



Thematic Network
CIP-ICT-PSP 2012 Call 6 | Ref.: 325137
European Network for FALL Prevention, Intervention & Security

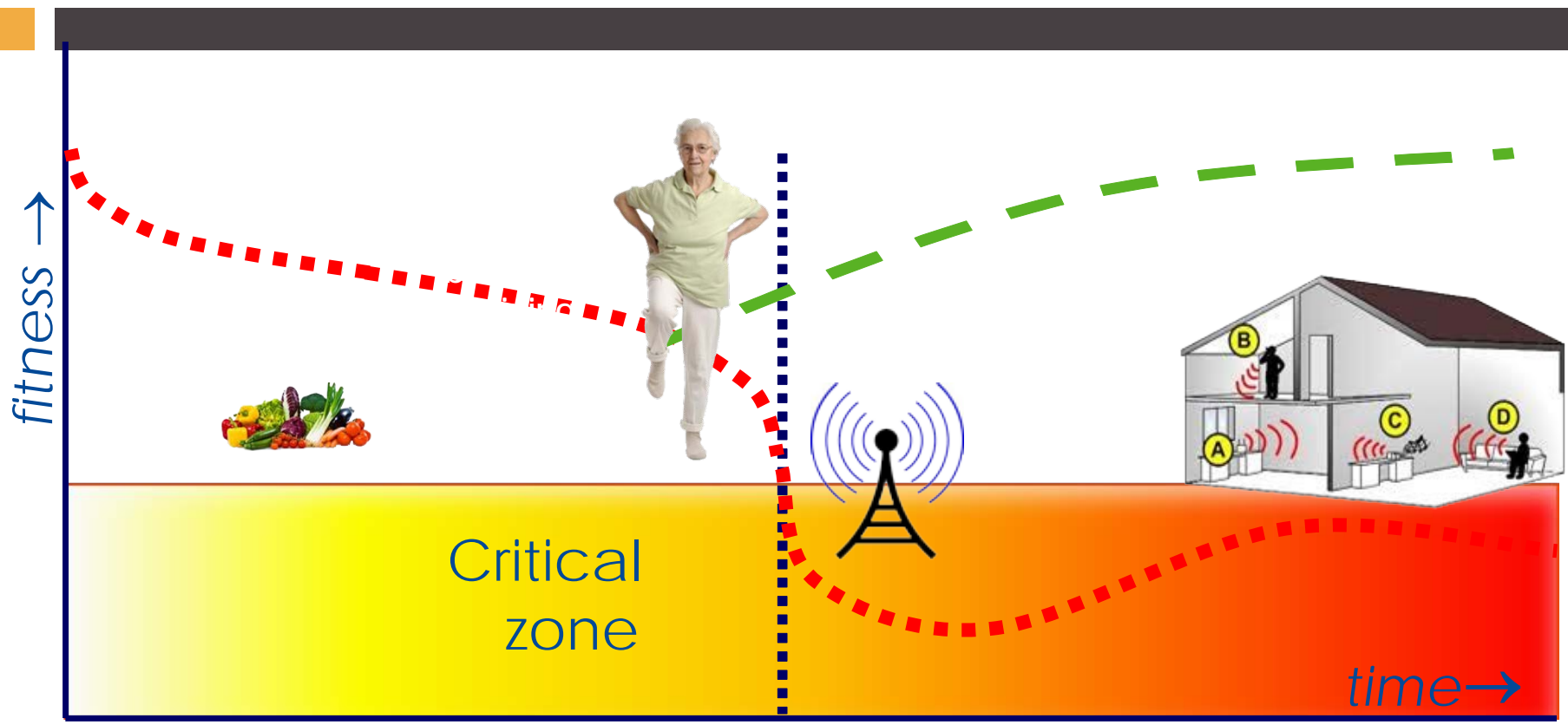


NEN

How the use of standards can facilitate interoperability and uptake of ICT based solutions for fall prevention

Marlou Bijlsma (NEN) - 2016 Falls Festival Bologna

Active and Healthy Ageing Action Plan and Falls Prevention



Falls can be prevented!

