NEEDS ASSESSMENT FOR ACTIVE ASSISTED LIVING CONCEPTS AMONG THE ELDERLY

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Agenda

Health and social care needs of the elderly

Determinants of needs

Characteristics of the Austrian care system

Needs assessment

AAL-Welten-Modell

Health and social care needs of the elderly

„*Need*"= desire to significantly improve the current situation or to correct a deficiency

Needs of older people differ from those of other age groups, needs such as housing.

Health and social care needs are highly influenced by:

1) Political / Economic developments

2) Societal developments

3) Demographic developments

Gebreyohannis, B. & Kharel, K. (2012). *Needs Assessment for Assisted Living facilities among elderly population*. Centria University of Applied Sciences. Finland.
Koch, S. (2010). *Healthy ageing supported by technology – a cross-disciplinary research challenge*. Health Informatics Centre. Stockholm, Sweden.

Societal development

- Increasing number of older people living alone

- Greater desire of autonomy

- Higher awareness of a better and healthy lifestyle

- Increased mobility

Political / Economic development

- Greater expectations of the quality of healthcare system

- Financial resource constraints

- Shortage of skilled labour

- Oversupply

Koch, S. (2010). *Healthy ageing supported by technology – a cross-disciplinary research challenge*. Health Informatics Centre. Stockholm, Sweden.
WHO. (2015). *World Report on Ageing and Health*. Available at: http://www.who.int/ageing/events/world-report-2015-launch/en/ [23.11.2018]

The population of Austria vs. Burgenland by demographic characteristics

Great **east-west-differences** in **Austria** as well as **north-south-differences** in **Burgenland** → no fundamental explanations for that!

The Region South Burgenland has:

- On of the lowest life expectancies in Austria

- Highest mortality rate (due to cardiovascular diseases)

- One of the lowest birth rates

West-east-differences

North-south-differences

Oberösterreich

Niederösterreich

Vorarlberg

Tirol

Salzburg

Steiermark

Tirol

Kärnten

South Burgenland

Statistik Austria. (2018). *Österreichische Gesundheitsstatistik*. Available at: http://www.statistik-austria.at/web_de/statistiken/menschen_und_gesellschaft/gesundheit/index.html [23.11.2018]
Szabo, B., Stöller, J., Hauer, K., Csar, B., Gollner, E. & Schnabel, F. (2018). *Burgenländischer Gesundheitsbericht 2017 Langfassung*. Amt der Burgenländischen Landesregierung - Abteilung 6 Soziales und Gesundheit (Hrsg.). Eisenstadt: Erstes Burgenländisches Rechenzentrum.

Demographic Forecast & Future Challenges

- Total population of Austria will **increase to 9.43 million people (+9%) until 2030.**

- **Elderly population in Austria will grow**
18.6% (2017) → **28.1% (2060**)

Rising life expectancy

Rising healthcare costs

Lower birth rates

Future challanges

Increasing chronical disease prevalance

Higher mortality

Ageing population

Inequalties of health

WHO. (2015). *World Report on Ageing and Health*. Available at: http://www.who.int/ageing/events/world-report-2015-launch/en/ [23.11.2018]
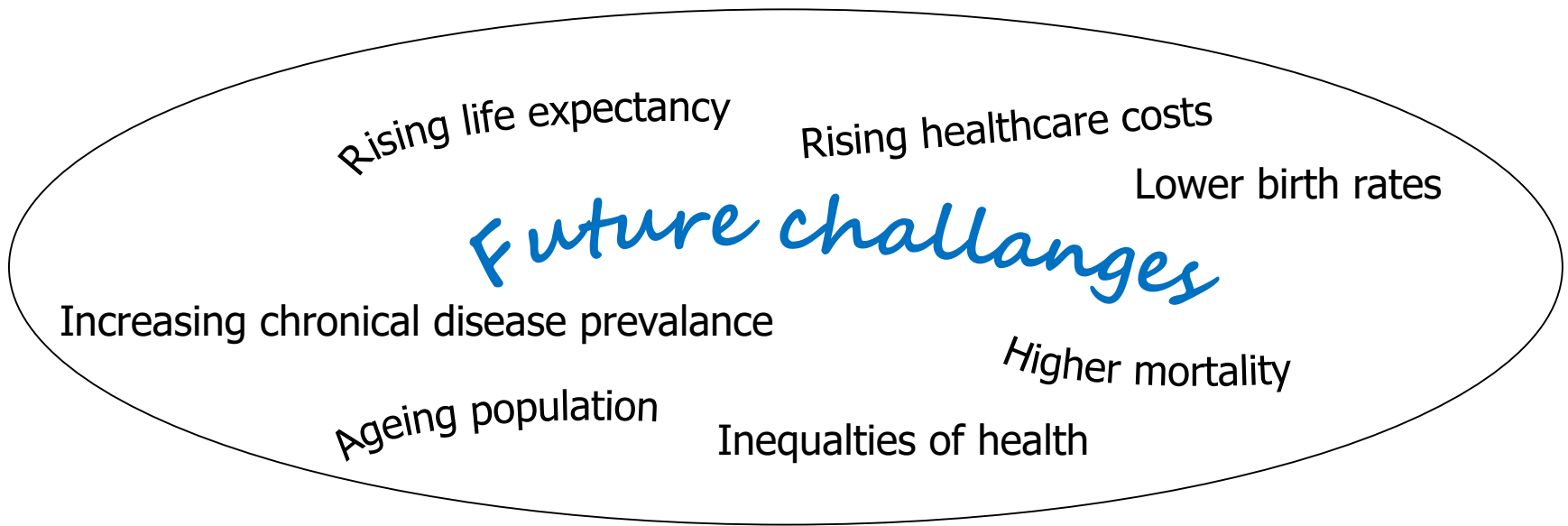
Basic characteristics of the Austrian care system

1. **Informal care**

2. **Formal care**
   - Institutional (inpatient) care
   - Home-based care (mobile services)
   - Semi-institutional care

457
Thousand people receive federal long-term care allowance at the moment

750
Thousand people will receive federal long-term care allowance until 2050 (according to Wifo expectations)

Technical solutions could bring significant reliefs here - for those who are affected, but also for the health and social care system.

A large variety of challenges in elderly care!

Bundesministerium für Arbeit, Soziales, Gesundheit und Konsumentenschutz.(2010). The Austrian Health Care System: Key facts. Available at:
https://www.bmgf.gv.at/cms/home/attachments/2/7/1/CH1602/CMS1475570873153/the_austrian_health_care_system.pdf [23.11.2018].
Statistik Austria. (2018). *Betreuungs- und Pflegedienste*. Available at: http://www.statistik-austria.at/web_de/statistiken/menschen_und_gesellschaft/soziales/sozialleistungen_auf_landesebene/betreuungs_und_pflegedienste/index.html [23.11.2018].
Famira-Mühlberger, U., Firgo, O. F. & Streicher, G.(2017). *Österreich 2025: Pflegevorsorge- Künftiger Finanzierungsaufwand und regionalwirtschaftliche Verflechtungen*. Österreichisches Institut für Wirtschaftsforschung (Hrsg). Wien.

