Hands-on SHAFE

01: STUDY TO CROSS KNOWLEDGE GAPS AND TO PREPARE ONLINE TRAINING PACKAGES

Research results for Germany

Co-funded by the Erasmus+ Programme of the European Union

DOCUMENT INFORMATION

The aim of IO1 is to create a valid basis for the training packages to be developed in the frame of the Hands-on SHAFE Erasmus+ project. This national report summarizes the research results in Germany.

ORGANISATION NAME OF LEAD PARTNER

ISIS Sozialforschung • Sozialplanung • Politikberatung

AUTHOR(S)

Jesper Schulze, Karin Stiehr and Marcel Neumann

CONTRIBUTING PARTNER(S)

Willeke van Staalduinen, AFEdemy, Academy on Age-Friendly Environments in Europe B.V.
Sonny Renaux, Airelle

VERSION

V01.06

STATUS

Final

DELIVERY DATE

March 2020

Contents

1 Aims of the report

Based on the approach of the World Health Organization, age-friendly environments include three dimensions – physical environments, social environments, and municipal services – with eight interconnected domains: 1) Outdoor environments, 2) Transport and mobility, 3) Housing, 4) Social participation, 5) Social inclusion and non-discrimination, 6) Civic engagement and employment, 7) Communication and information, 8) Community and health services.

The overall aim of the Hands-on SHAFE project is to promote smart healthy age-friendly environments by fostering the implementation and application of ICT solutions, adequate physical environments as well as health and well-being. For each of these areas - abbreviated by SMART, BUILT and HEALTHY- training packages for facilitators are to be developed. The target groups of the trainings are volunteers, entrepreneurs, family members, formal and informal caregivers and other stakeholders in personal services. Special awareness is given to low-skilled or low-qualified persons who want to engage in an entrepreneurial initiative.

Against this background, the Hands-on SHAFE project addresses:

- Facilitators who support the implementation of SHAFE products and services as direct target group,
- Persons of all ages whose social participation and inclusion can be improved by means of SHAFE products and services as indirect target group.

The aim of IO1 is to create a valid basis for the training packages to be developed. Information gaps on needs and demands on the side of end-users still hinder the implementation and usage of existing technologies and appropriate environments. Findings are needed to learn how adults can be best approached, trained and advised on aspects of smart healthy age-friendly environments.

This national report summarizes the research results in Germany. Besides an overview on the national context it describes existing SHAFE products and services as well as their target groups, gaps between their availability and usage, existing implementation support offers and their funding, and examples of good practice for the application and implementation of user-centred services and products in the realms of SMART, BUILT and HEALTHY. With special regards to facilitators who want to start their own company, the BUSINESS chapter informs about SHAFE areas which are appropriate for this intention, main regulation, support offers and stakeholders for starting a business, available training concepts and examples of good training practice. Based on this information, conclusions will be drawn on appropriate strategies regarding the training and support of the target groups.

Together with the reports of the other Hands-on SHAFE partner countries, this national report will be used to elaborate a European synthesis report. Further, a European factsheet will be provided to interested stakeholders, containing information in a reader-friendly and low-threshold style and serving for further dissemination activities.

2 Methodology and proceedings

In compliance with the project proposal, the following methods served to achieve the above-mentioned aims:

1. Desk research in each partner country concerning offers in SHAFE products and services, practices in the application and implementation of these offers, and examples of good practice;
2. Interviews in each partner country with experts from the individual modules (SMART, HEALTHY, BUILT and BUSINESS) or interconnected areas as well as with representatives of the target groups for the training.

The lead organizations for the training IOs defined keyword for the desk research, and interview questions for experts and stakeholders were jointly decided upon. Given the complexity of the topics, an exemplary case was to be discussed at the beginning of the interviews. It was agreed that the interviews could be adapted according to the specific background and expertise of the interviewee.

Interviews with experts included the following questions:

1. Which SHAFE products, services and initiatives are known besides those that were mentioned in the initial example?
2. Which SHAFE products and services are available in the region?
3. Do you think there is a considerable gap between the availability of SHAFE products and services and their usage by those in particular need of them?
4. If yes:
   - What are the underlying reasons for this gap?
   - What should be done to remove such barriers?
5. Which role can personal counselling and accompaniment play in facilitating the usage of SHAFE products and services?
6. Can you tell us about specific initiatives in the pilot region to facilitate the usage of SHAFE products and services?
7. Are there areas for SHAFE products and services which can be recommended to start one's own enterprise?
8. Can you tell us about funding opportunities in the pilot region if someone wants to facilitate the usage of SHAFE products and services by those who are in need of them?
9. Which agencies or other organisations offer support to persons who want to start a business?
10. Which themes should be in the focus of SHAFE facilitators?
11. What are the specific counselling needs of the SHAFE end users?
12. What are the specific training needs of SHAFE facilitators?
13. Which problems may arise during the training of facilitators?

14. Do you know any training concepts and experiences that should be taken into account in the design of the Hands-on SHAFE training?
15. What else can you recommend for the Hands-on SHAFE training?

Focus groups discussions with potential future facilitators were structured along the following questions:

1. Which SHAFE products and services are known besides those that were mentioned in the initial example?
2. Which SHAFE products and services are available in the region?
3. Who is in need of SHAFE products and services, and what are characteristics of these target groups?
4. Given these special needs: How should the implementation of SHAFE products and services be facilitated?
5. What can be done to make the role of a facilitator of SHAFE products and services attractive?
6. Which preconditions must be met to encourage facilitators to enrol in a training?
7. Which special requirements as regards contents, methods, duration and timing and certification must be met in the training?
8. What should be done to sustain the training outcomes?

In compliance with the specifications of the research plan, 8 expert interviews were carried out. 3 interviews were performed face-to-face and 5 interviews by telephone.

The experts covered a wide range of competences and thematic areas:

Advisor in adult education, Hanau	HEALTHY / SMART
Project developer, Wiesbaden	BUSINESS
Urban planner, Bensheim	HEALTHY / BUILT
Medical expert, Kassel	HEALTHY / SMART
Entrepreneur in AAL products, Weiterstadt	HEALTHY / BUILT / SMART / BUSINESS
Honorary counsellor on housing adaptation, Hanau	BUILT
Urban developer, Hanau	HEALTHY / BUILT
Advisor of older people, Hanau	HEALTHY / BUILT

Focus group interviews were performed with four experienced volunteers engaged in different projects to create an age-friendly environment in Hanau. One volunteer is working on the improvement of the living conditions in care homes, another is organising trainings for fall prevention. A third volunteer gives advice and training to seniors to enhance their ICT literacy, while the fourth volunteer is a member of the municipal Seniors Council and commissioned with mobility topics, including traffic safety.

3 Offers and implementation of SHAFE products, services and initiatives

3.1 National, regional and local contexts

3.1.1 Profile of the pilot location

With around 96.000 inhabitants Hanau is the sixth largest city in the State of Hessen. It is located in the south-west of the district Main-Kinzig-Kreis, part of the administrative district of Darmstadt, and belongs to the agglomeration Frankfurt/Rhine-Main. Due to its geographic location, the city of Hanau can be considered as a link between the more rural regions of eastern Hessen and the metropolitan region of Frankfurt am Main.

Although Hanau is part of a heavily urbanized region, the city is also characterized by a natural location. The so-called Green Ring Hanau connects 13 nature reserves within a radius of 60 km. In the city alone nine nature reserves and ten protected areas are designated.

Hanau is characterised by cultural diversity, which have shaped the city's history and development. This includes, for example, the settlement of Calvinist religious refugees in the 16th century, but also being one of the largest US military bases in Europe after the World War II. So-called "guest workers" from southern Europe and Turkey were recruited in the 1960-ies and 70-ies. Today people from around 130 nations live in the city (ProjektStadt, 2019, p.50).

The Municipality of Hanau is especially active in working with and for older citizens and recognises the need to establish an environment apt for all generations. Civil society is well developed, including organizations of and for older people like neighbourhood initiatives or the Seniors Council. The commitment of seniors for all areas for public life is promoted especially by the Seniors Office, the Volunteer Agency and the Department of Demographic Change of the municipality.

Given this background, two Erasmus+ projects (AFE Activists, 2018-2020, and “Mobility Scouts”, 2016-2018, were performed in Hanau. They have raised a high level of awareness for SHAFE issues among the responsible officials in the local authorities and policy-makers. Further, a stable group of 10-15 committed older volunteers has been established by the Seniors Office during the Mobility Scouts project. They continued to work for an age-friendly environment even beyond the life-time of particular projects.

These settings positively influenced the decision to select Hanau as a pilot location of the Hands-on SHAFE project.

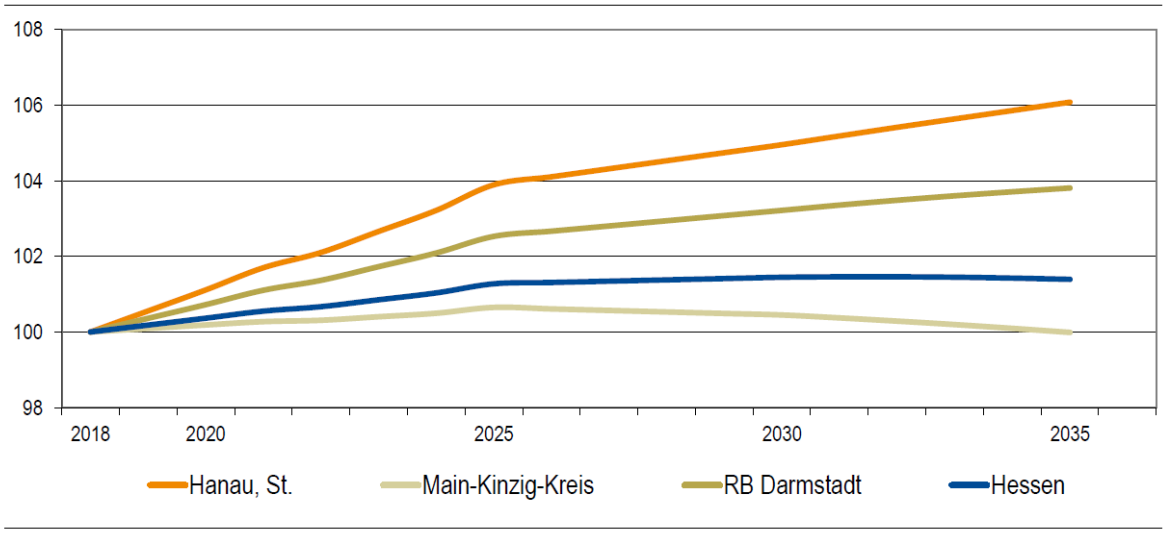
3.1.2 Population by age-group and sex

At the end of 2017, Germany had almost 82,8 million inhabitants. In the age groups 60+ women outnumber men considerably. 22,6% of all females were aged between 60 and 79 years, but only 20,7% of all males. This difference increases for the age group 80+. While 7,7% of all women were 80 years or older, this only applied to 4,7% of all men.

For the number of inhabitants of Hanau (2018: 96.000) an above-average increase compared to surrounding entities is forecasted. Graph 1 is depicting the development from 2018 until 2030 with an initial value of 100 for all entities under study. Hanau will experience the sharpest increase of inhabitants, followed by the regional district of Darmstadt. Only a

mod-erate increase is forecasted for the State of Hessen and even a slight decrease for the more rural Main-Kinzig-Kreis.

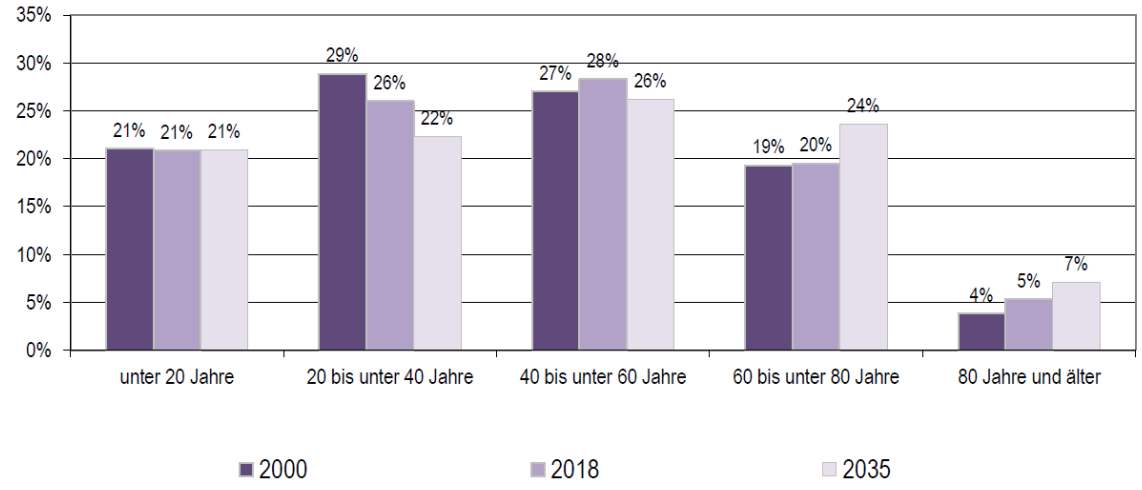
GRAPH 1: *DEVELOPMENT OF POPULATION IN A REGIONAL COMPARISON 2018 - 2035 (2018 = 100)*



Quelle: Bevölkerungsvorausschätzung der Hessen Agentur (2019).

As regards the age structure, Hanau is a comparatively young city. In 2018, the average age of a person living in Hanau was 42,2 years, in Hessen 43,8 years and in the Main-Kinzig-Kreis 44,5 years. But the general trend of an ageing society also applies to Hanau. Graph 2 illus-trates that according to forecasts the share of people aged between 60 and 79 years in the overall population will have increased from 19% in 2000 to 24% in 2035. The percentage of persons 80+ will have risen from 4% to 7%.

GRAPH 2: *TRENDS IN THE AGE STRUCTURE OF THE POPULATION IN HANAU*



2000: Fortschreibungsergebnisse auf Basis der Volkszählung 1987; 2018: Fortschreibungsergebnisse auf Basis des Zensus 2011;
2035: Bevölkerungsvorausschätzung der Hessen Agentur.
Quelle: Hessisches Statistisches Landesamt (2019), Bevölkerungsvorausschätzung der Hessen Agentur (2019).

