

## [Supporting Health by Technology IX 2019](#)

Oral Presentation (EN)

Oral presentations are scheduled for 10 minutes, followed by 5 minutes of discussion time.

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Submitting author

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Subject area (max. 4): blended treatment, smoking cessation, adherence, measurement

Topic: Development and evaluation approaches for health technology

Abstract title (max.15 words): How do we measure adherence to a Blended Smoking Cessation Treatment?

Abstract text (max.250 words)

Blended care (combined face-to-face/web-based) is a promising way to stop smoking. Because adherence is an indicator for both acceptance and effectiveness of a treatment, we explore the measurement of adherence to a new, second-line, blended smoking cessation treatment (BSCT). Two methods for the measurement of adherence are compared and validated.

User data of 75 patients of the outpatient smoking cessation clinic of Medisch Spectrum Twente hospital (Enschede/The Netherlands) are analysed. BSCT, based on the current Care Standard, consists of five sessions face-to-face alternated with five online sessions for six months. Two adherence measurement methods are compared: time-based (exposure to number of minutes of protocol-based components) and content-based (active use of eight face-to-face and ten web-based components). The first method is relatively simple and heuristic, the second more detailed and labour-intensive.

Both adherence measures correlate reasonably well with each other ( $\rho=.53$ ) and have useful content, construct and divergent validity. Predictive validity is only found for the content-based method: adherence is higher in quitters ( $P=.03$ ).

This study compared and validated two methods for the measurement of adherence to a blended treatment. Both methods seem adequate for clinical research, with the time-based method appearing to be more efficient while the content-based method appears to have better predictive validity.