Need-oriented Active and Assisted Living technologies have the potential to:

- Improve ability to self-manage their health + wellbeing, safety as well as the social participation

- Alert health professionals to changes in the patient's condition and support medication and care adherence

- Support health and social care providers to deliver safer, more efficient and cost-effective care

- Increase the efficiency and productivity of used resources in the ageig societies

Active & Assisted Living (AAL)

- Wide range of different AAL technologies, services & concepts

- <u>Problem</u>: Often no connection to the needs of end-users

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- Not only the right technology is required, also infos about the life situation and needs of the target group(s) to **put human centre stage**

> „*Patients / clients are the most underused resource*"
> Warner Slack

Focus on the needs of the elderly and hear the voice of the older people → But what are the needs of the elderly and how can we assess the needs?

Our approach: AAL-Welten-Modell

Schön, S., Schneider, C., Wieden-Bischof, D. & Willner, V. (2016). *Das Potential verfügbarer Daten – für Forschung und Entwicklung im Kontext von Active and Assisted Living (AAL) bzw. Ambient Assisted Living (AAL)*. Norderstedt: BoD Verlag.

Needs assessment at a glance

Needs assessment (NA):
Systematic method for reviewing the health and social needs + capacity facing a population

The NA helps all people / parties involved to obtain a general sense of the level of (technical) assistance required

NA is carried out in the framework of two research projects of the FHB:

→ Interreg SI-AT Project "COOP4HEALTHCARE"

→ Interreg Central Europe Project "digitalLIFE4CE"

Gebreyohannis, B. & Kharel, K. (2012). *Needs Assessment for Assisted Living facilities among elderly population*. Centria University of Applied Sciences. Finland.

Summary: Needs assessment

Start

Step ONE
"Getting started"

Definition of the target population, desired objectives, involved actors, ressources;

Step TWO
Designing an instrument for needs identification

AAL-Welten-Modell

Model to collect data about the needs of assistance and support in daily living along various areas of life

Step THREE
Selecting + describing the research methods

1. Literature research
2. Questionnaire based on the AAL-Welten-Modell

Step FOUR
Performing an Pre-Assessment

Conduct the pre-assessment and evaluate the results

Spotlight on: „AAL-Welten-Modell

Weghofer, A. & Mut M. (2018). *AAL-Welten-Modell*. Science. Research. Pannonia. Fachhochschule Burgenland GmbH. Pinkafeld.

Individual Area

Age

Occupational

Gender

Human values

Marital status

Health status

Education

Health restriction

Income

Lifestyle
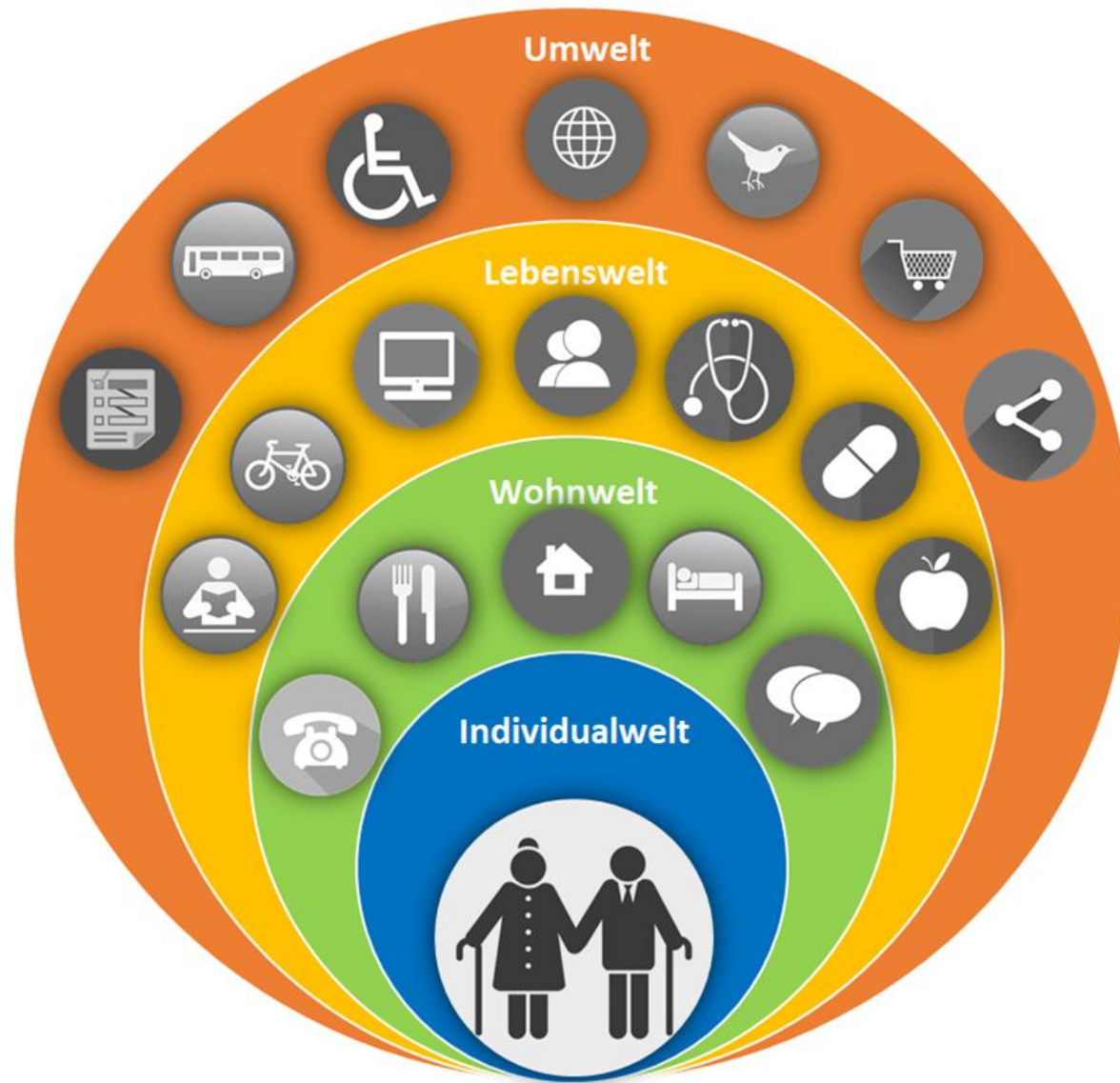
Individualwelt
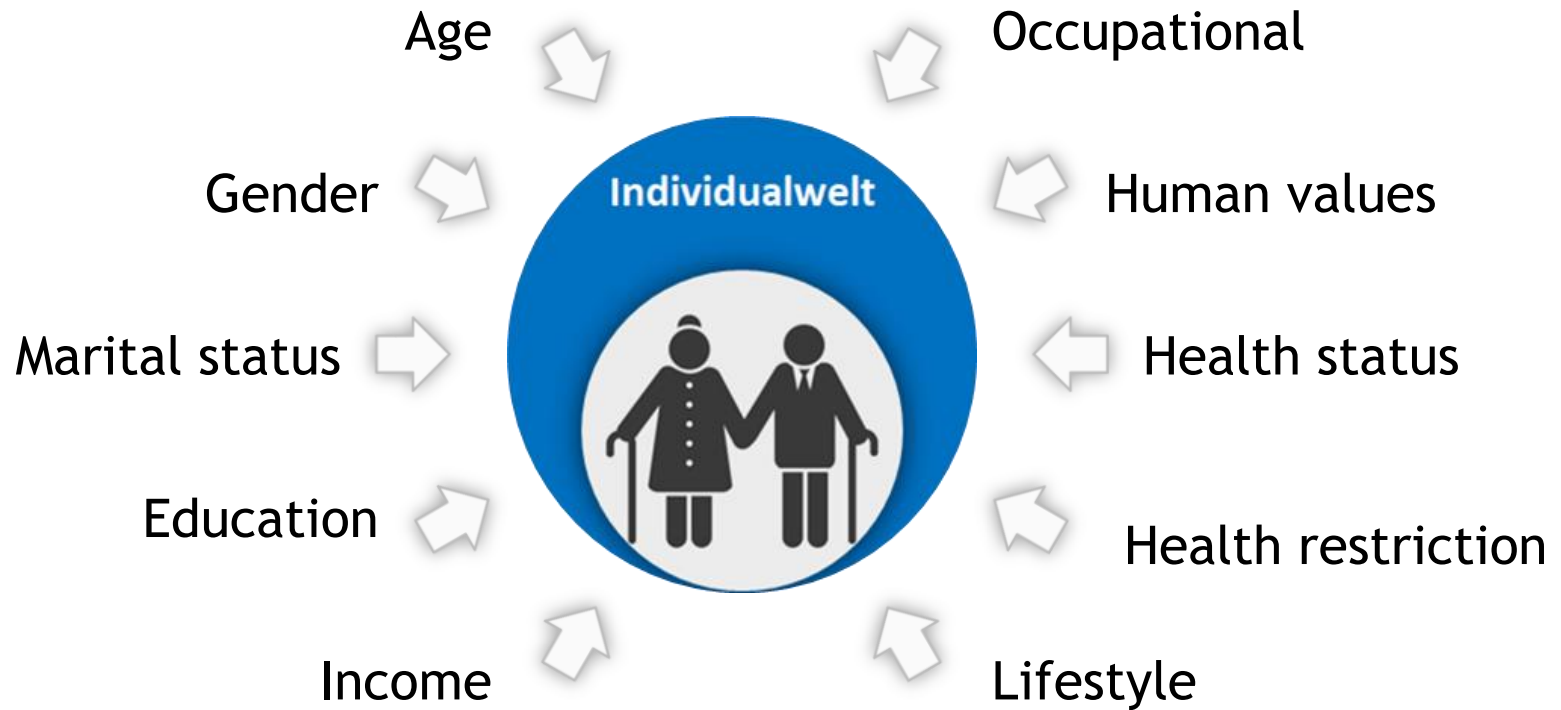
Level of „AAL-Welten-Modell"
Living Area