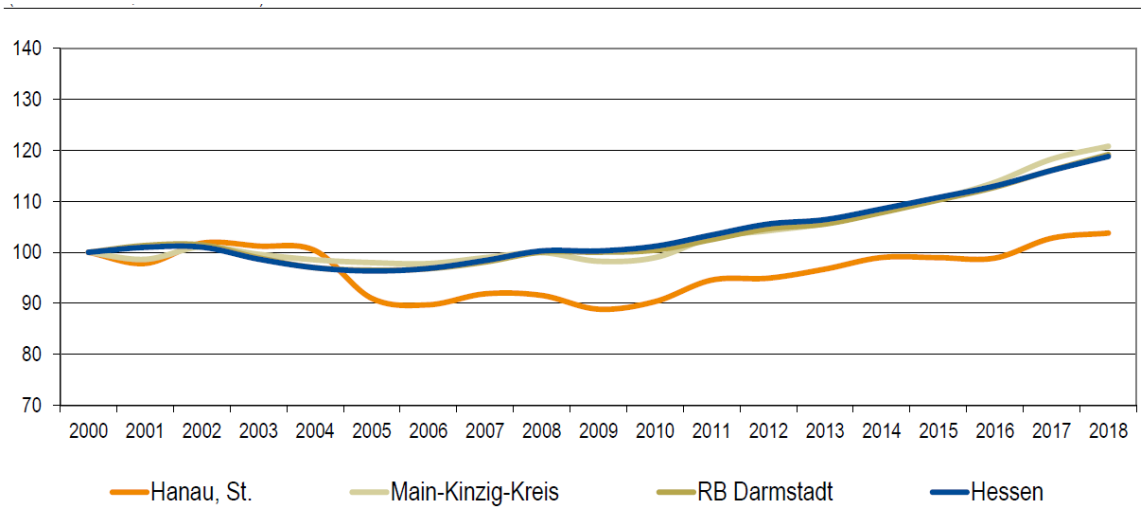
A data compilation by the municipality in 2013 indicates quarters with especially high shares of old and very old people. Their ratio is above-average in the city centre and in an urban quarter - Nordwest - which was built in the 70-ies and attracted young families at that time. Also the number of people with disability has grown considerably from 11.695 in 2005 to 17.492 in 2013.

3.1.3 Workforce

According to data of the Federal Statistical Office, the number of economically active persons has increased between 2008 and 2018 from 43.814.000 to 46.177.00 persons. The share of unemployed persons has decreased in this period of time from 10,2% to 9,1%. Most gainfully employed persons work in the service sector. Their ratio across all sectors has in-creased from 68,2% to 72,4% between 2008 and 2018.

Developments in Hanau mirror these trends. Starting in 2000, the number of gainfully employed persons with social insurance was initially on the decline but has risen again within the last 10 years. Compared with the districts or the State of Hessen, however, this rise was below average in Hanau (graph 3).

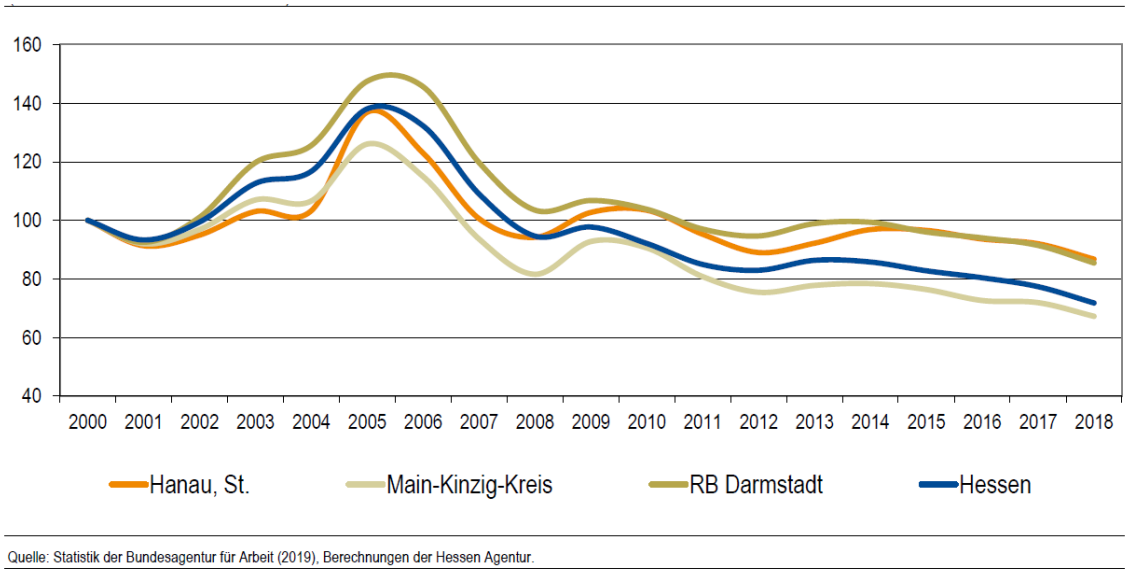
GRAPH 3: *DEVELOPMENT OF GAINFULLY EMPLOYED PERSONS IN REGIONAL COMPARISON 2000 – 2018 (2018 = 100)*



Quelle: Statistik der Bundesagentur für Arbeit (2019), Berechnungen der Hessen Agentur.

As regards unemployed persons, Hanau follows the general trend (graph 4).

GRAPH 4: *DEVELOPMENT OF UNEMPLOYED PERSONS IN REGIONAL COMPARISON 2000 – 2018 (2018 = 100)*



Quelle: Statistik der Bundesagentur für Arbeit (2019), Berechnungen der Hessen Agentur.

No statistics for self-employed persons in Hanau are available on the internet.

3.1.4 Health

Lifestyle-related data show that physical activity of older people in terms of sports and exercises decrease with increasing age (tab. 1).

TABLE 1: SPORTS AND PHYSICAL ACTIVITY BY OLDER PERSONS 2014 (%)

	40 - 54 yrs	55 - 69 yrs	70 - 85 yrs
Several times a week	36,2	38,1	29,8
Once a week	17,7	17,8	16,4
More seldom	25,5	21,1	14,1
Never	20,6	22,9	39,8

Smoking as a habit is mostly given up with increasing age. The daily consumption of alcohol, however, increases and is highest in the age group of people aged 70 to 85 years (tab. 2).

TABLE 2: SMOKING AND ALCOHOL CONSUMPTION BY OLDER PERSONS 2014 (%)

	40 - 54 yrs	55 - 69 yrs	70 - 85 yrs
I have never smoked	41,7	39,5	54,0
I was a smoker in the past	25,8	38,2	37,7
I am a smoker at present	32,5	22,4	8,3
I consume alcohol daily	7,7	13,0	13,3

Prevention measures in terms of influenza vaccination, cancer screening and health check-ups are more regularly used with increasing age (tab. 3).

TABLE 3: DISEASE PREVENTION BY OLDER PERSONS 2014 (%)

	40 - 54 yrs	55 - 69 yrs	70 - 85 yrs
Regular influenza vaccination	20,4	35,3	53,0
Regular cancer screening	57,9	69,8	62,2
Regular health check-up	55,3	66,9	66,4

According to a study by the Robert Koch Institute, at an age over 65 only 7,1% of women and 9,4% of men are healthy. About 41% have one to two chronic diseases, 37% three to four chronic diseases, and 22% five or more chronic diseases. It is estimated that one third of chronically ill people get multiple medications. In the age group of 85 to 94 years, medicine consumption is highest with an average of more than four daily doses (Aerzteblatt.de).

TABLE 4: PREVALENCE OF PARTICULAR DISEASES IN OLDER PERSONS 2014 (%)

Share of patients in diagnostic groups	40 - 54 yrs	55 - 69 yrs	70 - 85 yrs
High blood pressure	21,4	42,5	54,9
Joint wear of the hip or knee joints or the spine	22,7	38,7	46,8
Increased blood lipid levels	15,4	26,6	31,7
Inflammatory joint or spinal disease	10,0	14,9	19,5
Circulatory disorders in the legs	3,4	8,4	14,7
Diabetes, high blood sugar levels	4,6	11,5	18,2
Heart failure, including circulatory disorders	2,8	8,7	19,8
Osteoporosis	2,3	7,2	13,1
Psychological disorder	11,1	10,5	5,4
Cancer, malignant tumor or leukemia	4,3	8,1	12,3

The share of older persons with multiple diseases rises with increasing age. However, approx. 1 out of 6 persons between 70 and 85 years reports no or only one disease (tab. 5).

TABLE 5: INCIDENCE OF MULTIPLE DISEASES IN OLDER PERSONS 2014 (%)

Number of reported diseases	40 - 54 yrs	55 - 69 yrs	70 - 85 yrs
No or 1 disease	52,9	34,4	17,9
2 to 4 diseases	42	51,2	56,7
5 or more diseases	5,1	14,3	25,4

The overall prevalence of dementia in the population aged 65+ in affluent countries like Germany is estimated at 6% to 9%. Meta analyses from numerous individual studies over the past few decades have shown that the age-specific prevalence of just over 1% among 65- to 69-year-olds rises to more than 30% among people 90+ (Robert-Koch-Institut).

The proportion of people with an officially recognised disability in the German population is 12,7% (women 12.0%, men 13.4%) and increases significantly with age. Approximately one quarter of persons between 60 and 79 years and more than one third of all persons aged 80+ live with a disability, the majority of them officially recognised (Robert-Koch-Institut).

Nevertheless, complaints about one's state of health only slightly increase with age (tab 6).

TABLE 6: SELF-ASSESSMENT OF HEALTH BY OLDER PERSONS 2014 (%)

	40 - 54 yrs	55 - 69 yrs	70 - 85 yrs
Very good	12,5	8,6	4,6
Good	52,1	45,1	40,0
Average	26,8	34,4	40,9
Poor	7,2	9,4	12,1
Very poor	1,5	2,6	2,5

Data on the usage of products and services for the health promotion of older people are difficult to procure. In a survey among people between 65 and 85 years in 2013, a minority of the respondents considered electronic health supervision devices in their households especially important. The majority of those who share this assessment, however, would usually be ready to bear a large part of the costs (tab. 7 and Boo 2018, p.83).

TABLE 7: ASSESSMENT OF ELECTRONIC MEASURES FOR AGE-FRIENDLY HOUSING 2013 (%)

	Especially important	Ready to bear costs
Transmission of medical data from home to the GP	23,0	17,0
Automatic reminder for taking medication	20,0	16,0

© Generali Altersstudie 2013

In estimates on the development of products needed by people in need of care, between 2007 and 2050 an increase by 78% in nursing beds and incontinence aids is forecasted. The needs for optical aids, walking aids and barrier detectors will increase by 34%, for hearing aids by 27%, and for walking frames, wheelchairs and shower or bathing aids by 16% (STATISTA).

3.1.5 Housing

Only around 5% of the dwellings do not exhibit barriers in the access to the building, to the apartment, to the sanitary area or to the sanitary equipment. Higher shares of people 70+ have to access their apartments by up to 10 stairs than people at younger ages (tab. 8).

TABLE 8: ACCESS TO APARTMENTS OF OLDER PERSONS 2014 (%)

	40 - 54 yrs	55 - 69 yrs	70 - 85 yrs
Without stairs	36,7	35,4	33,0
With up to 10 stairs	35,7	38,0	41,3
With more than 10 stairs	27,7	26,7	25,7

© GeroStat - Deutsches Zentrum für Altersfragen, Berlin. DOI 10.5156/GEROSTAT

The satisfaction with the infrastructure in their quarters does not differ significantly across age-groups with the exception of the connection to public transport. The highest satisfaction in this area is found among people 70+.

TABLE 9: ASSESSMENT OF HOUSING INFRASTRUCTURE BY OLDER PERSONS 2014 (%)

	40 - 54 yrs	55 - 69 yrs	70 - 85 yrs
There are enough shops available	76,1	75,2	78,3
There is a shortage of doctors and pharmacies	19,7	21,1	18,0
My neighbourhood is well connected to public transport	70,4	72,0	77,8
My neighbourhood is affected by noise	23,6	21,4	21,1

© GeroStat - Deutsches Zentrum für Altersfragen, Berlin. DOI 10.5156/GEROSTAT

Against this background, there is still a surprisingly high satisfaction level of older persons with their housing situation (tab. 10).

TABLE 10: ASSESSMENT OF GENERAL HOUSING SITUATION BY OLDER PERSONS 2014 (%)

	40 - 54 yrs	55 - 69 yrs	70 - 85 yrs
Very good	47,1	48,4	48,5
Good	41,0	41,7	43,5
Average	9,1	7,9	7,1
Poor	2,5	1,4	0,7
Very poor	0,4	0,5	0,2

© GeroStat - Deutsches Zentrum für Altersfragen, Berlin. DOI 10.5156/GEROSTAT

In a survey among people between 65 and 85 years of age in 2013, it was considered especially important to have a barrier-free bathroom, be able to avoid stairs, and have an emergency system or alarm button to call help in case of need. But also an age-friendly kitchen, in which you do not have to bend down to operate the equipment, and electronic anti-theft devices were considered important by many. The majority of those who share this assessment would usually be willing to bear a large part of the costs (tab. 11 and Boo 2018, 83).

TABLE 11: ASSESSMENT OF RETROFITTING MEASURES FOR AGE-FRIENDLY HOUSING 2013 (%)

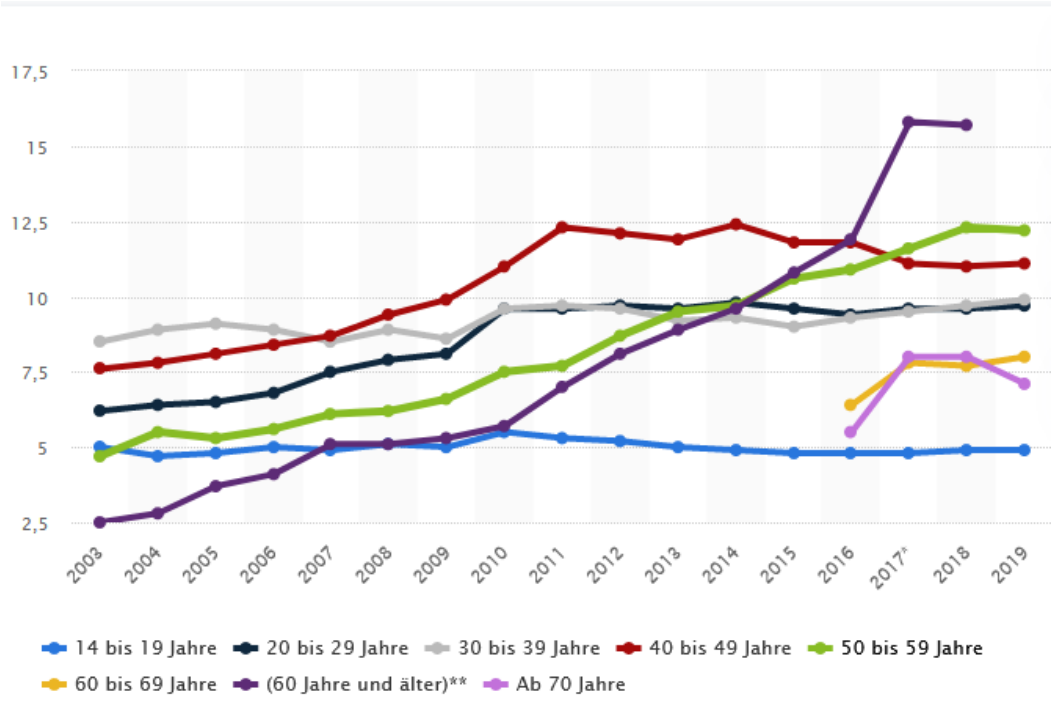
	Especially important	Ready to bear costs
Barrier-free bathroom	65	53
Avoidance of stairs	59	42
Home emergency system	53	48
Age-friendly kitchen	34	25
Electronic anti-theft device	25	20

© Generali Altersstudie 2013

3.1.6 ICT literacy

In the monitoring of internet usage by the Federal Statistical Office, an especially sharp incline for persons 60+ could be noted since 2016 (graph 5). Although their share is still lower than that of other age-groups, 75% of people 70+ are using the internet.

