Active and Healthy Ageing in EU and the regional approach in the Northern Netherlands

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Active Ageing @ Home
Leuven, 22 oktober 2014
### Challenge

<table>
<thead>
<tr>
<th>The burden of diseases, including associated co-morbidity conditions (major causes of disability, loss of function, ill-health, health-related retirement and premature death)</th>
<th>Earlier and more effective prevention, diagnosis and treatments strategies. Better prevention and assessment is particularly important as it can largely contribute to keep population healthy, preserve quality of life and reduce healthcare costs</th>
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<td>The ageing population which will further increase the burden of diseases, of frail and dependent people</td>
<td>Strategies and innovation supporting more active and healthy ageing</td>
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<td>The rising of health and social care costs due to lifestyle and the ageing population</td>
<td>Strategies for organising health and care systems in a more efficient and sustainable way, capitalising on technological development, new organisational models, independent living and fully exploiting advances of modern medicine and of digital solutions</td>
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<td>The decrease of research and innovation productivity in the health-related industry</td>
<td>Conditions and strategies for stimulating and exploiting the potential of technology and entrepreneurship in health care business</td>
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Healthy Ageing: a European top priority

Demographic change and Healthy Ageing - one of the grand societal challenges of EU

Many programmes, actions and initiatives:
- European Innovation Partnership on Active and HA
- Knowledge and Innovation Community (KIC Health)
- Health in Horizon 2020
- Joint Programming Initiatives
- Ambient Assisted Living (AAL)
- Interreg A, B and C
- Third UE Health programme (Sanco)
Knowledge and Innovation Communities: the champions League

Characteristics of a KIC

- Higher Education, Research and Business
- leading players in Europe
- total innovation chain (education, from research to market, innovation projects, incubators)
- 25% through EIT, rest from stakeholders
- hundreds of millions of euro’s for Innovation for healthy living and active ageing in next 7 years
- about 4 applications, one with BE/NE
- decision december 2014
H2020: largest EU Research and Innovation programme ever: 80 billion euro’s

Social Challenges; 7 billion for health, demographic change, wellbeing

Work programme 2014/2015: Personalised health and care

Work programme 2016/2017: Promoting healthy ageing and personalised healthcare?
European Partnership on Active and Healthy Ageing (EIP AHA)

EIP AHA brings together key stakeholders (end users, public authorities, industry, research and knowledge institutions), tackling practical problems.

EIP AHA pursues a triple win for Europe:
- enabling UE citizens to lead healthy, active and independent lives while ageing
- improving sustainability & efficiency of social & health systems
- improving competitiveness of markets for innovative products and services, responding to ageing

Action groups e.g. C2 on Independent Living (with ICT)

Active Ageing at home, Leuven 22-10-2014
Ageing and participation society in the Netherlands

- **Population:** 16 million: now 17% > 65 year
- **Demographic change:** in 2050: 30% >65 year
- **Costs of health care** system: huge increase
  - (without change 25% of GNP in 2050)

- 1970-2000: *welfare state*; many older citizens in care homes / nursing homes
- from 2013: *participation society*; independent living with help of family, friends, neighbours: big challenge!
Independent living / HA @ home

Developments in the Netherlands

- Transition from welfare state to participation society
- Transition to primary care
- Emphasis on quality of life, prevention, lifestyle
- Citizen centered instead of disease centered
- More informal care and volunteers
- New roles for health professionals
- More use of enabling technology
- New citizen initiatives, care corporatives
Healthy Ageing Network Northern Netherlands (HANNN)

- University of Groningen (RUG) + University Medical Centre Groningen (> 35.000 students)
- 4 Universities of Applied Sciences (> 45.000 students)
- >100 companies (SME and multinationals)
- Many health care organisations
- Regional authorities (3 provinces, 4 big cities)

(triple helix, and involvement citizens becoming stronger)

N. Netherlands in top 3 Reference Sites European Union on Ageing
Succes factors
- Health is largest branche in N NL (20%)
- Strong partners: UMCG and other HE partners
- Theme HA is important for business and society
- Sustainable regional collaboration on HA (RIS3)
- Support from regional authorities (3 provinces)
- Growing collaboration and trust between partners
- Growing attraction for new business (food, ICT)
- Growing reputation in Netherlands and Europe
Challenges

- Building a network takes time
- Network, communication, branding is not enough
- Show clear results to stakeholders
- Need for clear vision and action plans
- (too) strong influence of HE partners?
- Business development takes much time
- Collaboration but also competition?
- More international collaboration (Germany)
Central question: Why do some people age healthy, and why have others already severe impairments or diseases early in their life?

- 165,000 participants
- 3 generations
- 3 Northern provinces
- Open infrastructure
- BioSHaReEU: LifeLines = coordinator, 15 biobanks involved; € 12 mio FP7 (BBMRI)

Mission: to understand the mechanisms that result in aberrant functioning of old cells and tissues in order to develop evidence-based recommendations for healthy ageing.

