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# CLINICAL PRACTICE GUIDELINE FOR THE REHABILITATION OF ADULTS WITH MODERATE TO SEVERE TBI

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AGREE EVALUATION

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**SUMMARY REPORT**

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OCTOBER 30, 2014

## Summary

A scoping review was undertaken for clinical practice guideline (CPGs) focused on moderate to severe traumatic brain injury (TBI). For search strategy information, please refer to the scoping review article. Only the CPGs older than < 2000 were used for the quality evaluation. Seven CPGs were evaluated.

### Identification

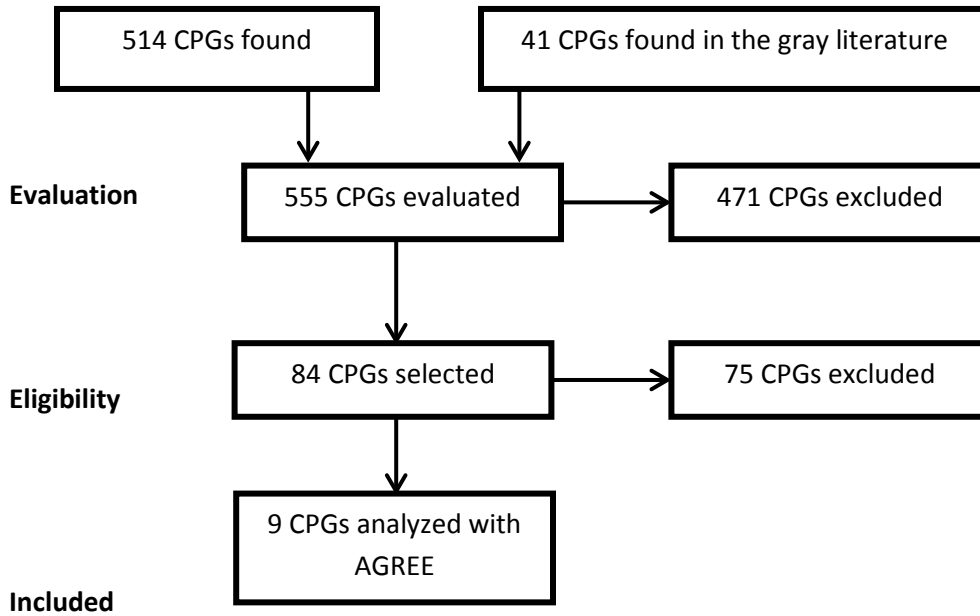


Figure 1. Flow chart of literature review

## AGREE instrument

The Appraisal of Guidelines for Research and Evaluation (AGREE) was used to evaluate the CPGs in the present project. The AGREE instrument is composed of 23 items organized in six domains followed by two global rating items. Each domain is specific to a unique dimension of guideline quality.

Table 1. Explanation of the Domains

Domain 1. Scope and purpose	Overall aim of the guideline, the specific health questions and target population.
Domain 2. Stakeholder Involvement	The extent to which the guideline was developed by appropriate stakeholders and represents the views of its intended users.
Domain 3. Rigour of development	Process used to gather and synthesize the evidence, the methods to formulate the recommendations and to updated them.
Domain 4. Clarity of presentation	Language, structure and format of the guideline.
Domain 5. Applicability	Likely barriers and facilitators to implementation, strategies to improve uptake and resource implications of applying the guideline.
Domain 6. Editorial Independence	Formulation of the recommendations not being unduly biased with competing interests.
Overall assessment	Rating the overall quality of the guideline and whether the guideline would be recommended for use in practice.

Reported from the AGREE II user's manual

## Appraisers

Four appraisers were recruited to independently evaluated using the AGREE instrument. They were recruited to ensure adequate representation of expertise and geographic location.

