

Disclosures 2015

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The impact of the number of co-morbidities and ageing on Health Related Quality of Life in HIV-infected and uninfected individuals

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Background & rationale

- HIV-infected persons: premature onset of age-associated non-communicable co-morbidities (AANCCs) compared to the general population^{1,2}.
- Such co-morbidities may have a negative impact on patients' Health-related quality of life (HRQL).
- Previous research³: HIV infection itself and aging may also have a negative impact on HRQL

1. Schouten et al, 2014, CID. 2. Kooij et al, 2015, JID. 3. Miners et al, 2014, Lancet

Objectives

- To investigate the impact of the number of co-morbidities, ageing and HIV infection on HRQL.
- To investigate if age and the number of comorbidities have a different impact on HRQL in HIV positive versus HIV negative persons.

AGE_hIV Cohort

- Comparative observational cohort study
- HIV-1-infected ≥ 45 years Academic Medical Center, Amsterdam
- HIV-uninfected ≥ 45 years STD clinic of Municipal Health Service, Amsterdam
- Participants were screened at enrollment for the presence of co-morbidities:
 - DM2, hypertension, COPD, renal disease, chronic liver disease, myocardial infarction, angina pectoris, peripheral arterial disease, ischemic cerebrovascular disease and non-AIDS/AIDS associated cancer