- 10 high profile research groups (e.g. Systems Biology Centre for Energy Metabolism and Ageing)
- 150 researchers
- 4500 sq mtrs
- International recruits
- Basic science
- Ready in 2011
- 50 M€

International cooperation: Mayo Clinic, Buck Institute, Copenhagen, Cologne, Newcastle
Hanze University of Applied Sciences:  
- strong regional partner with a clear profile  
- respected European University of Applied Sciences

Focus on:  
- Healthy Ageing
- Energy
- Entrepreneurship

- 26,000 students
- 2,700 employees
- 80 BA/MA progrs
Healthy Ageing programme Hanze UAS

- Care
- Social work
- Sport
- Education
- Food & Nutrition
- Labour
- eHealth & medical technology
- Living & Domotica
- Music & Arts
- Entrepreneurship
Healthy and active ageing is a component in 25 BA and 4 MA programmes, not only nursing, physiotherapy etc. but also ICT, LST, sports etc.

Also in special programmes:
- Minor Healthy Ageing
- Minor Care and Technology
- Honours programme Healthy Ageing
- Development 2 new Healthy Ageing masters
Many people involved:
- 27 professors
- 100 researchers
- 30 PhDs on Healthy Ageing
- many students of different programmes

Projects: 10 very large projects and 100 other projects;
EU projects: FP7 Health Literacy; Interreg iAge; Erasmus ELLAN
1/3 of our research capacity on Healthy Ageing
Focus of the HA programme Hanze UAS

Active and healthy lifestyle/prevention
- physical activity
- healthy food
- work environment
- living environment

Integrated approach; eHealth, entrepreneurship

Good track record, base for Centre of Expertise Healthy Ageing
Centre of Expertise Healthy Ageing

- **Business plan**: June 2012
- **Start**: January 2013
- **Lead partner**: Hanze University of Applied Sciences
- **Partners**: from 35 in 2012 to 140 now
- **2013-2016**: 16 million Euros of which 4 million grant

- **Public Private Partnership, partners involved**:
  - 4 Universities of Applied Sciences, University of Groningen (RUG), University Medical Centre Groningen (UMCG); 5 schools for vocational training
  - 50 health-welfare institutions
  - 50 companies
  - local government and other partners like HANNN

- **25 Innovation Labs in the region; public/private partnerships**
Innovation Labs

• The Centre of Expertise Healthy Ageing (CoE HA) collaborates on innovation in health care, welfare, participation, growing up healthy and healthy ageing.

• Innovation is realised in “innovation labs” where professionals (from the health care and business sector) collaborate with researchers and citizens and realise practical innovation: in education, in the professional practice, and in the business sector.

• Elements: applied research, implementation of innovation in healthcare, innovation of education, business development
Innovation Labs

- Public Private Partnership: always collaboration between knowledge institutes, health-welfare organisations and business partners
- Practical Innovation as a goal
- Sustainable: chain of activities for about 4 years
- Quality: selection of Living Labs by a committee of partners
- Support and Review by management CoE HA

- 23 Innovation Labs have been realised within 2 years
Positive development CoE HA

- Concept living labs for innovation successful
- Strong growth partners and regional activities
- Allignment education, research, entrepreneurship
- Learning proces innovation/co-makership/PPS
- Economic and societal innovation

- Contribution to eco-system Healthy Ageing N.NL;
  not another network organisation, not only fundamental research;
  but practical innovation and implementation in care
Results 2013 / 2014

- 10 million euro’s in innovation programmes
- from 35 to 140 partners
- 125 partners active in 23 living labs
- 200 students involved in living labs
- 20 research programmes, 7 PhD’s, 70 projects
- new curricula health, social work
- in 2013/14 14 start-ups HA student companies
- 11 innovative products and services
Challenges CoE HA

- Companies more in the lead
- More innovative products
- More cash, not only in kind
- Business model after grant period
- Governance: Hanze UAS/other partners
- From regional to (inter)national
Innovation Labs: examples

Independent Living is one of the important themes in our Innovation Labs. Examples of Active Ageing at home:

- Active Ageing for elderly citizens, with physical activity
- Life cycle resistant housing (with citizen participation)
- Active Ageing for children in the community
- eHealth/serious gaming for physical activity with elderly citizens
- Psychiatric health care: from intramural to extramural
- Health Space Design: healthy care environments
- Quality of Living Environment in Care, Home and leisure
Conclusions

Healthy Ageing is a European social challenge and in new H2020 programmes HA is one of the priorities, active ageing at home with IT is an important part.

Regional focus on Healthy Ageing gives the region a stronger profile and new possibilities for development.

For a broad university like Hanze UAS, Healthy Ageing is a theme that inspires many colleagues and students of different backgrounds, that gives opportunities for combinations between education, applied research and entrepreneurship.
Thank you for your attention!

Questions?

Discussion?
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