In conclusion, this symposium will give insight in the challenges of designing novel technology and its implementation into daily practice, to assist informal and formal cares to be able to deliver person-centered care.

## Towards data-informed shared decision making: what do we need?

**Authors: Dr. Sil Aarts**, Prof. Jan Hamers & Prof. Hilde Verbeek. Living Lab in Ageing and Long-Term Care, Department of Health Services Research, Maastricht University

**Background:** The increasing availability of data offers new possibilities for supporting quality of care in long-term care (LTC) for older adults, also for dementia care units in nursing homes. Examples are quantitative data in electronic health records (i.e. medication), data collected by technological devices such as sensors and wearables (i.e. data related to psychical and mental health including for example heart rate and sleeping patterns), but also qualitative data stored in texts (e.g. transcribed conversations about perceived quality of life). LTC organisations currently lack tools to interpret and integrate the data in the shared decision-making (SDM) process. This project investigates the necessities for data-informed SDM.

**Methods:** The study was conducted in co-design with the knowledge group 'Data Science' residing in the Living Lab in Ageing and Long-Term Care, Maastricht. A focus group-setting, in which a diverse set of stakeholders, including data/ICT-specialists, care managers and client representatives, took place to discuss bottlenecks, possibilities and solutions related to data-informed SDM.

**Results:** In total, representatives (n=18) from 7 care organisations participated in three separated focus groups. This resulted in several themes that were deemed necessary for data-informed SDM: 1) an organisational vision on data and data-informed SDM, 2) investment in data-driven care SDM, 3) the instalment of multidisciplinary teams, including clients, informal and formal caregivers, 4) a planned implementation process is needed, and 5) the use of living lab constructions.

**Conclusion:** A well-thought-out, integral learning process, including a vision statement on data and the installation of multidisciplinary teams working on data-problems, is deemed necessary in order for LTC organisations to accomplish data-informed SDM. A concrete step-by-step plan, which can provide LTC organizations with tools to embed data in the current SDM process, is suggested to help organisations in their quest to data-informed personal care.

## Developing a system for measuring stress in the care for nursing home residents with dementia

**Authors: Manon W. H. Peeters**<sup>1</sup>, Leoni van Dijk<sup>1</sup>, Ittay Mannheim<sup>1</sup>, Evelien van de Garde-Perik<sup>2</sup>, Petra Heck<sup>2</sup>, Noortje Lavrijssen<sup>3</sup>, Gerard Schouten<sup>2</sup>, Eveline J.M. Wouters<sup>1</sup>.

- <sup>1</sup> School for Allied Health Professions, Fontys University of Applied Sciences, Eindhoven, The Netherlands;
- <sup>2</sup> School for Information & Communication Technology, Fontys University of Applied Sciences, Eindhoven, The Netherlands;
- <sup>3</sup> University of Law Avans-Fontys, Fontys University of Applied Sciences, Tilburg, The Netherlands;

**Background**: Measuring and monitoring stress has potential benefits for the care and self-management of stressors for people with dementia. Early identification of stressors may help to cope with challenging behaviours (CB), occurring in up to 80% of nursing home residents with dementia. The identification of stressors causing CB is difficult (as often