Daily activities

Living conditions

Food preparation

Living ambience

Assistive Technologies

Interiour

Houskeeping

Neighbourhood relationships

Body hygiene

Lifestyle
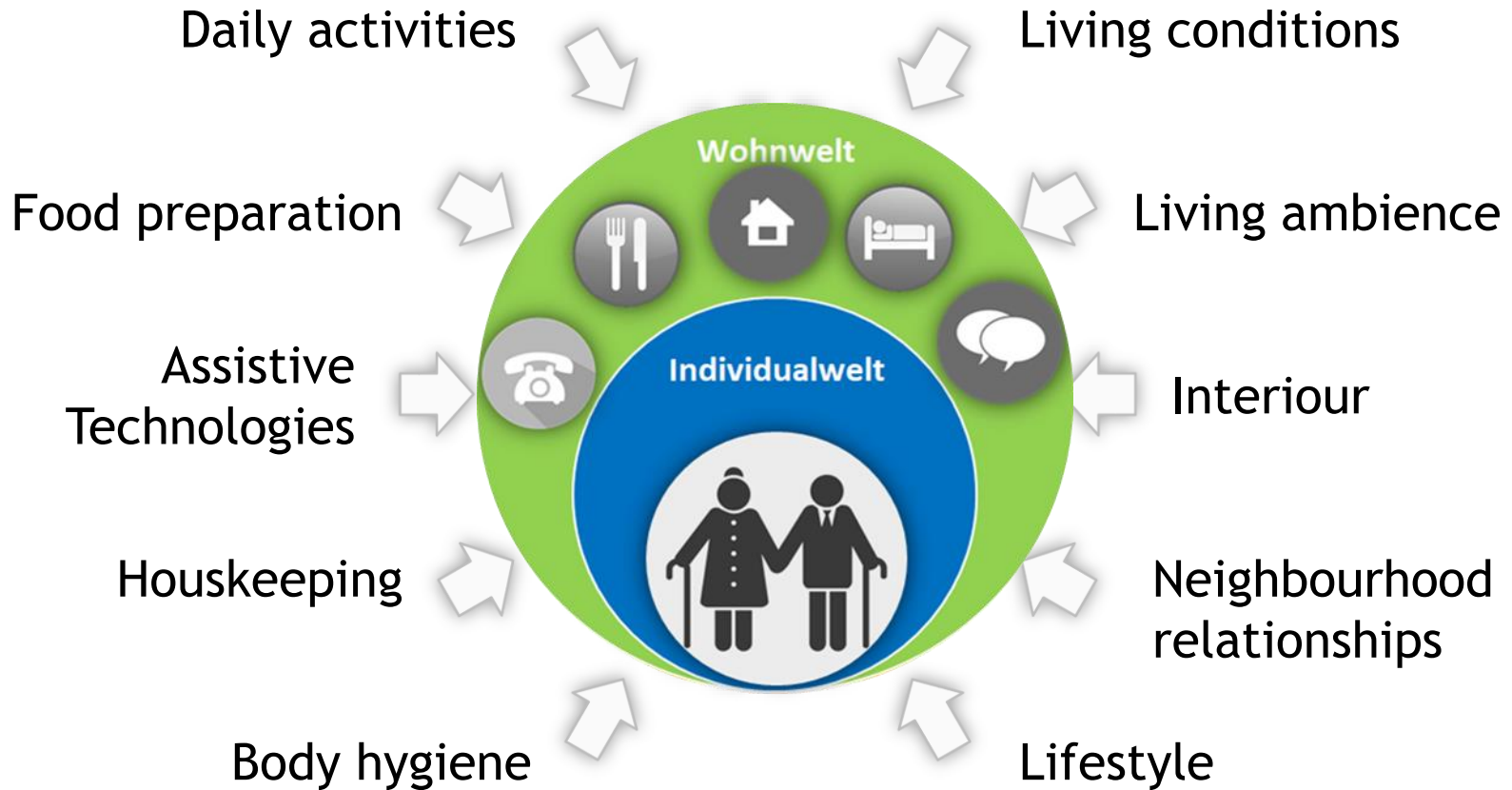
Life Area
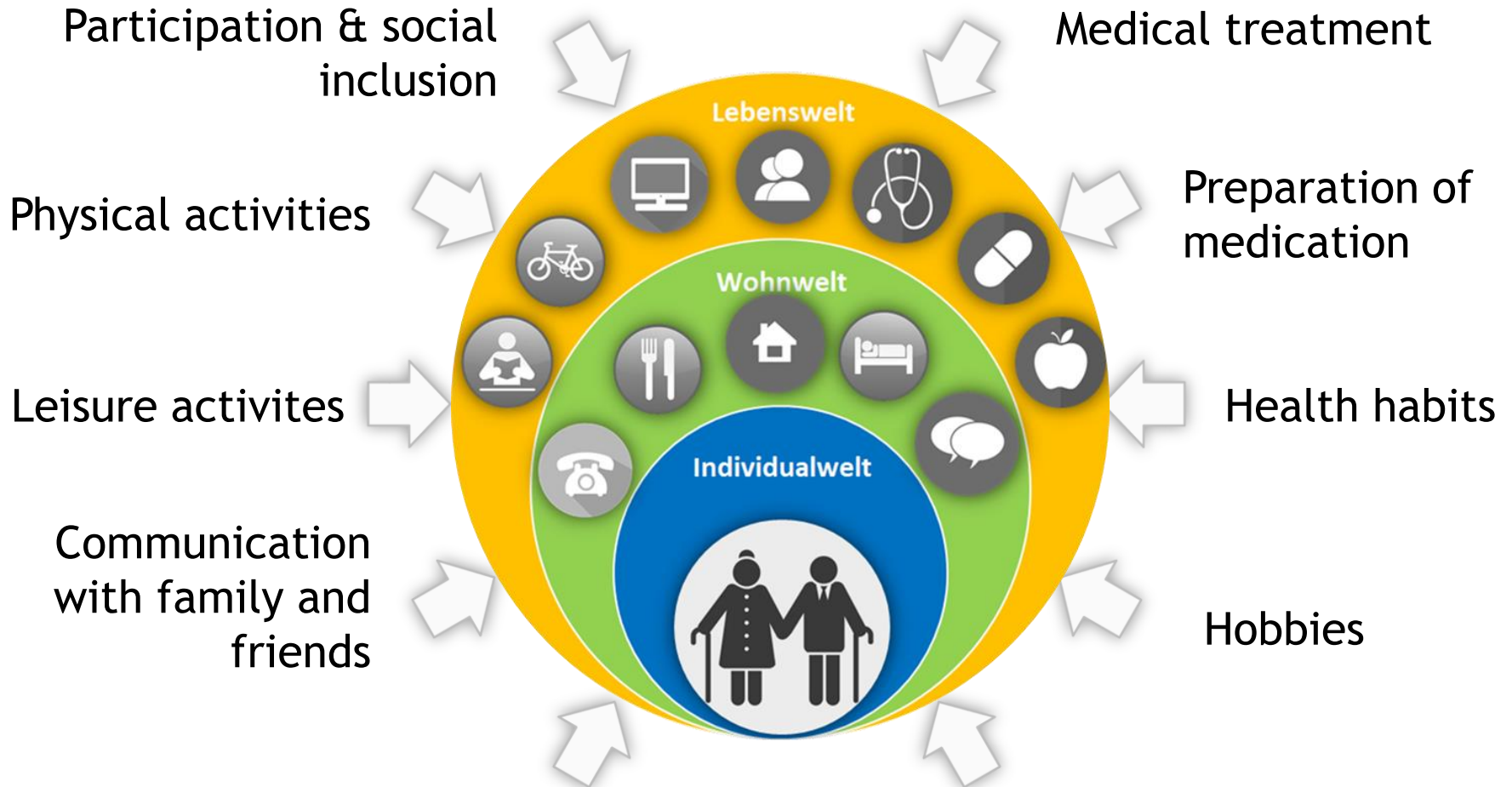
Level of „AAL-Welten-Modell"
Environment
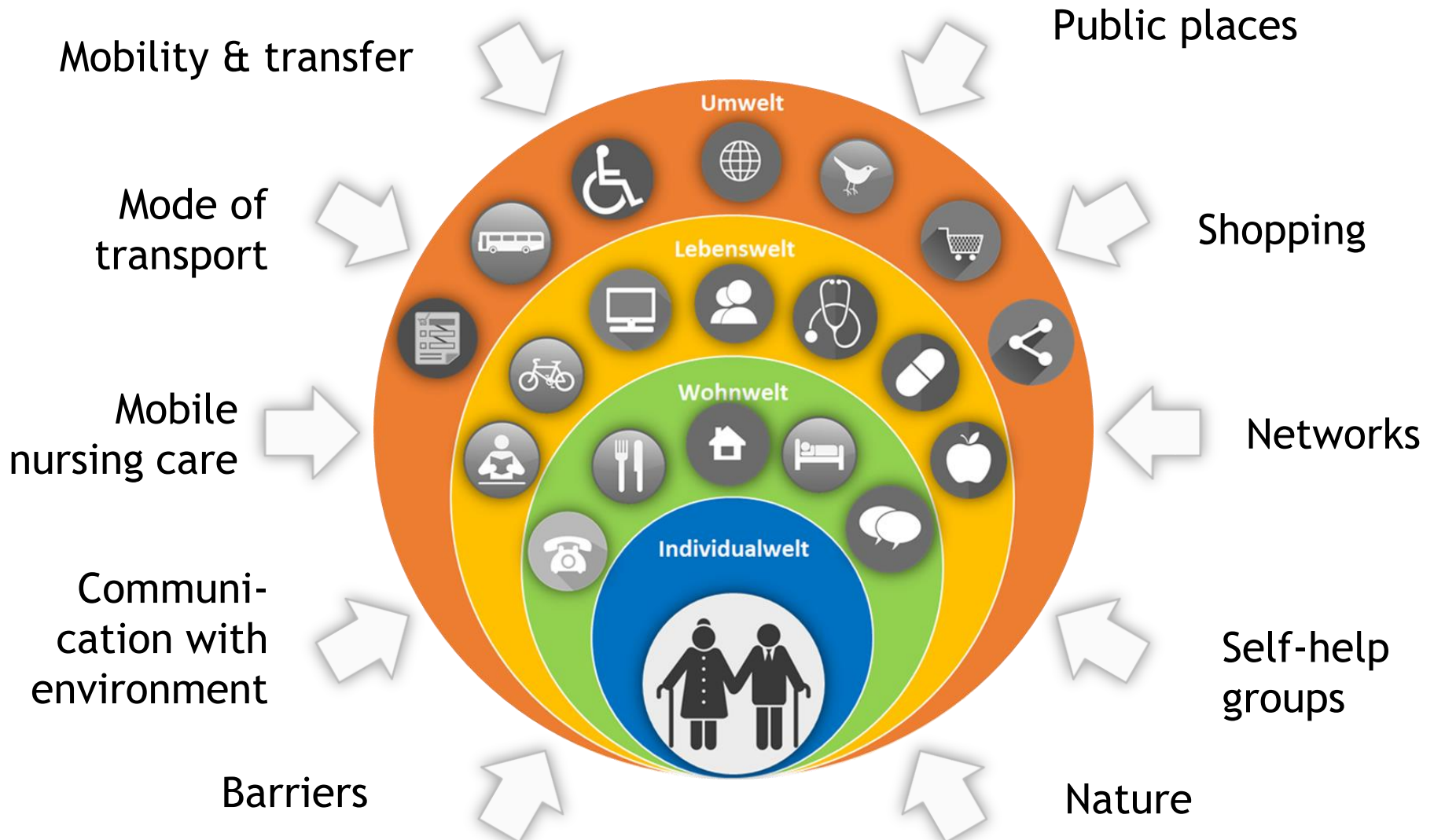
Pre-Assessment of needs

