# Developing a framework for housing models to age in place

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by

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#### **Preface**

This thesis marks the end of my master program Complex System Engineering and Management. During my side job in the nursing home of Stichting Eykenburg, I experienced the different changes in the field of housing and care over the last 10 year. The changes in the field of housing and care sparked my interest to find a topic in the field of housing and care for my master thesis. The subject appeared to have more depth than I initially thought and I can state the topic has aged me behind my desk.

I would like to thank a number of people who supported me during the process of writing my thesis. First of all, I would like to thank my wife. Talisa, thanks for your unconditional love during the process. Second of all, I want to thank my graduation committee for their feedback and support. I would like to thank Harry van der Heijden for his advice, interest about the topic and keeping me on track. I would like to thank Rens Kortmann for his advice on the structure of my thesis. I would like to thank Marja Elsinga for chairing the committee meetings and overviewing the bigger picture.

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#### **Abstract**

The global population is ageing at a rapid pace, accordingly many countries implement ageing in place policies to prevent unmanageable growth of costs of institutionalised care settings. Like many other countries, the Dutch government also shifted towards ageing in place policies to reduce the costs of institutionalised care settings. Ageing in place is aimed at allowing the elderly to live independently and stay part of the community. Therefore, policies and services are increasingly aimed at supporting the elderly in 'place', where 'place' consists of the dwelling and its surrounding environment. However, the current 'place' may not always be the best option for the elderly to receive care and support in order to age in place.

The playing field of housing and care has made a significant transition since the decentralisation of the General Act on Exceptional Medical Expenses. Due to the changes in national policy and legislation, the binary perspective on housing for the elderly, in the conventional market or traditional institutions, has been expanded to include a potential spectrum of housing models to age in place. By disconnecting supportive functions, such as housing, care and welfare, from the traditional institutions, a new playing field has arisen for housing models to age in place between the traditional family home and the traditional institutions. Furthermore, public and individual responsibilities have shifted. The municipality has been given the responsibility to develop a strategy on ageing in place and the elderly have become responsible for choosing a 'suitable' place to age. However, municipalities, elderly and other stakeholders have their own perspective on the definition of a suitable 'place' to age, therefore municipalities, elderly and stakeholders have their 'own language' with regard to housing models to age in place. This leads to a so-called 'dialogue of the deaf' during the process of development and realisation of housing models to age in place. The new playing field of housing and care grants the opportunity to develop new supportive 'places'. In order to provide supportive 'place' for the elderly, municipalities are able to proactively facilitate stakeholders in the development and realisation of *housing models* to age in place. This study offers an instrument that supports the coordination task of Dutch municipalities in order to develop and realise housing models to age in place, see figure 1.

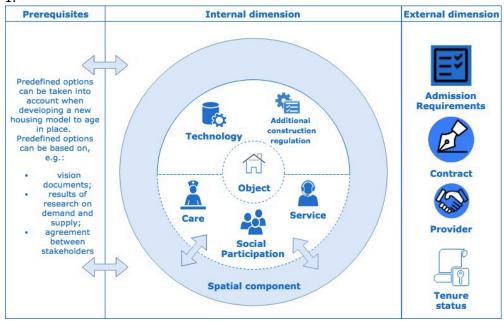


Figure 1: Finalised framework for housing models to age in place

The basic functioning of the framework is as follows. The combination of the *residential object* and the variables in the *inter- and external dimension* reflect what a *housing model to age in place* entails. Within each variable, several options or combination of options are available to define the variable, where the *prerequisites* can be predefined options that need to be included in the model when developing a new *housing model to age in place*. The diverse variables are able to 'build' a variety of housing models within the new spectrum of ageing in place, therefore the variables are labelled as building blocks. Based on this study, three applications of the framework have been defined in order to support the coordination task of Dutch municipalities in order to develop and realise housing models to age in place.

The first application of the framework is focussed on structurally collecting data on preferences of the elderly on local scale in relation to *housing models to age in place*. The framework can be used as a tool to gather data of the preferences of the elderly in relation to *housing models to age in place*. Findings based on the data collected on the preferences of the elderly in relation to *housing models to age in place* can be used to define *prerequisites*, which can be taken into account when developing a *housing model to age in place*. By exposing the demand for *housing models to age in place* through the use of the framework, the municipality is provided with data that can be used for both housing and ageing in place policy.

