Future Housing for the Elderly in Norway

Session 31-E: Senior Housing for the Future

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## Demographic Indicators: 2005 and 2025

<table>
<thead>
<tr>
<th></th>
<th>2005</th>
<th>2025</th>
</tr>
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<tbody>
<tr>
<td>Total population</td>
<td>4,593 (100 %)</td>
<td>4,917 (100 %)</td>
</tr>
<tr>
<td>Male</td>
<td>2,277 (49,6 %)</td>
<td>2,427 (49,4 %)</td>
</tr>
<tr>
<td>Female</td>
<td>2,316 (50,4 %)</td>
<td>2,490 (50,6 %)</td>
</tr>
<tr>
<td>65+</td>
<td>681 (14,8 %)</td>
<td>1,025 (20,8 %)</td>
</tr>
<tr>
<td>Male</td>
<td>286 (6,2 %)</td>
<td>466 (9,5 %)</td>
</tr>
<tr>
<td>Female</td>
<td>394 (8,6 %)</td>
<td>559 (11,4 %)</td>
</tr>
<tr>
<td>85+</td>
<td>97 (2,1 %)</td>
<td>126 (2,6 %)</td>
</tr>
<tr>
<td>Male</td>
<td>28 (0,6 %)</td>
<td>41 (0,8 %)</td>
</tr>
<tr>
<td>Female</td>
<td>68 (1,5 %)</td>
<td>85 (1,7 %)</td>
</tr>
<tr>
<td>Life expectancy at birth</td>
<td>79,4</td>
<td>81,7</td>
</tr>
<tr>
<td>(years)</td>
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<tr>
<td>Total fertility rate</td>
<td>1,8</td>
<td>1,7</td>
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<tr>
<td>(per woman)</td>
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Building Program - Results 1997 - 2005

- Governmental grants in the period: ~ 6 bill. US$ (~ 9,000 US$ per person 65+)
Care flats – Typical floor plan
Example: Skjoldtunet, Bergen
Common living room, Sarpsborg
Care Plan 2015 (Launched Sept. 2006)

- Investing in the effective organisation of buildings and accommodation offers is worthwhile
  - This is a key focus area during the period before the growth in needs begins.

- The Government’s strategy plans for greater responsibility for users having their own homes and a more long-term perspective with regard to maintenance and investments

- The current building stock must also be maintained and renewed continuously

Care Plan 2015 ..... 

- In order to provide financial predictability and stimulate the necessary expansion of more nursing home places and accommodation offers, the Government is warning of a new investment contribution for such purposes (National Budget 2008)

- The use of ICT, smart house solutions, telemedicine and new care technology can also help prevent institutionalization, and give the users greater independence from the care sector and a better local medical offer

- Additionally, the employees are then able to spend more of their time on the primary care tasks and less on transport, administration, supervision and heavy lifting
Needs for housing for elderly

- Persons 67+ (retirement age in Norway)
- Needs for special living units
  - - - - Simple extrapolation
  --- --- Taking changes in age-composition into account
How do people in Norway live?

- **Detached house**
- **Vert. div. house**
- **Hor. div. house < 3 st.**
- **Block of flats > 3 st.**
- **Other**
What about the seniors?

• Today, three out of ten seniors may access the entry level of their home from ground/parking area without needing to negotiate steps.

• The homes of six out of ten contain all essential rooms, i.e., bathroom, kitchen, sitting room and at least one bedroom, on the entry level, and every fourth senior dwelling is navigable by wheelchair.

• Only 13% have wheelchair access both to their home and inside it. Good accessibility is something only a fraction of the senior citizens of tomorrow enjoy today.

