WHITE PAPER

How to enhance safety, independence and quality of life of residents with dementia.

Every third second an individual somewhere in the world is diagnosed with dementia[1]. An increasing number of these individuals come to reside in care facilities, and six out of ten starts to wander and run the risk of getting lost and injured.[2] The care facilities are faced with the challenge of providing a safe environment for these wanderers while promoting freedom of movement and independence to the highest degree possible – the answer to this challenge is to a high degree smart technology.

"Unfortunately, 70 does not yet appear to be the new 60", says Dr. John Beard, Director of the Department of Ageing and Life Course at WHO, when commenting on the "World report on ageing and health, 2015".

Longer lives doesn't necessarily mean healthier lives

When commenting on the "World report on ageing and health, 2015" Dr John Beard, Director of the Department of Ageing and Life Course at WHO says that the report "finds that there is very little evidence that the added years of life are being experienced in better health than was the case for previous generations at the same age."

The dramatic increase in life expectancy throughout most of the world in the 20th century could be considered as one of society's greatest achievements, but unfortunately living longer also means a greater potential for individuals to suffer what is predicted to be the chronic disorder of the 21st century – dementia.[1]

As defined by the U.S. National Institutes of Health, dementia is the name for a group of symptoms caused by disorders that affect the brain. It is not a specific disease. People with dementia may not be able to think well enough to do normal activities, such as getting dressed or eating. They may lose their ability to solve problems or control their emotions. Their personalities may change. They may become agitated or see things that are not there.

Memory loss is a common symptom of dementia. However, memory loss by itself does not indicate dementia. People with dementia have serious problems with two or more brain functions, such as memory and language. Although dementia is common in very elderly people, it is not part of normal aging.[3]

Alzheimer's is by far the most common form of dementia and typically progresses slowly through three stages: mild, moderate and severe. On average, a person with Alzheimer's lives four to eight years after diagnosis, but can live as long as 20 years.[4]

ascom

Dementia – a global exploding problem

- In Germany, for instance, more than 1.4 million people are living with Alzheimer's disease,[5] and researchers predict that the number of dementia sufferers in the European Union's most populated country will double by 2050.[6]
- In sparsely populated Australia, more than 342,800 people are living with dementia, a number expected to reach nearly 900,000 by 2050, in the absence of a medical breakthrough.[7]
- In the United States, one in three seniors die with Alzheimer's disease or other dementia each year, and an estimated 5.3 million Americans of all ages currently suffer from Alzheimer's.[8]

All told, there are an estimated 46.8 million people across the globe living with dementia today.[1]

Safety and control vs. integrity and independence

A common problem in caring for people with dementia is the propensity of many to wander and get lost. This creates an additional challenge especially for the care homes which are faced with the task of providing a safe environment for these wanderers, while promoting freedom of movement and independence to the highest degree possible.

46.8 million people worldwide are living with dementia in 2015. This figure is estimated to reach 131.5 million by 2050.

A solution to this is found in modern technology, which can help facilities strike that balance with wanderer control tools that both support safety and enhance quality of life.

As noted, a tendency to wander can occur at any point in the progression of dementia. The term "wandering" can suggest aimless walking, and this can be the case, especially as an effect of the fear, anxiety and depression that can accompany dementia. More likely, however, according to mental health experts, it is a purposeful behavior triggered by a desire to fulfill a need and has meaning for the person with dementia. Obviously, cognitively impaired individuals who wander unattended are at high risk of injury,[9] including falls and other accidents away from immediate assistance. Elopement, in which the person wanders away from home or from a skilled nursing facility, is the most dangerous type of wandering and has resulted in death.[10]

Wanderer control techniques

Wanderer control techniques vary by country and among care facilities within them. These techniques range from severely restricting movement to varying levels of technology designed to track and locate wanderers. Unfortunately, many of these mechanisms are lacking. Locked rooms limit mobility and the beneficial effects of exercise. Locked doors in a facility can unnecessarily restrict other residents who do not require the same safeguards. Constant face-to-face monitoring can be demeaning to the person with dementia, as can loud electronic alerts of movement from the bed or room, which can make them subjects of ridicule. These methods also can cause the person with dementia to become agitated or anxious, which are in themselves instigators of wandering behavior.[11]

This creates an ongoing and serious challenge for facilities across the world that increasingly are charged with balancing safety and personal freedom in order to maintain licensing, avoid sanctions and provide the best possible care.

This situation has led a growing number of care facilities worldwide to integrate smart Wanderer Control technology that keeps a discreet eye on residents – with minimal effort from staff.

Features to look for when implementing smart technology

Incorporating wearable devices that are both unobtrusive and fail-safe for residents, today's superior systems provide constant monitoring and updates to staff in real time.

Smart technology easily can be incorporated into a facility and its care plan, leveraging both passive and active monitoring to enhance daily life while maintaining a safe environment. Significantly, the monitoring system can be configured to meet the specific needs of the person as their illness advances.