The second application of the framework is aimed at creating a frame of reference for municipalities on *housing models to age in place*. Currently, the new spectrum of ageing in place is mostly unexplored and therefore municipalities have an incomplete frame of reference on *housing models to age in place* within their municipality borders. Therefore, the framework can be used to enhance the frame of reference on *housing models to age in place* by analysing existing housing models within municipality borders. The framework offers a 'template' for municipalities to structurally organise information on existing *housing models to age in place*.

The final application of the framework focuses on the guidance of stakeholders in relation to the discussion on what a supportive 'place' is for the elderly. The framework provides a starting point for 'shared language' on *housing models to age in place* in order to guide the dialogue between stakeholders involved with the development of *housing models to age in place*. The framework can be used as a guidance in order to break the 'dialogue of the deaf' that frequently occurs between stakeholders during the development of *housing models to age in place*. This application of the framework can be compared to a structured interview with the same questions asked in the same order each interview. In this case, the same building blocks are discussed in the same order each consultation round between stakeholders. Through repeating the process the occurrence of the 'dialogue of the deaf' will decrease.

The research presents several recommendations. One of the recommendations is focused on bridging the domains of different stakeholders. It became apparent that stakeholders within the playing field of housing and care think too 'compartmentalised'. While the framework offers an instrument to bridge the domains, it still requires a cultural change to bridge the domains. This means that the stakeholders have to show 'entrepreneurship and guts' to successfully develop new *housing models to age in place*. The municipality will have to take a proactive and facilitating role in order to stimulate stakeholders to 'look over their own fence'.

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#### 1 - Introduction

The global population is ageing at a rapid pace, accordingly many countries implement ageing in place policies to prevent unmanageable growth of costs of institutionalised care settings (Wiles, Leibing, Guberman, Reeve, & Allen, 2012; World Health Organization, 2007). Like many other countries, the Dutch government also shifted towards ageing in place policies to reduce the costs of institutionalised care settings (Hooimeijer, 2007). *Ageing in place* is aimed at allowing the elderly to live independently and stay part of the community (Wiles et al., 2012). Therefore, policies and services are increasingly aimed at supporting the elderly in 'place', where 'place' consists of the dwelling and its surrounding environment (Van Bilsen, Hamers, Groot, & Spreeuwenberg, 2008). Old age has its infirmities, therefore the interaction between the 'ageing body' and the built environment becomes increasingly important and one of the challenges is to develop a 'place' that is supportive for the elderly in order to age in place (Gilroy, 2008). In the Netherlands, the ageing in place policy gradually transferred the task of providing a supportive 'place' for the elderly towards the municipalities (VNG, 2014). First, the development of the ageing in place policy in the Netherlands will be briefly discussed, before zooming in on the local challenges for municipalities and other stakeholders.

#### 1.1 - The ageing in place policy in the Netherlands

The development of the *ageing in place* policy in the Netherlands is the result of a number of factors. In this section two factors are highlighted, namely the post-war institutional logics and the babyboom.

The post-war policy, on providing a supportive 'place' for elderly, was established on institutional logics in contrary to the current *ageing in place* policy. After the Second World War, the development of institutionalised settings to support the elderly was seen as a solution to the housing shortage caused by the war (Mens & Wagenaar, 2009). Based on the institutional logics, national care legislation was created that funded a fixed amount of categories of housing for elderly (Hooimeijer, 2007). The General Act on Exceptional Expenses (in Dutch: 'De Algemene Wet Bijzondere Ziektekosten') acted as the overarching care legislation that funded both care and housing for the elderly in several institutionalised settings (Spiering, 2014).

The liberation, that ended the Second World War in the Netherlands, led to a baby boom in the Netherlands. The euphoria of the liberation led to an increase in marriages and birth rates from 1946-1955, accumulating to approximately 2.4 million 'baby boomers' (CBS, 2012). The first of this generation have reached the legal retirement age of 65 in 2011 and the Central Bureau of Statistics expect that this group will have a long 'evening of life' because of higher life expectations (CBS, 2012). This is combination with the size of the group is also referred to as 'double ageing' (in Dutch: 'dubbele vergrijzing') (Groot et al., 2013). According to the Central Bureau of Statistics, the number of over-65s of the Dutch population will increase with 2 million until 2040 to 4.7 million over-65s.

