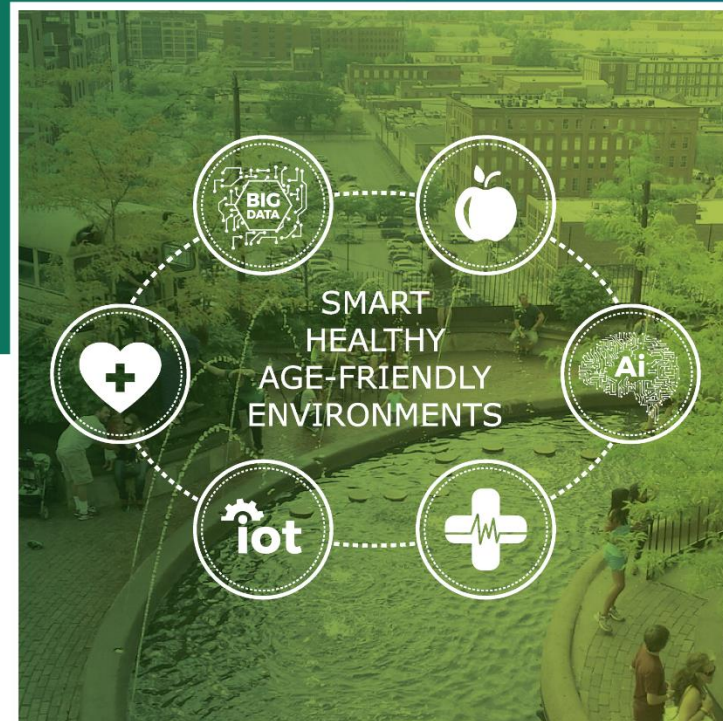


THEMATIC NETWORK 2018

SMART HEALTHY AGE-FRIENDLY ENVIRONMENTS



First research results
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Thank
you!



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&

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SHAFE Questions

1. How to enhance Places and People in the creation of eHealth and mHealth solutions, with special focus on quality and costs?
2. What is the current state of the art in Europe of e-support at home to people with chronic diseases and/or impairments?
3. How to align technological development with the building industry for smart environments within terms of policy and funding, enhancing a more efficient health care system that may add better quality for less investment?
4. How to bridge the main gaps between technological development and user's real needs and expectations?



Main definitions

- **Persons with chronic diseases or impairments:** long duration of diseases and limiting in functioning
- **eHealth:** ICT as enabler of managing health
- **mHealth:** medical and public health practice supported by mobile devices
- **E-support:** supportive services or activities using ICT
- **Places and People:** physical and social environments



Indicators quality and costs

Quality	Costs
Quality of Life, Life expectancy Social benefits	Societal / system costs <ul style="list-style-type: none">- Public funding- Insurance fees- Taxes
Quality service delivery <ul style="list-style-type: none">- Answers wishes, needs and preferences- User-driven design- Empowerment of users	Costs for healthcare <ul style="list-style-type: none">- Purchase- Implementation- Maintenance- Environmental requirements
Technical quality	Costs for users <ul style="list-style-type: none">- Purchase- Implementation- Maintenance- Fees- Environmental requirements

Research methods



- Interviews per telephone, skype, face to face: 20-30 opinion leaders. Results ready mid-July
- Online Survey: 11 target group oriented questionnaires. EU SURVEY tool. Duration: June 6-30. Number of respondents on Monday June 18th: 30. Much more needed!

<http://www.afedemy.eu/en/participate-in-the-survey-thematic-network-shafe/>

- Desk research: results follow below



Data resources desk research

PubMed

Cochrane

Scopus

Google
Scholar

Web of
Science

Cordis

AAL

Innoradar

EIP AHA
repository

Age-friendly
World

Picarta

Worldcat



Most used search terms - in relation to chronic diseases or impairments

eHealth

mHealth

Digital &
Health

Independent
living

Age-friendly
environments

Ageing at
place

Health &
Technology &
Home

Physical
environment



Report on Outcomes

- Well-being and Quality of Life
 - Social contacts (digital, physical)
 - Adaptation and accommodation (accessibility, aids, lifestyle)
 - Safety
- Health
 - Prevention (lifestyle, falls, physical activity, mobility)
 - Cure and therapy (telehealth, telemonitoring, physical activity therapy, training)
- Independent living
 - Physical and social environments
 - Community support and provisions
- Efficiency and efficacy
 - Cost-benefit
 - Benefits by changes in care pathways
 - Clinical/residential setting versus home based setting