GRAPH 5: *DEVELOPMENT OF NUMBER OF INTERNET USERS ACCORDING TO AGE-GROUPS (IN MILLION)*



© DESTATIS

As regards the frequency of internet use, somewhat lower rates of older people than of other adults are displayed in tab. 12. Nevertheless, more than two thirds of people 65+ are using the internet each day or almost each day.

TABLE 12: FREQUENCY OF INTERNET USE BY AGE-GROUPS 2018 (%)

	10 - 15 yrs	16 - 24 yrs	25- 44 yrs	45-64 yrs	65+ yrs
Each day or almost each day	90	98	97	87	68
At least once per week	8	/	3	10	23
Less than once per week	/	/	/	3	9

© DESTATIS (/ = too low numbers)

Also the share of people 65+ in searching the internet for products and services and communicating by email is somewhat lower than those for other adults. No significant differences, however, can be noted in the search for health information. Although men are usually more prone to ICT usage, the latter is mainly due to women, their interest in health information influences the results strongly across all ages. Considerable differences by age-groups occur in the participation in social networks or using offers such as online games or video sharing, from which the majority of people 65+ still restrains (tab. 13).

TABLE 13: PURPOSES OF INTERNET USE FOR PRIVATE REASONS 2018 (%)

	10 - 15 yrs	16 - 24 yrs	25- 44 yrs	45-64 yrs	65+ yrs
Sending or receiving emails	49	91	96	90	86
Participation in social networks	66	89	71	43	22
Search for products and services	64	89	97	94	86
Search for heath information	17	54	76	70	70
Playing online games	82	64	46	26	20
Using video sharing services	90	89	80	52	24

© DESTATIS

As persons 65+ spend more time at home than people in other age-groups, their mobile use of the internet occurs more seldom (tab. 14). Across all age-groups approx. 1 out of 5 respondents has not equipped their mobile phone with security software (persons 65+: 18%).

TABLE 14: MOBILE USE OF THE INTERNET 2018 (%)

	10 - 15 yrs	16 - 24 yrs	25- 44 yrs	45-64 yrs	65+ yrs
Mobile phone	91	98	96	79	51
Laptop	10	25	31	24	11
Tablets	11	17	26	23	12
Other devices (e-book reader, smart watch, etc.)	4	9	10	7	3

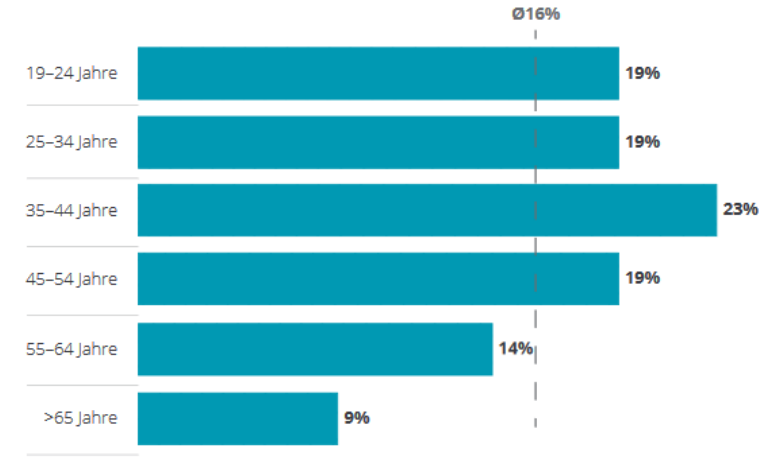
© DESTATIS

According to the Federal Statistical office, 6 million of the approximately 65 million Internet users in Germany applied smart home technology in the first quarter of 2019. This corresponds to about 9% of Internet users.

Another survey presents findings on the dispersion of smart home solutions in 2018 in Germany. Remote controllable switches and sockets, domestic appliances like cleaning and networked speaker systems are already available in numerous households. Huge interest consists in safety-relevant solutions like alarm or elementary protection systems as well as surveillance cameras. 16% of all German are making use of smart home technologies. Their share is highest among people aged 35-44 years and amounts to 9% in the age-group 65+ (see graph 6). 54% of the latter would refuse charges for extra services by the providers

(41% in all age-groups), and only 34% are ready to share their usage data in principle or with specific service providers. This is in stark contrast to the 61% of persons between 25 and 34 years (Deloitte 2018).

GRAPH 6: *RATIO OF SMART HOME USAGE ACCORDING TO AGE-GROUP 2018*



© DELOITTE

3.1.7 Governance and funding of SHAFE measures

Measures in health promotion - with or without smart technologies - are initiated by pilot projects at national, regional and local level. Offers for the community are performed by municipalities, associations in the health and social sectors as well as by adult education institutions. These measures are usually funded through a mix of public subsidies, own funds of the organisation and/or participants' fees.

The governance and financing of retrofitting measures, aids and services is subject to various legal and financial requirements. The funding is granted in accordance with the regulations and statutory provisions. Potential funding institutions vary from case to case and depend from criteria such as income, wealth, care level or disability. Also mixed financing occurs often. The most important funding sources are listed below.

Long-term care fund benefits: If long-term care needs are officially recognised, professional and informal care at home is financially supported. Technical aids are funded, if they are part of the list of recognised aids (GKV Spitzenverband). Tools that help to compensate for physical disabilities include vision and hearing aids, bathing aids and walking aids, but the list also contains aids that facilitate nursing, e.g. incontinence products. Construction measures can be subsidised, if this restores the independent living or easier home care is expected. The subsidy amounts up to € 4,000 per measure; own financial contributions of dependent persons are usually necessary.

Health insurance benefits: Sick and disabled persons are eligible to benefits of the health insurance fund, if they are needed to prevent or treat illnesses, to compensate for a disability and to prevent aggravation (§ 33 SGB V). Aids are provided by the medical insurance according to medical prescription.

Social assistance benefits: Social assistance in the framework of SGB XII is meant to support persons with a very low income. It can also be used to improve the housing situation

of older, dependent and disabled people. Social assistance benefits are subsidiary to those of other providers and can only be claimed if no other party can cover the costs.

Accident insurance benefits: These benefits are granted if a disability results from an accident at work or an occupational disease. On the legal basis of SGB VII § 41, the statutory accident insurance finances aids and measures for housing adaptation, the move to a suitable apartment and the provision of aids. The costs incurred for the measure are fully paid regardless of income.

Funds of the Kreditanstalt für Wiederaufbau (KfW): The promotional bank KfW at national level grants financial support for age-friendly reconstruction measures. Under the KfW programme, applicants can receive a subsidised low interest loan and subsidies for housing adjustments. Often, the KfW programme is one of the few funds for age-appropriate conversion if the applicant is not in need of care or ill and is not entitled to social assistance. For the loans and grants, not only owners and housing companies, but also the tenants, regardless of age, health status or income can apply, if the house owner agrees.

Funds of the Hessische Wirtschafts- und Infrastrukturbank (WI-Bank): This promotional bank at Länder level funds various barrier-reducing and modernisation measures for an independent living at old age or with disability up to 85%. Hanau is located in the area for which the WI-Bank is responsible.

3.2 SMART: ICT for BUILT and HEALTHY

3.2.1 SMART measures and their target groups

In the area of digitization a large field of new possibilities is currently evolving that are driven by the expansion of the Internet and the development of powerful and very small computers. The realization of higher computing and storage capacities with simultaneously decreasing production costs make digital, technical products attractive for everyday applications. Important topics are Big Data[1], the Internet-of-Things[2], apps[3], wearables[4] and KI[5].

Synergy effects are expected in combining these different aspects of digitization. The Federal Ministry of Economics and Energy envisages more prosperity and a better quality of life for citizens through increasing digital literacy, expanding infrastructure and equipment, innovation and digital transformation, the creation of ethical and legal frameworks, and expanding digital administrative services (Presse- und Informationsamt der Bundesregierung, 2019).

Digitization represents an attractive economic area. According to the Federal Statistical Office, the turnover in the German ICT sector was 343,9 billion EUR in 2016, with almost two thirds generated by the ICT service sector where 1,2 million persons were employed. The trend is rising (Statistisches Bundesamt, 2018).

The target groups of smart applications are extraordinarily diverse. Besides the broad public, many e-health measures that are specifically aimed at older people in need of care, people with a cancer diagnosis, people with mental illnesses, but also people with physical disability. With the concept of smart homes, various technical solutions and automations are offered for this area, too.

a) ICT for BUILT

Digital, technical solutions are also gaining influence in architecture and the construction sector. As economic analyses show, smart homes represent a potentially lucrative market, also among older people who, however, are still more reserved about the new options than younger people (see chapter 3.1.6). In smart homes electronic household appliances are linked, blinds, heating and room lighting are controlled or consumer electronics are addressed. These functions can often be controlled via smartphone or a tablet or are completely automated by sensors.

The market of providers is growing. One of the first smart homes in Germany was the so-called "inHaus" in which various digital solutions are tested and presented." It was opened in

1 This is considered a generic term for a large amount of structured and unstructured data. Problems and opportunities arise from the large amounts. Only with appropriate computing capacities can these be processed, structured and analysed. There is hope that they will enable us to gain more insights and make predictions in the future.

2 Due to the expansion of the Internet, the spread of smart phones and computers and the production of digital technical components for conventional electronic devices, devices can be interconnected. This allows processes to be controlled, monitored and tested.

3 The spread of smart phones has created a large market for apps. They can provide help for everyday problems and tasks.

4 Wearables are products that can be worn on the body. These include smart watches, activity trackers and data glasses. Especially in the area of personal health data collection, a great opportunity is seen here.

5 Complex tasks are to be processed automatically by artificial intelligence. Special attention is paid to so-called machine learning.

Duisburg in 2001. More than 100 partners from industry and commerce are involved in the "inHaus". Also various start-ups are associated here (see Fraunhofer-inHaus Zentrum).

In addition to technical feasibility and aspects such as resource conservation and comfort, healthy ageing and coping with functional restrictions and diseases play an important role in the idea of smart homes. Technical systems that are specially adapted to the needs of older people or people with disability are summarized under the generic term "Ambient Assisted Living" (AAL). The "Deutsche Gesellschaft für Gerontotechnik" in North Rhine-Westphalia offers a certification of age-appropriate products. Their portfolio includes various technical products, such as the so-called Smart Hub (Deutsche Gesellschaft für Gerontotechnik, 2019, p. 146). It serves as a monitoring and alarm system and is intended to enable care services at home with the help of sensors.

In the Hessen region, the "WoQuaz" project in Weiterstadt has been founded in 2011. Technical systems from the Fraunhofer Institute for Computer Graphics Research in Darmstadt were installed in the residential and district centre. The project was developed in cooperation with welfare associations. In addition to various shops, the project also includes a dementia shared flat and day care (for details see good practice description in chapter 3.2.5).

b) ICT for HEALTHY

The general increase of life expectancy is combined with a rising number of healthy years (66,7 years for German women, 65,1 years for men). However, the potential years of illness are taken seriously. Particular hope is placed on technical solutions: "Digital technologies can help us to better solve the challenges faced by almost all healthcare systems in the western world - treating more and more older and chronically ill people, paying for expensive medical innovations, providing medical care to structurally weak rural areas. They enable better and more efficient care and broader access to medical expertise, especially in rural areas. New forms of better patient care in the home environment can also be realised" (Bundesministerium für Gesundheit, 2019).

In Hessen, the German pilot region, a large number of projects at the interface between digital technology and the health care system are being supported by the E-Health Initiative Hessen. E-health offers are promoted in order to improve health care in rural areas, provide comprehensive medical expertise, reduce costs by increasing effectiveness and efficiency, and prevent incorrect or over-treatment (E-Health Initiative Hessen, 2020); their dispersion, however, has still to be developed. The following - non-exhaustive - list of programmes are funded under the E-Health Initiative Hessen displays potential fields for the application of ICT for HEALTHY including their various target groups:

- "Apojet" improves the communication between patients and pharmacies via a smartphone app. It includes the pre-ordering of drugs, transmission of prescriptions, information about pickup time, order or delivery, information about medication plan and drug application and intake, range analysis and reminder function for daily medication intake.
- Doctors' portal CGM Jesajanet ensures the electronic exchange of findings, tumour conference recommendations, doctors' letters, patient information etc. It is expanded to a bidirectional platform with online appointment allocation, patient data upload for physicians in private practice (imaging, findings, doctor's letters etc.).

- BIPOLIFE A3 analyzes communication behaviour, distances, etc. of patients via smartphone. The analysis is intended to detect early warning signs of (hypo)manic or depressive episodes in the context of bipolar disorder.
- CardioMEMS interlinks outpatient and inpatient therapy as well as improved communication between general practitioners and attending cardiologists through outpatient telemonitoring and the use of specially trained "Heart Failure Nurses". This should lead to an improved therapy and training of patients.
- CardioSecurActive is applied via a smartphone, consisting of a free app and an ECG cable. They allow the patient to receive feedback on his or her heart health in a short time.
- ERimALTER investigates the effects of social-emotional robots. These technical systems are to stimulate and maintain social interaction and communication and to meet the emotional and specific psychological needs of people.
- The Epilepsienetz Hessen offers a tele-medical consulting service for hospitals and neurological practices to improve care offers in structurally weak regions.
- The evaluation of the e-learning program for psychological pain therapy intends to improve the care of patients with chronic pain. It includes an e-learning tool.
- "Every mistake counts" intends to improve safety culture and error management for GP practices. It was developed in cooperation of a healthcare insurance fund and the University of Frankfurt.
- Medical Televisite Rheingau is used for the exchange of patient data in real time as well as for consultation and case discussions within the clinic network.
- PReDicT is a PC application with tasks to recognize and assess emotions. The test is accessed online. Results are available immediately after the test has been performed.
- SIMPAT is improving case management for people with dementia. It includes an e-learning tool for patients and their relatives.
- Tele-therapy Stuttering offers treatment under professional supervision by qualified therapists on a secure online therapy platform directly on the computer in their home.
- TransFIT is to improve case management, as well as consulting services via APP and video telephony. Is intended to improve the care of chronically ill children and young people.

3.2.2 Challenges in implementation and gaps between availability and usage

Basically, in order to use SMART technologies, a stable internet access is required. This is still not everywhere the case. Besides that, there are concerns on a personal level, leading to reluctance in accepting the measures.

In a survey carried out as part of the "D21 Digital Index" study, it can be observed that people's opinions towards technical products depend on age and on the product itself. For example, 41% of those surveyed could accept implants based on smart technology, while 25% would feel uncomfortable. 37% of the respondents have concerns with smart safety systems that automatically report malfunctions (24% have none). 57% would feel

uncomfortable with support from assistance robots at home or in care, while only 11% would feel good (Initiative D21, 2019, p. 48).

These data correspond with the statements of the interviewed experts. All of them underlined that technical solutions can only have an assistance function and be a supportive aid. Technical applications cannot replace direct human contact, but often fill gaps left by human caregivers. The current generation of older people has not grown up with the current technical equipment. Therefore, their concerns include its safe handling. The experts considered this lack of technical knowledge as one of the central implementation difficulties. Appropriately adapted, target group-oriented and emphatically communicated assistance is urgently needed. One expert assumes that there is not primarily a lack of innovative ideas and products; they just do not sufficiently take into consideration the reality of the lives of those concerned. According to the Fraunhofer Institute, the reasons for a lack of acceptance are usually "a too strong technological orientation, lack of involvement of end users, shyness about cooperation, too many technical problems and risks and also insufficient financing of the innovation process" (Fraunhofer-inHaus-Zentrum, p.2).

