element14 Offers Engineers a Potentially Lifesaving Challenge

element14

Design engineers across the world to unite in finding a healthcare solution for the elderly

Engineers on the element14 Community [1] are being invited to develop an intelligent solution for people living with cognitive impairments and other long term conditions that could change their lives.

Project Nocturne [2], run in conjunction with the Bath Institute of Medical Engineering and Armley Helping Hands in Leeds, UK, hopes to find a reliable solution that will alert a relative or carer if their loved one is not safely in bed at night, or fails to get up in the morning.

Often the safety of people with long term conditions are dependent on a pendant or wrist worn alarm. At night these become less reliable, are stored away from the patient, can fall off or set alarms unnecessarily. Additionally, telecare solutions like Bed Occupancy Sensors (BOS) that are built in to mattresses can also be problematic due to technical problems and short lifespan.

With over 160,000 members on its Community, element14 is asking design engineers across the world to work together and develop ideas which will lead to a real, workable solution, which will make a significant difference to the lives of elderly or vulnerable people.

Project Nocturne will draw on the experience and expertise of engineers and only end once a suitable solution has been found. element14 will then partner with Newcastle based telecare and telehealth solutions provider TyneTec to assess the commercial viability and potential for manufacture and production.

Design engineers can get involved in the project and offer their help and advice to develop a workable solution on the element14 Community. Throughout the project engineers will blog about their progress and ask for advice to any challenges that they face from fellow community members.

While initially focused on the UK the technology being developed could benefit many elderly or vulnerable people around the world. In the UK alone there are many thousands of people over the age of 70 years old who live independently at home. Many of these will have some form of disability, or a long term condition (stroke, arthritis, diabetes, heart failure) and will be at increased risk of a fall, or a sudden illness, where they might need to summon assistance but be unable to get to a telephone.

“Knowing that your loved one is safe is something we always seem to take for granted. But as people grow older and start to suffer from long term conditions it can become a huge concern for family and carers,” commented Dianne Kibbey, Global Head of Community, element14. “Working with the Bath Institute of Medical Engineers to find solutions for people living with serious conditions really excites us and I am sure our Community will work together to make a real difference to people’s lives.”

Nigel Harris, Director of the Institute said’ This is a novel design approach to a challenging engineering problem; we are looking forward to seeing what insights and experience the element14 Community can bring, a successful product could benefit many thousands of people worldwide’.

Dawn Newsome, Project Manager at Armley Helping Hands, said: “This is a great opportunity for charities that don’t have the necessary funding to work with the business sector in supporting people with cognitive impairments through new technologies, skills & experience, allowing them and their carers to maintain their independence.”

Links:
[1] http://www.element14.com/community/index.jspa
[2] http://www.element14.com/project-nocturne