
Senior Residence Concepts in Norway: Challenges and Actions for a Sustainable Development

Senior
Residence
Concepts in
Norway

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Abstract

Purpose – It's a global challenge to make cities and communities become an age-friendly society. This paper aims to discuss how to develop good concepts for senior residences in Norway and aim to study what the challenges are in the early planning phase, searching the answer to the following research questions: (1) What makes a senior housing attractive? (2) What are the challenges that hinder future concept development? (3) Suggest actions in order to obtain a sustainable development.

Design/Methodology/Approach – This research uses a descriptive and explorative approach describing the phenomena by (I) a short literature review describing existing concepts and challenges, (II) "Walk-through"-methodology with informal dialogue on site and (III) semi-structured interviews of property developers, architects or contractors, politicians, care providers or planners in the municipality involved in seven pilot projects in Kristiansand and Stavanger.

Findings – The authors find that new and diverse concepts need to be developed to meet the demand of the seniors. The new concepts should be developed in collaboration with both public and private actors as well as developing a communication platform to meet the needs of the seniors in terms understanding the possibilities of alternative housings, incentives to move and how to influence and get involved in the planning.

Research Limitations/Implications – There is a limited no. of informants among the public stakeholders. Only three of the seven pilot projects are accomplished. There is an advantage if the rest of the projects are evaluated when accomplished.

Practical Implications – Develop participation models and PPP models at the local level.

Originality/Value – The value lies in the evaluation of the seven pilot projects.

Keywords Senior housing, Early phase planning, Concept development, Challenges, Actions, User involvement

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1. Introduction

The Sustainable Development Goals (SDG) is to make a better place to live for all people between now and 2030 (WHO, 2018). WHO (2018) says that to reach SDGs goals, it is crucial to help cities and communities to become an age-friendly environment by fostering a global network for age-friendly cities and communities. They also emphasise that as a response to global population ageing, it is necessary to focus on actions at the local level that fosters the full participation of older people in community life and promotes healthy and active ageing.

A white paper from the Norwegian Ministry of Health and Care Services (HOD, 2018), describes the need for actions that foster full participation of the elderly people in society in an accessible environment that includes and promotes healthy and active ageing. To develop an age-friendly society this requires major changes in many areas, both in cities and local communities in Norway. This paper support WHO's view of making actions at the local level and the need for developing more concepts for living and shared accommodation that contributes to a social and active ageing (HOD, 2018).

There is also a national strategy to offer more care and support services at home of the seniors, by implementing new technology and smart solutions using welfare technology (HOD, 2013). This argues for maintaining independency of seniors so they stay longer in their homes before needing institutional care.

In the latest years, new concepts, such as senior cooperative apartments, and sheltered retirement housing with communal facilities and support services are developed in some parts of the country. The goal of these pilot concepts were to gain experience with a maintainable housing for seniors that give safety, sense of belonging to the society, social connections and accessibility to public services (Van Bilsen *et al.*, 2008; Schmidt *et al.*, 2013; Marston *et al.*, 2014; Hellvik *et al.*, 2015; Berrington, 2017; Smistad, 2018).

This paper focus on the need of new and diverse senior housing concepts, to meet the demand of a healthier and an increasingly elderly population in the future. The aim is to (1) look for what makes a senior housing attractive; (2) discuss various senior housing concepts and their challenges that exist today; and (3) suggest actions in order to maintain a sustainable development in the coming decades.

2. Literature review

Positive health is not only the absence of disease but “a state of complete physical, mental and social wellbeing” (WHO, 1948). Factors that contribute to well-being and increased quality of life needs to be the focus of a sustainable development in cities and communities. Both European and Norwegian policy describes this and underpins the importance to develop social infrastructure that increase the quality of life (HOD, 2018, Grum, 2018).

A few years ago, the Hanza University of Applied Science (HUS) in Groningen, Netherlands developed the concept “Healthy Ageing” including the term positive health. They say:

“Healthy Ageing is so much more than growing old pleasantly. It's much more about the positive health resilience self-management and vitality and welfare trying to find new balance in life” (HUS, 2017).

The UK has long experience with retirement housing or sheltered housing. In the eighties, there was a profound building of sheltered housing to prevent institutional care. A housing cooperation association, supported by the Care and Support Special Housing Fond, to develop affordable housing for the senior population, owns the rental housing property (Berrington, 2017). Woods (2017) reviewed the UK research literature and

documented the benefits of the seniors living in sheltered homes. She underpins the benefits described by the Institute of Public Care (2012) as well as documenting cost savings of the society.