Wearable transmitter devices that are attractive and highly functional. While these devices come in pendant form, wrist transmitters often are the best choice for persons with more serious dementia, as the bands can be locked in place. Both forms, however, immediately alert staff when they are removed, and color coding identifies residents for staff. In addition, sensors reduce the need for active check in, with a "no-motion" feature continually tracking the resident, alerting staff if no movement has been detected over an established period of time.

More modern systems allow wearers to express their individual identities through a combination of different colored style elements and are ergonomic for comfort. Fashionable design helps prevent "alarm stigma" and promotes self-esteem.

Bed, door and resident-in-room sensors may be required for those at advanced stages of Alzheimer's disease or other forms of dementia, where greater circumscription of mobility is required.

Supervised two-way communication that enables a wide range of interactions. Listings of needs on computers and mobile devices enable staff to prioritize responses, and normal assistance calls can be acknowledged with a reassurance signal to keep the resident calm.

With such bi-directional communication that includes the location of the call, residents and families can be assured that notification to the caregiver is only a moment away. When a staff member is unable to respond, he or she can quickly send the call on to an available resource to ensure appropriate and timely action.

Options also are available to deliver resident alerts to all possible notification devices in a system, including mobile phones and door and corridor signs, quickly notifying staff of the situation and location of the resident involved.

In addition, these systems monitor themselves to assure reliability.

Low-frequency location beacons that provide information on the whereabouts of residents. Some of the best systems also offer easily mounted, battery-operated technology. Cost effective and easily deployed, these beacons provide direct and discreet information on those in the vicinity, saving time in looking for residents. They also proactively help to prevent injuries by sending an alert to staff when a vulnerable resident appears to be in harm's way.

Antipsychotic medications and physical restraints are not appropriate interventions for wandering behaviors. They increase the risk of pressure ulcers, infections, falls and sedation, and can promote anxiety, agitation or violence.[12] Further, the improper use of physical restraints can cause injuries of varying severity, which can sometimes be fatal.[13]

A knowledgeable vendor that has long-standing, global experience in healthcare communications and can work with a facility to address wandering based on regional care practices and specific organizational requirements. Integration is a key factor, as incorporation of wanderer control with nurse call systems can enhance benefits and efficiencies. And proven performance in a similar facility also should be an important consideration.

The Right Answer for All

Residents

Smart technology enables individuals with dementia to move around in their environment, with benefits from pride in independence to the positive health effects of exercise. At the same time, other residents can live more peaceful and enjoyable lives, free from loud alarms and frantic searches for wanderers, while having freedom of movement for themselves. In addition, all residents can be assured that staff will be there when needed.

This technology also enables access to what the Alzheimer's Association calls "engagement in meaningful activities," which is "a critical element of good dementia care." Such activities help residents maintain their functional abilities and can enhance their quality of life with a sense of community, choice and a sense of enjoyment.[14]

Families and friends

With a system that enables staff and visitors to come and go freely, while maintaining a very high level of safety and security, residents' families and friends also gain peace of mind and confidence that their loved ones are receiving quality care.

Friends and family are encouraged to visit, and some come every day.

In 2013, CNN reported that residents at Hogewey require fewer medications, eat better, live longer and appear more joyful than those in standard elderly-care facilities.[15]

Staff

Facility staff can be more productive and efficient knowing residents with dementia are being monitored at all times.

The time saved in not searching for wanderers and performing active checks can translate into more quality time to be spent with each resident. Workflow also is enhanced by easy prioritization of tasks. As calls are quickly routed and escalated, caregivers can respond rapidly, maximizing staff productivity and increasing resident safety and satisfaction. Staff members also can achieve greater job satisfaction by knowing they are providing the best care for all residents.

The Facility

Smart, wireless technology is an affordable way for care facilities to lower risks associated with resident injury and elopement in a resident-friendly environment. The right technology also can be a competitive advantage, as today's "sandwich generation" of persons with both children and aging parents seek the best for their elderly loved ones and pass on instructions for their own care to the next generation.

In 2005, the ECRI Institute, a U.S. nonprofit research organization, reported that claims for elopements, one of the most costly claim types for long-term care facilities, ranged from an average cost of $118,186 to $305,644 per claim.[16]

In nations such as the United States, this technology also answers the call for "person-centered" care, while enhancing efforts to improve resident safety.

Labeled "an urgent need" for people with dementia by the American Society on Aging[17], person-centered care is defined by the Institute of Medicine as "respectful of and responsive to individual patient preferences, needs, and values and ensuring that patient values guide all clinical decisions".

Smart technology also can be an important tool in compliance with federal regulations – and human rights mandates. Indeed, assuring the human rights of persons under care is an issue in many parts of the world. For instance, in the United Kingdom, the legal rights of the individual have become increasingly significant with the introduction of the European Convention on Human Rights into law[18]. And many nations are signatories to the United Nations' Convention on the Rights of Persons with Disabilities. As a result of these initiatives and advocacy groups behind them, facilities may be closely scrutinized as to the level of human dignity and personal freedom they provide.