At the same time, concerns relate not only to application problems but also to security and privacy issues. One expert observed that old people feel being monitored by certain technical devices. The suspicion that "they know everything about me" makes them reject the offer. This coincides with the results of the D21 study. Asked for the reasons why certain digital technologies are rejected, the respondents mentioned the lack of product utility (50%), followed by data protection concerns (36%), and being "too expensive" (35%), "too impersonal" (25%) and "too complicated" (21%) (Initiative D21, 2019, p. 47). According to one expert, the stigma of technical assistance that provides for emergencies is still considerable. People avoid both anticipating emergency situations and spending money for it.

Another problem is the timing of implementation. Especially in the area of BUILT, measures must be taken long before problems arise. In a pilot project in Bensheim, an attempt was made to encourage early modernisation of the apartments to suit the needs of the older people with the help of subsidies. The person responsible for the project emphasised the necessity of timely prophylaxis. An age-appropriate conversion is in this sense a rational decision that must be made at an early stage. However, this requires targeted sensitization and advice, which can be provided by trained housing advisors.

3.2.3 Available implementation support offers by stakeholders

Support services must be adapted to the relevant target groups and implemented at different levels. Besides persons directly concerned, the target groups of implementation support should also include relatives and stakeholders in the medical and economic sector.

Uncertainties in the handling of digital products are widespread, and various offers are specifically aimed at older people. For example in adult education courses are offered to develop and promote basic technical skills and to use smart phones or tablets. They are designed to be low-threshold and sometimes held at untypical places to reach the target groups (e.g. in an organic supermarket, a butcher's shop, or a flower shop). In Hanau, volunteers offer computer advice for older people and practical support. Again, various experts point out that old people often seek help not before clear limitations are noticeable. The acquisition of the necessary skills is then even more difficult.

Another possible way to increase the acceptance of technical aids is their integration into everyday objects. If this is done in a fashionable way, e.g. the Smartwatch, experts expect that this would help to increase the acceptance for an auxiliary product.

Within the framework of a model project in Bensheim with the aim to design adequate housing for older people, an attempt was made to reach and sensitize potential target groups in advance of health problems. The project tried to promote a barrier-free, age-appropriate changeover at an early stage by means of financial incentives. In addition, various companies and service providers were invited to a round table, and further training measures for stakeholders in the medical, skilled crafts and trades sectors were offered.

3.2.4 Funding opportunities for implementation support

With the so-called Digital Strategie Hessen and the eHealth Initiative Hessen, the state of Hessen offers two programmes to promote innovative ideas. While the Digital Strategie Hessen is primarily concerned with the strategic development of conceptual foundations, the State of Hessen supports affiliated projects via the eHealth Initiative. There are also various clusters in Hessen for the economic promotion of innovative ideas. Currently, there are clusters for the areas of "Information and Communication Technology" and "Life Sciences, Bioeconomics and Healthcare" (Hessen Trade & Invest 2019).

Funding schemes for end users have been described in chapter 3.1.7. While volunteers are active in the field of retrofitting counselling, no specific schemes, however, could be found for self-employed facilitators offering implementation support. In the areas of SMART for HEALTHY and SMART for BUILT, relations are mostly governed by the market. One expert hinted to the fact, that skilled crafts and trades will face increasing demands in installing and retrofitting AAL systems. However, the increasing complexity and interconnectivity of the installed devices will require a certain amount of digital knowledge.

3.2.5 Example/s of good practice in implementation support

WoQuAz – Wohn- und Quartierzentrum (Housing and quarter centre), Weiterstadt

Objectives

The aim of WoQuAz is to combine various residential and care services for older people with a commercial infrastructure that can also be used by residents of the surrounding area. From the very beginning special emphasis was placed on the installation, testing and further development of technical solutions. From the very beginning in 2009, a cooperation with the Fraunhofer Institute was established. Meanwhile a company "Assisted Home Solutions" was founded and is selling housing concepts to older people.

Key facts

The WoQuAz project is located in Weiterstadt in a residential area that was developed in the 1970s. In cooperation with various sponsors and partners such as the German Red Cross, the Diakonie and the Fraunhofer Institute, a mixture of residential and commercial space was implemented. The day centre of the German Red Cross offers a daily programme for people with dementia in order to relieve informal carers. This offer is supplemented by a sheltered living for 11 people with dementia. The residents have private rooms and share facilities such as bathrooms or the kitchen. Available for all residents are multifunctional rooms that also can be used for events, a cafe and various commercial offers, including a cosmetics studio, a Pilates training course, a studio for Zumba and ballet as well as practices of physiotherapists and dentists.

Implementation

The WoQuAz project has realized a successful combination of private living and commercial offers, especially aiming at older people. In the area of assisted living, the WoQuAz project has implemented a variety of smart home applications. One of the biggest challenges was to

find a solution for long-lasting architectural requirements on the one hand and short-lived digital innovations on the other. This was solved by installing an extensive digital infrastructure (power, data cables, connections). Various current digital devices can be connected to this infrastructure.

Problems arose, for example, by the fact that various technical solutions as well as smart homes and AAL concepts were often only tested in show homes and in the laboratory beforehand. This resulted in a deficient suitability for everyday use and made further development necessary. In the AAL context correct problem and emergency identification is essential. Common concepts try to achieve this by monitoring situations and detecting deviations from the rule. This approach is not suitable for assisted living because everyday situations are too complex and data protection must be ensured. WoQuAz and the affiliated company "Assisted Home Solutions" therefore focus specifically on detecting emergencies, not on deviations. For example, two smoke detectors and sensors above the stove are used to detect whether a fire has broken out or only smoke has developed.

Results

WoQuAz has significantly contributed to the practical implementation of smart home concepts. Data on emergencies only leaves it when it is necessary to cope with them externally. Default for normal situations are initial (and repeated) conversations about habits and preferences of the residents. Thus, processes such as the control of heating and windows are performed safely. The result seems to be an age-appropriate smart environment that meets the needs of the residents.

More information

- https://www.woquaz.com
- https://assistedhome.de/

Kasseler Stottertherapie (Kasseler "Stutter Therapy"), Kassel

Objectives

The aim of the approach is to integrate digital technologies in conventional stutter therapy, but also as an autonomous system in the form of an app.

Key facts

Stuttering probably has neurological causes resulting in problems to pronounce certain syllables, words and sentences fluently. Pathological voice patterns are also caused by diseases such as dementia, strokes, Alzheimer's and Parkinson's. The therapy approach in the Kasseler stutter therapy is to practice soft pronunciation of syllables and words. Courses are offered for different age groups: computer-supported presence therapies for children from 6-9 and from 9-12 as well as for adolescents and adults aged 13 and over; online course for teenagers and adults with accompaniment of a therapist, and courses for parents to support children of 3-6 years.

Implementation

The Kasseler Stutter Therapy was developed by Dr. Alexander Wolff von Gudenberg. He started stuttering himself at the age of four and has subsequently gained experience with various forms of therapy. In 1994 he developed a computer-supported form of therapy based on the model of an Israeli system and has continued to develop it further in recent years.

The therapy of stuttering is labour and time consuming; a few appointments with speech therapists do not lead to sustainable effects. Constant repetitions and long-term exercises are necessary, which are analysed and corrected after pronunciation. The therapy is extremely expensive. By using technical solutions, conflicts were avoided and frustration thresholds were lowered.

The therapy integrates technology into the classroom courses, but the online courses transfer the therapy concept, consisting of individual therapy, group therapy and various activities, to a large extent completely into the digital space. For this purpose, a special platform was developed. The participants take part in the group meetings via an avatar, the instructing therapists join in as required and provide assistance. The long-term goal is to use an app to create a digital service that can be used autonomously by the users and can thus also be used in countries without corresponding financial support from health insurance companies.

A challenge in the realization of the therapy was the work with voices. Although there are now various software processes that perform voice recognition, the therapy is not yet fully developed. Usually, the software cannot recognize pathological voice patterns.

Results

The Kasseler Institute has been involved in different research projects for many years. Among others, it works on the speech recognition of diseases via the analysis of pathological speech patterns and develops therapy offers. The impacts of the therapy have been evaluated internally. It is meanwhile recognized and supported by the health insurance funds.

More information

- www.kasseler-stottertherapie.de/

3.3 HEALTHY: Health and well-being

3.3.1 HEALTHY measures and their target groups

Health and good medical care is one of the central challenges of an ageing society. One of the crucial questions is how older people can be cared for in the future. With the rising life expectancy, chronic and dementia-related diseases will also increase in the population and lead to specific demands. Big hope is placed in technical solutions to solve existing practical and financial problems. However, health care currently will always include a high demand for human attention and manpower.

For a long time, medical care was seen primarily from the perspective of curative medicine, i.e. primarily in the sense of measures to be taken when problems arise. In recent decades, this perspective has changed and shifted towards preventive measures. Primary prevention attempts to combat the causes of diseases before they become acute, secondary prevention aims to detect diseases as early as possible and prevent their progression, and tertiary prevention attempts to prevent consequential damage (Gerlinger, 2018, p.1). Various prevention programmes are promoted and supported by the health insurance funds and include, among others:

- Preventive medical check-ups
- information campaigns on healthy lifestyles and risks
- Promotion of sports activities
- Use of technical equipment for monitoring

A large area in the HEALTH sector is the care for dependent people. When the definition of the Nursing Insurance Act is applied, about 2,6 million people in Germany were in need of care in 2013. The nursing quota (dependent persons in per cent relative to the respective age group) increases strongly with increasing age. Only one in twenty persons between 70 and 75 years is in need of care, compared to almost two-thirds of persons 90+. Women have a higher life expectancy but experience more years of multi-morbidity and dependency than men. Also the proportion of long-term care in-patients is significantly higher for old and very old women than for men of the same age (Robert-Koch-Institut).

Nursing means different forms of support by which people are to be enabled to lead a life in dignity. Again, a special challenge in the care of people is the need for human attention and closeness. Older people in particular suffer from isolation due to diminishing social networks. But support is also provided by a variety of devices and technologies to compensate for handicaps and/or functional restrictions. The guiding principle for nursing is to ensure the greatest possible autonomy and quality of life. Problems, however, arise in its realization.

Various technologies contribute to maintaining autonomy, which are grouped under the generic term "assistive technologies" (ATs) and are, in principle, subject to being funded by different insurance funds (see chapter 3.1.7). Among others, these serve to improve the functional abilities of people with disability. These ATs include everyday devices such as reading glasses, crutches and hearing aids. Many innovations in the field of SMART try to design products for this sub-area with the help of technological and scientific achievements. In view of current socio-technical and regulatory trends, the authors of a study by the European Parliamentary Research Service conclude that ATs will play an increasingly important role in the lives of people with disabilities and support their further integration into society, education and employment. The authors of the study consider it useful to promote

the development of new professional profiles for AT (European Parliamentary Research Service, 2018, p.16).

A particular challenge for patients, their families and the health care system in general is the high number of dementia cases. About 1.4 million people in Germany live with dementia (Robert Koch Institute, 2015, p.413). Care for dementia patients is extraordinarily labour-intensive. An average care time of 6,5 to 10,5 hours per day is assumed (Robert-Koch-Institut, 2015, p. 442). Usually, the disease cannot be cured with the condition continuously worsening over time. The Federal Ministry of Health writes about therapy options: "A variety of treatments aim to train the patients' remaining abilities and strengthen their self-esteem. These include music and art therapy, movement exercises or sensory and perception exercises such as 'kim games' in which players are blindfolded and have to guess objects by touch or smell. It is important to focus on the patients' existing abilities and needs, take into account their life history background and avoid pressure to perform. Occupational therapy tailored to the specific situation of the patient can also help patients with mild to moderate dementia to maintain their everyday functions" (Bundesministerium für Gesundheit, 2020).

3.3.2 Challenges in implementation and gaps between availability and usage

The supply of doctors and hospitals is considered good in Germany, as is the provision of medical and technical equipment. In addition, the predominant majority of the population are covered by the statutory health insurance funds that offer a broad range of services. Nevertheless, the provision of healthcare professionals in rural areas forms an increasing problem (Robert Koch Institute, 2015, p. 447).

A particular challenge is the care of the older people in need of care. Due to demographic change, two parallel developments are taking place. On one hand, the number of very old people with higher needs of long-term care is increasing significantly, and on the other hand the number of relatives living nearby is declining (Robert Koch Institute, 2015, p. 444). This will lead to a foreseeable gap and enormous demand for nursing places, nursing facilities and outpatient nursing services in the near future. But also care homes suffer from a shortage of staff able and willing to work under difficult conditions with low salaries.

Given these overall trends, the concept of "caring communities" is gaining in importance in socio-political discussions. These communities are functioning by combined efforts of citizens, the state, civil society organizations and professional service providers. A municipal contact point for the caring community appears to be indispensable, serving as a network hub, as a place for bundling and coordinating offers and activities of municipal services and interlinking full-time and voluntary offers. Networks are essential, linking between citizens, municipalities, associations, educational institutions, churches, private and independent providers of social services and other representatives of the local economy. Qualified, full-time staff are required to be able to perform the tasks associated with these functions. It is beneficial if such facilities have premises for joint activities following the concepts of multi-generation houses, neighbourhood or family centres (ISS, 2014, p.32).

Considerable problems in the use of e-health services appear to be the handling of technical devices and reservations regarding data protection (for details see chapter 3.2.2).

3.3.3 Available implementation support offers by stakeholders

Medical care is provided by doctors and hospitals, and a high density of experts is found especially in urban centres. But there is a clear bottleneck in the area of nursing care. All-day or part-time care offers are associated with sometimes considerable costs.

As far as preventive offers and the promotion of healthy life-styles for older people are concerned, a wide range of services is available. A study from 2007 addressed several dimensions of health promotion and prevention. For example, a combination of nutritional counselling, stress management, exercise and sports activities as well as the strengthening of social skills and social contacts were very common. Offers to strengthen social skills and social contacts were most popular, followed by exercise and sport, nutritional counselling and stress management. Relatively rarely were measures such as accident prevention, safety or violence prevention or the use of PCs and other technologies offered (Federal Ministry of Health, 2007). Under the auspices of the Hanau Senior Citizens Office and independent associations and initiatives, a wide range of activities are carried out in Hanau to promote a healthy lifestyle, mobility and social participation of the older population.

On the one hand, organisations and institutions such as the adult education centre or various health insurance companies offer prevention courses. These can be used both online and in real life. These naturally include sports courses and general advice services on health issues. Especially in the field of prevention sports courses there has been a remarkable development in recent years. All these offers always pursue the goal to strengthen the social networks of people and promote their active membership in society.

In the field of e-health, work is also being done on various self-diagnosis tools and tele-medical counselling services (see chapter 3.2.1).

The following exemplary projects illustrate some of the offers:

- Volkshochschule Frankfurt am Main: Active in old age - courses for active seniors. Various training courses are offered here, including sports, memory training, cultural activities and computer courses. They are intended to prevent illness and promote participation in the community.
- Municipality of Hanau: Volunteers offer, besides other health-related measures, courses in fall prevention and trainings to use buses although they need walking frames. Also bus drivers are trained in adequate techniques to facilitate the use of public transport, e.g. stopping nearby curbs or not starting to drive until old people with mobility restrictions are seated.
- Techniker Krankenkasse: Digital health. This offer provides a collection of tools for digital prevention.

