C.1.5 Tremor in adults

Component	Description
Review question	In adults and young people who present with tremor, what is the accuracy of accompanying signs and symptoms to support non-specialists in identifying neurological conditions?
Objectives	To identify signs and symptoms that if presenting with tremor would indicate a suspected neurological condition that requires referral for further specialist assessment

Component	Description
Population	Adults, young people, and children (>5 years old) who present to a non-specialist with
	tremor
Presence or	The committee Identified the following predictors:
absence of clinical predictor	• bradykinesia
	• facial expressiveness
	• gait-disorder
	head tremor
	• medication
	progressive time-course
	REM sleep disturbance
	symmetrical tremor
	• tone
	voice changes
	• weight loss.
Outcomes	Main outcomes:
	Sensitivity (%) and specificity (%)
	 Area under the ROC curve (AUROC) – measure of predictive accuracy
	Positive and negative predictive values
	Other outcomes:
	Adjusted odds ratios for the presence of the following conditions:
	o cerebellar tremors
	o drug-related tremors
	o dystonic tremor (task-specific tremor)
	o essential tremor
	o neuropathic tremor
	o parkinsonism
	o physiological tremor
	o primary orthostatic tremor
	o psychogenic tremors
	o thyroid disorder.
Study design	Prospective or retrospective cohort studies and case-control studies with multivariate analysis
Exclusions	Neonates (infants aged 28 days and under)
	 Infants (<5 years old) as this age group would get referred or have basic investigations done
	Studies unadjusted for any of the identified predictors listed above
	Studies with univariate analysis only
How the	The following neurological condition groups* will form the basis of the search strategy:
information will	ataxia
be searched	development disorders
	• inflammatory disorders
	neuromuscular diseases
	 parkinsonism and other extrapyramidal disorders or tic disorder
	rare and other neurological diseases
	• tumours of the nervous system.
	*Condition groups taken from Defining Adult Neurological Conditions, National
	Neurology Intelligence Network, April 2016

Component	Description
Key confounders	Any of the predictors listed above
The review strategy	Meta-analysis where appropriate will be conducted.
	• Evidence from indirect settings, which the committee evaluate to be generalizable to a non-specialist setting, will be included in the review.
	 The risk of bias of each study will be assessed using the QUADAS-2 checklist for diagnostic studies or the NGC checklist for prognostic studies.
	 The overall quality of the evidence will be assessed using an adapted version of GRADE.
	• The review may cross-refer to existing NICE guidance, which has identified early signs and symptoms for neurological conditions that present with tremor.