CRITICAL REVIEW FORM: CLINICAL PREDICTION RULES

Citation:

Wisnivesky JP, Henschke C, Balentine J, Willner C, Deloire AM, McGinn TG. "Prospective validation of a prediction model for isolating inpatients with suspected pulmonary tuberculosis." Arch Intern Med. 2005 Feb 28;165(4):453-7.

Guide		Comments
I	**Is this a newly derived instrument? (LEVEL IV)**	
A	**Was validation restricted to the retrospective use of statistical techniques on the original database? (If so this is a Level IV rule). If so, consider the following standards for initial development of a decision rule.**	
1	Were all important predictors included in the derivation process?	
2	Were all important predictors present in significant proportion of the study population?	
3	Does the rule make clinical sense?	
II	**Has the instrument been validated? (LEVEL II or III) If so, consider the following.**	
A	**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)? How well did the validation exercise meet the following criteria:**	

Guide		Comments
1	Were the patients chosen in an unbiased fashion and do they represent a wide spectrum of severity of disease?	
2	Was there a blinded assessment of the criterion standard or outcome event (or was the outcome all-cause mortality) for all patients?	
3	Was there an explicit and accurate interpretation of the predictor variables and the actual rule without knowledge of the outcome?	
4	Was there 100% follow-up of those enrolled?	

Guide		Comments
B	**How powerful is the rule (in terms of sensitivity and specificity; likelihood ratios; proportions with alternative outcomes; or relative risks or absolute outcome rates)?**	
III	**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.**	
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?	