With the ageing population in sight, the General Act on Exceptional Medical Expenses became too expensive and uncontrollable for the central government (Ministerie van VWS, 2016). Therefore, the Dutch government took the first steps in the transition towards *ageing in place* policy in the 80s. The Dutch government planned to progressively phase out a part of the institutional settings of housing for elderly

(Spiering, 2014). Through the process of separation of housing and care (in Dutch: 'scheiden wonen en zorg'), the housing costs component was phased out from the General Act on Exceptional Medical Expenses for people with a low demand for care (Mandemaker & Crist, 2005). The group of people with a low-care demand, who qualified for the care home (in Dutch: 'verzorgingshuis') before the separation of housing and care, is now responsible for choosing a place to age outside the traditional institutional setting (Elp. Zaal, & Zuidema, 2012). At the same time, another part of the transition to ageing in place policy was to gradually decentralise tasks that were recorded in the General Act on Exceptional Medical Expenses, which started in 2000 and was finalised in 2015 (Ministerie van VWS, 2016). The decentralisation of the tasks is aimed at supporting the elderly on a local level, where municipalities have the freedom of choice to give substance to how the elderly are supported to age in place (Ministerie van VWS, 2016; VNG, 2014). Additionally, the decentralisation allows elderly to receive a broad spectrum of care options at home instead of being forced to move to an institutionalised setting (Vegter, 2006). For example, intensive care that was only available in the *nursing home* (in Dutch: 'verpleeghuis') can, under certain conditions, now also be received at home (Vegter, 2006). However, if the care demand becomes too complex and the current housing situation is unsuitable for the provision of intensive care, the elderly can be indicated to qualify for the nursing home (Ministerie van VWS, 2016).

In short, the change in government policy and the alterations in care legislation put the traditional institutionalised settings of housing for elderly under pressure. Additionally, the new care legislation grants the possibility for elderly to *age in place*, and receive necessary care and support at home. Broadly defined, this means that the group of elderly are able to remain part of the conventional housing stock instead of moving to an institutionalized setting. Nevertheless, what challenges arise for municipalities and other stakeholders within this new playing field of *ageing in place*?

#### 1.2 - A new playing field of housing and care: a literature review

As mentioned above, the core idea of the *ageing in place* policy is for elderly to remain on the conventional housing market and *age in place* instead of moving to an institutionalised setting. This literature review examines the challenges for stakeholders in the conventional housing market and the traditional institutionalised settings for housing for elderly, aware of the fact that the playing field for housing and care is larger.

To begin, due to the decentralisation, the 'directing role' of providing a supportive 'place' has been transferred from the central government towards municipalities (RLI, 2014). Supportive functions, such as housing, care and welfare, which were first offered in a standard package in traditional institutions, are now spatially disconnected and can be used flexibly according to the needs of the elderly (Houben, 2001). To add to this, municipalities have become responsible for developing strategies with regard to *ageing in place* within municipality borders and implementing supportive functions in co-operation with stakeholders (VNG, 2014). A part of this task has been enacted by the Social Support Act (in Dutch: 'de Wet Maatschappelijke Ondersteuning') (Ministerie van VWS, 2016). This creates a new junction at local level with regard to housing policy and ageing in place policy (Hooimeijer, 2007). The Social Support Act is built on the pillars of self-reliance and civil community, with the result that the elderly first have to rely on their social network before they can make use of professional support (Jager-Vreugdenhil, 2012). To add to this, municipalities have the freedom to determine the policy regarding the use of professional support. As a result,

municipalities have the opportunity to make tailor-made provisions (in Dutch: 'maatwerk voorzieningen') that fit the needs of an individual (Jager-Vreugdenhil, 2012). In addition, municipalities are able to establish general provisions (in Dutch: 'algemene voorzieningen'), for example, transport for the elderly or meal provision (Ministerie van VWS, 2016). The approach of the Social Support Act is reactive, which means that when the health of the elderly deteriorates, the Act is used as a 'safety net' to prevent the health from deteriorating even more (van Campen, 2011). In relation to the dwelling. adjustments can be made to the current dwelling in order to support the elderly to age in place, which are reimbursed by the Social Support Act. To add to this, when the costs of adjustment are too high, the elderly can receive support to find a suitable dwelling in order to age in place (Ministerie van VWS, 2018). In contrary to this reactive approach, international gerontology studies have shown that a proactive approach of housing the elderly in a suitable 'place', has a positive effect on the prevention of deterioration of health and ageing with infirmities, see Gitlin (2003) and Oswald & Wahl (2004). As mentioned by Hillcoat-Nallétamby & Ogg (2014), the current 'place' may not always be the best option for the general wellbeing of the elderly. Arranging suitable 'places' to age can enhance the quality of life of the elderly and decrease the demand for care, and eventually reduce the costs for municipalities (Gabriel & Bowling, 2004). So this raises the question: what 'place' is ideal for elderly to grow old? Wiles et al. (2012, p.365) answers this question by stating that there is no "one-model-fits-all". Thus, how does a municipality develop a vision with regard to ageing in place when there is no "onemodel-fits-all" solution for a supportive 'place'?

