



# CAT AND CAAT IMPLEMENTATION GUIDE

CAT Governance Board  
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<b>Patient Facing Layout: CAT/CAAT specific vs device specific</b>		
<b>LAYOUT / FORMATTING</b>	<b>Tablet</b>	<b>Handheld (i.e. phone)</b>
Horizontal layout of questions	Required	Required
CAT green/blue color scheme	Required	Preferred
Landscape (Handheld)	-	Preferred
Pop-up to tell patient to rotate device from portrait to landscape. (Handheld)	-	Optional
Portrait (Handheld)	-	Permitted
Landscape (Tablet)	Preferred	-
Portrait (Tablet)	-	-
<b>TABLET</b>		
All 8 items on one (1) screen.	Preferred	-
Split 4 and 4 (instructions on separate screen)	Optional	-
Single item per screen	Suitable only for small tablet	-
<b>HANDHELD</b>		
Single item per screen	-	Required
<b>ANCHORS</b>		
Anchors at ends of scale, not above or below		Required
Line breaks within anchors	Permitted	Permitted
Response options must be presented as six (6) separate cells/buttons.	Required	Required
Numbers within response option buttons, not above or below.	Required	Required
Center numbers horizontally and vertically within cell/button	Required	Required
Left anchor left justified; Right anchor right justified	Required	Preferred
Copyright notice	Required	-
Development statement	-	Preferred
Website attribution	-	Do not do (ePRO) ; Preferred (systems)



The CAT must also include the copyright attribution and the development statement on the final screen as follows:

The COPD assessment test (CAT) and the Chronic Airways Test (CAAT) were developed by an interdisciplinary group of international experts with support from GSK. CAT and CAAT activities are monitored by a supervisory council that includes independent experts, one of which is chair of the council.

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*From CAT Governance Board:*

There has been one small direct comparison of CAT on paper vs tablet. It found that scores obtained using paper version were a little higher than with tablet, although the study was confounded by the fact that paper versions were completed by post, and the tablet version was completed in the outpatient clinic.<sup>1</sup> Unlike that study, a meta-analysis across a wide range of patient reported outcomes has shown no consistent differences between paper and e-formats including PDAs.<sup>2</sup>

There has been no comparison between CAT on a single electronic page like the paper version and one item per page on a PDA. Whilst it cannot be assumed that electronic whole-page and single-item per page presentation of CAT/CAAT will give exactly the same scores, a systematic difference appears to be unlikely.

Whilst CAT/CAAT scores obtained with different formats may produce comparable scores, use of mixed methods of presentation within studies is not advised, whether between patients or longitudinally within patients.

In routine clinical use, a major advantage of the 8-item per page format is that the clinician can rapidly identify those items where the patient has indicated the greatest impact without having to move between pages.

<sup>1</sup> Nishimura K, Kusunose M, Sanda R, Tsuji Y, Hasegawa Y, Oga T. Comparison between electronic and paper versions of patient-reported outcome measures in subjects with chronic obstructive pulmonary disease: an observational study with a cross-over administration. *BMJ open*. 2019-9-032767

<sup>2</sup> Muehlhausen W, Doll H, Quadri N et al. Equivalence of electronic and paper administration of patient-reported outcome measures: a systematic review and meta-analysis of studies conducted between 2007 and 2013. *Health Qual Life Outcomes*. 2015;13:167.



### *Key references*

Jones P, Harding G, Wiklund I, Berry P, Leidy N. Improving the process and outcome of care in COPD: development of a standardised assessment tool. *Prim Care Respir J.* 2009;18:208-215.

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Jones PW, Brusselle G, Dal Negro RW et al. Health-related quality of life in patients by COPD severity within primary care in Europe. *Respir Med.* 2011;105:57-66.