## Scoring the AGREE II instrument

As written in the user manual, the six domains scores are independent and should not be aggregated into a single quality score. For each domain, standardizing score are calculated by summing up all the scores of the individual items in a domain and standardizing the total as a percentage of the maximum possible score for the domain.

$$\frac{\text{Obtained score} - \text{Minimum possible score}}{\text{Maximum possible score} - \text{Minimum possible score}}$$

Were Maximum possible score = 7 (strongly agree) \* x items \* x appraisers

Were minimum possible score = 1 (strongly disagree) \* x items \* x appraisers

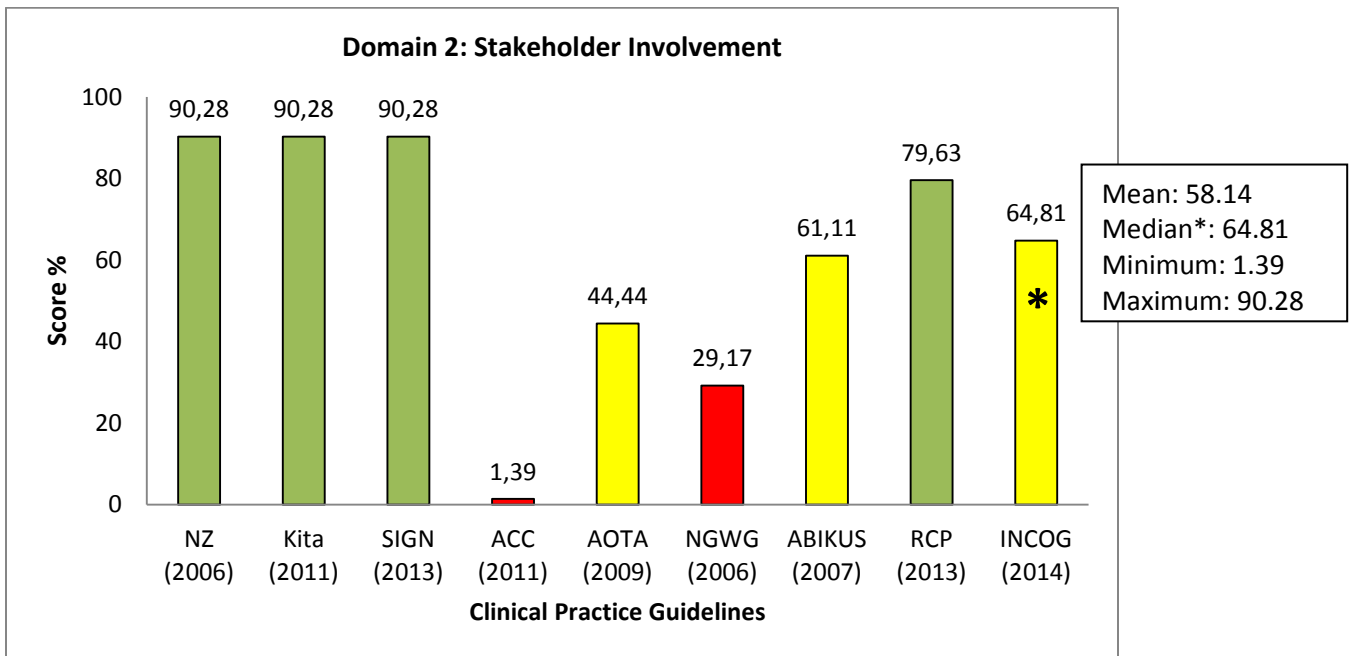
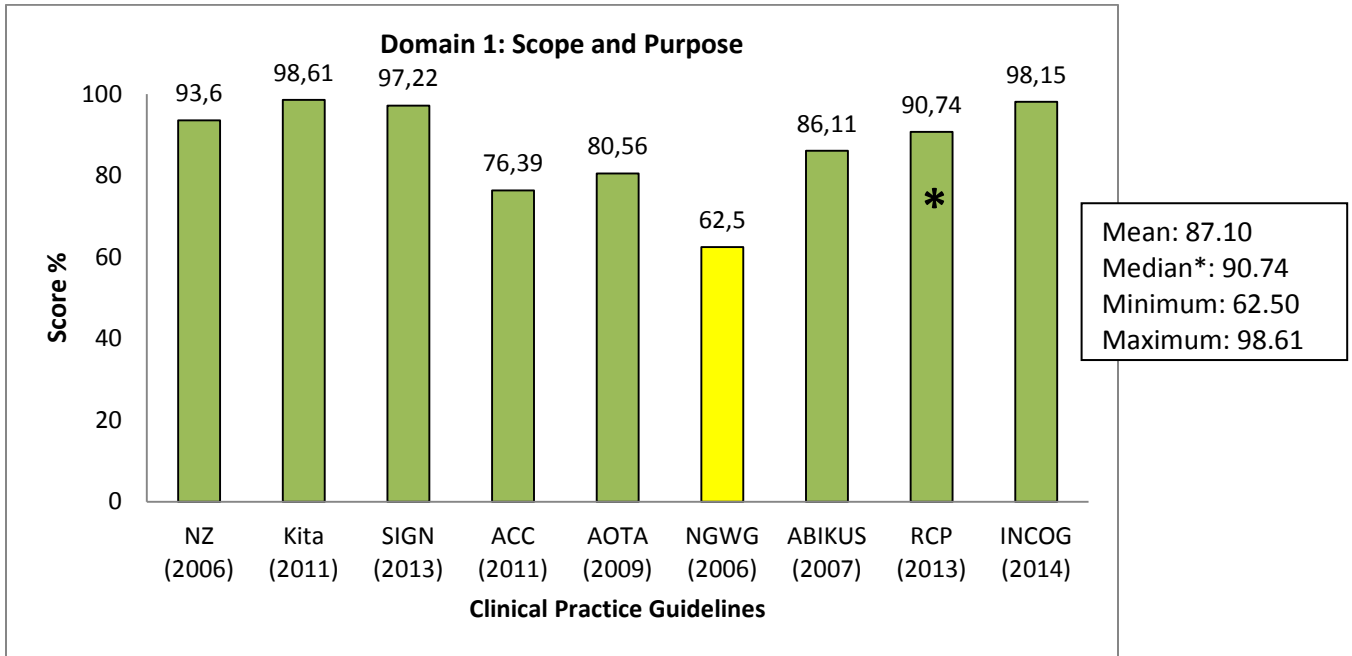
Table 2. Overall assessment of moderate /severe TBI clinical practice guidelines