A study in Slovenia reports that 80% of elderly people want to stay in their home instead of being in institutional care (Grum, 2018). EUROBAROMETER 283 reports that 90% of elderly members of the EU states want to stay at home and this is likely to be true in countries in Scandinavia, even though the population is less dense.

The concept of positive health, well-being or healthy ageing is a shift of mind-set that affects the way politicians plan societal development, housing politics, local culture and transport development.

2.1. Residence concepts

The international literature pinpoints the need for developing new residence concepts. In this way, seniors are given the freedom to choose among a diversity of residence concepts. The concepts practised today can be sorted according to the following categories (Van Bilsen *et al.*, 2008; Marston *et al.*, 2014; Schmidt *et al.*, 2013, Berrington, 2017; Woods, 2017; Smistad, 2018):

- cooperative housing;
- service-oriented housing;
- sheltered housing; and
- extra care housing.

Extra care housing is a sheltered house with extended care and support. This concept is not discussed in this paper. The literature recommends a mix of these concepts as well as development of new concepts. The view of the Norwegian seniors, reported in the literature, that they prefer a mix of age groups rather than living in a community with only seniors (HOD, 2018; Hellvik *et al.*, 2015).

Cooperative housing is based on individual accommodation of seniors above the age of 55 years with communal facilities for shared activities like social events, fitness room and guest rooms. In this way, the accommodation is downsized compared to a two-room apartment. In a cooperative housing the service model is based on the residents to be self-responsible for organizing activities and using the communal facilities to the common goods.

Service-oriented housing concept has employed staff and a valet reception that offers tailored support and services. For example, many elders that are likely to travel feel safe that, e.g. someone is taking care of their plants or feeding their cat while being away. It can also be getting help with simple FM tasks like changing a light bulb or shifting curtains.

Sheltered housing is defined as “accommodation for elderly or disabled people consisting of private independent units with some shared facilities and a warden” (Oxford Living dictionary). The experience with sheltered housing in UK, reports health gains from such retirement housing as greater interaction and involvement, improved self-care, sense of improved health and wellbeing as well as improved mobility (Berrington, 2017; Woods, 2017, Institute of Public Care, 2012). This concept is targeting seniors above pension age with a certain need. We find no studies or experiences of such sheltered homes in Norway.

3. Methodology

We approach this by exploring different concepts described in national literature and to some extent international sources. We also search for what the literature describes as the challenges of concept development. The last question is explored by interviewing different stakeholders of housing developers, architects and contractors, politicians and caregivers of the public sector, involved in new development of senior housing projects in Norway.

The research is based on a descriptive and explorative approach drawn from a short literature review and studying seven senior housing projects (some planned, some under construction and some accomplished) using a combination of “Walk-through” methodology, on-site visits and semi-structured interviews with relevant stakeholders described by Bryman (2014) as conversational format. The information gathered, was done in the period of October to December 2017.

3.1. Literature review

The short literature review aimed to find what senior residence concepts exist today and is needed in the future.

We focused on the research literature found in United Kingdom and the Nordic countries and study assessment reports looking for description, experiences and benefits of the different concepts of today. We studied Norwegian strategy and policy documents to look at actions to be taken in the near future, at the municipality level in urban environments.

We studied national research articles, research reports and policy documents from Norway and the UK (White papers) using the search engines Google Scholar, Scopus and Oria. We also searched for what is reported as challenges in the early phase development.

The search key words we used were

- *senior housing or retirement housing or senior residence AND early phase development;*
- *challenges OR barriers AND senior housing; and*
- *needs AND elderly people.*

3.2. Walk through methodology and pilot studies of senior housing projects

Seven projects, located in Stavanger and Kristiansand, were used to gather information and experience with senior housing concept development. These projects are considered new senior housing concepts in their communities. Three of the projects are accomplished, two of them are under planning and two projects are under construction. [Table 1](#) presents the projects studied.

To collect information and relevant experience, we used a combination of “Walk-Through” methodology, on-site visits and informal dialogue as well as formal but semi-structured interviews. The information gathered through the informal on-site walk was collected in notes and minutes, while the semi-structured interviews were transcribed into minutes, presented for the informants for approval. We categorised the concepts into (1) cooperative housing; (2) service-oriented housing or (3) sheltered housing, as defined in the literature review chapter.

