## Letter

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# The national implementation of a triage algorithm based on patient-reported outcome measures in outpatients with epilepsy

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In a recent publication, Myrdal et al. concluded that a patient-reported outcome (PRO) triage algorithm in an outpatient epilepsy clinic has limited value [1]. PRO-based outpatient follow-up of epilepsy patients is a national assessment strategy implemented in neurological departments all over Denmark. Myrdal et al. included responses to the PRO questionnaires from 72 epilepsy patients at the local adult neurology outpatient clinic. One neurologist retrospectively assessed patients' clinical needs and allocated these into three categories (green – no clinical need for patient contact, yellow - contact to the patient should be considered, or red – mandatory patient contact). This retrospective assessment was compared with the result from the national triage algorithm for the same patients. The neurologist did not access any additional information, did not contact the patient and was not blinded to the result of the original national triage algorithm. The authors found that the neurologist would change triage colour in 50% of cases. Among the questionnaires originally triaged to green (no clinical need for patient contact), none were reclassified to red (mandatory patient contact). The majority of discrepancies occurred between yellow and red colours, which are of little practical or clinical consequence.

When PRO is used to decide if a patient needs a clinical contact, it serves as a substitute for a clinical evaluation and thus the criterion validity of the algorithm is essential. The relevant criterion (gold standard) should be an experienced clinician's conclusion of need of contact based on a thorough clinical evaluation of the patient's actual symptoms and needs. In the study by Myrdal et al., no such gold standard was applied. The results were based solely on the response to the PRO questionnaires and an alternative algorithm adopted by one specific neurologist. The

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algorithm adopted by the assessing neurologist was partly only revealed, and it is not possible to identify exactly where it deviates from the national triage algorithm. The revealed examples of situations in which the alternative algorithm should result in mandatory patient contact (colour red) were patients who reported seizures, increase in seizure frequency, suicidal thoughts, poor adherence to medicine or drug abuse, pregnancy or planned pregnancy. These situations are all included in the national algorithm with a red or yellow outcome, depending on the response category.

The PRO triage algorithm has been used in outpatients with epilepsy during the past 11 years and is implemented in all Danish regions and neurological departments. In the two regions, the Central Denmark Region and the North Denmark Region, more than 6,000 patients have completed more than 28,000 PRO questionnaires based on this algorithm [2]. Over the years, neurologists from all over Denmark have been engaged in the consensus-based process of developing and adjusting the questionnaire and the algorithm. The process and results were described elsewhere [2-5]. The present study by Myrdal et al. basically demonstrates that a single neurologist partly disagrees with consensus based on the algorithm developed by fellow Danish neurologists.

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**Conflicts of interest** Potential conflicts of interest have been declared. Disclosure forms provided by the authors are available with the article at www.ugeskriftet.dk/dmj

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