The Dutch Ministry of Health, Welfare and Sport (2018) presented an action program for municipalities and stakeholders to contribute to the quality of life of the elderly with an action point aimed at the development of a supportive 'place'. The action point calls for co-ordination between municipalities, care organisations, housing associations, market parties and the elderly to map out housing preferences of the elderly and translate them into a municipal housing vision, and performance agreements between municipalities and housing associations (Ministerie van VWS, 2018). Houben (2001) typifies this form of co-ordination in relation to the implementation of ageing in place policy as 'managed co-ordination', where municipalities are responsible for inter-sectorial co-ordination and develop a shared vision on ageing in place. The goal of this shared vision in relation to the supportive 'place', is that the elderly are housed into dwellings that fit their housing preferences, but are also 'suitable' to age in place (Ministerie van VWS, 2018). Several housing market studies have indicated that the demand for suitable dwellings for the elderly is growing because of the separation of housing and care (Pop, Heijs, & Meerman, 2014; Post, Poulus, van Galen, & van Staalduinen, 2012; Van Iersel, Leidelmeijer, & Buys, 2010). Accordingly, researchers state that the current housing stock of large Dutch cities can be an obstacle to provide a place to age, while rural areas are confronted with the lack of supportive facilities near dwellings to age in place (Leidelmeijer, Iersel, & Leering, 2017). The growing demand can be met by developing new suitable dwellings or by modifications of existing dwellings. On national scale, researchers state that the task will mostly consist of the modification of existing dwellings because the elderly want to stay put in their current dwelling (Groot et al., 2013; van Dam, Daalhuizen, de Groot, van Middelkoop, & Peeters, 2013). Nevertheless, whether it is a modification task or otherwise, municipalities are responsible for comprehending the task in order to develop a vision for a supportive 'place' for the elderly to age (Van Iersel & Leidelmeijer, 2015). Other studies were conducted to quantify the growing demand for suitable

dwellings. On the one hand, studies indicate that there are shortages in relation to suitable housing for the elderly (Pop et al., 2014; Post et al., 2012; Van Galen & Willems, 2011), while on the other hand, a study indicates that there is a 'mismatch' (Atrive, 2016). With the 'mismatch', researchers indicate that the current housing stock contains enough suitable dwellings in absolute numbers, but the 'wrong' household occupies the suitable dwelling. For example, a young couple occupies a dwelling, which is suitable for someone with a wheelchair. Thus, a part of the research suggests the development of new suitable dwellings to deal with the shortages, while the other research suggests the implementation of policies to deal with the 'mismatch'. Aware of the fact that abovementioned studies based on different scales, all studies attempt to quantify the demand and supply of suitable dwellings based on different target groups and a different definition of a suitable dwelling. For example, Pop et al. (2014) acknowledge the broad understanding of a suitable dwelling and state that the suitability of a dwelling depends on the demand of the elderly and the characteristics of the dwelling, while the research by Atrive (2016) defines the suitability of a dwelling only based on physical characteristics of the dwelling. The definition of a suitable dwelling differs between studies, but also experts have disagreement on what is suitable for the elderly and what is not. For example, as mentioned by Leidelmeijer et al. (2017), some experts believe that stairs in a dwelling are positive for the vitality of the elderly, while other experts believe that stairs are a potential risk for fall accidents. To add to this, Ipso Facto (2012) shows that municipalities also have their own interpretation of the definition of suitable dwellings in relation to the elderly. The different interpretations of a suitable dwelling between researchers, experts and municipalities, increase the complexity of comprehending the task and developing a vision to create supportive 'places'. Especially when one considers that there are currently 355 Dutch municipalities with 355 (potential) different interpretations of a suitable dwelling. To add to this, it should also be borne in mind that the municipalities' vision is demarked by municipality boundaries, while care organisations, housing associations, market parties and the elderly are not bound by the municipal boundaries. As a result, these stakeholders can be confronted with different definitions of suitable dwellings in different municipalities. Nevertheless, how do the other stakeholders experience the changes within the new playing field?