- **AAL-Welten Modell was basis for the needs assessment**

- **4 categories & 99 items**

- **Conducted as semi-quantitive interviews**

Results of needs Pre-Assessment

Socio-demographic data of population

|	
Sample	n= 11 residents of nursing home St. Vinzenz, Pinkafeld (AT)
Gender	54% female, 46% male
Mean age	84,2 years
Family status	64% widowed, 18% divorced, 9% single, 9% married
Educational level	73% intermediate-level 27% higher-level
Income	27% very good financial situation 64% good financial situation 9% limited financial situation

Results of needs Pre-Assessment

Individual Area

Individualwelt

Do you have any health restrictions or chronical diseases?

12,5

87,5

- Yes
- No
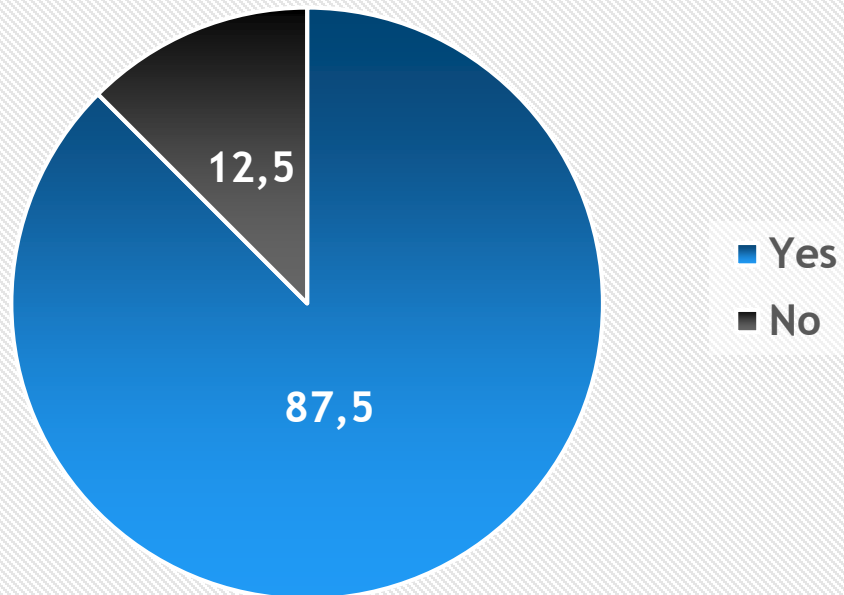
TOP 3: **chronical diseases:** (multiple answers)

1. arthrosis
2. hypertension
3. chronic low back pain
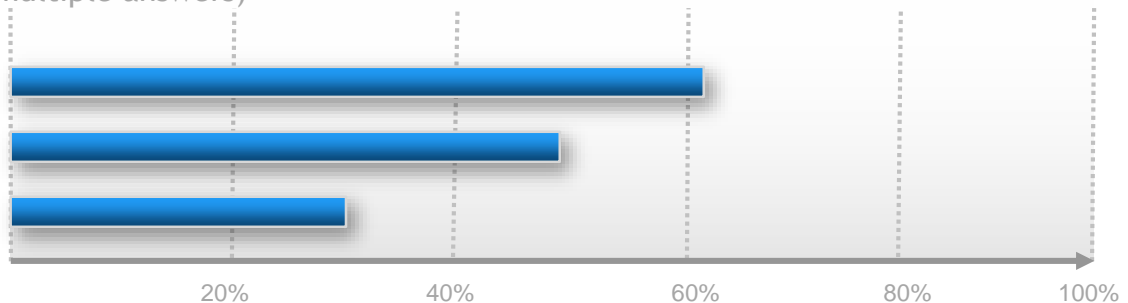
20% 40% 60% 80% 100%

Results of needs Pre-Assessment

Individual Area

What impairments do you have?
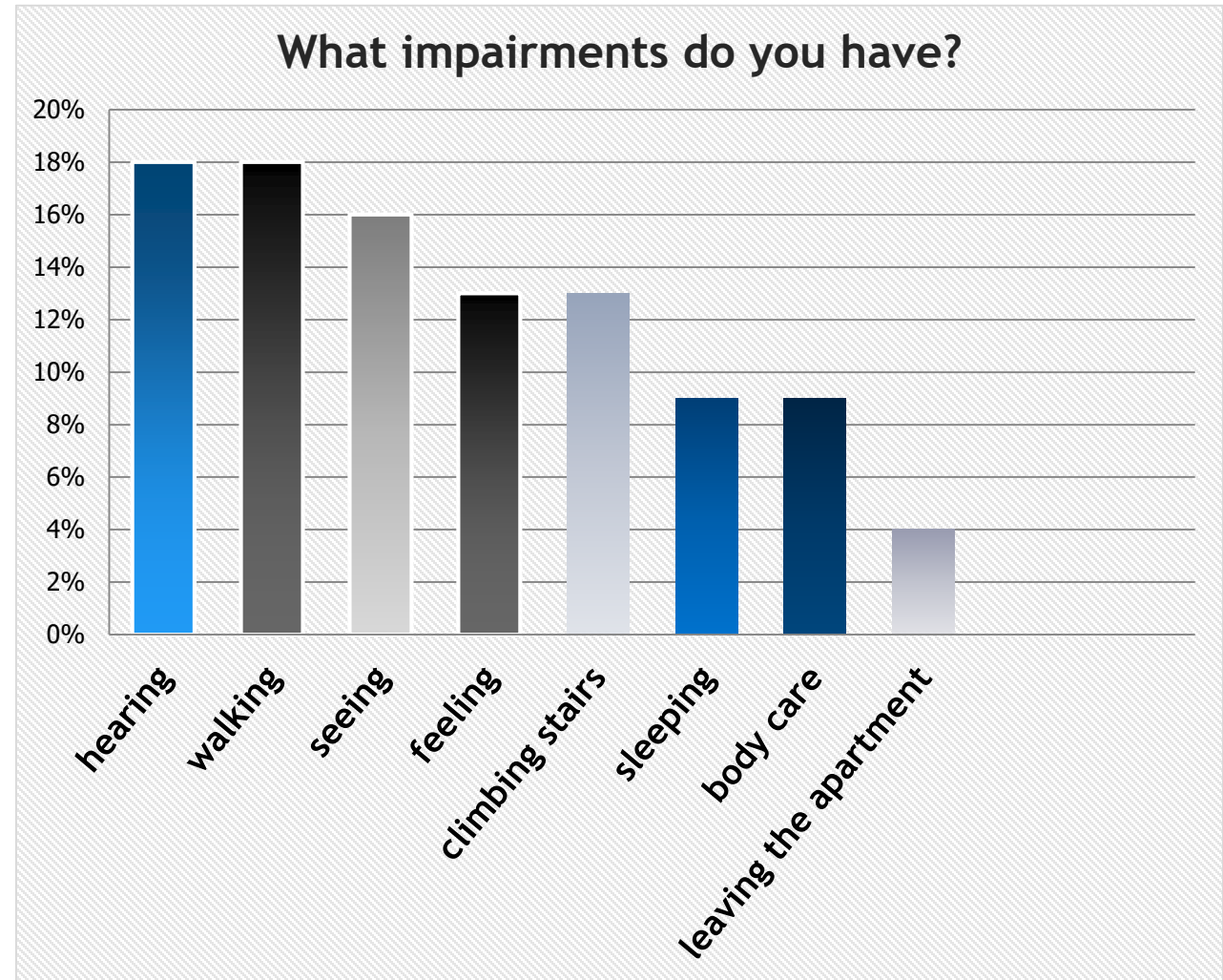
Results of needs Pre-Assessment