3.3.4 Funding opportunities for implementation support

Funding schemes for end users have been described in chapter 3.1.7. Facilitators are indirectly subsidized by the statutory health insurance funds by following means:

1. Facilitators can offer services in social care to dependent persons. If officially recognized as in need of care, dependent persons can receive funds for respite care when the primary care giver is ill or on holidays. Further funds are available for paying "everyday life companions" who offer services like befriending or transport. Trainings are available and mostly used by persons who work as volunteers or are employed by organisations. No formal skills are required, however, in self-employment. Since the amounts granted to dependent persons for services of this kind are comparatively small, self-employed facilitators need a large circle of customers.
2. Facilitators who are qualified as licensed trainer for preventive sports programmes can expect relatively high hourly rates, as sports clubs or private fitness centres profit from

the subsidies for participant fees by statutory health insurance funds. The details are described in the second good practice example below.

3.3.5 Example/s of good practice in implementation support

Netzwerk Demenz (Dementia Network), Bensheim

Objectives

The Dementia Network is integrated into the Bensheim concept of a "city in networks" and aims to improve the situation of people with dementia and their relatives, to inform about the disease and its impacts for patients and their environment, to raise public awareness and integrated people concerned, to inform about existing support offers for relatives, to identify and name gaps in supply and to create networking opportunities among the stakeholders to promote the best possible access to care.

Key facts

The Dementia Network arose from a pilot project on age-friendly housing concepts in which thematic networks were established. The 31 members of the Dementia combine a wide range of services, including social associations, counselling centres, companies and doctors. They perform, among others, information events on the topic of dementia, preventive measures and the work with relatives, offer training for social and health care providers, link services and facilities, carry out public relations work on current topics and pro-actively involve people with dementia and their relatives.

Implementation

The network was founded in May 2013 and is coordinated by the urban planning and demography team in the Bensheim city council. It is based on forecasts of an ageing society and the necessity to offer age-appropriate solutions.

Usually the diagnosis of dementia is a considerable shock for both patients and their relatives. Often it happens at a time when people with dementia still have own potentials to actively deal with the topic. The brochure, which is available at many easily accessible places in the city, provides basic information on the disease, offers psychological counselling and legal assistance and shows the whole range of support services available from low-threshold care services to nursing homes. The aim of counselling services is to raise awareness and provide advice at an early stage to strengthen the choice between options for patients and their relatives.

In addition to that, the network engages in public relations work, also making use of unconventional means. In addition to public symposia with experts from science and politics, theatre plays on the topic of dementia have been organised in the past. An attempt has been made to raise awareness on the topic with a public "dementia demonstration".

Results

The public events are met with great interest and well attended. The brochure is also positively received. As it is available at easily accessible locations, many people collect and use it as a basis for initial information. As of 2018, the brochure has already been distributed in its fourth edition. The regular exchange between the participating organizations and individuals is also positively assessed. Numerous stakeholders take part in this regular get-together.

More information

- https://www.bensheim.de/leben-in-bensheim/demographie/demenz-und-pflege.html

Licensing of fitness trainers by the Hessian Sports Association, Hessen

Objectives

The aim of this measure is to qualify trainers in implementing qualitatively assured, health-oriented programmes in sports clubs. The intention is to support people in developing healthy lifestyles by strengthening their individual resources. Participant fees for courses run by licensed fitness trainers can be reimbursed by the health insurance funds up to 80%. Thus mostly older people are addresses who want to maintain their functional abilities and prevent diseases.

Key facts

The National Sports Association has – in cooperation with the Federal Medical Association – developed standards and quality criteria for trainings that have a proven positive impact on health. The Health Insurance Funds subsidize the participant fees, if local sports clubs are granted the quality seals “Sport pro Gesundheit” and “Deutscher Standard Prävention”, and if the trainers offering these courses are licenced after having performed specific training measures (ÜL B-Lizenz). A number of associations at state level and in specific sports are offering these trainings.

Trainers who are interested in getting qualified by offers of the Hessian Sports Association must have a license of a lower grade (ÜL C-Lizenz), be an active member of a local sports club and commit themselves to a norm of conducts for the well-being of children. The fee is 450 €, usually borne by the sports club of the trainee and reimbursed by 50% if the training is successfully completed.

Licensed trainers work as volunteers or for an hourly tariff; those who are self-employed offer their services to fitness centres, too.

Implementation

The training consists of 60 hours and is usually run in 3 weekend trainings. Its content is divided into four thematic areas:

1. (Holistic) understanding of health and health models: Health definitions and models / Individual understanding of health / Effects of sports in the prevention of diseases
2. Components of preventive health training: Conditional and coordinative skills and abilities / Coping with stress and relaxation / Basics of a health-oriented diet
3. Planning, implementing and evaluating health-oriented exercise programmes: Organizational framework / Introduction to the programme “Preventive health training for adults” / Quality management and quality seals
4. Personal and social skills: Working in groups / Qualification / Role and self-image of fitness trainer

Upon completion of their qualification, the trainers are ready to run preventive fitness courses for their target groups of adults at middle or advanced age. Their sports clubs are very interested in this kind of qualification because the demand for courses, subsidized by the health insurance funds, is high and financially attractive.

Results

Currently, 444 certified preventive training programmes are being run by sports associations in Hessen. 1.717 licensed trainers have been qualified during the last years. The number persons interested in gaining the ÜL B licence is on the rise. 2 courses with 34 participants

were conducted by the Hessian Sports Association in 2018, and 5 courses with 68 participants in 2019.

More information

- https://www.landessportbund-hessen.de/fileadmin/media/Schule_Bildung_Personalentwicklung/LSB_Ausbildung_2019_web.pdf

3.4 BUILT: Housing, public spaces, buildings and mobility

3.4.1 BUILT measures and their target groups

For many people, barrier-free building is an essential prerequisite for being mobile and being able to participate in social life. People with restricted mobility, people with walking difficulties, paralysis or missing limbs who rely on aids such as wheelchairs, walkers, walking aids or handholds or railings, but also tall or small people, including children, people with luggage or prams need to be able to move freely. There must be enough space to apply the technical aids, and passages must be sufficiently wide and high. Movement areas must be flat, differences in height or steps can be obstacles. Pushbuttons, handles etc. must be at an adequate height in order to be easily accessible from a wheelchair. People who are limited in their ability to perceive or in information processing, for example, need clear room arrangements, blind or partially sighted people can be supported by tactile devices or floor indicators.

In legal terms, DIN standards for barrier-free construction are recommendations in Germany that do not necessarily have to be applied. The state authorities can, however, make stipulations in their building codes that ensure compliance with accessibility standards for certain buildings or facilities. Some standards are currently introduced as technical building regulations in almost all federal states with the exception of North Rhine-Westphalia. They cover streets, squares, paths, public transport, green areas, playgrounds, public buildings and the design of information in public spaces. In Hessen, in buildings with more than two apartments, apartments on at least one floor must be easily accessible. In these apartments, the living and sleeping areas, a toilet, a bathroom and the kitchen must be barrier-free. Also facilities that are open to the public must be barrier-free in the parts serving general visitors and users. This applies in particular to institutions of culture and education, sports and leisure facilities, healthcare facilities, administration and court buildings, points of sale, restaurants and accommodation, parking spaces, garages and toilet facilities.

Approx. 93% of people 65+ live in conventional apartments, 4% in care homes and 2% in facilities of assisted living. Two-thirds of dependent people 65+ are provided with care at home. According to survey results from 2011, about half of the households of seniors are located in owner-occupied residential property. Approx. one quarter each rents their homes from housing companies or private landlords. The home ownership rate of senior citizen households is by 7% higher than the national average (Bundesministerium für Verkehr, Bau und Stadtentwicklung, 2011).

Only around 5% of the dwellings do not exhibit barriers in the access to the building, to the apartment, to the sanitary area or to the sanitary equipment. With currently 11 million senior citizen households, this corresponds to only 570,000 largely barrier-free housing units, which have no more than three steps to the house or apartment entrance (or technical aids to overcome these barriers), no steps within the apartment (or respective technical aids), sufficient movement areas and door widths in the sanitary area and are equipped with a floor-level shower. 83% have significant barriers and thus need adjustment. Every tenth apartment used by a senior citizen has extreme barriers that are not suitable for adaptation measures (Bundesministerium für Bau, Verkehr und Stadtentwicklung, 2011).

Especially for older people or for people with a handicap, living in their own familiar living environment is a relevant criterion for a self-satisfied and fulfilled life. In this area, there are now a large number of products and measures that are intended to guarantee a secure life in one's own four walls in the long term. Classic examples that have been around for decades are easily accessible showers and toilets at appropriate heights. In the sanitary area, various

handles and supports have been standard for many years. In many cities there are now programmes for fall prevention.

With the technical progress of the last decades, new technical products have also been introduced to the market. One example from this area is a floor equipped with sensors. In an emergency, this should detect whether a person has fallen and needs help. Such sensory floors were developed in cooperation with the Fraunhofer Institute, among others. In Weiterstadt, the WoQuAz project combines various architectural, technical and social possibilities (see chapter 3.2.1 and 3.2.5).

Besides a barrier-free design of one's house or apartment, for older people an easily accessible infrastructure is essential. This includes, among others, shops as well as health and social care services. In peripheral locations and settlements, restrictions in transportation and care service provision often exist. Especially older people in owner-occupied residential property face rather unfavourable situations: Only around one third of home owners compared to almost half of the tenants live near or in the centre. Older home owners complain more often about problems in the access to bus and train stations or to doctors and pharmacies. A quarter of both tenants and home owners were dissatisfied with the access to grocery stores (Bundesministerium für Bau, Verkehr und Stadtentwicklung, 2011).

The inDAgo app provides information on safe and barrier-free travel and helps with orientation in the city of Darmstadt: "inDAgo is intended to create the possibility of combining these different systems with GPS and public transport guidance systems. The focus here is on the seamless transition between the so-called AAL rooms, whether on the way from home to the doctor, to the shopping centre or to the children and grandchildren, to the arrival and departure for a concert, an exhibition or a city trip" (inDAgo, 2014). Further, targeted information is given to seniors about projects and dates of events.

An example of good practice in improving public spaces was the Mobility Scouts project in Hanau (Mobility Scouts, 2020). It was supported by the Erasmus+ programme and aimed to give older people a voice in creating an age-friendly environment. Older volunteers checked public spaces and gave advice to the city and the responsible authorities if action was needed (see good practice example below).

3.4.2 Challenges in implementation and gaps between availability and usage

Also in the area of BUILT, there has been an increasing focus on technical solutions in recent years. As a result, many of the application problems, concerns and difficulties are in line with the problems already described in the HEALTHY sections.

Solutions in form of personal guidance or training are usually well received, such as courses on fall prevention, energy or housing counselling. Often volunteers are involved in this. However, a major problem with housing counselling is that it is often accepted too late. The pilot project "Seize the opportunities - design living for older people" in Bensheim aimed at promoting necessary age-appropriate reconstruction measures at an early stage. In cooperation with the KfW Bank, this was facilitated through financial incentives. However, experts consider people's awareness a problem. Dealing with the issue is avoided and timely measures are not taken. When help is needed, many old people lack the initiative for innovations; this is aggravated by the fact that many future heirs reject them for cost reasons.

About a quarter of senior citizens' households, especially tenants, are ready to relocate in order to live independently for as long as possible. 14,4% of the households, usually owners, consider adjustment measures. They are also more willing to bear financial burdens for

adaptation measures (Bundesministerium für Bau, Verkehr und Stadtentwicklung, 2011). However, according to the experts, tenants or owners of apartments may face specific problems. Landlords or the corporation of condominium owners often impede age-appropriate conversion measures for cost reasons. Thus, measures are often not realized although they are technically possible and subsidies for them available.

Finally, another expert pointed out that a too long stay in one's own home can also lead to critical situations. Many old people refuse to move to care home, although they have hardly any social contacts or are not able to leave their home because of barriers. Hence moving to a care home could be a better solution than staying in their current residence.

3.4.3 Available implementation support offers by stakeholders

Support in the area of BUILT can be divided into financial aids and counselling offers.

Offers for individual consultations on housing adaptations and the accompaniment of measures are made by municipalities or welfare associations with paid staff or volunteers. At present, such advice is available at 132 locations across Germany, 18 of them located in Hessian towns (BAG Wohnungsanpassung). A total of 350 paid and 310 honorary counsellors have been trained in Hessen in recent years (Hessisches Ministerium für Soziales und Integration). In Hanau, a group of volunteers is offering these services (for details see good practice example below).

Counselling is provided by volunteers free of charge. However, there are also examples of self-employed persons or companies who offer counselling services.

To cover the costs of measures for removing barriers, owners of a property or even just tenants of an apartment or house can apply for a grant from the KfW Bank. A subsidy of 10 - 12.5% is granted, depending on the measure and the standards applied. Measures cover, among others, paths to buildings and residential environment measures, entrance area and apartment access, overcoming stairs and steps, room layout and threshold removal, bathroom conversion/measures on sanitary rooms, orientation, communication and support in everyday life, common rooms and multi-generational living (KfW, 2019). Funding is mostly used to improve the access to the building and the apartment, as well as to retrofit sanitary and other rooms. Between April 2009 and June 2011, almost 7 billion € were granted by the KfW programme "Age-friendly retrofitting" (Boo, 2018, p. 82).

3.4.4 Funding opportunities for implementation support

Funding programmes at regional and local level facilitate the work of honorary counsellors in housing issues. No specific schemes, however, could be found for self-employed facilitators offering implementation support.

3.4.5 Example/s of good practice in implementation support

Mobile Wohnberatung (Mobile housing advice), Hanau

Objectives

By setting up a mobile housing advice service in Hanau citizens should be informed about the possibilities of independent living in old age and new forms of living in a community should be supported. Thus its targets groups are mostly, but not exclusively, older people.

Key facts

The mobile housing advice team was established in the context of the pilot programme “New Forms of Living - Advice and Cooperation for a Better Quality of Life in Old Age" in 2009. It is run by the Seniors Office in Hanau and consists of (mostly older) volunteers with expertise in specific areas, for example planning and construction, elder care, and fundraising.

The municipality is supporting the team, for example, by public relations, the reimbursement of expenses and taking on administrational tasks. The Hessian Office for Housing Advice offers training to volunteers.

Implementation

Citizens with needs for advice fill in a registration form in which they indicate the topics of interest. The Seniors Office coordinates an appointment with the volunteers, ensuring that the necessary expertise is available. The volunteers work as a team of one architect and one person familiar with economic and administrational aspects.

As preferred by those seeking advice, counselling takes place in the Seniors Office or in the apartments themselves (hence "mobile" advice). Discussed are options for age-appropriate renovation and the technical equipment for a safe and comfortable life in old age. The outreach approach allows to directly respond to the conditions of the apartment or house, to give appropriate tips, name funding opportunities and, if necessary, additional contacts.

The mobile housing advice also addresses housing companies and, with events and information stalls, helps to promote the topics of new forms of community living in old age.

The volunteers are trained for their tasks and are meeting regularly for professional exchange and to find solutions for potential problems.

Results

The project was piloted in 2009 and turned out to meet profound needs of the citizens in Hanau. It is meanwhile established as a regular offer in the work of the Seniors Office. Data on the development of the requests within the last decade are not available.