3.3. Interviews

A conversational semi-structured format of 22 interviews as described by Bryman (2014) was used as a method of collecting information about challenges and experiences with the

Projects and location	Construction Year and Status	Concept	Description
Stavanger 1	Under construction	Cooperative housing	350 residences. Large transformation project. Mix of residence types that fit a mix of age groups. Carpool solution, guest room for rent and large outdoor area
Stavanger 2	Under construction	Cooperative housing	42 residences of shared accommodation. Mix of age groups with large common area. Offering several common facilities to rent, such as guest room, green house, car pool and banquet facilities
Stavanger 3	2009, Accomplished	Service oriented concept	128 residences with high standard and a high service level like valet desk, guest rooms for rent, common facilities, fitness centre etc.
Kristiansand 1	2016, Accomplished Phase II under construction	Service oriented concept	450 residences for people above 45 year. Mix of residences apartment, bungalows and yard houses with services like: valet desk, large common areas, fitness room etc.
Kristiansand 2	2016, accomplished	Service oriented concept	68 senior residences with services like restaurants and cafes, valet desk and several activities and services that are offered associated with a close by well-being centre
Stavanger 4	Regulation plan	Sheltered housing	42 residences. Only for elderly population with service functions and assisted living. Big common areas and outdoor areas, fitness room and banquet facilities
Stavanger 5	Concept development phase	Sheltered housing	Urban and modern residence concept. Only for elderly people with assisted living

Table 1.
Presentation of the
Seven Senior
Housing Projects

3 different concepts. The challenges and success criteria reported in the literature made the base for the interview guide, focusing on questions within the following topics.

- supply and demand;
- knowledge – and competences;
- economy;
- user involvement;
- interaction; and
- smart and Welfare technology.

The informants had various roles and experiences related to decision-making and planning of several early phase development of senior housing projects (real estate developers, architects and contractors, politicians, service provider within welfare technology, municipalities and senior representatives), as presented in [Table 2](#):

The informants had several business roles in practise and contributed with information from more than one role and perspectives of the early phase development. They also were

Table 2.
Type, Roles
and Number
of Informants

Categories	Roles	Number of informants
Real estate developers	Managers of development of big housing projects	2
Real estate developers	Sales and marketing	1
Real estate developers	Founders of a new senior residence concept	1
Architects	Planning and design of senior housing	3
Contractors	Senior housing projects	2
Politicians	Decision makers of the municipality council	7
Municipality	Project leaders of welfare technology, health and quality of life	2
Service provider	Smart housing and welfare technology	1
Senior representatives	Manager of an activity centre	1
	Project developer	1
	Real estate agent for new senior residence projects	1
Total		22

quite engaged in the topic as many of them were either related to a senior or being in that age of considering moving to a new senior housing environment in the near future. The age of the informants was from 30 to 62 years. Eight of the informants were women and 14 were men.

3.4. Analysis

We analyse the information gathered according to type of senior housing related to challenges and strategies to obtain a sustainable development divided into the six topics as follows:

- supply and demand;
- Knowledge and competences;
- economy;
- user involvement;
- private and public interaction; and
- smart and welfare technology

Table 2 presents the results found in this study.

4. Findings and discussion

4.1. What makes a senior residence attractive?

The literature agrees upon what makes a senior residence environment attractive. The most important factors is to feel safe at home, being included in society with possibilities to enjoy and have a social life in the community, having access to cultural and social activities, support and care if needed and easy access to public services and social meeting points (Grum, 2018; Smistad, 2018; Woods, 2017; Schmidt *et al.*, 2013, Harrigan *et al.*, 1998; Institute of Public Care, 2012). An age-friendly community that offers these attributes in a local community will also be attractive to other groups like young people and singles (Schmidt *et al.*, 2013).

4.2. Challenges of early phase development

The challenges reported in the literature are categorised as: (1) supply and demand, (2) knowledge and competence, (3) economy, (4) user involvement, (5) interaction between

public and private actors and (6) smart house and welfare technology. We discussed these challenges with the stakeholders, and the practise confirmed and gave in-depth understanding. Table 3 presents the overview of the challenges and actions suggested, clustered in six topics. The main challenges and actions suggested will be discussed in the following.