Clinical practice guideline	Authors	Number of raters	Overall assessment rating (%)		
			Strongly recommend	Recommend with alterations	Would not recommend
Traumatic Brain Injury: Diagnosis, acute management and rehabilitation	New Zealand Guidelines Group	4	75	25	0
A guideline for vocational evaluation following traumatic brain injury: a systematic and evidence-based approach	Stergiou-Kita, M.	4	50	50	0
Brain injury rehabilitation in adults	SIGN	4	100	0	0
Community Integration in moderate to severe Traumatic Brain Injury Depression in moderate to severe TBI Aging in moderate to severe TBI Substance abuse in moderate to severe TBI	Accident compensation corporation (ACC)	4	0	0	100
Occupational therapy practice guidelines for adults with traumatic brain injury	American occupational therapy association (AOTA)	4	25	50	25
Guidelines for the Pharmacologic Treatment of Neurobehavioral Sequelae of Traumatic Brain Injury	NGWG	4	25	75	0
ABIKUS Evidence Based Recommendations for Rehabilitation of Moderate to Severe Acquired Brain Injury	ABIKUS team	4	50	50	0
Prolonged Disorders of Consciousness National Clinical Guidelines	Royal College of Physicians (RCP)	3	67	33	0
INCOG Recommendations for management of Cognition Following Traumatic Brain Injury	INCOG Team	3	100	0	0