More information

- https://www.hanau.de/vielfalt-leben/familie-und-kinder/mobilewohnberatung/index.html
- https://www.serviceportal-zuhause-im-alter.de/praxisbeispiele/weitere-projekte/sonstige-projekte/mobile-wohnberatung-hanau.html

Mobility Scouts project “Traffic security”, Hanau

Objectives

Many citizens are aware of problematic traffic situations but do not inform the local authorities as they anticipate too many bureaucratic barriers. The aim of the Mobility Scouts project was to identify deficits in traffic security and to arrive, in sharing them with the responsible municipality officers, at improvements for citizens of all age-groups in Hanau.

Key facts

The activities were initiated in the framework of the Erasmus+ project Mobility Scouts (2016-2018). 16 older citizens were trained as volunteers in the promotion of age-friendly environments; 3 of them decided to work on the improvement of traffic security, having a specific professional or volunteer background in this area.

The municipality of Hanau, in particular the departments for senior citizens and demographic development, adopted the approach, facilitated the work process and supported the communication with the other responsible departments.

The commitment of the municipality for creating an adequate environment for all generations as well as an active civil society at local level were important preconditions for the success of the project. The project was promoted within the municipality especially by the Seniors Office, the Volunteer Agency and the Department of Demographic Change of the municipality including the information of the broad public and the organization of information events. The costs were borne by the municipality and through funds of the Erasmus+ project.

Implementation

Mobility Scouts organized several excursions to places which had been reported as problematic. Traffic situations were documented with photos, short descriptions and suggested improvements.

The results were submitted to the responsible officials of the City of Hanau who valued this feedback from citizens and took it seriously. A number of proposals for the improvement of traffic security were implemented quickly and with much less bureaucracy than expected.

Results

In some places signs were erected to warn road users about difficult traffic situations, plus special traffic lights to make it easier for older citizens to cross the road. The main success of this working group is that in the future, informal meetings will take place to allow citizens to present their complaints. Thus, Mobility Scouts were able to nudge a citizen-oriented implementation of security measures. The concept – proper preparation and documentation of the problems as well as mutually respectful communication – is likely to contribute to changes and solutions to problems.

The group of Mobility Scouts has continued their work beyond the life-time of the Erasmus+ project thanks to the professional support and accompaniment of the municipality of Hanau.

More information

- http://www.mobility-scouts.eu/wp-content/uploads/2018/05/Toolkit.pdf

3.5 BUSINESS: Business opportunities and planning

3.5.1 Silver economy market and potential areas for starting a SHAFE business

Regarding the universal trend of ageing societies, the "silver economy" emerges to a market of high significance for the economic development in all countries of the European Union. The term silver economy encompasses all economic activities that address the needs of people aged 50 or older, including their private consumption and all economic activity connected to it (Varnai et al., 2018a, p.6). In Germany, the federal government pursues the aim of further improvement mostly in the area of human-technology interactions. Various projects are funded in the areas of ambient assisted living (smart home solutions), intelligent mobility and assisted care (Varnai et al., 2018b, p.35).

The silver economy market includes the opportunity to meet the demands of an ageing society by designing and creating valuable SHAFE-products. Germany has, compared with all EU member states, the fourth highest purchasing power of people aged 65+ (Varnai et al., 2018b, p.37).

The smart home market in Germany is currently at an annual level of 3,632 billion € and is forecasted to increase annually by about 13,6%, leading to an expected market value of 6,06 billion € in 2023. The current penetration rate of 16,5% is expected to increase to 32,3% in 2023 (Statista, 2019).

Several companies especially in the healthcare sector have a high likelihood or already benefit from the trend of an ageing society. For example, the stock value of Eckert & Ziegler, a German company located in the medical technology sector, tripled in the last five years (Goddemeier, 2019).

Regarding the silver tourism market, Germany has the highest spending on tourism by people 65+; in 2014 it reached at a level of nearly 20 billion € (Varnai et al., 2018b, p. 82). The silver tourism market has even the potential to counterbalance economic fluctuations in the tourism sector.

SHAFE areas for starting a business identified for Germany are mainly preventive health programmes, personal assistance when care or cure is needed, as well as retrofitting in terms of counselling and the performance of construction measures. Also measures to improve the access of older people to the internet and SMART technologies can be considered (for more details on funding opportunities see chapters 3.2.4, 3.3.4 and 3.4.4).

If given an organisational framework with an adequate support structure, most measures are also apt the be performed by trained volunteers.

3.5.2 Main regulations for starting a business

Founding a business starts with the choice of the legal form. It regulates finances, liability, liability limitation, participation and capital requirements. It also depends on the legal form whether the company must submit balance sheets or be entered in the commercial register.

Very often business founders decide on a non-corporate entity. In the areas of SHAFE measures, this is likely to be a sole proprietorship or a civil law association. In both cases the founders are personally liable with their private assets. If a capital company is founded, usually a limited liability company (GmbH) or an entrepreneurial company (UG) are chosen. The shareholders are formally liable in a limited way with capital contributions. To found a GmbH requires a minimum deposit of 25.000 €. For a UG, the shareholders have to make a

minimum capital contribution of 1 €. However, at least 25% of the annual surplus must flow into the reserve until 25.000 € of registered capital are reached.

Depending on the industry, legal form and other conditions, founders of the company have to register their business at different institutions. This is also obligatory for those who become self-employed on a part-time basis, have a small business or work as freelancers.

Depending on the type, legal form and business volume, a company foundation must be recorded in the commercial register. For corporations, such as the GmbH, the commercial register entry is mandatory. The same applies to partnerships such as KG or OHG. The entry is not necessary for civil law associations, freelancers or small trade.

The trade registration office automatically informs the relevant Chamber of Commerce and Industry. Membership is compulsory. The contributions are based on the type and business scope of the company. Some micro enterprises or freelancers can apply to be exempt from contributions.

Special permits or concessions do not play a key role in self-employment in SHAFE areas. These include for example, the title of a master craftsman, test certificates of the Chamber of Commerce, or passenger transport certificates. However, anyone who wants to work with children or youth must submit a police certificate of good conduct. Concessions, for example, are required by companies that transport passengers or restaurants; caterers must prove hygiene skills.

The registration with the fiscal authorities takes place automatically when registering the business at the trade registration office. Invoices require a tax number issued by the tax office. In the case of cross-border companies, it is also necessary to provide the VAT identification number on the invoices and in the tax declarations.

Company founders are requested to seek contact with the fiscal authorities on their own initiative and fill out the questionnaires on turnover and profit expectations. The authorities then determine the quarterly or monthly tax pre-payments. The entrepreneur must regularly submit the VAT returns and make the corresponding payments. Otherwise, there is a risk of charges for late payment or attempted tax evasion, a problem that is not always noticed by newcomers.

Anyone who uses objects or rights belonging to others in his or her business – e.g. trademarks, patents, utility models, designs, design, characters, company names or trade names – requires a license.

3.5.3 Support offers and stakeholders for starting a business

Start-ups out of unemployment can be supported by the Federal Employment Agency. In order to bridge the initial phase, unemployment benefit recipients can receive financial support for livelihood and social protection through a start-up grant. The Employment Agency may pay a subsidy equal to the last unemployment benefit received for a period of up to six months for an additional social security contribution of 300 €. The social security funds can be paid for a further nine months. The prerequisite is a business plan with a viability confirmed by a chamber, trade association or credit institution. In 2010, 135,000 founders became self-employed with this start-up grant (https://www.fuer-gruender.de/wissen/existenzgruendung-planen/selbststaendig-machen/arbeitslosigkeit/).

Beneficiaries of social benefits under the Social Welfare Act can be granted a start-up allowance over a maximum period of 24 months. Self-employment must be sound enough to terminate the dependence on assistance in the long term, and it must be carried out full-time.

In 2010, nearly 17,000 founders started their own business with this start-up allowance (https://www.fuer-gruender.de/wissen/existenzgruendung-planen/selbststaendig-machen/arbeitslosigkeit/).

An online portal of the Federal Ministry for Economics and Technology provides founders with information, checklists, a forum for networking, an interactive search engine for relevant authorities, a multi-media library, an expert forum as well as an online training (see example of good practice in chapter 3.5.5). The Federal Ministry also offers consulting for new and established companies with a grant from the programme "Promotion of entrepreneurial know-how". Founders can get advice from qualified consultants on economic, financial, personnel and organizational questions. Firms in difficulty also receive a consultancy grant for their restoration of performance and competitiveness.

At the Hessian level, various consultancy centres are available to prepare for business start-ups, whose services are financially supported. The responsible chambers offer free introductory advice. The RKW Hessen or the Hessian Trade Organisation, for example, support the search for suitable consultants and deduct the funding for the applicant. For activities in the SHAFE areas the following funding programmes are available:

- Hessen micro crowd or micro loans for operating and office equipment
- Start-up and growth financing loans (GuW, ERP and ERDF) to finance sustainable projects, including through social enterprises
- Guarantees designed to improve the chances of success in the credit negotiations with banks

Private companies also support start-ups. Banks offer advice and support in all phases of starting a business, especially on finance-related issues. Telekom Germany offers low special tariffs for founders, including packages for building websites, for search engine optimization or for the design of an on-line shop.

The Social Impact Lab in Frankfurt promotes social innovations. Innovative social start-ups receive a free support programme with individual coaching, professional advice, a fully equipped desk in the co-working space as well as technical and methodical support in financing and subsidy applications. The support runs up to eight months.

The online portal Stifter-helfen offers non-profit product donations, discounts in all IT areas and relevant know-how.

Subsidies to private households for costs of household-related services, which would significantly increase the demand of SHAFE products and services, are stipulated in the coalition agreement of the current Federal Government. Their implementation is being urged by business stakeholders. In the current period, however, no corresponding efforts have become apparent.

3.5.4 Available training concepts

Start-up seminars are offered by public and private institutions. The local chambers of crafts, chambers of industry and commerce as well as the local employment offices organise seminars for business start-ups. Private educational institutions and foundations as well as start-up coaches are also active in this field. Seminars for start-up entrepreneurs include information events, basic seminars as well as the targeted group and subject-specific seminars.

Information events usually highlight the pros and cons of self-employment. They present different options like franchising, company succession or the start-up of a new company. Further, entrepreneurial and personal risks are usually revealed and necessary steps in setting up a business are explained. General conditions such as business registration, choice of legal form and the overview of the financing and funding options are outlined. Such events last for 2-4 hours. Costs usually do not arise for prospective entrepreneurs.

Basic seminars provide an overview of the processes in the start-up phase. They usually focus on topics like business plan, market analysis, marketing strategy, financing, promotion, accounting, taxes, calculation, pricing, insurance, protection rights, permits and contract design. They include at least 20 learning units. Fees amount to between 30 and 180 € and are under certain conditions eligible for funding.

In order to deepen the topics of the basic seminar, founders can participate in a multi-week seminar or an intensive workshop. There, individual company concepts are developed and individual strengths and weaknesses analyses carried out. Costs and duration vary by provider.

If founders only need qualification in some areas, they can attend specific seminars, e. g. to create a business plan, or to perform market and location analyses, sales and profitability planning, risk and hedging management, accounting, or to engage in Internet and online marketing. Such seminars include at least 8 lessons and are often offered as a weekend seminar. The costs are at least 50 € and under certain conditions eligible for funding.

Persons who are unemployed or at risk of unemployment may receive an activation and placement voucher (AVGS) from the Employment Agency or the Job Centre. They can attend business start-up seminars free of charge. The activation and placement vouchers are meant to support the entry in the labour market. The vouchers can also be used for seminars like foreign language courses, software training, subject-specific further education or a career entry accompanied by individual coaching.

3.5.5 Examples of good training practice

BMWi-Lernprogramm Existenzgründung (online training)

Objectives

The eTrainings offered by the Federal Ministry for Economics and Technology aim to support founders in getting prepared for their work. They are directed at founders in general with specific units for female founders and professionals such as tax consultants, MPs or independent researchers.

Low-skilled adults are not explicitly mentioned as target groups. However, the construction of the tutorial is simple – usually slides with information, charts, quizzes and exercises – and thus suitable for those who are inexperienced in using online learning programmes.

Key facts

The eTrainings are embedded in the Platform for Founders. The Federal Ministry for Economics and Technology (BMWi) and the Kreditanstalt für Wiederaufbau (KfW) accompany the platform conceptually. The platform was established in April 2018. More than 100 banks, economic development agencies from all federal states and numerous chambers of commerce and industry support the portal as external partners.

The platform is meant to be a one-stop facility to handle all start-up-related preparations and receive individual advice, from brainstorming, through the development of the business model and the business plan, to the appropriate support and financing. In order to make

starting up a business in Germany easier, the platform assorts useful digital tools and integrates all key players in start-up consulting and financing.

The eTrainings are globally accessible without registration and free of charge.

Implementation

Each training consists of several chapters. Depending on previous knowledge, the lessons can be chosen freely. A basic tutorial of 2-3 hours informs about the most important preconditions and planning requirements for starting a business. Further trainings offer in-depth knowledge on specific topics.

- Legal forms: In 10 learning units, founders are informed about legal forms and their suitability for their own business, and a decision-making aid is offered.
- Financing: 4 learning units cover the planning of financial requirements, funding during the start-up phase and while the business is growing, as well as securities and sureties.
- Talking with banks: Founders can learn in 6 units how to convince a bank about the success of a project.
- Marketing: 5 learning units explain how marketing works and what opportunities it offers.
- Cooperation: The advantages of cooperation are explained in 3 learning units.
- Female founders: 6 learning units are geared to the needs and requirements of start-up-minded women with family and female small business owners.
- Independent professions: 5 learning units cover the definition of independent professions and their members, specific legal framework conditions and retirement provisions.

Tasks and exercises, learning checks, charts and diagrams, texts and further links are part of the learning units.

Results

More than 10.000 users registered in the non-public area within only a few months after the launch of the platform which is designed as an ongoing measure. No data about users of the eTraining is available.

More information

- https://www.existenzgruender.de/DE/Planer-Hilfen/Online-Training/inhalt.html

WBS Training: Personal coaching – inventory taking and assessment

Objectives

The educational offer intends to help to answer the questions such as how to optimally prepare for self-employment, how to create a business plan, which legal form is most suitable, what funding options and programmes are available, which marketing is appropriate, how to protect from private and business risks, and how to find a suitable location and operating rooms.

The offer is directed at all interested founders, either still gainfully employed, unemployed or at risk of unemployment. It is also apt for founders in the start-up phase. Low-skilled adults are not explicitly mentioned. However, personal coaching is the best possible approach to adapt learning contents and methods to individual wants and needs.

Key facts

The training is performed by a private adult education provider. The introduction of the activation and placement voucher (AVGS), tested and probed as of 2002 and finally implemented as a continuing measure in 2013, has resulted in various educational offers for persons concerned or threatened by unemployment. Also fees for the personal coaching of people entitled to AVGS are covered by the local Employment Agency or Job Centre. With 25 WBS training locations in Germany, their personal coaching can be considered a daily practice and rolled-out. Further WBS has realized more than 200 mobility projects in the framework of the Erasmus+ programme.

The professional requirements of coaches include a high level of expertise in all start-up-related areas. This is reflected in the job advertisements for trainers. No external stakeholders are involved in the training.

