WORK - LEISURE - VOLUNTEERING An online resource for caregivers

F. RUDZICZ, J. POLGAR. An online resource for caregivers of persons with dementia. Gerontechnology 2016;15(suppl):138s; doi:10.4017/gt.2016.15.s.831.00 Purpose many products that can help support an older adult with dementia to live in the community. It is often up to family caregivers to find products that will be useful, but locating these can be difficult, frustrating, and often futile, as family caregivers may not know what they are looking for or how to find it^{1,2}. The goal of this project is to apply a new type of artificial intelligence called 'cognitive computing' to create an online tool that connects family caregivers to products, services and strategies they need to support themselves and an older adult with dementia. The resource will use 'natural language' (written and spoken) as the means by which users can input data to initiate and refine a search for strategies, technology and/or resources. Method A participatory approach³ is used to develop this online resource, involving collaboration among cognitive scientists, occupational therapists, rehabilitation engineers, target users and health care professionals. The project involves an iterative process that moves among initial definition of the online resource from engineering and clinical perspectives, conduct of focus groups with intended users and healthcare professionals to identify user needs, technological development, to ensure that technological development is informed by user needs, preferences and evaluation4. An initial search was conducted to identify similar online resources, using common search engines and known resources in the assistive technology field. Results of existing resources and a literature review informed the development of initial focus group guides. Six focus groups are planned: 4 involving intended users, and 2 with healthcare professionals (n=48; 18 years and older, gender proportion not available). Participants will be asked to describe their needs for information, their preferred method of seeking and receiving information and their preference for visual display of information. Results & Discussion Review of existing resources found no existing products that used cognitive computing technology or that had the planned scope and possible depth of information that will be made available via the planned online resource. Results from the focus groups will allow us to prioritize information to be included in the searchable database and to develop preliminary design criteria for the first product version. Use of a participatory approach to the project is intended to maximize the likelihood that the resulting product is useful and usable by family caregivers supporting an individual with dementia.

References

- Kinney JM, Kart CS, Murdoch LD, Ziemba TF. Challenges in caregiving and creative solutions: Using technology to facilitate caring for a relative with dementia. Ageing International 2003;28(3):295-313; doi:10.1007/s12126-002-1009-x
- 2. Kramer B. Dementia Caregivers in Germany and Their Acceptance of New Technologies for ;are: The Information Gap. Public Policy & Aging Report 2014;24(1):32-34, doi:10.1093/ppar/prt002
- Hakobyan L, Lumsden J, O'sullivan D. Participatory design: How to engage older adults in participatory design activities. International Journal of Mobile Human computer Interaction 2015;7(3):78-92; doi:10.4018/jmhci.2015070106.
- Cook AM, Polgar J. Assistive Technologies: Principles and Practice, 4th edition. St. Louis: Elsevier; 2015

Keywords: caregivers, dementia, online, assistive technology

Address: Western University, London, Canada;

E: jpolgar@uwo.ca