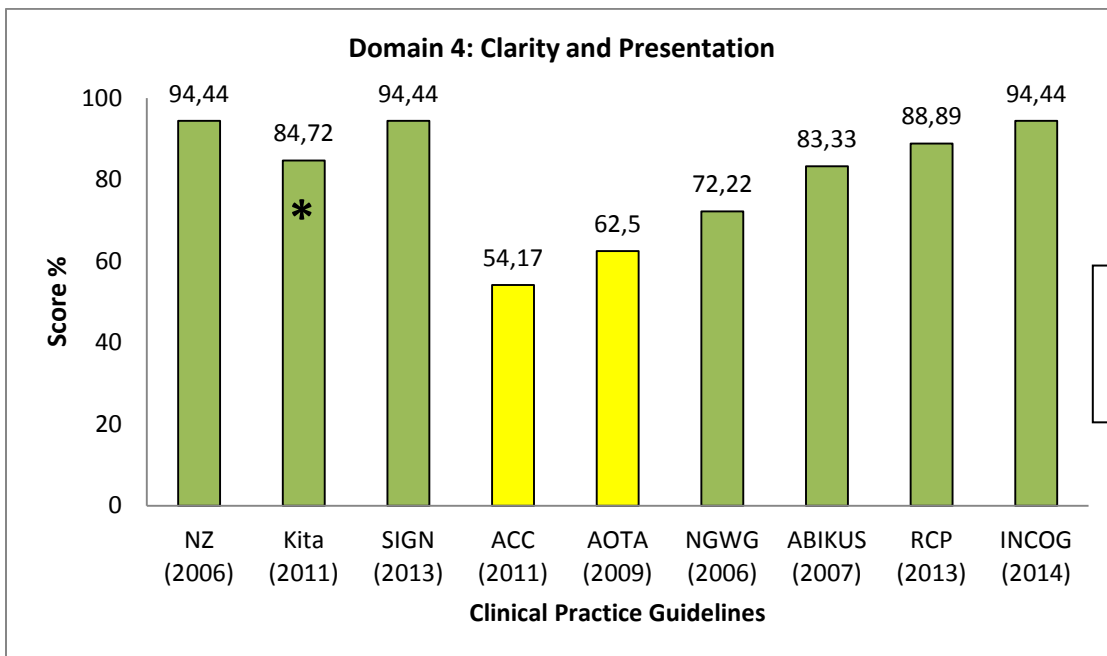
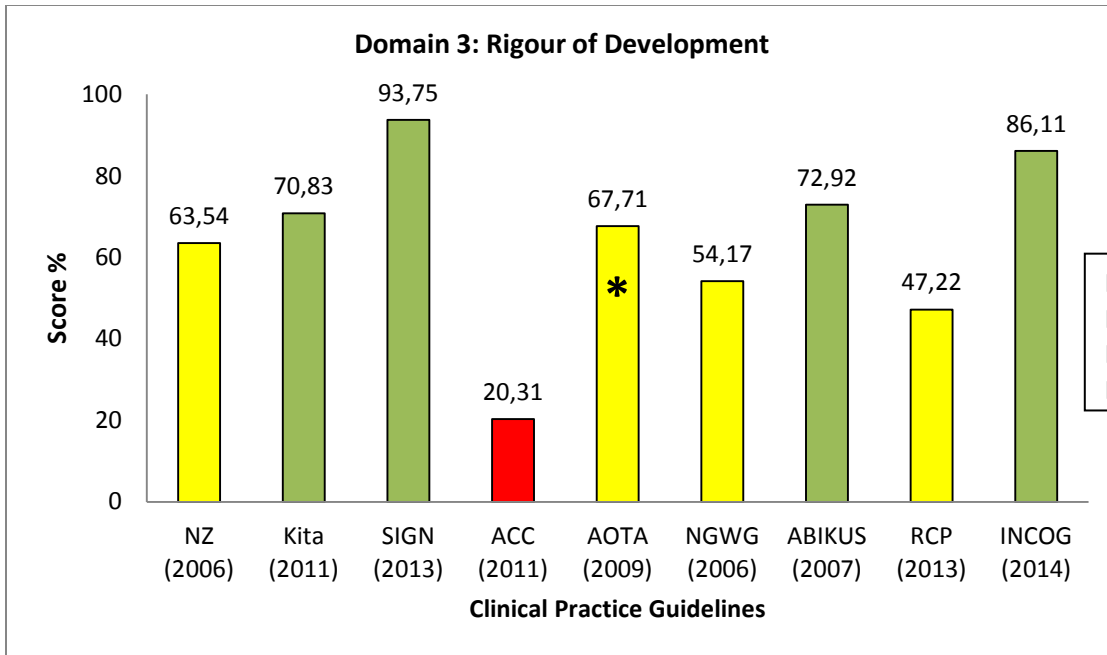
Table 3. Domain average scores of AGREE II evaluation from 4 appraisers

