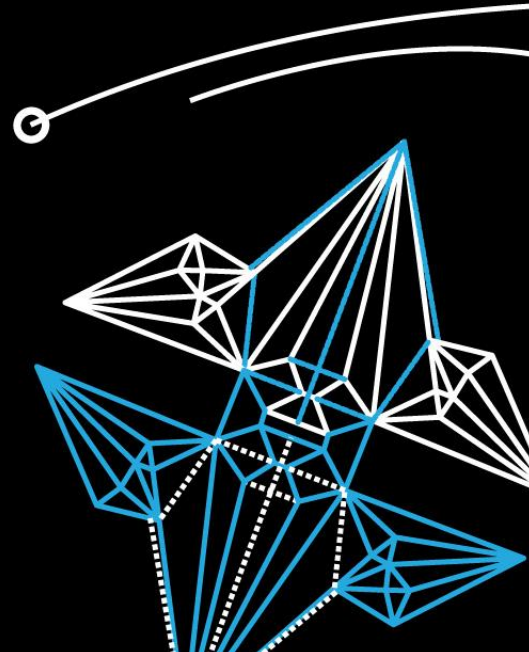


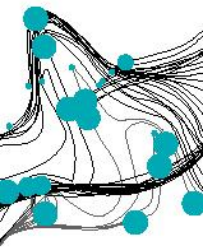


IRT (CAT) and physical functioning in rheumatology

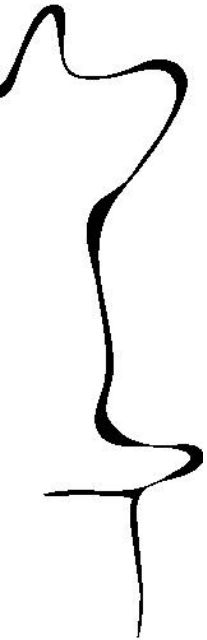
Martijn Oude Voshaar

PhD candidate





Overview



- Physical function (PF) as outcome domain in Rheumatoid arthritis (RA)
- Core problems in the assessment of PF using PROs
- How CAT handles core problems in the assessment of PF
- Research activities



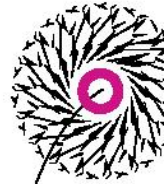


Physical function as outcome domain in RA

- Core outcome domain
 - ACR/EULAR core sets
 - OMERACT
- Health Assessment Questionnaire Disability Index HAQ-DI
- Systematic review



Core problems in the assessment of PF using (fixed length) PROs



- Measurement range

effects

change

Ceiling/floor

Sensitivity to

- Respondent burden

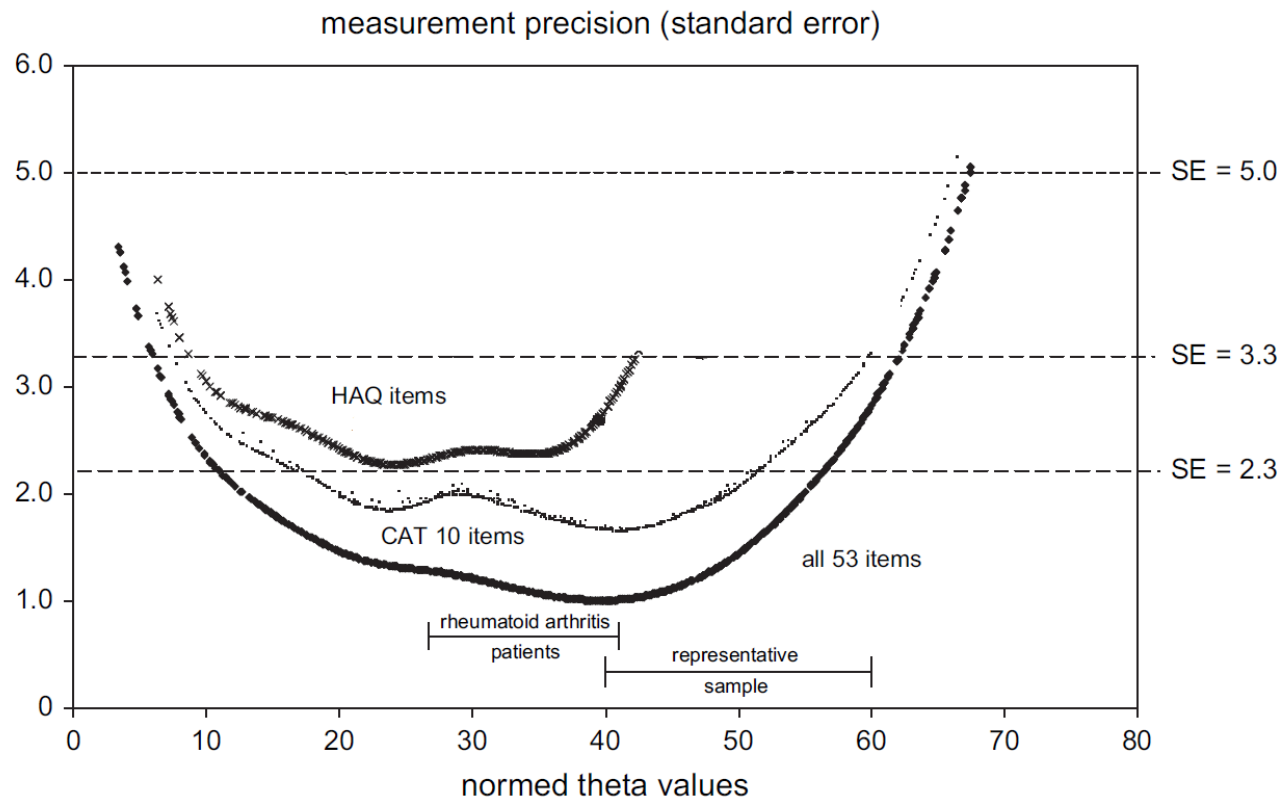
questions

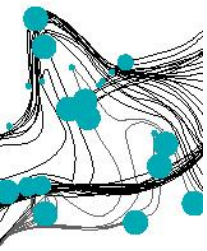
- Trade off

of items

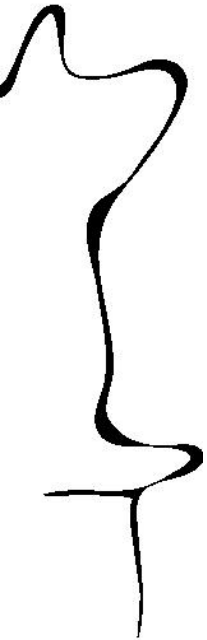
Irrelevant

How CAT handles core problems in the assessment of PF





How CAT handles core problems in the assessment of PF (2)



- Increased range of measurement

Eliminates floor and ceiling effects

Higher sensitivity to change

More comprehensive domain coverage

- Questions' difficulty 'adapts' to patients

Minimal confronting or irrelevant questions

Precise measurement with minimum number of questions

More precise measurement at extremes of PF continuum





Research activities

- **Calibrating PROMIS PF item bank in DREAM- registry**

- 2500 patient with RA included
- Prospective data collection
- Clinical data
- Longitudinal data collection

- **Validity testing**

- Comparing longitudinal performance to legacy instruments HAQ, SF-36
- Convergent validity clinical outcomes measures
- Analysis of Differential Item Functioning (DIF) / measurement invariance US version and over time



Questions?