Projects on Wellbeing

EU-WISE	BETTER AGEING
SOUND OF VISION	IMANAGE CANCER
RICHARD	MY AIR COACH
NEBIAS	DECI
ACTION	NEPRHON+
SIMPLESKIN	AALUIS
RECALL	CO-LIVING
SIFORAGE	CAPMOUSE
EGOVISION4HEALTH	CONNECTED
OPTIFEL	VITALITY
SIGNS FOR EUROPE	EXPRESS-TO-
OTOSTEM	CONNECT
SOCIAL ROBOT	FEARLESS
DISCIT	INCLUSION SOCIETY
VALUE-AGEING	
SILVER	
TEC FOR LIFE	

- **Social contacts:** imagism reduction, robot companions, social inclusion, social interaction
- **Adaptation:** self-management, overall quality of life improvement
- **Accommodation:** hearing or seeing aid, bionic prosthesis or kidney, memory recall, food, technology, hands-free, walker
- **Safety:** monitoring, sensing fabric, wearable cameras, technology and ethics, (sensory) alarm



Results desk research: Wellbeing

SHAFE:

- eHealth widely accessible and accepted
- More self-management → more quality of life
- Connect patient groups and motivate each other
- Support people with chronic diseases with lifestyle and personalized care
- Supports feelings of being cared for, and secured
- Smartphones main devices → lower cost and high portability



Projects on Health

FARSEEING	EUROBATS
ISTOPPFALLS	I-DON'T-FALL
DEM@CARE	WALKX-ROBOT
MATSIQEL	HELENA
HEALTH-ON-THE-MOVE	VELOINFO
COOLNESS	PRECIOUS
CARDIOPROOF	PEGASO
DOREMI	PREVENTIT
EURO-URHIS	MY-AHA
UNCAP	GIRAFF+
FOODSMART	ACCESS
SWORD	ICT4LIFE
REHAB@HOME	APA
PASTA	PRIMER COG
V-TIME	SPOTLIGHT
IROHLA	RECALL

- **Prevention:** frailty, falls, obesity, urban health, active mobility, livable cities, enhanced balance and gait, cycling, ubiquitous sensing, motivation healthy lifestyles, early detection,
- **Cure and therapy:** dementia training, rehab, wireless healthcare, monitoring in clinical setting, food intake and nutrition, physical and cognitive assessments, exercises and rehab at home, health literacy, data sharing within health sector, integrated care



Results on Health

SHAFE:

- Quality of healthcare delivery improves
- Improves physical activity and dietary behavior
- Better tracking physical activity and wandering
- Better monitoring and data collection → self-management and professionals decision making and immediate response
- Real-time insights by mHealth
- Patients have most to gain of ICT



Projects on Independent Living

MARIO
SILVER
ALFRED
JADE
INNOVAGE
AQB-CARE
COMPATABILITY
HOMECARE
IBENC
REAAL
ACCOMPANY
PRO ACT
MIRACULOUS LIFE
PERSSILAA
USEFIL
CITY4AGE

MY LIFE
ROSETTA
AUTONOM@DOM
LIFE LONG LIVING
ANDALUSION
TELECARE SERVICE
CARPETSYSYSTEM
GROWMEUP

- **Physical and social environments:** robots to support independent living and social contacts, portable shower, compact neighbourhoods, supportive environments for dementia, intelligent carpet
- **Community support and provisions:** accessible basic urban facilities, integrated home care (services), user-friendly, open and flexible ICT applications, affordable in-home monitoring and web communication, Ambient Assisted Cities, interactive model municipality and citizen



Results on Independent Living

SHAFE

- Walking and cycling far most used means for errands
- Social environment very important for health education
- Improves adherence of care and enhance ability on independent living
- Improves confidence in disease management
- Decreased burden for parents or caregivers
- Improves reconciliation with other life spheres (work, family, social activities)



Projects on Efficiency/efficacy

FUTUREID
MAESTRA
FERARI
ANCIEN
SOPHIE
WE-CARE
TICD NOVEL
COURAGE IN EUROPE
AGE-FRIENDLY
VALUE-HEALTH
ELECTOR
ROBOT-ERA
INTEGRATE

- Age-friendly cities, Learning from big data streams, Predictive modelling on incidence and ageing, Electronic ID cards for access to public and private services, Policies impact on health inequalities, Sustainable and affordable healthcare models, Management of chronic diseases, Integrate health and social security systems, Cost-effectiveness analysis health system, Substitution of healthcare settings to home, Robot services



Results on Efficiency and efficacy

SHAFE

- Ehealth can increase efficiency of care pathways: decrease nursing staff, reduce visits of patients, improve quality of treatment decisions, decrease number of clinical tests
- Reduce travelling time, especially in rural areas
- Decrease administration costs and increase of work efficiency
- Reduction of inappropriate hospitalizations and duration of stay
- Better identification of risk profiles and tailored intervention strategies



Discussion

- Most remarkable outcome thus far: “patient has more to gain with ICT than others”. Is this the reason for poor scaling up and further implementation?
- Suggestions for further literature or projects?
- Any other suggestions?

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