• Every third senior lives in some form of apartment building with access to and within the living units.
Dementia – An important factor

- In 2007 about 66,000 persons suffer from dementia in Norway
- The number is increasing with ~ 10,000 per year
- Housing planned for people with dementia will function well for the majority of the elderly
The Årdal model  (Source: ’Demens’, vol 1/#1, 1997)

Arkitektkontoret Erling Haugen as
Example from Sarpsborg
Some lessons learned:

- Residents get more visits, and next of kin are more involved in care than in nursing homes
- Residents satisfied having their own flat
- Access to adapted outdoor area on the same level important
- Common areas with activities appreciated
- Planning for weak-sighted must be improved
- Flats for couples too small
That’s how seniors want to live
(Survey among 1900 persons 2004 -2005)

Some findings:

• Having all essential rooms on the same level is a key factor in efforts to achieve housing adapted to the needs of frail/incapacitated residents

• Four out of every ten respondents have modified or are planning to modify their current dwelling to obtain living conditions adapted to declining physical capacity

• Every third senior does not want to move despite declining physical capacity and increasing care needs

• Four out of ten would consider moving to adapted accommodation if the need arose

• A surprising level of interest among the elderly of the future in shared living arrangements, congregate housing and domiciliary or assisted living services

• Half of the respondents wanted the local authorities to deliver various services, but only 6 % wanted to move to a nursing home
Smart home technology

- ~20 out of 434 municipalities have built flats with smart home technology

**Challenges:**
- Framework conditions
- Competence
- User interface
- Value choice - Ethics

"Thanks to smart house technology the home help only drops in every half year to adjust the clock" (1981)
Support from the authorities

- NAV (The Norwegian Labour and Welfare Organisation) finances adequate personal equipment
- The State Housing Bank can offer favourable financing
- The Directorate for Health and Social Affairs, Guidance report: “Smart Home Technology – Planning and management in municipal services”
Increased focus on Universal design

What is needed?

- Competence and consciousness
- Good planning routines and control
- Change in attitudes - Inclusion

Good solutions can be simple:
Crutch and stick holder

Unnecessary difficulty: Door opening
sitting in a wheelchair uphill
Working for InnoMed (www.innomed.no)
National Network for Need-driven Innovation in Health Care
Some examples of earlier projects

- Bathtub
- Height adjustable leg prosthesis
- Furniture
- Height adjustable cupboards
- Preventing fracture of the neck of the femur
- Preventing pressure wounds
Ongoing project: Future Housing for Elderly – Investigating Needs - Examples

“Buying time” in fire situations for people not able to evacuate themselves – Development of mobile water fog equipment

Improve toilet equipment combinations
Improving private homes

Example from Germany (NRW): Bathroom Checklist

<table>
<thead>
<tr>
<th>Bad und WC</th>
<th>Ja</th>
<th>Nein</th>
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<tbody>
<tr>
<td>Macht es Schwierigkeiten, ins Bad zu kommen?</td>
<td></td>
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<tr>
<td>Wünschen Sie sich mehr Platz im Bad?</td>
<td></td>
<td></td>
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<tr>
<td>Sind Sie schon mal im Bad ausgerutscht?</td>
<td></td>
<td></td>
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<tr>
<td>Ist es mühsam, die Badewanne zu benutzen?</td>
<td></td>
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<tr>
<td>Fehlen Haltegriffe für einen sicheren Ein- und Ausstieg?</td>
<td></td>
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<tr>
<td>Fehlt in der Wanne eine rutschfeste Matte?</td>
<td></td>
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<tr>
<td>Dauert es lange, bis heißes Wasser aus der Leitung kommt?</td>
<td></td>
<td></td>
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<tr>
<td>Ist es mühsam, die Dusche zu benutzen?</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Fehlt in der Dusche eine rutschfeste Matte?</td>
<td></td>
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<tr>
<td>Ist es mühsam, das Waschbecken zu benutzen?</td>
<td></td>
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<tr>
<td>Wünschen Sie sich, das Waschbecken auch im Sitzen benutzen zu können?</td>
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<tr>
<td>Könnten Sie sich besser sehen, wenn der Spiegel in einer anderen Höhe hängt?</td>
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<tr>
<td>Sollten Ablage oder Spiegelschrank besser erreichbar sein?</td>
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<tr>
<td>Ist es mühsam oder unsicher, die Toilette zu benutzen?</td>
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Improving private homes

Example from Germany (NRW):

Practical advise regarding balcony and terrace
Example of possible improvement

The challenge

Two possible solutions
Thank you for your attention!