Interventions for preventing falls in older people living in the community (Review)

Gillespie LD, Bellizzi MC, Gillespie WJ, Lamb SE, Case S, Canning HG, Rowe BB



THE COCHRANE COLLABORATION®

This is a Cochrane review prepared and submitted to The Cochrane Collaboration and published in The Cochrane Library

Gillespie et al 2012
159 trials 79193 participants

- **Multiple-component group exercise**

- RaR 0.71 [0.63-0.82] RR 0.85 [0.76-0.96]

- **Multiple-component home-based exercise**

- RaR 0.68 [0.58-0.80] RR 0.78 [0.64-0.94]

- **Tai Chi**

- RaR 0.72 [0.52-1.00] RR 0.71 [0.57-0.87]

- **Multifactorial intervention individual risk assessment**

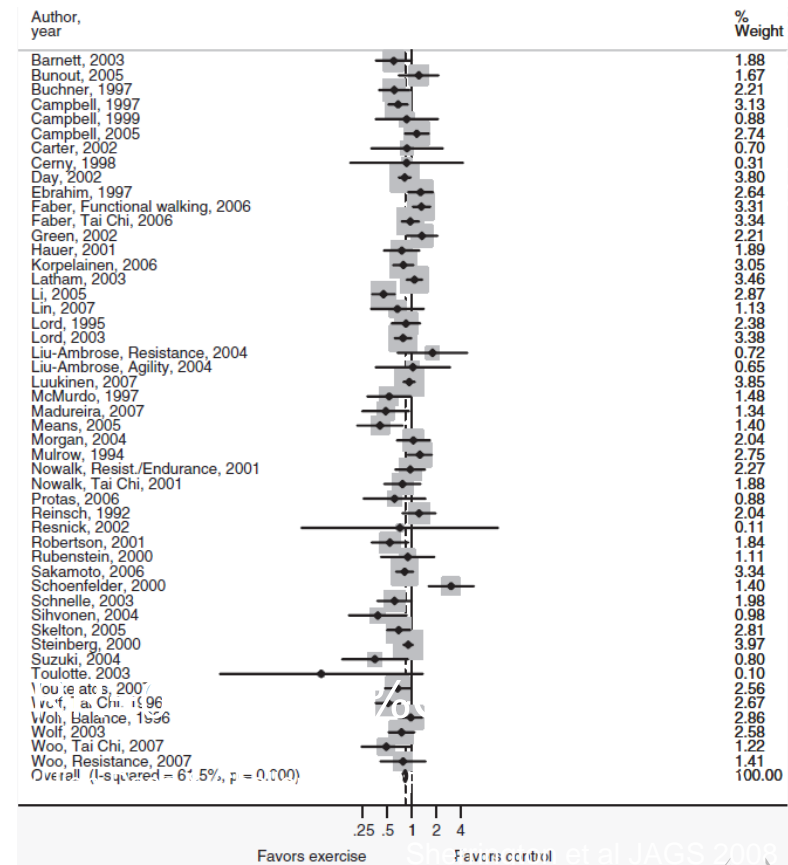
- RaR 0.76 [0.67-0.86] RR 0.93 [0.86-1.02]

