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### Value-based eHealth: Lifestyle monitoring

H.H. Nap, H. Buimer, E. Wouters

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**Purpose** There is a gradual increase in scaling-up eHealth services and technologies in long-term care (Wouters et al., 2019). EHealth is implemented to improve quality of life for clients and caregivers, but also to make the care process more efficient. Despite evidence for the added value, upscaling of eHealth is slow and complex (Wouters et al., 2019). It is time to scale up and adjust the organization of care, such that clients can make optimal use of eHealth. The purpose is to gain insight into value-based eHealth and its indicators considering i) Quality of Care (e.g., outcomes on clients and (in)formal carers), ii) Accessibility (e.g., acceptance), and iii) Costs (e.g., financial cost-benefits). In this paper we present results on Quality of Care and for the purpose of this study we followed and evaluated the value of eHealth in an implementation and up-scaling project in 2019-2020 with lifestyle monitoring (Zwierenberg et al., 2018). Lifestyle monitoring can, potentially, be valuable in a time of pandemic such as COVID-19, since (in)formal carers can monitor the lifestyle of a client at a distance. **Method** To gain insight into the values of lifestyle monitoring for end-users, 29 home care clients were included in the study ( $M_{\text{age}} = 55$  years, range 41-71 years of age, 22 female). They filled in a questionnaire twice; at T0 ( $n = 29$ ) and T1 ( $n = 16$ ) after an average of 172 days ( $SD = 23$  days). 14 informal carers filled in the questionnaire at T0 and T1, so the data of these participants were used for further analysis. The questionnaire focussed on, among others, the following (possible) values of lifestyle monitoring: motivation to use, caregiver burden (Robinson, 1983), technology acceptance, perceived value, and willingness to pay. **Results and Discussion** An important value is the motivation to reduce concerns about informal carers' loved ones about being able to live independently. Additionally, reducing physical and cognitive health seems an important motivator to use lifestyle monitoring (e.g., early detection of health problems). Repeated measures showed the caregiver strain remained similar over a period of approximately 170 days ( $M_{\text{CS11}} = 4.9$ ,  $SD = 2.6$ ;  $M_{\text{CS12}} = 5.1$ ,  $SD = 3$ ) while strain among dementia caregivers generally increases over time, particularly towards the end of life (Vick, Omstein, Szanton, Dry & Wolff, 2018). In respect to the acceptance of lifestyle monitoring, it appeared that the differences between T0 and T1 measurements were small and non-significant. Interestingly, the pleasure and fun to use lifestyle monitoring reduced over time, while the financial value of lifestyle monitoring increased. Lifestyle monitoring was reported as beneficial in various situations, which can be roughly divided in monitoring client health (e.g. unusual inactivity), monitoring of living patterns (e.g. kitchen usage), and unsafe situations. This study into the values of eHealth resulted in a set of Quality of Care related values that may impact the successful upscaling of eHealth. Future research will further study the values within other eHealth domains and with different stakeholders to strengthen indicators for the evaluation of value-based eHealth.

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**Address:** Vilans (The Netherlands)

**Email:** h.nap@vilans.nl



Figure 1. Lifestyle monitoring used in evaluation.