Individual Area

Individualwelt

What values are important for you?

TOP 8 (multiple answers)

1. autonomy
2. health
3. family
4. friendship
5. tranquility
6. religion
7. safety
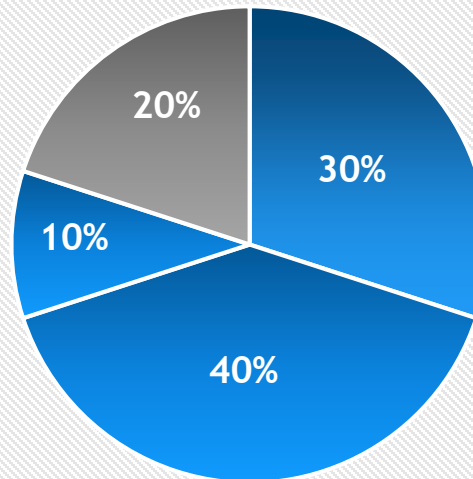8. sociability

20%   40%   60%   80%   100%
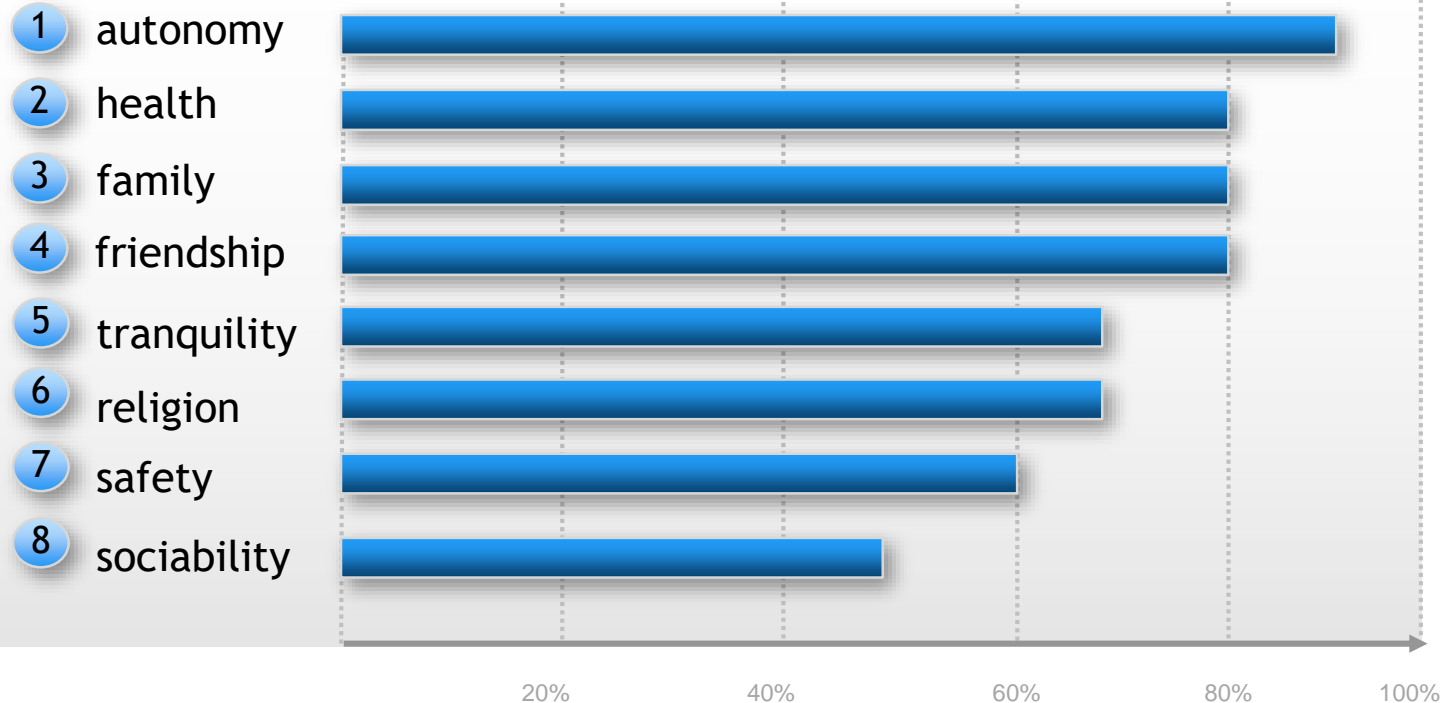
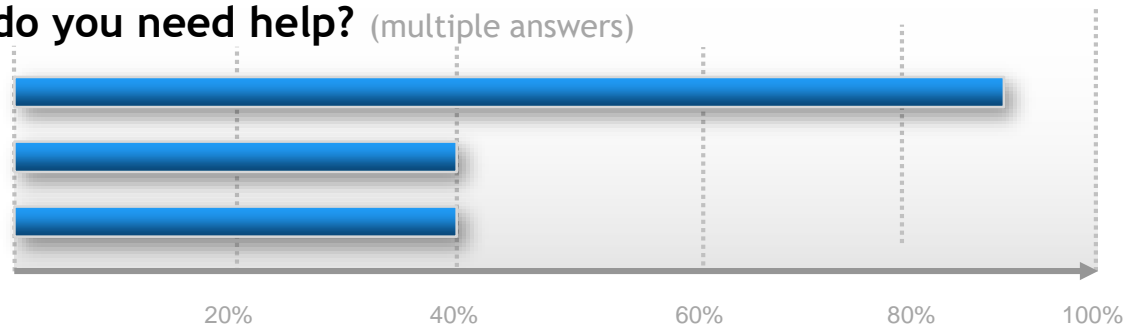# Results of needs Pre-Assessment

Living Area
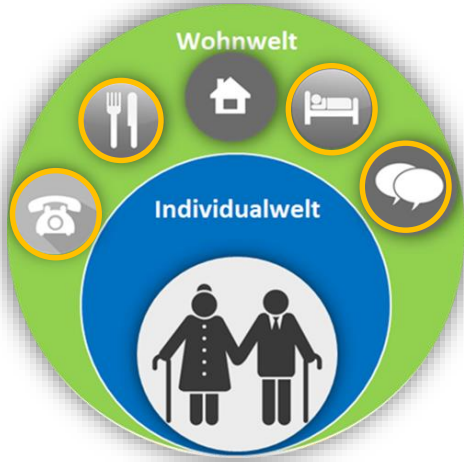
How much are you impaired in daily activities due to health problems?