- **Vitamin D**

- RaR 1.00 [0.90-1.11] RR 0.96 [0.89-1.03] NB low Vit D

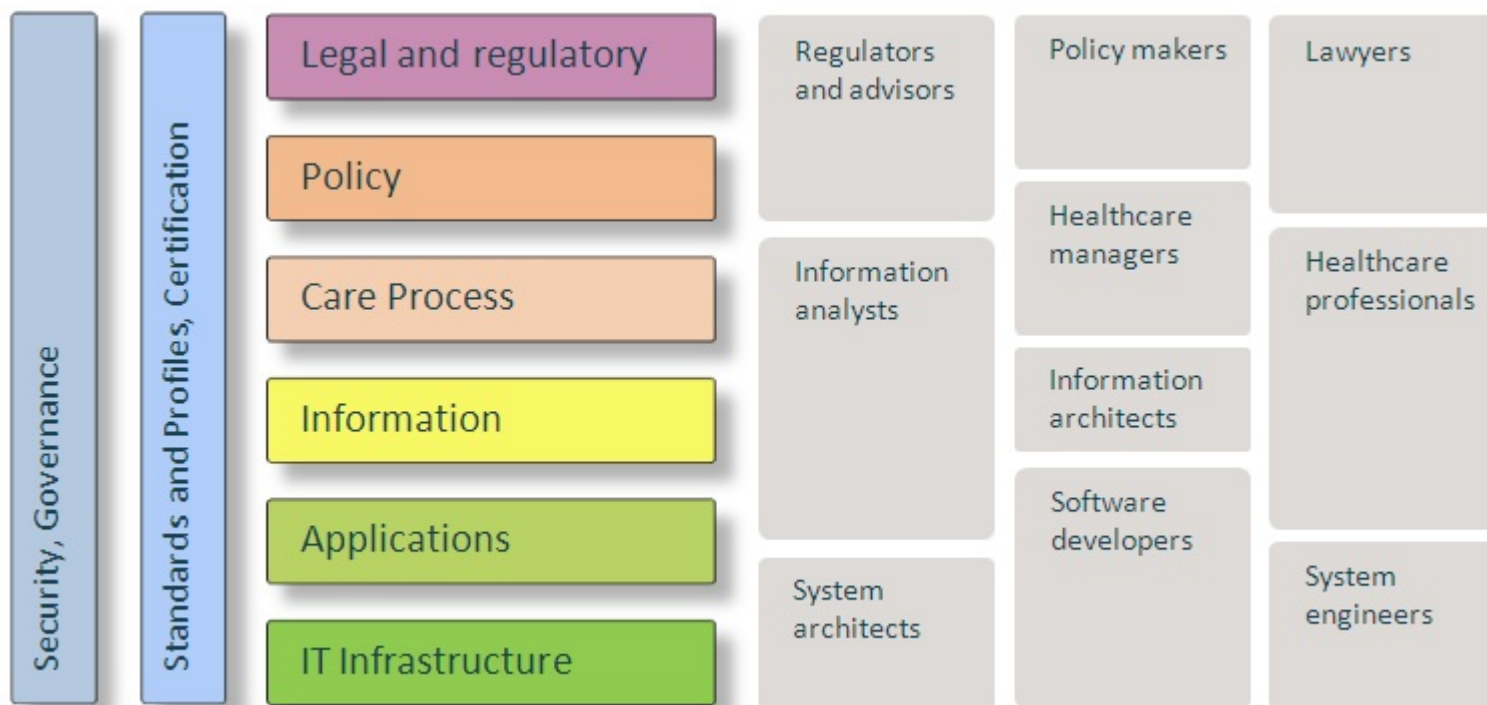
- **Home safety interventions by OT**

- RaR 0.69 [0.55-0.86] RR 0.79 [0.69-0.90]