Supply and Demand. The status of the demand and supply of today is that there is not enough housings for the younger seniors that are between 65 + and 80 years. This age group, that is healthy and actively involved in society, is expected to be a great resource in the concept development and in societal development.

In the urban environment, this age group demand a diversity of housing concepts. They prefer to live in a central environment with a mixed age group. The trend is also pointing towards an increasing healthy aged people that will be an important source of information in the early concept phase. The willingness to pay is increasing, but there is a need for better information and consultancy among this age group.

Knowledge and Competence. Even though there is high knowledge and competence in both private and public sectors, there is a need for more information to tell the seniors about their options when choosing housing. Some informants suggest to form a housing cooperation to represents the voice of the seniors in dialogues with municipalities and health care organisations. The UK has good experience with public and private cooperative house associations that collaborates with public and private support and care organisations.

Economy. Experience from several pilots show that there is a need for further research and strategies to develop innovative and collaborative concepts across several stakeholders.

The stakeholders indicate that actions like dialogue models and arenas for sharing knowledge, workshops and exploratory approach as well at looking at experience from other countries will help developing further financial schemes and concepts that fit the seniors in the future.

Experiences from other countries and particularly the UK indicate that sheltered housings with different service packages of care and support have positive effects (Woods, 2017). European researchers and policy makers also claim that there is a need to create a diversity of choices that suits both the fitted and healthy seniors as well as those with need for different care levels. Offering more than one concept gives the people the freedom to choose among a variety of offers within the built environment and in their community that are well known.

Better information and guidelines that provide information and framework of the process to seniors on how to get involved in the early phase development is needed. There is also need for actual service models with tailored care services that are flexible and easy to change needs. These models must be developed in close collaboration between public and private care providers.

User involvement. The informants in this research point out that the understanding of the senior needs is reported missing in both private and public sector. The study shows that there is a lack of user involvement in the early phase development of senior housing. The user involvement in the senior housing projects that were visited in Kristiansand and Stavanger were good. The projects and informants reflected the importance of user involvement in the early phase development to succeed with the concept development. To increase the interactions and dialogue between the developers, the study finds creative workshops and meetings as an important platform for involvement of the decision-making. The Norwegian Government also suggests a model called *Senior tråkk*, which is a participation model for involving seniors in the planning of age-friendly society (HOD [2018]) at a local level.

Table 3.
Findings from
the Seven Senior
Housing Projects
in Kristiansand
and Stavanger

	Supply and demand	Knowledge and competence	Economy	User involvement	Public and private interaction	Smart house and welfare-technology
Challenges	Not adequate Increasing demand	Varying Lack of user involvement Few pilot projects Lack of knowledge sharing and areas for interaction	Time and resource demanding Un-predictable projects with high risk Lack of willingness pay Public demand	Lack of user interests and user involvement The value of changing residence is under communicated	Lacking dialogue and interaction between public and private actors Public guidelines that limits the concept Lack of confidence to public health sector	Lack of dialogue Lack of procurement competences Fear of the unknown/ Lack of security and faith of the technology Lack of competences
Actions	Mapping of needs and planning of supply Diversity of supply and concepts Increased information and guidance assistance to the senior people Change of ownership concept	Economic incentives and financial support	Knowledge dissemination Action plan and social senior residential program Public consultant and involvement Housing association organisation for seniors Integrated user involvement to create ownership and governance	Increased interactions and dialogue Creative workshops and meetings as a platform for involvement of the decision making Proactive representative for needed FM services	Develop and implement participation models at the local level that include the users in the decision - making	PPP of FM services Development of the new FM role Integration of technology – healthcare and social services

Representatives of seniors were involved, but the developers interviewed, said the benefits of the concept is not well communicated to the seniors. They highlighted the value of using workshops and dialogue meetings with seniors increasing attractiveness and interests of the projects. A real estate developer said that such involvement is crucial to create ownership to the process and importance for creating the sense of belonging and fellowship among the neighbours. One developer said that “It’s important that they feel that they are able to influence the decisions made”. The informants’ points out that ownership is vital importance for thrive. The literature discuss how user involvement can affects their daily life having positive influence on their health (Harrigan *et al.*, 1999; Shelter, 2012; Schmidt *et al.*, 2013; Hellvik, 2015).

