Reviewer's report

Title: Correlates of sitting time in adults with type 2 diabetes

Version: 1  Date: 3 March 2015

Reviewer: Maria Fiatarone Singh

Reviewer's report:

1. The limitations of self-reported sitting time questionnaire have not been adequately acknowledged. Validation studies have been published showing low correlation of this questionnaire and accelerometry measures, and these should be cited. Instead, it is simply indicated that it is validated, this does not adequately reflect the limitations of this tool. If it has not been validated in an older diabetic cohort, that should be stated as well.

2. The final statement of the manuscript is:

Novel strategies that reduce sitting time and increase step counts could have a powerful impact in the prevention and management of type 2 diabetes and other chronic conditions linked to a sedentary, low active lifestyle.

The results presented however show no association between sitting time and any clinical variables measured in multivariate models. This should be acknowledged, rather than suggesting that the data indicate that strategies to reduce sitting time may have a powerful impact on chronic conditions.

Please find more recent validation references for the IPAQ than the one cited in the article (ref 17) by the authors attached.

Note in particular this paragraph from Healy, et al ref indicating the low correlation between self-report and measured sitting time:

The validity of the IPAQ single-item question used to assess overall sitting time has been extensively examined in a number of countries with participants of varying ages (18–65 years).9, 11 Most studies have shown low-to-moderate correlations with a criterion of accelerometer-derived sedentary time,9, 11, 17, 18 comparable in magnitude to those reported for interviewer-administered physical activity measures (Figure 1).41 While composite measures of sedentary time have also shown only low-to-moderate correlations with accelerometer-derived sedentary time (Figure 1),15, 21, 22, 28 total sitting time tends to be lower when assessed by a single-item (4.35–7.92 hours/day)9, 42, 43 than those by composite measures (7.25–9.80 hours/day).12, 19, 21 While direct comparison is hampered by the use of varying criterion measures, mode of administration, and target populations, correlations tended to be higher for domain-specific measures than for overall sedentary measures (Table 2) – particularly for screen time, computer use, work, and TV viewing time.19, 36 Collectively, results suggest it may be more difficult to recall the time spent sitting during the entire
day than the time spent sedentary for specific behaviors or in different domains.