Implementation

In coordinated topic modules, the business strategy is elaborated jointly, and the essential know-how for a successful start in self-employment is taught. These modules cover the following topics:

- Foundation preparation and legal framework: Founding reasons, self-check of entrepreneur personality, formulation of business idea, location and choice of premises, market analysis, consulting and coaching, application and approval procedures, legal framework, choice of legal form, knowledge of GDPR, preparation of applications and documents
- Financing options and business plan: Modules of a business plan, criteria of success from the point of view of the donors, financing planning, founding with equity capital, basic knowledge of loans and support programmes for entrepreneurs, discussion with financial institutions
- Commercial basics: Accounting, liquidity planning, basics cost accounting, price calculation, receivables management, annual profit and loss, target-performance comparison
- Basics taxes and insurance: Income tax, sales tax, hedging private and corporate risks
- Role as founder and entrepreneur: Employee selection, leadership, communication, confident behaviour in business relationships, crisis management, self-marketing

The compilation of educational modules is possible and depending on personal requirements and individual needs. The maximum duration is 30 hours in 4 weeks.

Results

The results for the individual participant are described as follows: “After this qualification, you can start your business optimally prepared. You know how to create a business and financial plan, know financing options and have useful commercial knowledge. You are also familiar with applicable legislation and important insurance. So you can also calmly face unforeseen situations.”

More information

- https://www.wbstraining.de/weiterbildung-aktivierung-und-berufliche-eingliederung-heranfuehrung-an-eine-selbststaendige-taetigkeit-existenzgruendung-einzelcoaching-1/

4 Recommendations for training packages

4.1 Needs of the end-users and role of facilitators

Target groups of HEALTHY measures, including SMART applications, are all persons who are in need of cure or care or intend to prevent diseases. Although this covers in principle all ages and health states, older persons, persons with disability as well as their relatives are the predominant target groups. BUILT measures – with or without digital support – also aim to support in dealing with everyday tasks, especially as regards mobility. Again, older people and people with disability are primarily addressed; however, these measures can also be apt for tall or small people, including children, and people with luggage or prams.

Hence, in order to prepare facilitators-to-be for their tasks, especially the needs of persons at advanced age or with disability must be considered. As volunteers or self-employed persons with comparably low level of skills they will mostly be able to deal with needs of everyday life. Problems that demand solutions at technically advanced levels will remain to be subject to specialist knowledge; nevertheless, retired architects, for example, could cover this area as volunteers, too.

The role of facilitators will be to advise their clients and/or provide practical support in promoting healthy lifestyles as well as comfortable and safe living environments. Lobbying at political level is also a function worthwhile to be put forward. As it will not serve to earn one's living, this function will usually be performed by volunteers.

With view to the needs of people with functional restrictions or disability, facilitators must take the following aspects into account:

- The clients define the contents and methods of being counselled and supported.
- Communication must be based on their language and concepts of comprehension. Especially digital appliances should be explained in a way that is oriented at practical needs; patience is an obligatory prerequisite for facilitators.
- After a joint search for solutions to a problem, they define the measures to be applied and the speed of implementation.
- In order to provide a basis for profound decisions in this respect, it must be clarified how the measures work and what are their benefits.
- Concerns about potential negative side-effects, especially data protection issues, must be taken seriously.
- In case of solutions that need internet access, the technical preconditions as well as the readiness to learn how to apply them must be clarified.
- Technical solutions that are offered should be intuitive in application; also attractively designed products are easier to accept.
- Blended solutions, applying digital tools with personal accompaniment, can reduce barriers of persons who are not familiar with them.
- If digital solutions are rejected despite a thorough clarification of facts, alternatives should be offered although they may be only the second best solutions.

Facilitators must be aware that they are rendering support for situations that are not welcome. Older people are not inclined to prepare for being in dire straits well in advance.

Usually, help is sought when it is already difficult to deliver. Nevertheless, the number of older people who are internet-savvy should not be underestimated in the first place.

Relatives can be very supportive in assisting older people or people with disability to find and apply adequate solutions to their problems.

4.2 Strategies to attract and address potential SHAFE facilitators

According to the project concept, SHAFE facilitators include low-skilled adults intending to start their own business on one hand and volunteers on the other. Some strategies to attract and address them must be tailored to their specific primary motives; others apply to both target groups.

The benefit of SHAFE facilitating to the individual and common welfare should be pointed out in both cases. Its value must be important to everybody engaging in this area. The personal satisfaction of contributing in a meaningful way can also at least partly compensate for the fact that persons who want to earn their living as SHAFE facilitator will not get rich.

Given this background, it is to be recommended that key actors at political level – e.g. the town mayor – is publicly addressing interest persons and highlighting the value of SHAFE facilitation for the community and individuals in need of support. This also increases the status of volunteers and self-employed persons that cannot be derived from financial gains.

Another means to attract potential facilitators arises from opportunities for the personal development by certified educational offers. For younger persons certificates with detailed information on the gained knowledge are important for participating in the labour market. If publicly displayed, it proves the seriousness and quality orientation of one's own work. But also volunteers at retirement age should be issued a certificate as it demonstrates acknowledgement and appreciation of the educational efforts.

Finally, adequate working conditions play an important part in the decision for professional activities or volunteering. Facilitators planning to set up their own business will appreciate flexible working times. On the other hand, they must be sure that their commitment will serve to earn their living. Therefore personal coaching, especially in the preparatory phase, is essential to make best use of the market potentials.

Volunteers will not be interested in a gainful employment in the first place. But they expect satisfactory working conditions in which they can focus on activities that correspond with their motivation. Administrative work necessary to match demand and offers, for example, is seldom in their primary interest. Also individual overburdening must be avoided, e.g. by team solutions offering a substitute for times in which they have other obligations. The reimbursement of costs arising due to their activities (e.g. travel expenses) as well as accidence and third-party liability insurances should be considered as a matter of course by the organization running the facilitating offers. Allowances may be attractive to older volunteers with a low income.

4.3 Appropriate training contents and methods

For SHAFE facilitators in Germany who want to start their own business, there are favourable opportunities when their clients are funded for these services. This applies, for example, for running preventive sports programmes by licenced trainers or the support of people in their daily chores whose need of care is officially recognized. This also includes

respite care, befriending or mobility services. For housing advice, regional support structures exist for volunteers. Nevertheless, self-employed counselling does exist. Another market niche could be the sales of devices like easy-to-handle can openers, spikes for shoes for safe walking on slippery grounds, games for memory training etc. At exhibitions, older people are usually interested in purchasing them. But if they are only available on the internet, this barrier may be too high for many seniors.

It goes without saying that all these offers need a thorough preparation and training, depending on the chosen field. The training should result in a comprehensive understanding of the needs and characteristics of the clientele. This includes the reflection of one's own stereotypes in connection to age and old people. In addition to that, the training participants should develop skills in presentation and communication techniques, like active listening and moderating the search for solutions. They should also understand the necessity of a professional and respectful appearance.

The SHAFE project provides training packages that address these issues. Nevertheless, adult educators should be aware of the difficulties, if accredited training programmes are already run by institutions like the health insurance funds or umbrella associations with large outreach potential. In this case cooperation instead of competition may be an adequate approach.

Facilitators who want to start a business will have to get further training offers. Especially important are topics like legal and administrative requirements, an introduction into social entrepreneurship, advertising and public relations, and setting up a business plan. The latter will have to include a market analysis and is indispensable if funding is applied for in the initial work phase.

As regards the training methods, job shadowing, personal coaching and blended learning were recommended by the interviewed experts. For volunteers, 60 learning units were considered the upper limit; this is in accord with the duration of the courses for licenced trainers in preventive sports programmes. Professional advice and the sharing of experiences once a week should be arranged for at least six months after the training.

4.4 Strategies to sustain the training outcomes

A couple of measures are important to sustain the activities of SHAFE facilitators. Organisations that run measures with volunteers should at least provide the following support:

- Logistical provisions: SHAFE facilitators may need a workplace to organise meetings and to offer consulting hours for citizens who want to contact them (e.g. for advice in housing issues). These rooms can be located in municipality buildings, community centres or day centres and should have a low threshold for seniors. Further, the work of SHAFE facilitators may require office equipment (such as computers, telephones and an internet access). Without these facilities, long-term projects will be very difficult to coordinate and implement.
- Organisational support and provisions: Clear goals of the activities and organisational structure are crucial factors. Administrative burdens should be reduced as far as possible by paid staff. Besides framework conditions like allowances, the reimbursement of costs and insurances, other aspects of the legal framework conditions (e.g. data protection) must be clarified. Also, continuous communication among SHAFE facilitators should be promoted. The exchange of information, knowledge and expertise, as well as sharing

methods and good practices are supportive conditions. Specific training on digital applications (E-Mail, SMS, WhatsApp, Dropbox, etc.), internal workflows and work organisation should be offered in case of need.

- Support in public relations: The knowledge of the community on SHAFE facilitation offers is also important to generate resonance and motivate persons to make use of the offers. Effective public relations can be established in cooperation with local newspapers (still a preferred information source by older people) and parishes. Older people's organisations may also play a role in the dissemination of SHAFE facilitation offers to a broad (older) public. The public recognition of the achievements of SHAFE facilitators by local authorities and policy-makers – e.g. on "thank-you-events", receptions or the bestowals of badges of honour – are important to motivate them in the long run.

The above-mentioned measures are necessary for a successful work of volunteers. Parts of it can be also used to sustain the work of self-employed SHAFE facilitators.

5 Quotes of experts and stakeholders

> Certain diseases require time-consuming therapies to be treated successfully. Digital technologies make it possible to help here and offer successful therapy concepts.
>
> *Medical expert, Kassel*

> Current technical developments give us the possibility to develop forms of therapy that people can use individually with the help of an app. In this way, people all over the world could be helped, even if medical infrastructure is lacking.
>
> *Medical expert, Kassel*

> When counselling older people, it is important to take them seriously and give them time to describe their problems. Only then can solutions be developed together. It's a waste of time trying to teach them what's best for them.
>
> *Honorary counsellor on housing adaptation, Hanau*

> Conversational skills and a correct personal appearance are key competences that should not be missing in any training for consultants.
>
> *Honorary counsellor on housing adaptation, Hanau*

> Data protection is an important issue. People need to trust technical solutions.
>
> *Entrepreneur in AAL products, Weiterstadt*

> In construction we are planning for 100 years ahead, but the digital sector is very short-lived. We have to create a good technical infrastructure in houses to provide a basis for the future innovations.
>
> *Entrepreneur in AAL products, Weiterstadt*

> Technical assistance systems for older people must be attractive and modern. If they are used with pleasure, they are a good companion for everyday life.
>
> *Project developer, Wiesbaden*

> All technical aids are always just a supplement. Human closeness and affection cannot be replaced.
>
> *Project developer, Wiesbaden*

I have the impression that many technical solutions have currently more or less a placebo effect. But often the devices help to strengthen self-confidence and ensure independence.

Urban planner, Bensheim

We need good structures in the districts and in the neighbourhood. Human contact is most important, and there is nothing worse than when emergencies go unnoticed.

Urban planner, Bensheim

Never underrate an older person!

Advisor in adult education, Hanau

You have to reconsider your age picture constantly and ask yourself: whom do I sit across from?

Advisor in adult education, Hanau

It is important that there are human beings that are guiding and explaining things.

Advisor in adult education, Hanau

There has to be somebody who cares. You can never replace human attention.

Urban developer, Hanau

For products and services that are generally disliked, advertising is meaningless.

Advisor of older people, Hanau

Credibility is most important. You have to have the feeling that somebody cares.

Volunteer, Hanau

People use to reconsider their housing situation when it is already too late.

Volunteer, Hanau

With further technical support you can minimize the risks of accidents, but you can never fully eliminate these risks.

Urban developer, Hanau

> Tele-presence robots are a good solution to bridge the distance between helpers and the people in need of care.
>
> *Volunteer, Hanau*

> In the area of IT-solutions, coaches have to cater especially to the learning pace and the language of older people.
>
> *Urban planner, Bensheim*

6 Sources

AERZTEBLATT.DE. Polypharmakotherapie im Alter: Weniger Medikamente sind oft mehr. [Online] Available from: https://www.aerzteblatt.de/archiv/123048/Polypharmakotherapie-im-Alter-Weniger-Medikamente-sind-oft-mehr [Accessed: 9th December 2019].

ANDERS GRÜNDER. Der Inkubator für Social Start-ups. [Online] Available from: https://andersgruender.eu/ [Accessed: 2nd December 2019].

BRÜDER-GRIMM-STADT HANAU. Hanauer Zahlen. [Online] Available from: https://www.hanau.de/mam/Stadtentwicklung/statistik/hanauer_zahlen_12_2013.pdf [Accessed: 6th December 2019].

BUNDESAGENTUR FÜR ARBEIT. Existenzgründung und Gründungszuschuss. [Online] Available from: https://www.arbeitsagentur.de/existenzgruendung-gruendungszuschuss [Accessed: 2nd December 2019].

BUNDESARBEITSGEMEINSCHAFT WOHNUNGSANPASSUNG. Wohnberatungsstellen. [Online] Available from: http://www.wohnungsanpassung-bag.de/seite/259749/wohnberatungstellen.html [Accessed: 9th December 2019].

BUNDESMINISTERIUM FÜR GESUNDHEIT (2007). Gesundheitsförderung und Prävention für ältere Menschen im Setting Kommune. Online] Available from: https://www.in-form.de/fileadmin/Dokumente/Materialien/Gesundheitsf%C3%B6rderung_und_Pr%C3%A4vention.pdf [Accessed: 9th December 2019].

BUNDESMINISTERIUM FÜR GESUNDHEIT. (2019) E-Health – Digitalisierung im Gesundheitswesen. [Online] Available from: https://www.bundesgesundheitsministerium.de/e-health-initiative.html. [Accessed: 8th January 2020].

BUNDESMINISTERIUM FÜR GESUNDHEIT. (2020). Diagnose Demenz: Krankheitsbild und Verlauf. [Online] Available from: https://www.bundesgesundheitsministerium.de/themen/pflege/online-ratgeber-demenz/krankheitsbild-und-verlauf.html. [Accessed: 7th February 2020].

BUNDESMINISTERIUM FÜR VERKEHR, BAU UND STADTENTWICKLUNG (ed.) (2011). Wohnen im Alter. Marktprozesse und wohnungspolitischer Handlungsbedarf. Forschungen, Heft 147. [Online] Available from: https://www.bbsr.bund.de/BBSR/DE/Veroeffentlichungen/ministerien/BMVBS/Forschungen/2011/Heft147_DL.pdf?__blob=publicationFile&v=2 [Accessed: 9th December 2019].

BUNDESAMT FÜR WIRTSCHAFT UND AUSFUHRKONTROLLE. Unternehmensberatung. [Online] Available from: https://www.bafa.de/DE/Wirtschafts_Mittelstandsfoerderung/Beratung_Finanzierung/Unternehmensberatung/unternehmensberatung_node.html [Accessed: 2nd December 2019].

BUNDESMINISTERIUM FÜR WIRTSCHAFT UND ENERGIE. Existenzgründungsportal. [Online] Available from: https://www.existenzgruender.de/DE/Gruendung-vorbereiten/Entscheidung/Beratung/Beratungsfoerderung/inhalt.html;jsessionid=1D8824AC1AD3B0B1C5B98009DF7F41CD [Accessed: 2nd December 2019].