Conclusion

Barring a major medical advancement in the diagnosis and treatment of dementia, most people today will deal with some form of it, whether in a loved one or themselves. The assurance of human dignity, safety, quality of life and freedom of movement cannot be overstated as an essential component – and perhaps deciding factor – in residential care. With the integration of smart wanderer control technology, facilities can more effectively and efficiently meet the goals of safety, security and quality of life for all residents, while supporting organizational viability.

1. World Alzheimer Report 2015: The Global Impact of Dementia; An analysis of prevalence, incidence, cost and trends. Alzheimer's Disease International. 2015 Aug. [accessed 2015 12 Nov]. http://www.alz.co.uk/research/world-report-2015.
2. Wandering and getting lost. Alzheimer's and Dementia Caregiver Center, Alzheimer's Association. [accessed 2015 Nov 12]. https://www.alz.org/care/alzheimers- dementia-wandering.asp
3. Dementia: Also Called Senility. NINDS Dementia Information Page. NIH National Institute of Neurological Disorders and Stroke. [accessed 2015 Nov 12] https://www. nlm.nih.gov/medlineplus/dementia.html
4. 2011 Alzheimer's Disease Facts and Figures. Alzheimer's Association. [accessed 2015 Nov 12]. http://www.alz.org/documents_custom/2011_Facts_Figures_Fact_ Sheet.pdf.
5. Alzheimer's and Dementia in Germany. Alzheimer's Association | Germany. [accessed 2015 Nov 12]. http://www.alz.org/de/dementia-alzheimers-germany.asp.
6. Germany sees increase of dementia cases. Research. Deutsche Welle. 2013 May 4. [accessed 2015 Nov. 13]. http://www.dw.com/en/germany-sees-increase-of- dementia-cases/a-16722825.
7. Key Facts and Statistics 2015. Alzheimer's Australia. Updated Feb 2015 [accessed 2015 Nov 12]. https://wa.fightdementia.org.au/wa/research-and-publications/ key-facts-and-statistics.
8. 2015 Alzheimer's disease facts and figures. Alzheimer's Association. [accessed 2015 Nov 12]. http://www.alz.org/facts/.
9. Aud M, Dangerous wandering: elopements of older adults with dementia from long-term care facilities. Am J Alzheimer's Dis Other Demen. November/December 2004 vol. 19 no. 6 361-368. [accessed 2015 Nov 12] http://aja.sagepub.com/content/19/6/361.short. doi: 10.1177/153331750401900602.
10. Lester P, Garite, A, Kohen, I. Wandering and elopement in nursing homes. Annals of Long-term Care. Volume 20; Issue 3l; March 2012 [accessed 2015 Nov 12]. http:// www.annalsoflongtermcare.com/article/wandering-and-elopement-nursing-homes.
11. Wandering: Families and carers of people with dementia may be faced at some time with the problem of what to do if the person begins to wander. Alzheimer's Australia. [accessed 2015 Nov 12] https://fightdementia.org.au/support-and-services/families-and-friends/coping-with-behaviour-changes/wandering.
12. Aud, M. op. cit.
13. Berzlanovich, A, Schöpfer, J, Keil, W. 2012. Deaths due to physical restraint. Dtsch Arztebl Int. Volume109(3); 2012 Jan. [accessed 2015 Nov 12]. http://www.ncbi. nlm.nih.gov/pmc/articles/PMC3272587/
14. Dementia Care Practice Recommendations for Assisted Living Residences and Nursing Homes. 2009. Alzheimer's Association Campaign for Quality Residential Care. [accessed 2015 Nov 12] http://www.alz.org/national/documents/brochure_DCPRphases1n2.pdf.
15. The Dutch village where everyone has dementia. The Atlantic. 2014 Nov 14. [accessed 2015 Nov 12]. http:// www.theatlantic.com/health/archive/2014/11/the- dutch-village-where-everyone-has-dementia/382195/.
16. Hazardouswanderingandelopement.ContinuingCareRiskManagement.ECRI.2005.[accessed2015 Nov 12] http://wrotenlaw.com/pdf/conference/2011/ SafEnv1-Elopement.pdf.
17. Maslow, K. Person-centered care for people with dementia: opportunities and challenges. American Society on Aging, 2013 Nov 19. Excerpted from the fall 2013 issue of ASA's Generations. [accessed 2015 Nov 12]. http://www.asaging.org/blog/person-centered-care-people-dementia-opportunities-and-challenges.
18. Safe to wander? Principles and guidance on good practice when considering the use of wandering technologies for people with dementia and related disorders. Mental Welfare Commission for Scotland. 2007. Thistle House. [accessed 2015 Nov 12]. http://www.mwcscot.org.uk/media/51838/Safe%20to%20wander.pdf

Ascom Holding AG
Zugerstrasse 32,
CH-6340 Baar,
Switzerland
info@ascom.com
Phone: +41 41 544 78 00
ascom.com

ascom