	<b>NZ (%)</b>	<b>Kita (%)</b>	<b>SIGN (%)</b>	<b>ACC (%)</b>	<b>AOTA (%)</b>	<b>NGWG (%)</b>	<b>ABIKUS (%)</b>	<b>RCP (%)</b>	<b>INCOG (%)</b>
<b>Domain 1.</b> Scope and purpose	93.06	98.61	97.22	76.39	80.56	62.50	86.11	90.74	98.15
<b>Domain 2.</b> Stakeholder Involvement	90.28	90.28	90.28	1.39	44.44	29.17	61.11	79.63	64.81
<b>Domain 3.</b> Rigour of Development	63.54	70.83	93.75	20.31	67.71	54.17	72.92	47.22	86.11
<b>Domain 4.</b> Clarity of Presentation	94.44	84.72	94.44	54.71	62.50	72.22	83.33	88.89	94.44
<b>Domain 5.</b> Applicability	64.58	56.25	65.63	6.25	5.21	3.13	3.13	31.94	58.33
<b>Domain 6.</b> Editorial Independence	79.17	83.33	50.00	0.00	2.08	12.50	25.00	80.56	75.00
<b>Overall Assessment</b>	75.00	83.33	83.33	29.17	50.00	54.17	66.67	66.67	83.33

