentrating?	☐	☐	☐	☐
Are you noticeably overly alert?	☐	☐	☐	☐
Are you noticeably jumpy or are you easily startled?	☐	☐	☐	☐

Thank you – please return this form

OFFICE USE ONLY		0	____×1=____	____×2=____	____×3=____
	HYPER-AROUSAL SYMPTOMS		[total] ____		
	NDI (REPORT FROM PREVIOUS PAGE)		____%		
	AGE (REPORT FROM PREVIOUS PAGE)		____		

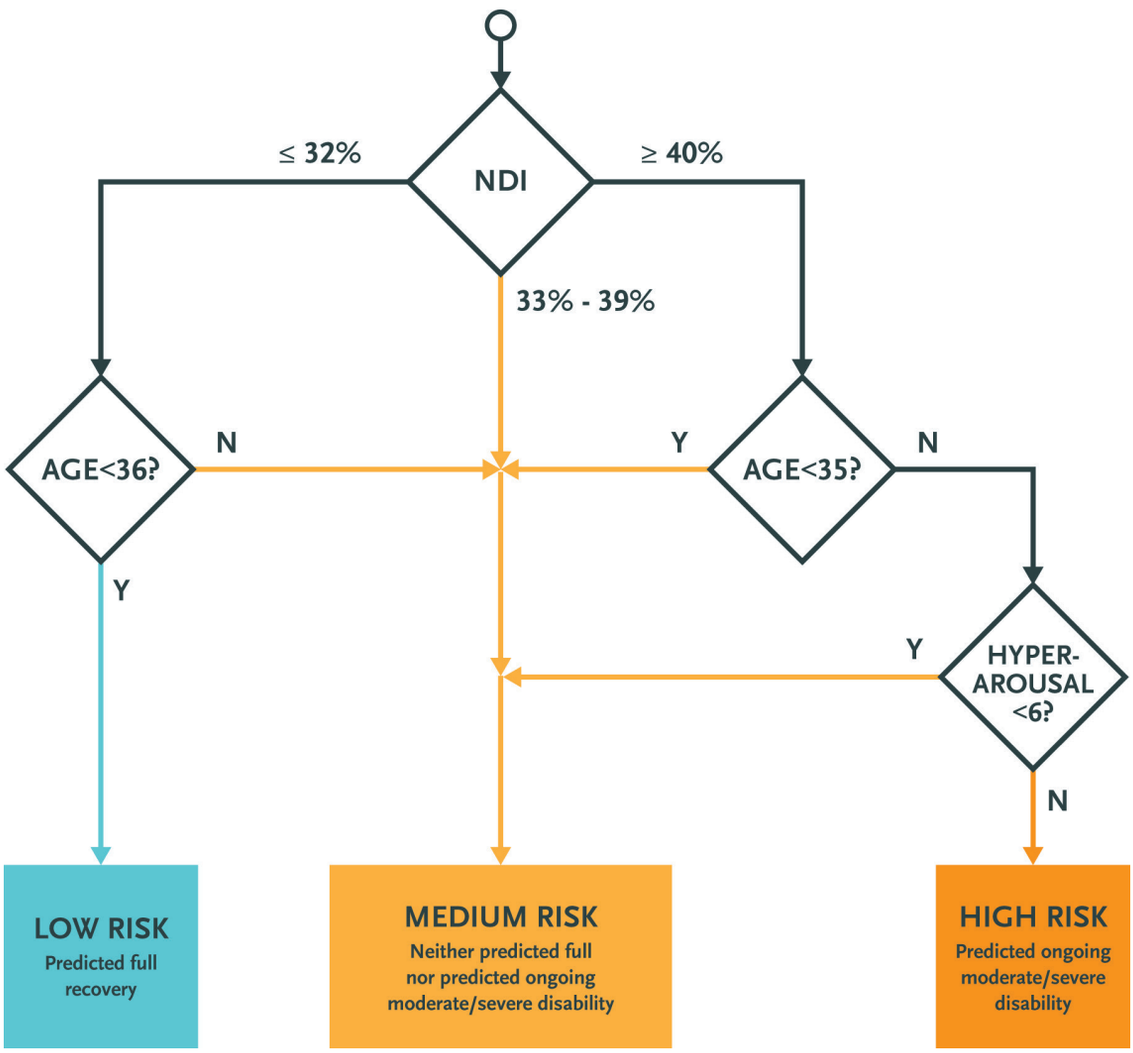
For interpretation of the results, please see the back page of the pad or visit the dedicated page on recover.edu.au

Predicted outcome (for your own record): _____

THE UNIVERSITY OF QUEENSLAND
AUSTRALIA

RECOVER
Injury Research Centre

WHIP - PREDICT
Whiplash Risk Stratification Tool



WHAT THE RISK CLASSIFICATION MEANS FOR TREATMENT

We are currently undertaking a clinical trial where treatment is provided based on the risk classification of the patient. We are proposing that those classified as 'low risk' will need minimal intervention comprising of advice and simple exercises.

Patients classified as 'medium' or 'high risk' require further assessment of physical (movement and muscle control, kinaesthetic awareness, sensory examination) and psychological factors such as recovery expectations and post-traumatic stress symptoms. Treatment will depend upon findings from this more detailed assessment.

Further information about the whiplash clinical prediction rule is available on recover.centre.uq.edu.au
The current (2015) evidence based Clinical Practice Guidelines for Acute Whiplash is available on https://www.maa.nsw.gov.au/for-professionals/for-health-professionals/acute-whiplash

RECOVER is a joint initiative of the Motor Accident Insurance Commission and The University of Queensland.

NHMRC CENTRE OF RESEARCH EXCELLENCE IN RECOVERY FOLLOWING ROAD TRAFFIC INJURIES

MAIC Motor Accident Insurance Commission

THE UNIVERSITY OF QUEENSLAND
AUSTRALIA