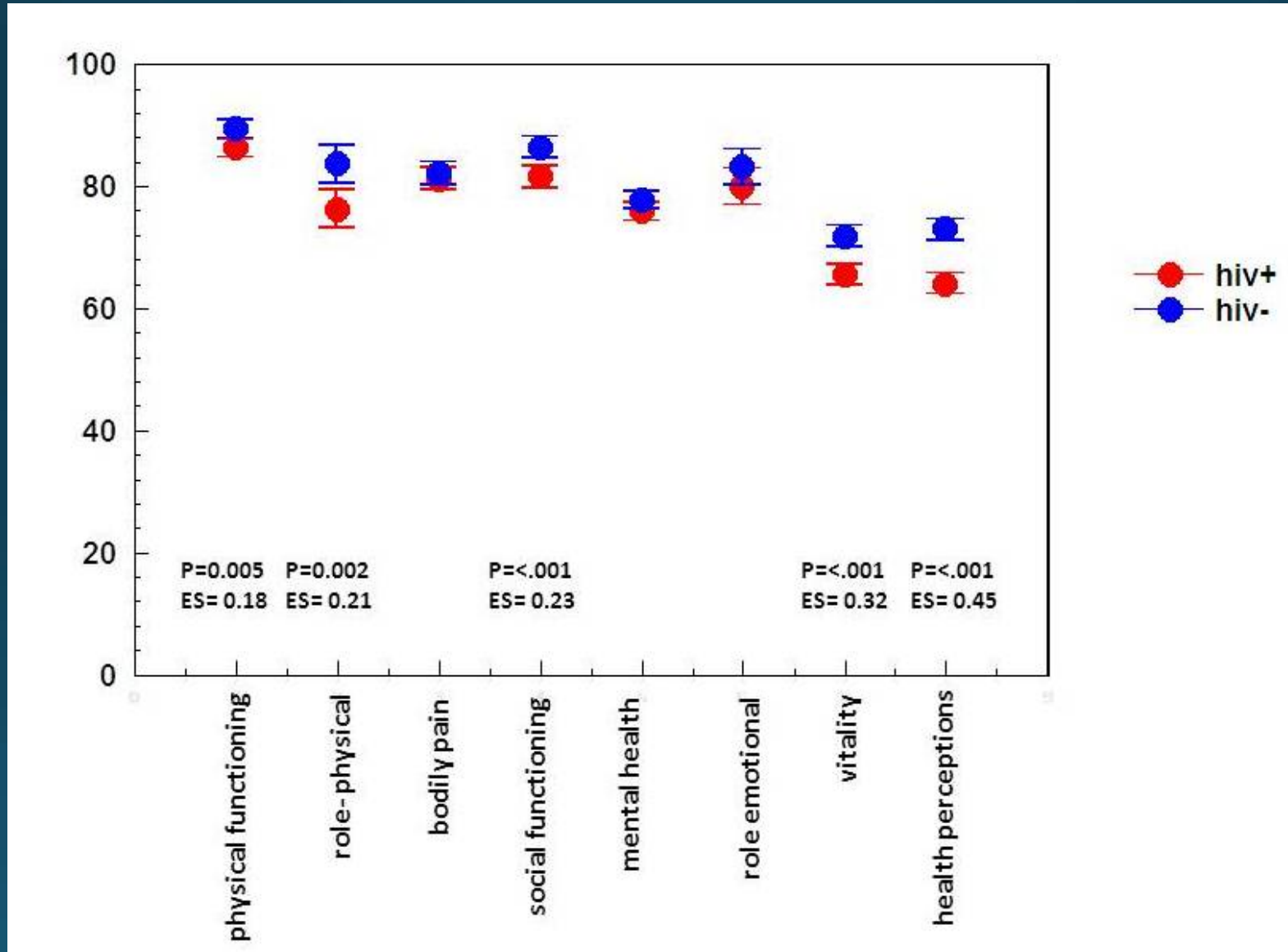
Methods & analyses

- Medical Outcomes Study Short Form 36-item health survey (SF36).
- SF-36: 8 subscales: physical-, role physical-, role emotional-, and social-functioning, bodily pain, mental health, vitality and health perceptions
- Physical- and Mental Health Summary score: based on 8 subscale scores.
- General linear models HRQL: HIV-infection (y/n), number of co-morbidities (0, 1, 2, >2), and age (<50, 50-55, 55-60, 60-65, >65)
- Effect sizes for differences in HRQL between HIV+ en HIV-: mean differences/pooled standard deviations.
- All models adjusted for background characteristics: gender, MSM (y/n), Dutch origin, living together (y/n), educational level, and life style factors, i.e., current smoker (y/n), heavy daily drinking (y/n), and ever IVD (y/n).

