



Silver Paper on Falls Prevention in Older Age: Executive summary

The ProFouND, EUFF, EIP-AHA AG2, E-NO FALLS working group*

Background

About 1/3 community dwelling people aged 65 or over fall each year; fall rates increase with age and are higher in long term residential care and hospitals. In 2015 in EU28 it is estimated there were some 46 million falls amongst community dwelling older people. Some 30-50% falls result in minor injury, 5% in fractures, (1% hip fracture), 5-6% in other major injury. Fear of falling is common and can result in older people becoming socially isolated. Falls are a major predictor of loss of independence and admission to care. Falls cost about 1-1.5% of national health care expenditure. However, the good news is that falls prevention is effective.

Prevention

The core fall prevention strategy for persons living in the community is enrolment into and sustained participation in evidence based, progressive strength and balance programmes. These must be delivered following the evidence protocol, with adequate dose, and should be challenging and progressive. Individuals with specific deficits and/or diseases (e.g. Parkinson's disease or stroke) require assessment and intervention aimed at that disease and specific risk factors. Patients presenting after injurious fall should be carefully assessed, following published guidelines, using (e.g.) AGS/BGS algorithm. In hospitals and long-term care facilities falls are very common. Prevention in these settings has proven challenging and resource intensive. Systems wide approaches are required; the key for fall prevention in institutions is the implementation of proactive organisational strategies that include leadership, monitoring, supportive risk management, and a change agent. The evidence for interventions in different settings is summarised in a series of factsheets at <http://profound.eu.com/wp-content/uploads/2015/10/Updated-Falls-Intervention-Factsheets.pdf>

Implementation and dissemination

There is wide disparity in fall prevention across EU. Some regions are running ambitious programmes, whilst others lag behind. There is considerable opportunity to make major improvements in many areas of older people's lives via activity promotion, including preventing falls. Much can be gained by "closing the implementation gap". The strong evidence base as to what works, needs to be expressed in terms of best practice models, and then implemented coherently and comprehensively. The **EC Blueprint on Digital Health and Care Innovation for Europe's Ageing Society** argues the need for models of self-organisation and citizen empowerment for social transformation facilitated by digital and technological innovation. Such models can be implemented in reference sites to act as beacons for the way forward.

We need a wholesale change of attitudes and knowledge. In community settings, the challenge is to set up evidence based strength and balance programmes (for groups and for individuals at home) that are attractive to older people so that they not only start the programme but also adhere to them long term to be beneficial. Technologies can help facilitate the implementation of such strategies, but they must be attractive to older people. Technologies need to be developed for the prediction, detection, assessment and prevention of falls, which provide alerts and feedback useful to the multiple stakeholders, including health and social care professionals, whilst prioritising older people and their families and taking account of older people's needs and preferences for technologies.

There is still much to be done in the development of suitable technologies to bring them to the mass market. "Fall technologies" need to address 4 domains; fall detection technologies to detect falls and if appropriate call for help, fall assessment technologies, to provide information about the aetiology and mechanisms of falls for diagnostic purposes etc., fall prediction technologies to predict changes in risk status in real time in order to feed into fall prevention technologies to prevent falls either by intervening during periods of immediate threat during e.g. gait perturbations, or in the longer term though encouraging longer term risk reduction by appropriate

intervention (strength and balance exercises and clinical regimens) and their delivery and adherence. Despite major efforts the market is yet to deliver breakthrough technologies, widely acceptable to older people. EC funded research such as the FARSEEING project is moving this in the right direction.

The Silver Paper calls for :

Greater awareness of falls as a public health issue and that falls can be prevented. A great deal has already been achieved by EIP-AHAAG2 https://ec.europa.eu/eip/ageing/actiongroup/index/a2_en and the European Stakeholder Alliance for Active Ageing for Falls Prevention <http://profound.eu.com/eu-level-stakeholders-joint-statement/> but more still needs be done.

All too often falls are seen as an inevitable part of ageing. But falls are not an inevitable part of ageing! Much can be done, as shown by the promotion of strength and balance training implemented by the ProFouND project across regions of EU www.profound.eu.com. Awareness should be raised amongst:

- Older people and their families
- Citizens and society at large
- Health care and social care service providers
- The scientific and technological community
- ICT-for-Health value chain stakeholders
- Policy makers and political organisations and NGOs

Awareness should be converted to action via implementation and upscaling of evidence based best practice. Much of this is not "rocket science" but requires the political will to invest in prevention. The strong evidence base for falls prevention needs to be implemented into practice. The most effective prevention strategies for community living older people are exercises to improve strength and balance function. Such programmes are likely to have multiple beneficial effects on health and well-being, but require long term commitment, both by society in terms of provision and funding models and by older people themselves, in terms of adherence to the programme. The provision must therefore be attractive and tailored to older people's needs. Creation of a cadre of exercise instructors to deliver evidence based should be a priority and will create jobs and wider social capital. We still require:

- Greater awareness of ICT solutions including stimulation of public and private investment for innovation and research on ICT solution for fall preventions
- Legal clarity by development standardised platforms, specifications, interoperability agreements etc.
- Evidence of cost effectiveness of ICT solutions for falls detection, assessment, prediction and prevention
- Implementation of effective health care ICT solutions in practice

Technology will help, but needs to be supportive and remains to be more fully developed. Technologies can be promoted via repositories such as www.e-nofalls.eu/ictrepository/. Evidence based integrated service pathways should be implemented (risk assessment, appropriate clinical intervention, etc.).

Engagement of end-users. Specific actions are required to engage and convince end users, their family and carers of the benefits of fall prevention and management products and reduce resistance to technological solutions is crucial. A number of principles have been outlined in publications such as Don't mention the F-Word www.ageuk.org.uk and the FARSEEING review of older people's use of technology www.farseeingresearch.eu; but we should also address:

- Education of frontline health professionals is required as key influencers
- Falls in hospitals and care homes, which drive considerable costs for health services.
- Promotion of fall prevention programmes with national patient advocacy groups, primary healthcare providers, local authorities and older people's organisations.

More needs to be done to prevent falls: A call to action

Falls and injurious falls are common amongst older people and represent a major public health challenge for European countries. However, there is clear scientific evidence that there are effective interventions to prevent falls and injurious falls, and that exercise based interventions can provide cost-effective solutions. So why are we not more effective in preventing falls amongst older people? Over recent years there has been considerable interest in new technologies which can be used to predict, detect, assess and prevent falls. These technologies require further development and investment; "low-tech" exercise interventions also require investment and greater implementation. The time has come to make a change and address this issue across Europe.

FOOTNOTE

**This paper is a follow-up to discussions at the 2016 European Falls Festival and within the European Innovation Partnership on Active and Healthy Ageing Action Group 2 on Falls Prevention (EIP-AHAAG2) and ProFouND & E-NO FALLS networks.*

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