

Sample Format 2 Abstract – to be submitted by symposium conveners

M. Parker (Convenor). From sensors to informatics-based telehomecare: Making remote monitoring work. Participants: A. Sixsmith - *Developing user-driven approaches to research and development for ambient technologies*; D. Kutzik - *It's all about implementation: Lessons learned from the USA, the UK and the Netherlands*; A. P. Glascock - *Care informatics: the missing link in remote monitoring implementation*; C. Willems- *Integrating behavioural monitoring in telehomecare: A report from the Netherlands.* **ISSUE:** For the last decade remote monitoring of behavior and vital signs has been promoted as an effective means of enhancing patient centered care in the home. Yet widespread adoption by care provision systems has not occurred in the US or anywhere in the world. Speakers will address the reasons for this lack of large scale adoption by focusing on what needs to be done to overcome systemic impediments. **CONTENT:** Findings, both positive and negative, will be presented from studies of remote monitoring systems deployed in a variety of care provision settings in the US, Canada and the Netherlands. The papers will report on the use of behavioral, vital signs and environmental extreme remote monitoring applications in the field. Appropriate 'user centered' design issues will be discussed from development to implementation with respect to the transformative impact of these technologies, i.e. how they transform the way care is delivered. Four levels of analysis will be addressed: technology (sensor-based data gathering), implementation (integration into the specific care provision practices of each site), care (how information from monitoring affected care provision), and, informatics (the presentation and use of actionable information by care providers). **STRUCTURE:** Andrew Sixsmith will provide a conceptual framework based on his wide ranging experience with ICT development projects in Europe and Canada with a focus on how to improve the design and development process to ensure that new technologies are centered on the needs of elderly and frail populations rather than the needs of engineers. David Kutzik will analyze the role of care provision protocols which integrate information from monitoring systems into the care delivery practice, the essential component for successful use of remote monitoring as a tool for enhanced care provision. Anthony Glascock will discuss the leading role played by information and informatics in remote monitoring and argue that a paradigm shift from a focus on sensor technology to "care informatics" is necessary in order to move beyond an obsession with gadgetry to person-centered homecare. Charles Willems will discuss the problems and potential of informatics-based remote monitoring based on a series of field experimental studies of the use of such technologies by care providers in the Netherlands. Following the individual presentations, there will be an open discussion led by Mary Parker, focusing on the next steps to effectively use remote monitoring in care provision. **CONCLUSION:** Despite increasing needs and considerable technical development in the area, different countries have been slow to uptake this technology. Substantial barriers to implementation remain, not least the cultural change of introducing technology-based products and services into a sector that traditionally has relied on face-to-face human contact.

Word Count: 500; limit = 500 words.

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