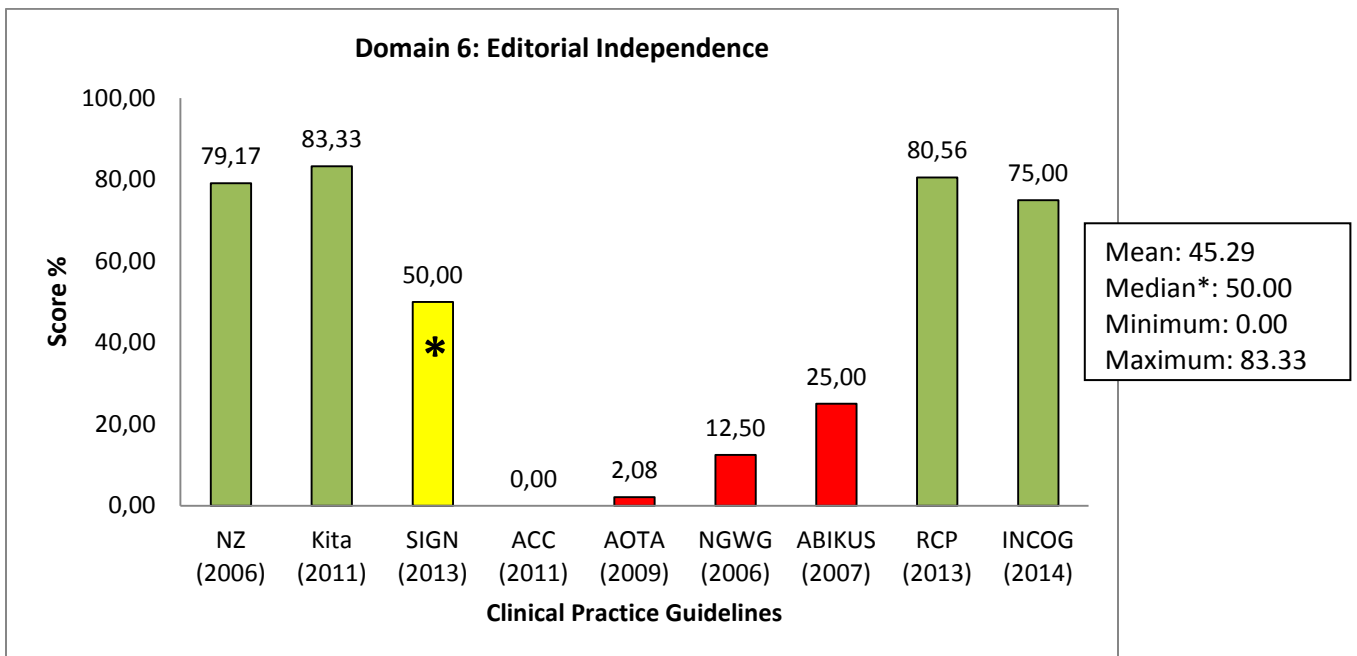
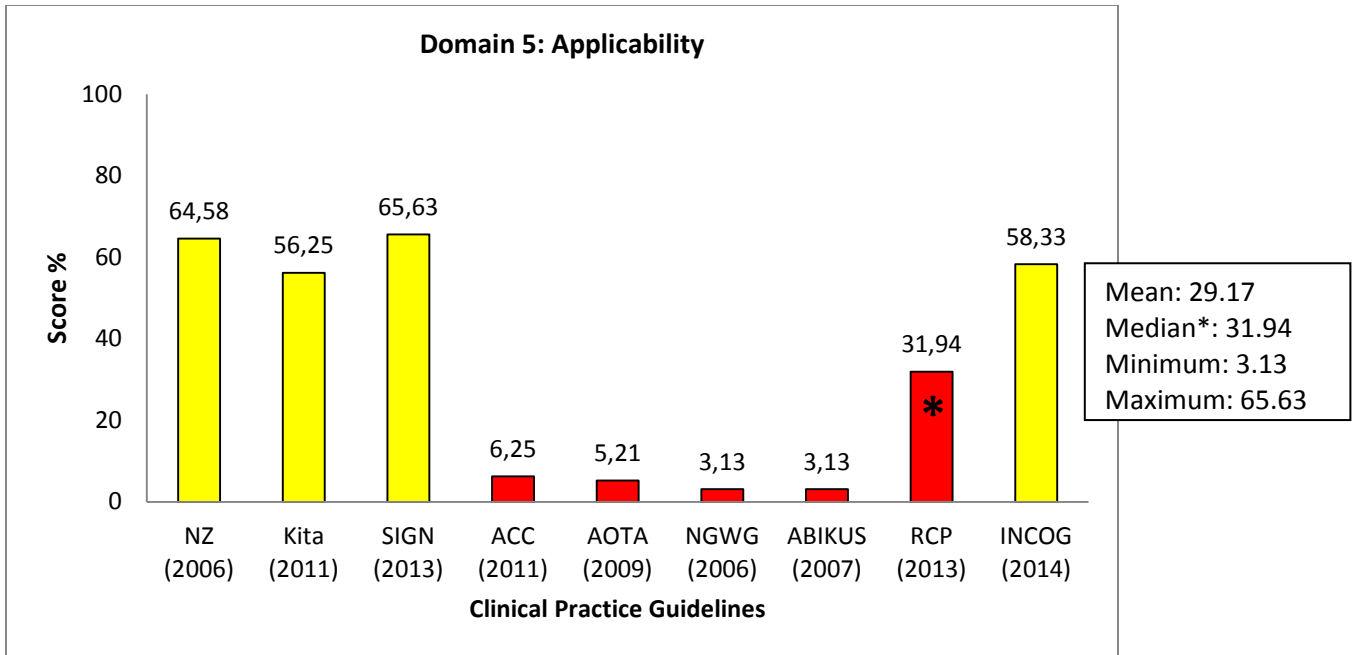
Figure 2. AGREE II standardized domain scores



