Fall prevention activities in Region Emilia Romagna

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- Health and Social Regional Agency
- Directorate General for Health, Social and Integration Policies:
  - Collective Prevention and Public Health Service
  - Hospital Care Service
  - Primary Health Care
- Technical Group PASSI d’Argento Emilia-Romagna
Emilia-Romagna Region: a snapshot

- 4.500.000 inhabitants
- 23% over 65 years
- 12% over 75 years

Hospital care
- More than 18,000 hospital beds (more than 75% in public hospitals)

Primary Health Care
- 38 Local Health Districts
- 204 General Practitioners Groups
- 72 Patient-Centred Medical Homes (*Case della Salute*) – 50 more planned

Residential care
- More than 25,000 elderly in nursing homes/residential homes (27% 85-89 yrs; 32% > 89 yrs)
From innovation to policy and practice

Research is an essential function, as well as education and care, in the Emilia-Romagna Regional Health Service (Regional Law 29/2004)

<table>
<thead>
<tr>
<th>Program</th>
<th>Target</th>
<th>Funds (millions €)</th>
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<tbody>
<tr>
<td><strong>Promoting research</strong></td>
<td></td>
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<tr>
<td>Regional program for research and innovation (PRIER)</td>
<td>All Local Health Trusts</td>
<td>1,5 (2009-2014)</td>
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<tr>
<td>Support to Research and Care Scientific Institutes (IRCCS)</td>
<td>IRCCS</td>
<td>30 (2009-2014)</td>
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<tr>
<td><strong>Regional calls for research</strong></td>
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<tr>
<td>University-Region Program</td>
<td>University hospitals and other places of collaboration with the university</td>
<td>70 (2007-2014)</td>
</tr>
<tr>
<td>Fund for modernization</td>
<td>All Local Health Trusts</td>
<td>7.2 (2010-2012)</td>
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</tbody>
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Funded research projects on falls
(2013 call, 6 research questions related to Geriatrics)

Efficacy of a multifactorial and personalized intervention program to prevent elderly falls at home compared to standard care: randomized controlled trial
Fabio La Porta, AUSL Modena

Stepped wedge cluster randomized trial to evaluate the efficacy of a care care bundle to prevent falls in elderly hospitalized patients
Daniela Mosci, AOU Bologna
Innovation must be translated into practice

Covering all health settings

Using all possible strategies to improve quality of care

- Accreditation
- Education (provider, patient, caregivers)
- Organizational changes
- Incentives
- Audit and feedback
- Monitoring and benchmarking
<table>
<thead>
<tr>
<th>Year</th>
<th>Action</th>
</tr>
</thead>
<tbody>
<tr>
<td>From 2005</td>
<td>Centers for home adaptation</td>
</tr>
<tr>
<td>2008-2010</td>
<td>Regional Health Prevention Plan: <strong>falls among the elderly</strong></td>
</tr>
<tr>
<td>2009</td>
<td>Social-health <strong>accreditation</strong></td>
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<tr>
<td>2010</td>
<td><strong>Accreditation</strong> criteria for geriatric wards</td>
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<td></td>
<td>Regional communication campaign “<strong>Casa salvi tutti</strong>”</td>
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<tr>
<td>2012</td>
<td><strong>Accreditation</strong> criteria for internal medicine wards</td>
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<td>2011-2013</td>
<td>Regional Health Prevention Plan: falls among the elderly</td>
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<tr>
<td>2013</td>
<td>Emilia-Romagna Region becomes reference site of EIP-AHA <strong>Survey on falls in residential facilities</strong></td>
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<tr>
<td>2014</td>
<td><strong>Regional hospital survey on falls</strong></td>
</tr>
<tr>
<td>2015</td>
<td>Regional survey of Health Trusts activities to prevent falls <strong>Accreditation</strong> criteria for Primary Care Departments</td>
</tr>
<tr>
<td>2016</td>
<td>Regional document to prevent falls in nursing homes for the elderly</td>
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</tbody>
</table>
Environmental interventions

Centers specialised in home adaptation

interdisciplinary and multiprofessional teams offer information and advice

In 2014 more than 2,500 elderly and disabled people, counting 7,058 total accesses.

At home

Ad hoc trained elderly volunteers visit the houses of their friends of the same age to control and identify together possible risks and to suggest solutions and simple tips (using a regional checklist).

