Can we predict problem residents?

Reference:
Brenner AM,1 Mathai S,1,2 Satyam Jain,1,3 and Paul C. Mohl.4 Can We Predict “Problem Residents”? Academic Medicine. 2010;85(7):1147-51

Author Institution(s):
1University of Texas Southwestern Medical Center, Dallas, Texas, USA; 2OEF/OIF Program, Fort Worth VA Medical Center, Fort Worth, Texas, USA; 3Dallas VA Medical Center and North Texas State Hospital, Dallas, Texas, USA; 4University of Texas, Dallas, Texas, USA.

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Tags

Educational domain
Assessment Method
Admissions and selection
Residency

Background
Investigate whether information available at moment of admission and selection of a resident was predictive to future performance within the program and predictive of what they term “problem residents.”

Purpose
To identify factors that predict residents who will have difficulty during training.

Type of paper
Research: Retrospective record review

Key Points on the Methods
Identified all residents in a single program over 20 years identified by a program director as “problem residents.” Then retroactively extracted data from various
sources (dean’s letter, application materials, USMLE scores, interviewer ratings, encoded comments in these documents and letters of recommendation). Blinded reviewers coded positive and negative comments and the authors retroactively sought out match controls for the “problem residents.”

**Key Outcomes**

The authors found a correlation between negative comments in the dean’s letter and those residents who later became labeled “problem residents.” All other documents did not correlate to residents who were retrospectively labeled “problem residents.”

The term “problem resident” was operationized as being “nervous, timid, displaying little curiosity, difficulty applying knowledge clinically.”

**Key Conclusions**

The authors conclude that educators should be really mindful of dean’s letters as they seem to be predictive of identifying “problem residents”

The list of terms used to define “problem residents” contains subtle notions and items of different levels of importance – somebody who is shy is different than someone who cannot apply clinical reasoning.

The initiative of looking for prognostic factors to admissions is to be commended, however, there are some biases – operationization of what a “problem resident” is; single program director’s opinion on identifying “problem residents”; biases to outcome; recall bias; work-up bias. This paper is a good example of what not to do when pursuing validity.

Clinical incompetence is not included as part of what constitutes a “problem resident” but acute mental illness is.

**Spare Keys – other take home points for clinician educators**

While the goal of the paper is sound and would make an ideal tool for any educator, the applicability is ultimately limited. In particular, when applied to international medical graduates (IMG), who for cultural assimilation and pre-existing knowledge bases reasons can be some of the more challenging residents to teach, the IMG dean’s letter is not predictive of a “problem resident.” Many educators will have a system for reading dean’s letters from specific schools – some will be form letters while others will be more honest and informative.