DELOITTE (2018). 1Smart Home Consumer Survey 2018. [Online] Available from: https://www2.deloitte.com/content/dam/Deloitte/de/Documents/technology-media-telecommunications/Deloitte_TMT_Smart_Home_Studie_18.pdf [Accessed: 6th December 2019].

DESTATIS (2016). Ältere Menschen in Deutschland und der EU. [Online] Available from: https://www.bmfsfj.de/blob/93214/95d5fc19e3791f90f8d582d61b13a95e/aeltere-menschen-deutschland-eu-data.pdf [Accessed 18 th December 2019]

DESTATIS. Eckzahlen zum Arbeitsmarkt, Deutschland. [Online] Available from: https://www.destatis.de/DE/Themen/Arbeit/Arbeitsmarkt/Erwerbstaetigkeit/Tabellen/eckwerttabelle.html [Accessed: 5th December 2019].

DESTATIS. Internetnutzung. [Online] Available from:

https://www.destatis.de/DE/Themen/Gesellschaft-Umwelt/Einkommen-Konsum-Lebensbedingungen/IT-Nutzung/Tabellen/durchschnittl-nutzung-alter-ikt.html [Accessed: 6th December 2019].

DESTATIS (2018). Wirtschaftsrechnungen. Private Haushalte in der Informationsgesellschaft –Nutzung von Informations- und Kommunikationstechnologien. Fachserie 15, Reihe 4. [Online] Available from: https://www.destatis.de/DE/Themen/Gesellschaft-Umwelt/Einkommen-Konsum-Lebensbedingungen/IT-Nutzung/Publikationen/Downloads-IT-Nutzung/private-haushalte-ikt-2150400187004.pdf?__blob=publicationFile [Accessed: 6th December 2019].

DESTATIS. 9 % der Internetnutzerinnen und -nutzer verwenden Smart-Home-Technologie. [Online] Available from: https://www.destatis.de/DE/Presse/Pressemitteilungen/2019/09/PD19_335_639.html [Accessed: 6th December 2019].

DEUTSCHE GESELLSCHAFT FÜR GERONTOTECHNIK. (2019) Besser Leben mit Komfort & Qualität – Empfehlenswerte Produkte für alle Gnerationen. [Online] Available from: https://www.komfort-und-qualitaet.de/2019/. [Accessed: 8th January 2020].

E-HEALTH INITIATIVE HESSEN. (2020) Gut vernetzt, bestens versorgt. [Online] Available from: https://www.ehealth-in-hessen.de/initiative. [Accessed: 8th January 2020].

EUROPEAN COMMISSION. (2010) Communication from the Commission – Europe 2020 – A strategy for smart, sustainable and inclusive growth. [Online] Available from: https://ec.europa.eu/eu2020/pdf/COMPLET%20EN%20BARROSO%20%20%20007%20-%20Europe%202020%20-%20EN%20version.pdf. [Accessed: 7th February 2020].

EUROPEAN COMMISSION (2010)(2) European Disability Strategy 2010-2020: A Renewed Commitment to a Barrier-Free Europe. [Online]Available from: https://eur-lex.europa.eu/LexUriServ/LexUriServ.do?uri=COM:2010:0636:FIN:en:PDF. [Accessed: 7th February 2020].

EUROPEAN COMMISSION. (2015) Communication from the Commission to the European Parliament, the Council, the European Economic and Social Committee and the Committee of the Regions – A Digital Single Market Strategy for Europe. [Online] Available from: https://eur-lex.europa.eu/legal-content/EN/TXT/HTML/?uri=CELEX:52015DC0192&from=EN. [Accessed: 7th February 2020].

EUROPEAN PARLIAMENTARY RESEARCH SERVICE (2018). Assistive technologies for people with disabilities. [Online] Available from: http://www.europarl.europa.eu/RegData/etudes/IDAN/2018/603218/EPRS_IDA(2018)603218_EN.pdf [Accessed: 6th December 2019].

FRANCHISEPORTAL. Praxiswissen für Fortgeschrittene [Online] Available from: https://www.franchiseportal.de/wissen-fuer-gruender/praxiswissen/ein-unternehmen-gruenden-rechtliche-voraussetzungen-und-formalitaeten-a-30322.html [Accessed: 2nd December 2019].

FRAUNHOFER-IN HAUS-ZENTRUM. Intelligente Raum- und Gebäudesysteme. [Online] Available from: https://www.inhaus.fraunhofer.de/content/dam/inhaus/de/documents/DokumentezumDownload/PP_Standardpr%C3%A4sentation_Fraunhofer-inHaus-Zentrum.pdf. [Accessed: 7th February 2020].

FÜR-GRÜNDER.DE. Selbstständig aus der Arbeitslosigkeit: Ihre Förderung. [Online] Available from: https://www.fuer-gruender.de/wissen/existenzgruendung-planen/selbststaendig-machen/arbeitslosigkeit/ [Accessed: 2nd December 2019].

FÜR-GRÜNDER.DE. Seminare für Existenzgründer: wertvolle Hinweise. [Online] Available from: https://www.fuer-gruender.de/beratung/termine/existenzgruenderseminar/gruenderseminare-im-ueberblick/ [Accessed: 2nd December 2019].

GERLINGER, THOMAS (2018). Baustelle Gesundheitssytem. Aktuelle Herausforderungen in der Gesundheitspolitik – Essay. [Online] Available from: https://www.bpb.de/apuz/270312/baustelle-gesundheitssystem-aktuelle-herausforderungen-in-der-gesundheitspolitik-essay. [Accessed: 7th February 2020].

GKV SPITZENVERBAND. Hilfsmittelverzeichnis. [Online] Available from: https://hilfsmittel.gkv-spitzenverband.de/hmvAnzeigen_input.action [Accessed: 9th December 2019].

GODDEMEIER, M. (2019). Megatrend Silver Economy: Profitieren vom demografischen Wandel. [Online] Available from: https://boerse.ard.de/anlagestrategie/branchen/demografie-alterung100.html [Accessed: 8 th January 2020]

HESSENAGENTUR. Gemeindelexikon. [Online] Available from: https://www.hessen-agentur.de/dynasite.cfm?dsmid=18822 [Accessed: 4th December 2019].

HESSEN TRADE & INVEST.(2019) Cluster- und Netzwerkinitiativen in Hessen. [Online] Available from: https://www.technologieland-hessen.de/mm///mm001/Cluster_und_Netzwerkinitiativen_in_Hessen_2019.pdf. [Accessed: 7th February 2020].

HESSISCHES MINISTERIUM FÜR SOZIALES UND INTEGRATION. Wohnen im Alter. [Online] https://soziales.hessen.de/familie-soziales/senioren/sicher-und-selbstbestimmt-leben [Accessed: 9th December 2019].

HESSISCHES MINISTERIUM FÜR WIRTSCHAFT, ENERGIE, VERKEHR UND WOHNEN. Gründung aus der Arbeitslosigkeit. [Online] Available from: https://existenzgruendung.hessen.de/gr%C3%BCndungsformen/gr%C3%BCndung-aus-der-arbeitslosigkeit [Accessed: 2nd December 2019].

INDAGO. (2014) Home. [Online] Available from: http://www.indago-projekt.de/index.php?id=255. [Accessed: 7th February 2020].

IN FORM. (2020) WHO-Bericht zu Zivilisationskrankheiten. [Online]Available from: https://www.in-form.de/wissen/meldungen/profiportal/who-bericht-zu-zivilisationskrankheiten/. [Accessed: 7th February 2020].

INITIATIVE D21. (2019) D21 Digital Index 2018/2019 – Jährliches Lagebild zur Digitalen Gesellschaft. [Online] Available from: https://initiatived21.de/app/uploads/2019/01/d21_index2018_2019.pdf. [Accessed: 7th February 2020].

ISS IM DIALOG (2014) Sorgende Gemeinschaften – Vom Leitbild zu Handlungsansätzen. [Online] Available from: https://www.iss-ffm.de/fileadmin/assets/veroeffentlichungen/downloads/Sorgende_Gemeinschaften_-_Vom_Leitbild_zu_Handlungsans_auml_tzen.pdf [Accessed: 14th February 2020].

JOO, B. (2018). Politik der altersgerechten Wohnungsanpassung und Wohnberatung für einen möglichst langen Verbleib in vertrauter Häuslichkeit. Anschluss an die Konzepte des Wohlfahrtsmarktes und der sozialen Innovation. [Online] Available from: https://eldorado.tu-dortmund.de/bitstream/2003/36821/1/Dissertation_Joo.pdf [Accessed: 8th December 2019].

KFW. (2019). Merkblatt: Barrierereduzierung-Investitionszuschuss. [Online] Available from: https://www.kfw.de/PDF/Download-Center/F%C3%B6rderprogramme-(Inlandsf%C3%B6rderung)/PDF-Dokumente/6000004452_M_455_B.pdf. [Accessed: 13th February 2020].

MAGISTRAT DER STADT BENSHEIM. Die Chancen ergreifen – Wohnen altersgerecht gestalten. [Online] Available from: https://www.bensheim.de/fileadmin/media/bensheim/04-Leben-in-Bensheim/Demographie/Wohnen-altersgerecht-gestalten-Broschuere-altersgerechter-umbau-2013.pdf. [Accessed: 7th February 2020].

MANAGER INSTITUT. Unternehmensgründung / Existenzgründung – Seminare und Weiterbildung. [Online] Available from: https://www.manager-institut.de/unternehmensgruendung.html [Accessed: 02/12/19].

MOBILITY SCOUTS. (2020) Ältere Menschen gestalten eine altersgerechte Lebenswelt. [Online] Available from: https://www.hanau.de/vielfalt-leben/projekte/mobilitaetsscout/index.html. [Accessed: 7th February 2020].

NETZWERK DEMENZ. (2016) Demenzwegweiser Bensheim – Informationen, Hilfe und Beratungsangebote für Betroffene und Angehörige. [Online] Available from: https://www.kreis-bergstrasse.de/pics/medien/1_1515575528/Demenzwegweiser_Bensheim.pdf. [Accessed: 7th February 2020].

PRESSE UND –INFORMATIONSAMT DER BUNDESREGIERUNG. (2019) Digitalisierung gestalten – Umsetzungsstrategie der Bundesregierung. [Online] Available from: https://www.bundesregierung.de/resource/blob/975226/1552758/c34e443dbe732e79c9439585b4fbade5/pdf-umsetzungsstrategie-digitalisierung-data.pdf?download=1. [Accessed: 7th February 2020].

PROJEKTSTADT (2019). Raum im Wandel – Zwei starke Partnerin der Region am Beispiel der Kreisfreiheit Hanau. [Online] Available from: https://hanau.de/mam/rathaus/kreisfreiheit/2019_07_05_hanau_-_raum_im_wandel.pdf [Accessed: 4th December 2019].

QUARTIERSMANAGEMENT RÖDELHEIM WEST. (2019) Projekte. [Online] Available from: https://www.diakonie-frankfurt-offenbach.de/ich-suche-hilfe/leben-in-ffm-unterwegs/soziale-stadt/nachbarschaftsbuero-roedelheim-west/. [Accessed: 9th January 2020].

ROBERT-KOCH-INSTITUT. Gesundheit in Deutschland. Wie gesund sind die älteren Menschen? [Online] Available from https://www.rki.de/DE/Content/Gesundheitsmonitoring/Gesundheitsberichterstattung/GBEDownloadsGiD/2015/08_gesundheit_in_deutschland.pdf?__blob=publicationFile [Accessed: 9th December 2019].

SENIORENBÜRO HANAU. (2019) Beratung und Hilfe für Digitale Medien. [Online] Available from: https://www.hanau.de/freizeit/veranstaltungskalender/veranstaltungen/007881.html. [Accessed: 7th February 2020].

STATISTA. Bedarfsanstieg ausgewählter medizinischer Hilfsmittel im Zeitraum von 2007 bis 2050. [Online] Available from https://de.statista.com/statistik/daten/studie/247662/umfrage/bedarfsanstieg-ausgewaehlter-medizinischer-hilfsmittel-bis-2050/ [Accessed: 9th December 2019].

STATISTA. Smart Home. [Online] Available from https://de.statista.com/outlook/279/137/smart-home/deutschland [Accessed: 6th December 2019].

STIFTER HELFEN. IT für Non-Profits. [Online] Available from: https://www.stifter-helfen.de/ [Accessed: 2nd December 2019].

ROBERT KOCH INSTITUT**.** (2015) Gesundheit in Deutschland - Gesundheitsbericherstattung des Bundes – Gemeinsam getragen von RKI und DESTATIS. [Online] Available from: https://www.rki.de/DE/Content/Gesundheitsmonitoring/Gesundheitsberichterstattung/GesInDtld/gesundheit_in_deutschland_2015.pdf?__blob=publicationFile. [Accessed: 7th February 2020].

STATISTISCHES BUNDESAMT**.** (2018) IKT-Branche 2016. [Online] Available from: https://www.destatis.de/DE/Themen/Branchen-Unternehmen/Unternehmen/IKT-in-Unternehmen-IKT-Branche/Publikationen/Downloads-IKT/flyer-ikt-branche-5529106167004.pdf?__blob=publicationFile&v=4. [Accessed: 7th February 2020].

TECHNIKER KRANKENKASSE**.** (2020) Digitale Gesundheit. [Online] Available from: https://www.tk.de/techniker/magazin/digitale-gesundheit-2000210. [Accessed: 7th February 2020].

VARNAI, P. et al. (2018). The silver economy. Final Report. [Online] Available from: https://ec.europa.eu/digital-single-market/en/news/silver-economy-study-how-stimulate-economy-hundreds-millions-euros-year [Accessed 27 th November 2019]

VARNAI, P. et al. (2018). The silver economy. Annexes. [Online] Available from: https://ec.europa.eu/digital-single-market/en/news/silver-economy-study-how-stimulate-economy-hundreds-millions-euros-year [Accessed 27 th November 2019]

VOLKSHOCHSCHULE FRANKFURT AM MAIN. (2018) Aktiv im Alter – Kurse für aktive Seniorinnen und Senioren. [Online] Available from: https://vhs.frankfurt.de/VHSFFM/media/InfocenterDownloads/Programm_02_2018/VHSffm_AktivImAlter_Prg_2018_02.pdf [Accessed: 7th February 2020].

WBS TRAINING. Erfolgreich gründen: Ihr Weg in die Selbstständigkeit. [Online] Available from: https://www.wbstraining.de/weiterbildung-existenzgruendung/ [Accessed: 2nd December 2019].

WHO. (2017) Global strategy and action plan on ageing and health. [Online] Available from: https://www.who.int/ageing/WHO-GSAP-2017.pdf?ua=1. [Accessed: 7th February 2020].

WHO. (2018) Towards a dementia plan: a WHO guide. [Online] Available from: https://apps.who.int/iris/bitstream/handle/10665/272642/9789241514132-eng.pdf?ua=1. [Accessed: 7th February 2020].

WHO. (2019) Neue WHO-Leitlinien fördern eine gesunde Lebensweise zur Verringerung des Risikos einer Demenzerkrankung. [Online] Available from: http://www.euro.who.int/de/health-topics/noncommunicable-diseases/mental-health/news/news/2019/5/new-who-guidelines-promote-healthy-lifestyle-to-reduce-risk-of-dementia. [Accessed: 7th February 2020].