<table>
<thead>
<tr>
<th>Risk</th>
<th>Check yes</th>
<th>Check no</th>
<th>Suggestion</th>
<th>done</th>
<th>not done</th>
</tr>
</thead>
<tbody>
<tr>
<td>Lack of safety mats in shower or bath tub</td>
<td></td>
<td></td>
<td>Provide for appropriate mats to be used during bathing or showering</td>
<td></td>
<td></td>
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<tr>
<td>Mats and mobile platforms near sanitary fittings</td>
<td></td>
<td></td>
<td>Eliminate or remove mats and mobile platforms soon after use</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Lack of safety grab bars in the shower or bath tub</td>
<td></td>
<td></td>
<td>Install safety grab bars</td>
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</tbody>
</table>
Children and elderly are the most frequently and most seriously affected categories in household accidents.

Regional campaign to:
- to increase knowledge on possible risks and to promote the adoption of safe behaviours.
- Booklets, posters, short videos with plasticine characters
Regional program for regularizing and qualifying work in homecare, favoring the emersion of the role of family assistants (Regional Resolution no. 509/2007)

A series of information booklets produced and translated in the most common foreign languages spoken by family assistants

Information/education initiatives for family caregivers
Preventing falls at home

- 10% of persons > 65 yrs old had fallen in the 30 days preceding the interview (Passi d’Argento 2012-2013)
- 48% at home, 30% walking in the street, 10% in the garden
- Highest risk: with disabilities (19%), serious economical difficulties (13%), >= 74 years (12%)
- 6% of fallen people hospitalized for more than 1 day

Personalized program of physical activity and physiotherapy to people over 80 who have fallen in the last year

- Gymnastics sessions at home, followed by home visits and telephone calls for the following 12 months; a weekly walking program
- Among the 606 people recruited, only a third of the expected falls actually occurred: 147 falls in total (84 no consequences, 48 some consequences; 15 outcomes in lower limbs).
Preventing falls in residential facilities for the elderly

- 7% of persons living in residential facilities for non self-sufficient elderly and day-care centers had fallen and 25% had fallen more than once (Regional Survey, 2013)

- Most falls happened: while walking (36)%, rising from the chair (20%), getting up from the bed (14%)

- 9% of fallen people had serious injuries

Regional recommendations for fall prevention in nursing homes for the elderly

- Comprehensive approach, professionals awareness raising, promotion of physical activities, multifactorial intervention plan, routine system of falls monitoring and fall risk management

- Pre-post study: reduction of repeated falls (-3%) and serious injuries (-1%).
Preventing falls in hospital

In February-May 2014 a study was carried out in general medicine, geriatrics, orthopedics/traumatology, long-term care, rehabilitation of nearly all Local Health Units in Emilia-Romagna. The study enrolled 10,489 patients.

- Falls incidence is 1.5% in hospitalized patients; higher fall frequency in rehabilitation (4.1%)
- More than 50% falls occur during the night; in most cases (80.5%) events happen in the room; bed are equipped with bedrails in 23.6% cases; in 71.8% no safety devices used to prevent falls.
In November 2011, “Recommendation for the prevention and management of patient falls in health facilities» (Ministero della salute 2011):

In 2014 the Region provided indications to Local Health Trusts to prepare local Plans for falls prevention in health facilities which have to account for:

- reporting information system for falls
- falls risk assessment tools
- fall risk profile
- implementation of prevention measures
- appropriate management of the fallen patient
- monitoring and assessment of results
- information/training programs for professionals, patients, family members and visitors.

A survey in 2015 revealed that all regional Local Health Trusts have developed specific procedures. Regional recommendations are under way.
European networking

European Innovation Partnership on Active and Healthy Ageing

Reference Sites

10 partners

More information on the project, the partners and the concept and dimensions of frailty is available at www.sunfrail.eu

• Innovative, integrated **model for the prevention and management of frailty** and care of multimorbidity
• **Validating** the model
• Assessing the potential for the **adoption/replication** in different European organisational contexts
• Promoting the **dissemination** of the results
Available regional data show that the burden of falls in all settings is significant.

Data recorded in the experimental phases, before launching regional interventions are encouraging: both at home and in nursing homes, education of providers and patient, multiprofessional teams and personalized interventions are effective in reducing the risk of falls.

New effective interventions demonstrated by regional funded research projects may be easily integrated in the regional service, given the existing level of awareness.