

## CRITICAL REVIEW FORM: CLINICAL PREDICTION OR DECISION RULE

### Citation:

Stiell IG, Wells, GA, Vandemheen K, Clement C, Lesiuk H, Laupacis A, McKnight RD, Verbeek R, Brison R, Cass D, Eisenhauer MA, Greenberg GH, Worthington J The Canadian CT Head Rule for patients with minor head injury. *Lancet* 2001; 357: 1391-96

Stiell IG, Clement CM, et al. Comparison of the Canadian CT Head Rule and the New Orleans Criteria in patients with minor head injury, *JAMA*, 294(12), 2005, pp 1511-1518.

Smits M, Dippel DWJ, et al. External validation of the Canadian CT Head Rule and the New Orleans Criteria for CT scanning in patients with minor head injury, *JAMA*, 294(12), 2005, pp.1519-1525.

Guide		Comments
<b>I</b>	<b>Is this a newly derived instrument? (LEVEL IV)</b>	
<b>II</b>	<b>Has the instrument been validated? (LEVEL II or III) If so, consider the following.</b>	
1a	Were all important predictors included in the derivation process?	
1b	Were all important predictors present in significant proportion of the study population?	
1c	Does the rule make clinical sense?	
2	Did validation include prospective studies on several different populations from that used to derive it (II), or was it restricted to a single population (III)?	
<b>III</b>	<b>How well did the validation exercise meet the following criteria?</b>	
1a	Did the patients represent a wide spectrum of severity of disease?	

Guide		Comments
1b	Was there a blinded assessment of the criterion?	
1c	Was there an explicit and accurate interpretation of the predictor variables and the actual rule without knowledge of the outcome?	
1d	Did the results of the assessment of the variables or of the rule influence the decision to perform the criterion standard?	
2	How powerful is the rule (in terms of sensitivity and specificity; likelihood ratios; proportions with alternative outcomes; or relative risks or absolute outcome rates)?	
<b>IV</b>	<b>Has an impact analysis demonstrated change in clinical behaviour or patient outcomes as a result of using the instrument? (LEVEL I) If so, consider the following.</b>	
1	How well did the study guard against bias in terms of differences at the start (concealed randomization, adjustment in analysis) or as the study proceeded (blinding, co-intervention, loss to follow-up)?	
2	What was the impact on clinician behaviour and patient-important outcomes?	