Public and private Interaction. The informants stated that the interaction between private developers and contractors could benefit from a better dialogue with municipalities and financial institutions. The developers interviewed, find little incitement to develop senior housing. They are asking for a greater engagement of public health and care departments and other healthcare organisations that have great knowledge about the need of this group, saying there would be mutual benefits and interest to collaborate in the early phase.

Smart house and welfare technology. In Norway, there is an ambition to digitalise services in all sectors in the municipalities in the future (NOF, 2016). This topic is debated in media and among politician as an important strategy to help seniors to maintain independency and staying longer at home. This topic is not researched here, but several of the informants said that this would enhance people to stay connected and maintain their social life even when with reduced mobility.

4.3. Success criteria and actions to be taken

This research indicates that diversity of residence concepts that attracts both, younger seniors as well as older seniors and mixed groups, is needed. New concepts where the seniors are involved in the idea development will create greater ownership and belonging to the concepts. According to the informants, dialogue and interaction processes between stakeholders, public and private actors should take place. The developers should involve the municipality in their early phase as well as the municipality should work actively to involve and create ideas in their housing plan and programme. A suggested action to secure the information needed is to establish housing cooperation associations that can work together with the public to develop further affordable residences.

4.4. Limitations and further research

The majority of the informants represent either the business perspectives or the user perspective. Only two informants from the municipalities representing the public view. Views from public owners are also lacking. This research could benefit from information from more public stakeholders, particularly at the strategic level. It was difficult to find relevant literature regarding the early phase development of senior housing.

5. Conclusions

This paper explores the following questions: what makes a senior housing attractive, what are the challenges of the early phase developments and what actions should be taken to obtain a sustainable development in cities and communities in Norway? This research draws conclusion upon policy documents and reports, research literature, pilot studies and interviews of stakeholders involved in senior residence projects. Our conclusions follow:

5.1. *What makes a senior housing attractive?*

The literature reviewed agree on that the following factors gives attractiveness to a local community: Accommodation that gives safety, sense of belonging to the community, access to facilities services and health care services, freedom to choose among social activities, diversity of population groups (not only seniors) and access to public services and cultural and social activities. This research indicates that diversity of housing concepts that attracts mixed groups of people is preferable.

Our conclusion is that the design of future concepts should be planned in a residential area with certain service function in the neighbourhood.

5.2. *Challenges of concept development in early phase*

The study indicates that there are several challenges and barriers of concept development in early phase. Further development and interaction between public and private property developers is needed. The private developers are asking for engagements and cooperation between the municipalities providing care and public services. The private developers also ask for financial schemes and incentives to develop new housing concepts by strong involvement of the seniors.

The informants believe that a closer integration between private and public service providers, as well as increased dialogue between stakeholders is necessary.

We believe that pilot projects with research involvement for testing new concepts and ownership models are good strategies. Actions pinpointed among the informants are municipal planning in close collaboration with private actors, dialogue and good informative services, societal and economical profit assessments and incentives arrangements that can inspire to new ways of living and increased quality of life among the seniors.

5.3. *Actions to be taken*

To secure a sustainable development of senior housing in the future, there is a need for developing models that involve the user, not only in the idea creation, but also in the decision-making. We believe that such involvement will create greater ownership and belonging to the concepts. Suggested actions are dialogue and interaction processes between stakeholders, of public and private actors. The developers should involve the municipality in their early phase planning as well as the municipality should work actively to involve developers and seniors to create ideas and develop senior housing plan/programmes. A suggested action to secure the information needed is to establish a housing cooperation association for seniors that can work together with the public to develop further affordable residences.

References

- Berrington, J. (2017), "The Value of Sheltered Housing", National Housing Federation, available at https://www.housinglin.org.uk/_assets/Resources/Housing/OtherOrganisation/Value_of_Sheltered_Housing_Report.pdf (accessed on 26 Sept 2018).
- Grum, B. (2018), "Elderly and the impact of the maintenance cost of their real estate on their potential relocation", (eds. Grum, B., Veuger, J., Grum D. K. and Salaj, A. T.) in the proceedings of the 3th Conference of Interdisciplinary Research on Real Estate (CIRRE), Groningen, 20–21 Sept 2018, pp. 228–238.
- Hamers, K., Hammink, J. H. W. and Mohammadi, M. (2018), "Empowering encounters: An exploration of smart environments for stimulating encounters for older adults with dementia in inpatient facilities", (eds. Grum, B., Veuger, J., Grum, D. K. and Salaj, A. T.) in the proceedings of the 3th Conference of interdisciplinary research on real estate (CIRRE), Groningen, 20-21 Sept 2018.