- 30% strongly impaired
- 40% impaired
- 10% little impaired
- 20% not impaired

TOP 3: In which activities do you need help? (multiple answers)
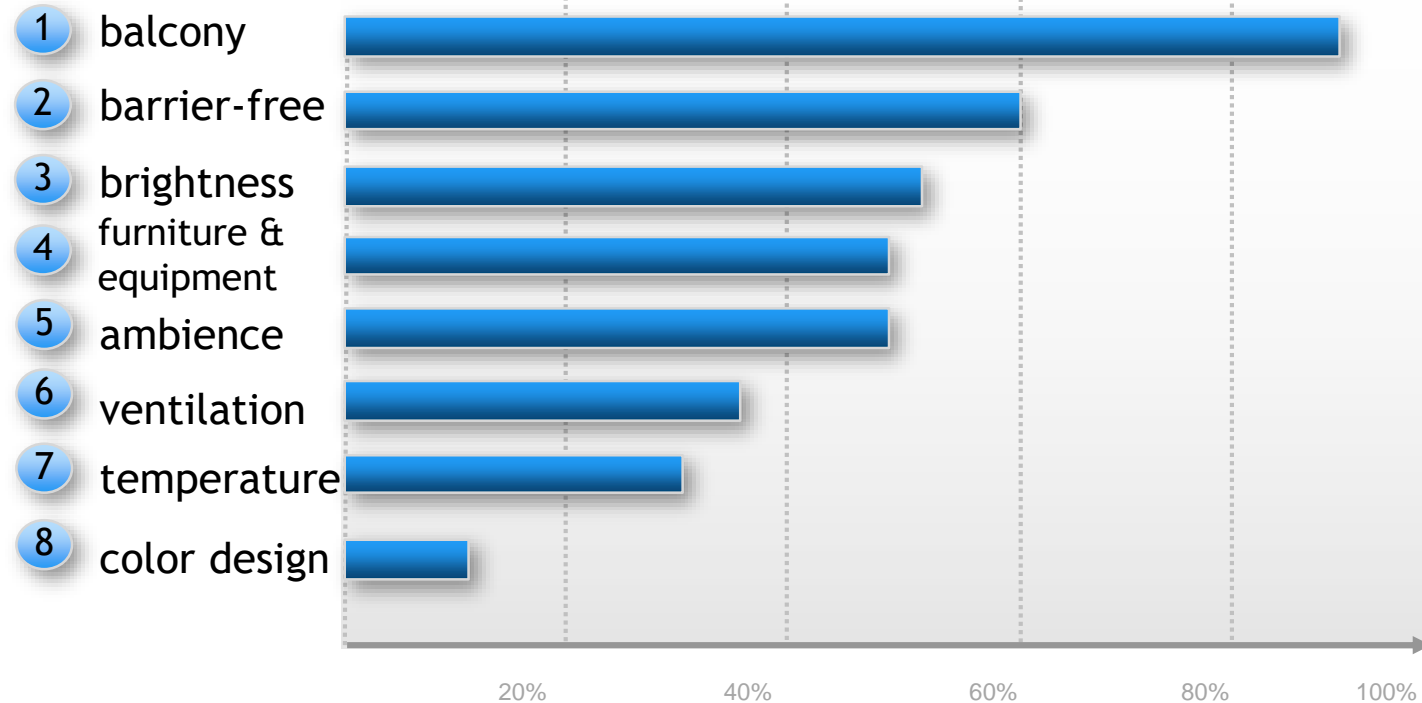
1. household
2. meal preparation
3. shopping

Results of needs Pre-Assessment

Living Area

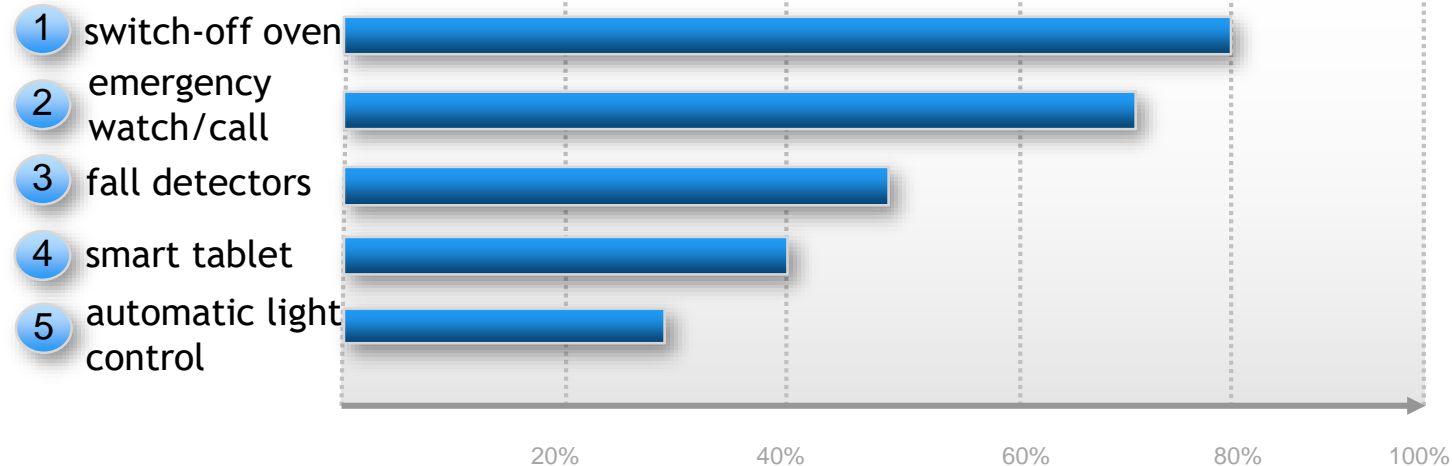What is important in your apartment?

TOP 8 (multiple answers)

1. balcony
2. barrier-free
3. brightness
4. furniture & equipment
5. ambience
6. ventilation
7. temperature
8. color design

20%   40%   60%   80%   100%

Results of needs Pre-Assessment

Living Area

Wohnwelt

Individualwelt

Which technical applications would make your everyday life easier?

TOP 5 (multiple answers)

1. switch-off oven
2. emergency watch/call
3. fall detectors
4. smart tablet
5. automatic light control

20%   40%   60%   80%   100%

TOP 3: What are the barriers?