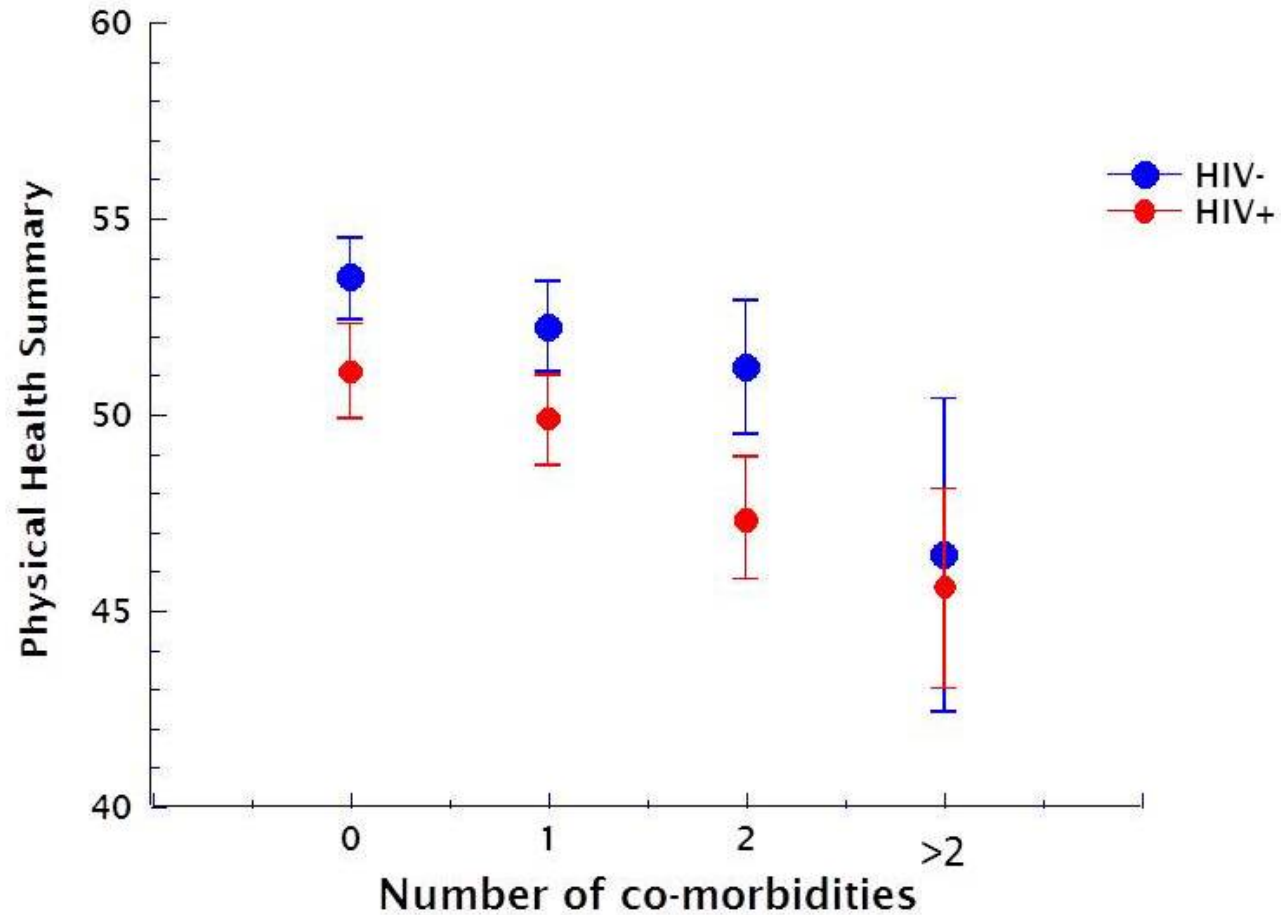
Characteristics at enrollment

	HIV-uninfected participants (n=524)	HIV-infected participants (n=540)	P Value
Age, y	52.1 (47.9-58.3)	52.9 (48.3-59.6)	.200
Male sex	85.1%	88.1%	.146
Dutch origin	81.3%	72.2%	<.001
MSM	69.7%	73.9%	.125
Number of AANCCs, median (IQR)	1 (0-1)	1 (0-2)	<0.001
Number of AANCCs, mean (SD)	0.95 (0.96)	1.27 (1.15)	<0.001
On cART		95.7%	
Plasma viral load >200 c/ml, among participants on cART		1.5%	
CD4 count, median (IQR)		565 (435-745)	