-
- Harrigan J., Raiser, J. M. and Raiser, P. H. (1998), "*Senior residences. Designing Retirement Communities for the Future*", John Wiley & Sons, Canada & NY.
- Hellvik, H., Haugse, K. K., Strømmes, K. R., Roksvaag, K., Halmrast, H. H., Kvåle-Gissing, H., Kornstad, S. M. and Killingland, M. (2017), "Boliger til pleie- og omsorgsformål – egnethet for dagens og fremtidens brukere (In Norw.)", A feasibility study, Rambøll, Oslo, available at http://www.ks.no/contentassets/da0430a43808418c8578d2a673c61a9b/fremtidens-omsorgsboliger_feb2017.pdf (accessed on 2 Sept 2018).
- HOD (2013), "Morgendagens omsorg" (White paper «Future care»), Oslo: Ministry of Health and Care Services (HOD), -available at <https://www.regjeringen.no/contentassets/34c8183cc5cd43e2bd341e34e326dbd8/en-gb/pdfs/stm201220130029000engpdfs.pdf> (accessed on 1 Sept 2018).
- HOD (2018), "Leve hele livet – En kvalitetsreform for eldre" (White paper: In Norw.), Oslo: Ministry of Health and Care Services (HOD), available at <https://www.regjeringen.no/contentassets/196f99e63aa14f849c4e4b9b9906a3f8/no/pdfs/stm201720180015000dddpdfs.pdf> (accessed on 1 Sep 2018).
- HUS (2017), "Healthy aging. Education, research and entrepreneurship working on health and participation together", (eds. Degenaar J., Heeres, M. and Bolsius, D.), The Centre of Expertise Healthy Ageing of Hanze University of Applied Sciences, Hanze University of Applied Sciences (HUS), Groningen.
- Institute of Public Care (2012), "Identifying the health gain from retirement housing", available at https://ipc.brookes.ac.uk/publications/Identifying_the_health_gain_from_retirement_housing.pdf (accessed on 26 Sept 2018).
- Marston et al, (2014), "North Tyneside Living: An integrated housing, health and social care model to deliver preventative and enabling sheltered housing services: Case Study 98", Housing LIN.
- NOF (2016), "Industrien – Grønnere, smartere og mer nyskapende" (White paper: "A greener, smarter and more innovative industry"), Oslo: Ministry of Trade, Industry and Fisheries (NOF), available at <https://www.regjeringen.no/contentassets/9edc18a1114d4ed18813f5e515e31b15/en-gb/pdfs/stm201620170027000engpdfs.pdf> (accessed on 15 Sep 2018).
- Schmidt, L., Holm, A., Kvinge, T. and Nørve, S. (2013), "Housing + - New housing concepts for seniors and common people" (In Norw.) – Research report, Norwegian Institute of city and regional research (NIBR, 2013:19), Oslo.
- Shelter, (2012), "A better fit? Creating housing choices for an ageing population", policy report, available at http://england.shelter.org.uk/_data/assets/pdf_file/0005/427730/Policy_report_A_better_fit.pdf (accessed on 26 Sept 2018).
- Smistad, I. (2018), "Concept development of the senior housing of the future. Interaction in early development phase" (In Norw.), master thesis, Norwegian Science and Technical University (NTNU), Faculty for Engineering and Science, Trondheim.
- Van Bilsen, P. M., Hamers, J. P., Groot, W., Spreeuwenberg, C. (2008), "Sheltered housing compared to independent housing in the community", *Scandinavian Journal of Caring Sciences*, 22(2): 265–274.
- WHO (2018), "The Global Network for Age-friendly Cities and Communities. Looking back over the last decade, looking forward to the next", available at <https://www.who.int/ageing/gnafcc-report-2018.pdf> (accessed on 1 Dec 2018).
- Woods, C. (2017), "The social value of sheltered housing", Briefing paper, Demos, available at <https://www.demos.co.uk/wp-content/uploads/2017/06/Sheltered-Housing-paper-June-2017.pdf> (accessed on 26 Sept 2018).