Colour Code	
Red	≥ 38%
Yellow	39-69
Green	≤ 70%







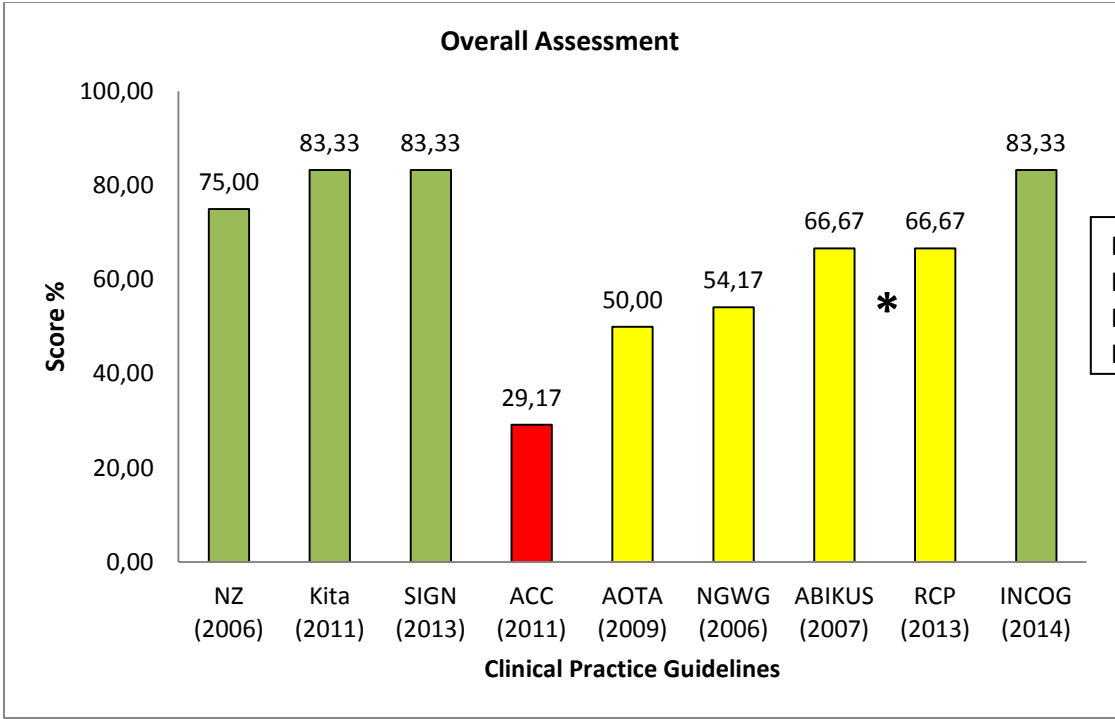


Table 4. Summary table of the median of the items for each CPG

Item	NZ (2006)	Kita (2011)	SIGN (2013)	ACC doc (2011)	AOTA (2009)	NGWG (2006)	ABIKUS (2007)	RCP (2013)	ONCOG (2014)
1	7	7	7	6	6	5	6.5	6	7
2	6	7	7	5.5	6	5	6	7	7
3	7	7	6.5	6	5	5	6.5	7	7
4	7	7	7	1	2.5	5.5	6	6	6
5	5.5	5.5	5	1	1	1	1	6	1
6	7	7	7	1	7	1.5	7	6	7
7	5	6.5	7	2	7	6.5	6.5	2	7
8	3	7	6	1	7	5	7	1	7
9	5.5	7	7	1	7	6	3.5	5	7
10	5.5	7	7	1	3.5	3	4.5	3	7
11	6	6	6	2.5	4.5	5	5.5	7	4
12	7	7	7	4.5	6.5	6.5	6.5	5	7
13	6	1	7	1	3	1	5	4	7
14	1	1	7	1	1	1	5	3	6
15	6.5	7	7	4.5	5	5	7	6	6
16	6.5	6	6.5	4	4.5	6	6	6	7
17	7	6.5	7	4	5	5	6.5	7	7
18	5	7	4	1	1.5	1	1	4	4
19	6.5	4	5.5	2.5	1	1	1.5	3	5
20	2.5	5	4.5	1	1	1	1	1	2
21	5.5	1	7	1	1	1	1	1	7
22	7	7	3.5	1	1	2	3	6	6
23	5	6.5	4.5	1	1	1	1.5	7	5
24	5.5	6	6	2.5	4	4	5	5	6

Color code:	
Range	Color
1 to 2.9	Red
3 to 5	Yellow
5.1 to 7	Green