Letter to the Editor
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Re: Amelsvoort et al. “Approaches for predicting long-term sickness absence”
by Schouten LS, Joling CI, van der Gulden JWJ, Heymans MW, Bültmann U, Roelen CAM

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Refers to the following texts of the Journal: 2015;41(1):36-42
2015;41(3):322-323

Key terms: absenteeism; calibration; discriminative ability; long-term sickness absence; manual worker; office worker; prognostic research; ROC analysis; screening; sensitivity; sick leave; sickness absence; specificity; WAI; work ability index; Youden index

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We would like to thank Van Amelsvoort et al (1) for the interest in our study (2) and take the opportunity to clarify here that none of the workers were sick-listed when they participated in the baseline health survey. We mentioned in the abstract that incident (ie, not prevalent) long-term sickness absence was retrieved from an occupational health register (2). Our explanation of how to interpret the area under the receiver operating characteristic (ROC) curve as measure of discrimination between workers with and without long-term sickness absence might have given the impression that the study population was a mix of workers with and without sickness absence. Throughout the paper, however, workers with long-term sickness absence refer to those not sick-listed at baseline who had incident long-term sickness absence during 1-year follow-up.

We agree with the authors that instruments to predict long-term sickness absence for workers still at work (secondary prevention) should be distinguished from instruments for workers already on sick leave (tertiary prevention). The objective of our study was to investigate the Work Ability Index (WAI) as an instrument to predict future long-term sickness absence in non-sick-listed workers, ie, as an instrument for secondary prevention. Therefore, the term “screening” was used in the appropriate context.

Van Amelsvoort et al (1) raise an interesting point when they state that including the outcome (sickness absence) as predictor in the model will shift the focus towards the prediction of recurrent sickness absence. Obviously, sickness absence is useless for predicting the first long-term sickness absence episode of an individual who has just finished education and enters the workforce. During working life, workers develop a sickness absence history either without sickness absence episodes (ie, zero-absenteeism) or with successive sickness absence episodes. In the latter case, Navarro et al (3) recommended to use statistical techniques for recurrent rather than independent events. A worker’s sickness absence history is the strongest predictor of future sickness absence episodes (4, 5). From that perspective, it would be a missed opportunity not to include past sickness absence as a variable in prediction models for future long-term sickness absence.

**References**


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