

**Making the EORTC QLQ-C30  
interactive:  
development of CAT for EORTC  
QLQ-C30 dimensions  
- project update**

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# Aim of the project

- Develop CAT for QLQ-C30 dimensions based on small item pools (10-30 items)
- CAT: interactive, individually adapted questionnaire (use responses to previous items to select most informative next item, stop when desired precision obtained)
- Advantages include: Reduced floor and ceiling effects, increased precision, questionnaire can be adapted to each study or person

# Status of the project

Dim	Developers	Literature review, item selection	Expert interviews	Patient interviews
PF	Mogens, Morten, Jorunn, Stein	Completed	Completed	Completed Dato coll started
RF	Susanne, Teresa, Jackie	Review done		
EF	Bernhard	Completed?		
CF	Neil, Martin			
SF	Teresa, Jackie	Review done		
FA	Thierry, Bernhard	Review done		
PA	Mogens, Morten, Jon, Stein	Completed	Completed	Completed in DK, FR
NV	Galina	Review done		
DY	Mogens & Morten	Completed		
SL	Mogens & Morten	Completed		

# Development process, PF

- **975 items** identified in the literature
- **454 items** belonged to the relevant subdimensions of PF
- Constructed **86 new items** fitting the 'QLQ-C30 item style'
- Based on expert and patient comments etc. the item list was reduced to **51 items**
- Combined with QLQ-C30 and debriefing items to the questionnaire for the data collection (87 items in all)

		<b>Not at all</b>	<b>A little</b>	<b>Quite a bit</b>	<b>Very much</b>
1.	Do you have any trouble lifting a full cup or glass to your mouth?	1	2	3	4
2.	Do you need help to walk about indoors (e.g. a walking stick or someone to support you)?	1	2	3	4
3.	Do you have any trouble walking 100 m?	1	2	3	4
4.	Do you need help caring for your feet (e.g. cutting your toenails)?	1	2	3	4
5.	Do you have any trouble walking around indoors?	1	2	3	4
6.	Do you have any trouble walking up a flight of stairs?	1	2	3	4
7.	Do you need help with eating, dressing, washing yourself or using the toilet?	1	2	3	4
8.	Do you need help with grooming (e.g. cleaning nails, brushing teeth, combing your hair)?	1	2	3	4
9.	Do you have any trouble walking down a flight of stairs?	1	2	3	4

# Development process, PF

## Data collection

- Collect 1000 responses in all from at least three countries
- 350-400 Danish, +200 from each of the other countries
- Typically by usual paper questionnaires (DK), but potentially also by computer (UK?)
- Started in DK, posted app. 120 questionnaires, received about 30 responses in two weeks
- Form the basis for final selection of items and calibration of IRT model for the CAT

# Development process, SL

- **120 insomnia items** identified in the literature
- **86 items** potentially relevant:
  - 73 items about 'sleep quantity' (e.g. difficult falling asleep)
  - 13 items about 'quality of sleep' (e.g. restless sleep)
- Only **16** unique items fitting the 'QLQ-C30 item style'
  - Many items did not fit response options, e.g. *'how many hours of sleep do you get?'*
- Constructed **20 items** fitting the 'QLQ-C30 item style'

# Development of CAT program

- Developing version 2
- New feature (on request): If go back and change responses, new items may be asked
  - **Example:**
  - ‘trouble long walk?’: quite a bit  $\Rightarrow$
  - ‘trouble short walk?’: a little  $\Rightarrow$  Enough info  $\Rightarrow$  Stop
  - Change: ‘trouble short walk?’: quite a bit  $\Rightarrow$  NOT enough info  $\Rightarrow$  new item
  - ‘need to stay in bed or chair’: a little  $\Rightarrow$  Enough info  $\Rightarrow$  Stop

# Coming months

- Finalize data collection for PF in DK, and potentially UK, FR, IT, TW
- Patient interviews for PA in UK, other places?, start data collection
- Expert and patient interviews for DY, SL, others?
- Grant for student working 12 months fulltime on project. Medical student starts Aug 1<sup>st</sup>. Initially works with appetite loss

**Anybody interested in  
participating, particular with  
the data collection, please  
contact us**

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