Interoperability : different levels

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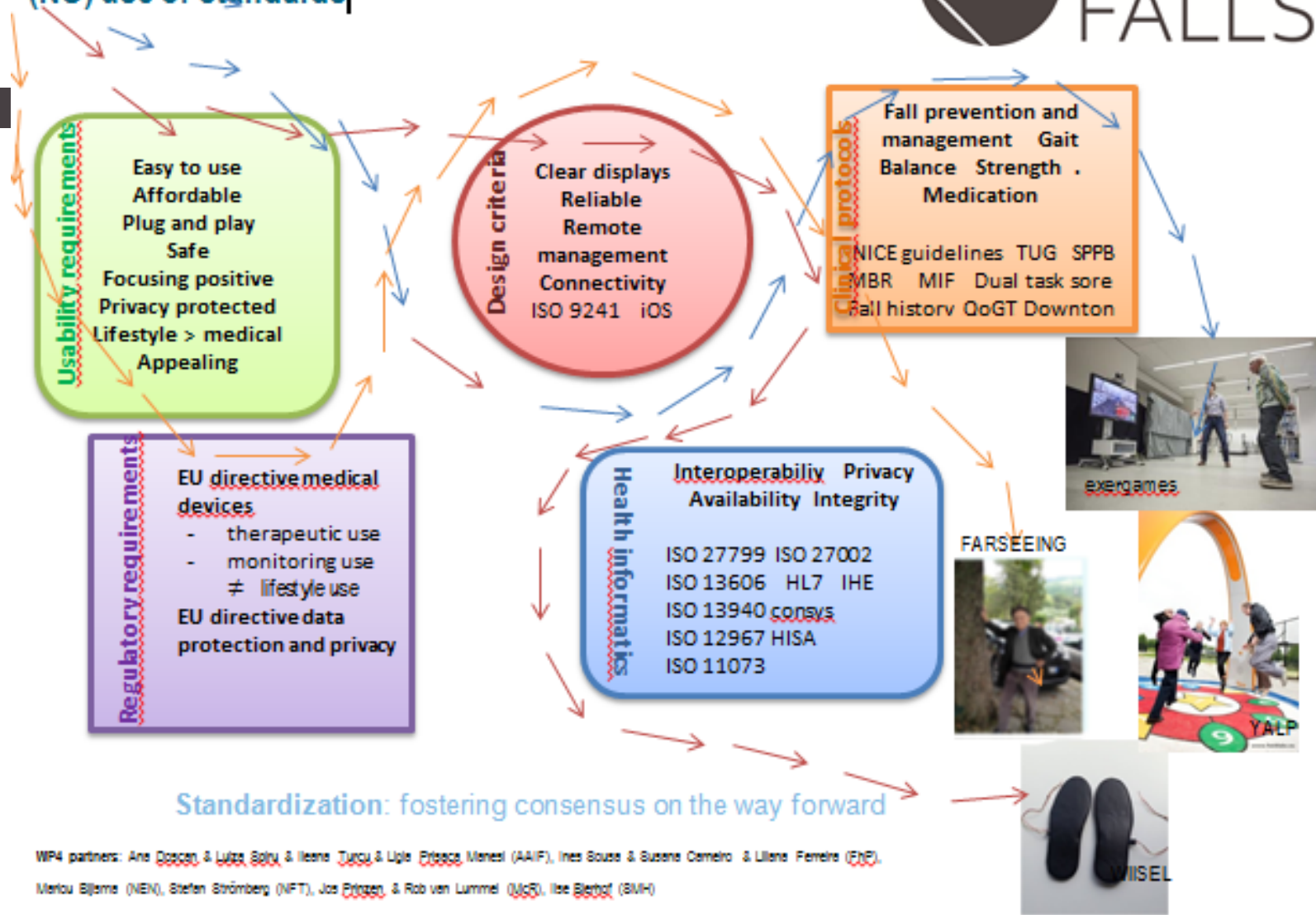
Antelope figure: stakeholders in the different levels of interoperability

E-NO FALLS: ICT solutions for fall prevention in elderly

(NO) use of standards



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Standardization: fostering consensus on the way forward

WP4 partners: Ana Coscan & Luiza Solu & Ileana Turcu & Ugle Prisca Menesi (AAIF), Ines Sousa & Susana Carneiro & Liliana Ferreira (EUP),

Merlou Bijlma (NEN), Stefan Strömberg (NFT), Jos Prinsen & Rob van Lummel (UvE), Ibe Bjerhof (SMH)



Recommendations :

Policy level

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- National governments shall continue to ensure that the European directives and national legislation on information security, are enforced by supporting implementation, inspecting compliance and sanctioning non-compliance.
- The European Commission should continue define an internationally acceptable interoperability strategy and guidance to enhance the interoperability of devices, applications, data repositories, services and networks.
- The European Commission and national governments could continue to enhance the use of interoperability standards by creating demand via calls for innovation projects or public procurement procedures.

Recommendations:

Personal health information shall be stored safely

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- Clients/informal carers, healthcare professionals and healthcare organizations should demand safe health information storage, exchange systems and infrastructure.
- Health care professionals and clients/informal carers shall take their responsibility in safe health information storage and exchange.
- Manufacturers of devices and ICT systems should comply to information security standards.
- Personal health information data should be anonymized or pseudonymized for research purposes.

Recommendations: Personal health record system should be based on an open data protocol

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- Clients and informal carers should demand an open 'Personal Health Record' system where they can collect and keep health data.
- The personal health record should exchange information with the health care 'electronic health record'.
- ICT based devices should supply assessment and monitoring data to the personal health record.



Recommendations: Person centered care process on fall prevention and management

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- Care protocol should define roles for client (self-management), informal carer, healthcare professionals
- Supportive role from ICT based fall prevention and management solutions
- Enabling environment by communities and care facilities
- Supportive role from health insurers
- Scientific evidence on the efficiency and efficacy of the care protocol and ICT tools

Recommendations: health informatics interoperability

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- Open protocol, specifications and terminology should be standardized for the exchange of data between the user, the devices, the persona/electronic health record and the care protocol.
- The device can be unique in measuring parameters and calculating outcomes; the device should use standardized protocols to communicate the results with the personal/electronic health record and the care processes



Questions and answers?

WP4 partners:

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