- lack of training and technical advice
- lack of digital skills
- limited financial situation – no big investments
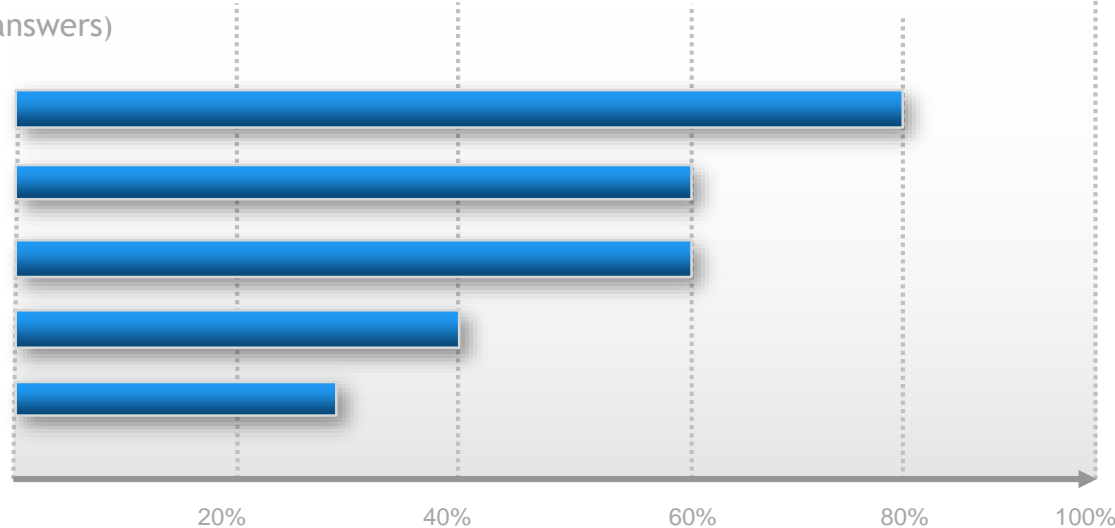
Results of needs Pre-Assessment

Living Area

How do you spend your spare time?

TOP 5 (multiple answers)

1. watch TV
2. go for a walk
3. books & newspapers
4. family & friends
5. shopping

20% 40% 60% 80% 100%

TOP 3:
What are your preferred communication channels?

- mobile phones
- direct talks
- messenger services (WhatsApp, Skype)

TOP 3:
What are the barriers for taking part in social events?

- lack of interest
- lack of relationsships
- lack of information
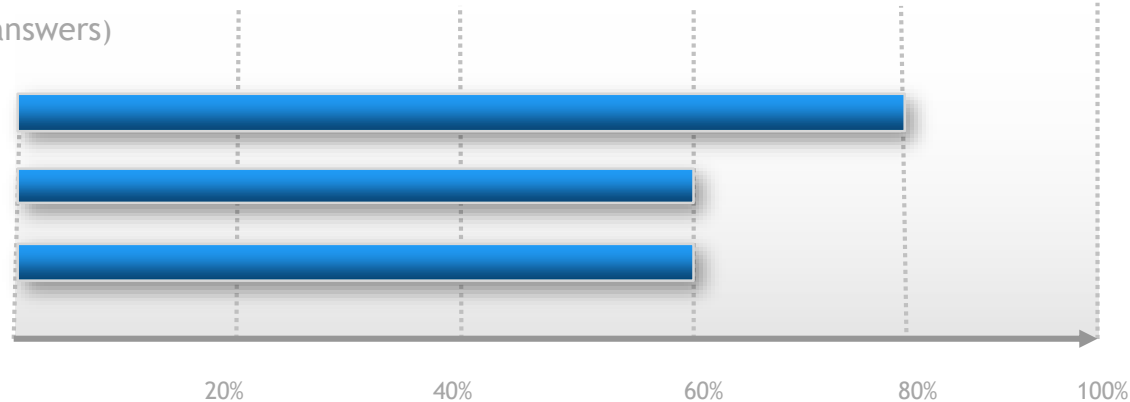
Results of needs Pre-Assessment

Environment

Which places do you visit regularly?

TOP 3 (multiple answers)

1. grocery stores
2. nature / parks
3. pharmacies & GP´s

20% 40% 60% 80% 100%

TOP 4: Which barriers are on the way or at the place?
- stairs
- lack of sitting facilities
- lack of lighting
- lack of rest rooms
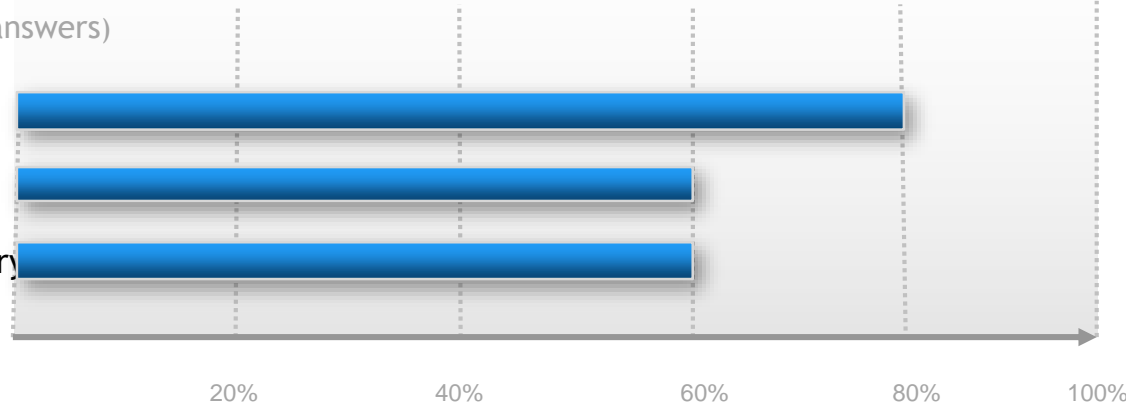
Results of needs Pre-Assessment

Environment

Which mobile services would be interesting for you?

TOP 3 (multiple answers)

1. transport services
2. food delivery services
3. medicine delivery services

20%   40%   60%   80%   100%

TOP 5: **What additional services or offers would be interesting?**

- grocery delivery services
- joint exercises, training sessions and sport facilities
- concerts, theater, culturel events
- emergency button to activate the emergency chain
- tablets with senior friendly-applications to get intouch with environment

Conclusion

Needs Assessment

- Shift of senior´s needs because of several determinants
- AAL-solutions offer numerous advantages, BUT technologies have to consider the needs and resources of the elderly
- Due to diverse life concepts we identified a broad range of needs

AAL-Welten Modell

- Concepts includes different areas and aspects of the elderly population
- Good transferability because of usage of different areas
- Ensures hands-on AAL interventions based on the needs of the elderly
- Human being is taking center stage

Questions and Discussion?

- What questions or points would you like to share from your experiences conducting a needs assessment among elderly?

- Which additional approaches / concepts to assess health and social care needs do you know? Have you already used one of them?

- Which instruments / methods do you think are adequate to gather and understand the needs and individualities of older people?

- Where do you see the strengths and weaknesses of our model?