HRQL in HIV positive and HIV negative individuals



Physical Health by number of co-morbidities

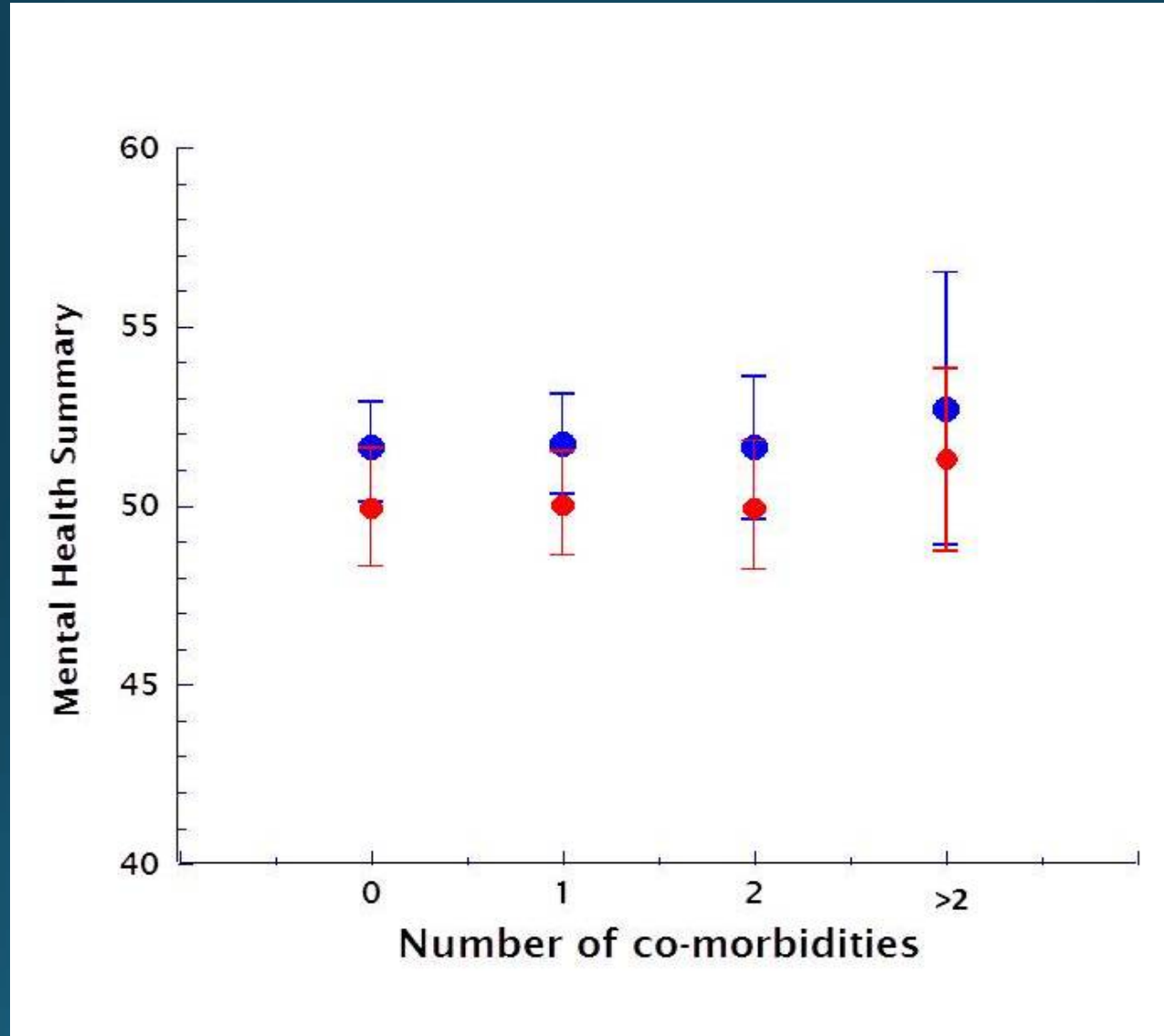


HIV-status : $p < 0.001$

Nr. of co-morbidities: $p < 0.001$

Interaction: NS

Mental Health by number of co-morbidities

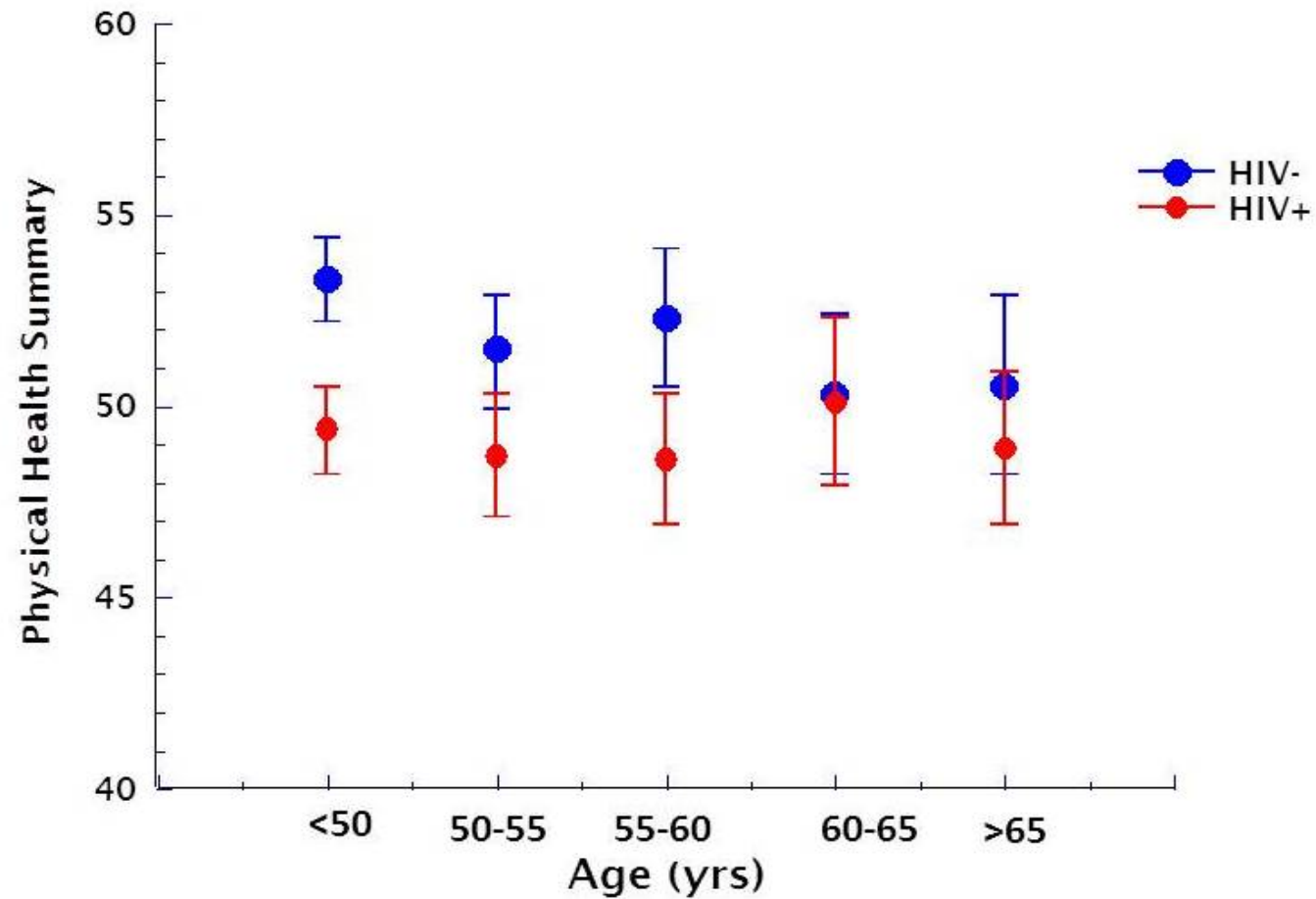


HIV status: $p=0.015$

Nr. of co-morbidities: $p=0.50$

Interaction: NS

Physical Health by Age

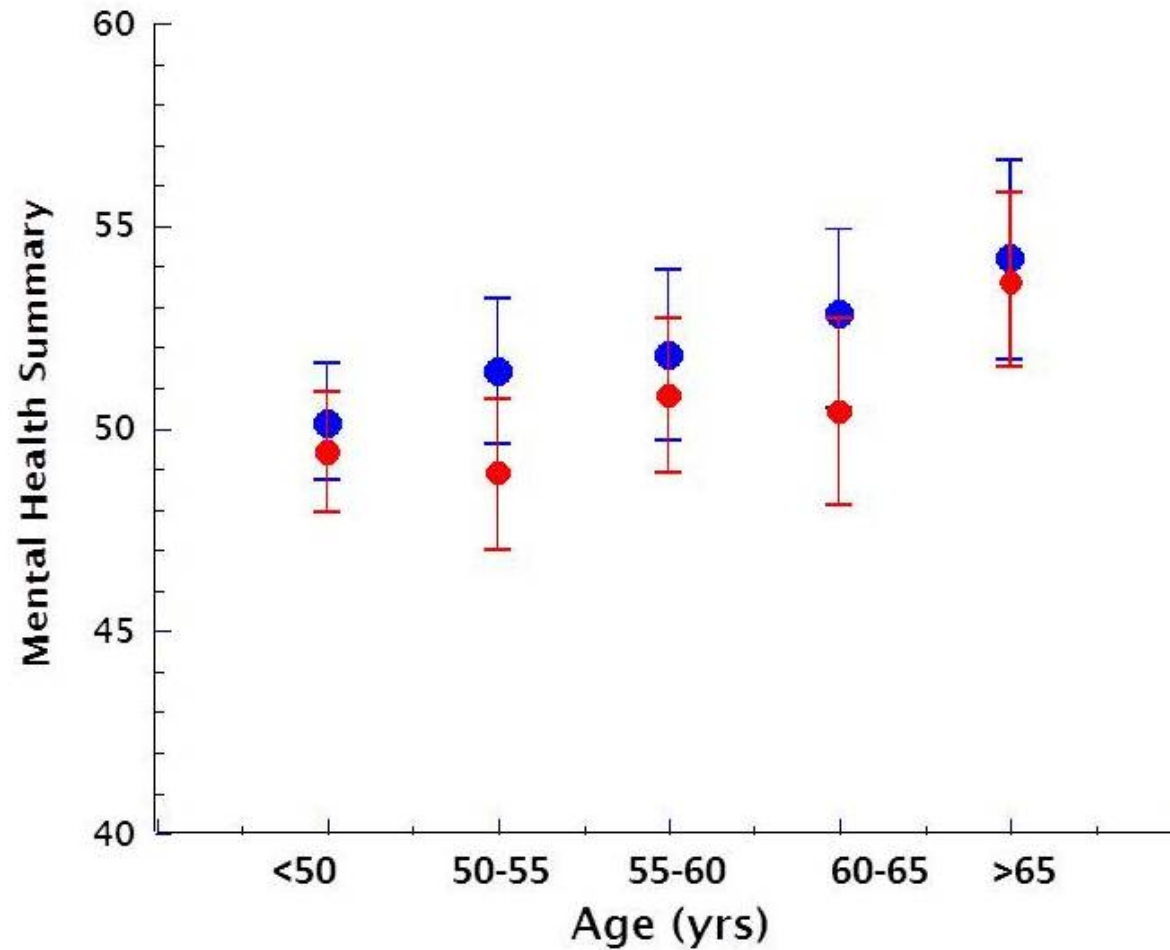


HIV status: $p < 0.001$

Age: $p = 0.82$

Interaction: $p = 0.068$

Mental Health by Age



HIV status: $p=0.015$

Age: $p<0.001$

Interaction: NS

Conclusions:

- HIV+ have worse physical and mental HRQL, albeit differences are of a small to medium sized magnitude
- Difference in HRQL between HIV+ versus HIV- does not become greater with increasing age or increasing number of co-morbidities
- Even HIV+ without co-morbidities have significantly worse physical HRQoL than HIV-

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