M.M. BERNARD, E. DRESCO, T. EL GHARBI, O. GALLON, K.G. OUECHNI, L. TURNER. ***Big data and teleconsultations for homebound seniors.*** *Gerontechnology 2016;15(suppl):31s*; doi:10.4017/ gt.2016.15.s.892.00 **Purpose** Innovative tools are being developed for the purpose of datamining and making better use of healthcare information. The value creation is still unclaimed, however, predictive modeling, simulation techniques and algorithms are bound to change the healthcare organisation. Our work, however, focuses on the promotion of confidential communication between a home-based senior and a health professional using customised ICT (no third party involved), which has not been previously reported. It is of value since a trusting patient-doctor relationship is pivotal to the success of chronic disease care, which affects most seniors. This paper discusses the impact of a telemedicine-telementoring® software interface, as tested by seniors, patients and physicians, through incremental inputs and iterative work with software developers (Agile methodology), followed by evaluations in 'real life', on the quality of the patient-physician relationship. **Method** Thirty chronically ill patients, aged 27–79 years (53% aged 60+;40% males), were enrolled in a 'real life situation', following the registration of clinical appointments to their hospital, to assess a telemedicine interface in a live connection with their doctor. A customized video conferencing interface was equipped with the symmetric sharing of medical results, supported by a secure intranet. **Results** Traveling time to hospital was 5–40min (mean: 21±17min). In the past two years, patients made 1-20 visits (mean: 7±5 visits) to their hospital; the average in-hospital waiting time was 5-60 min (mean: 23±26min). The enrollment process allowed for less than 15 minutes' training. Twenty-four (80%) patients rated the training as satisfactory (females 62%, aged 53±19yrs; males 38%, aged 63±1yrs). The quality of mutual understandings and perceptions exchanged during the teleconsultation were rated as satisfactory by 12 (43%) patients (females 50%, aged 51±19yrs; males 50%, aged 64±6yrs) and excellent by 16 (57%) patients (females 69%, aged 56±20yrs; Males 31%, aged 62±15yrs). Two patients did not respond (1 male aged 60yrs and 1 female aged 54yrs). Twenty (72%) patients (females 70%, aged 56±20yrs; males 30%, aged 63±13yrs) fully supported the use of the interface for maintaining a personal and confidential relationship with their doctor; 5 (18%) patients (2 females aged 55 and 57yrs; 3 males, aged 57, 63, 68 yrs respectively) simply approved; one considered it somewhat useful (male aged 74yrs) and 2 disapproved (1 female aged 29yrs, and 1 male aged 56yrs). Two patients did not respond (1 male aged 60 yrs and 1 female aged 54 yrs). The responses were not linked to the gender, nor to the age (r=0.127). **Discussion** The evaluation by patients, all ages, shows patient satisfaction and compliance to teleconsultations, as an adjunct to conventional medical care. It also provided unexpected changes in patients' behaviors and treatment acceptance. We conclude that 'the power is in the software' when it promotes relationships. A well designed software, customized to the needs of seniors and of patients, may become a unified tool for the promotion of autonomy, mobility and social interactions, for the purpose of 'ageing well'. A randomized medico-economic assessment is justified for its impact on understanding and assessing care and costs, and on self-management coaching.

References

1. Ridd M, Shaw A, Lewis G, Salisbury C. The patient–doctor relationship: a synthesis of the qualitative literature on patients' perspectives. British Journal of General Practice 2009;59(561):e116–e133; doi:10.3399/bjgp09X420248
2. Bernard MM, Fruhwirth M, Brooks M, Oakley K, Wang X, Ouechni K, Janson F. Intergenerational Telementoring for the promotion of social relationships. Gerontechnology 2011;10(1):38-50; doi:10.4017/gt.2011.10.01.005.00
3. Bernard MM, Dresco E, El Gharbi T, Gallon O, Ouechni KG, Turner L. Evaluation by 30 chronically ill patients of a connection to their specialist physician, using a telemedicine-telementoring interface. European Research in Telemedicine 2015;4(5):103-107; doi:10.1016/j.eurtel.2015.10.00

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Address: Centre Hospitalier Sud Essonne, Dourdan, France;
E: mmbernard@outlook.com