First, researchers address the impact of the ageing in place policy on the owners of traditional institutionalised real estate, such as care organisations and housing associations. Owners of traditional institutionalised real estate are confronted with vacancy of care homes and nursing homes because of stricter admission requirements (Mandemaker & Crist, 2005; Veuger, 2014). In the Netherlands, two-thirds of the institutionalised real estate is owned by care institutions, while the remaining one-third is owned by housing associations and exploited by care institutions (Mandemaker & Crist, 2005; Veuger, 2014). The risk of vacancy for care organisation has increased because of the implementation of the normative housing component (in Dutch: 'normatieve huisvestingscomponent') (RLI, 2014). The normative housing component is a rate care organisations receive to invest in new real estate and to pay for maintaining existing real estate based on their actual production (Elp et al., 2012; Veuger, 2014). Instead of receiving a fixed compensation according to the maximum capacity of beds, care organisations will now only receive compensation for the actual number of clients (ING, 2013). Therefore, care organisation will have less financial means when confronted with vacancy and thus less possibilities to transform vacant real estate into profitable real estate (Veuger, 2014). Furthermore, because of the separation of housing and care, housing associations only receive compensation for the residential object

within *care homes* with communal areas (Veuger, 2014). Hence, the compensation for the residential object cannot cover the costs of communal areas, resulting in unprofitable renting out of residential objects within *care homes* (Veuger, 2014). In addition to the unprofitable renting out of residential object within *care homes*, housing associations are confronted with the *property tax* (in Dutch: 'verhuurdersheffing'). Both unprofitable renting out of residential object within *care homes* and *property tax*, decrease the financial strength of housing associations (Veuger, 2014). Municipalities rely on the expertise of care organisations and housing associations in order to provide a supportive 'place' for the elderly (RLI, 2014). On the one hand, care organisation posses the knowledge and expertise to provide care at home, while on the other hand, housing associations have the means to develop new dwellings or modify dwellings in the social housing sector. The literature suggests that the implementation of the *ageing in place* policy has raised a real estate issue that requires priority before care organisations and housing associations can focus on supporting the municipality to develop a supportive 'place'.

Second, the change in government policy and alternations in care policy opened up the playing field for investors and developers (Katen & Rooijers, 2016; Veuger, 2017). Although the Dutch market of healthcare real estate is still new, the market is seen as an equally robust market comparable to countries with a longer history of healthcare real estate developments, for example, Australia and the UK (Veuger, 2015). Due to the retrenchment of the central government, the separation of housing and care, and the ageing Dutch population, the investment volume in healthcare real estate has risen sharply in recent years (Veuger, 2017). The increase in investment volume can partially be explained by investors, developers and care organisations cooperating and transforming traditional real estate through different financial constructions (Bouwinvest, n.d.; CBRE, 2017). To add to this, the new playing field offers the possibility to develop new models in the field of housing and care on the conventional housing market (CBRE, 2017). However, to be able to use these opportunities, stakeholders will have to work together to develop and market models (Veuger, 2015). Investors are still reluctant because the investment category health care real estate is new in the Netherlands and therefore a complete frame of reference is not yet available in terms of return (Veuger, 2017). Meanwhile, literature demonstrates the opportunities for new housing models to age in place because of changes in legislation and changing preferences of the ageing population (Lupi, van Triest, & Homan, 2015; Nagel, 2006; SEV, 2008), however how these models need to 'look and feel' is unclear. The increase in investment volume portrays the entrance of investors and developers into the new playing field and literature shows that the Dutch market for healthcare real estate has unused potential. This offers municipalities the opportunity to integrate the unused potential of models to age in place into their vision to develop supportive 'places'. The Ministry of Interior and Kingdom Relations (2016) suggest that municipalities incorporate a long term vision for supportive 'places' for the elderly into their housing vision in order to attract investors and developers. Apart from the suggestion that the Housing Vision should be attractive for investors and developers, the housing vision should also match the needs of the end user of the real estate, namely, the elderly themselves. Thus, how do the elderly experience the new playing field of housing and care?

Finally, the new playing field of housing and care has shifted the responsibility for choosing a suitable 'place' to age the elderly (Elp et al., 2012). Whereas the elderly could only receive care and support in a traditional institutionalised setting, it is currently

possible to receive the same care and support at home (Vegter, 2006). As mentioned before, the current 'place' may not always be the best option for the elderly to receive care and support in order to age in place (Hillcoat-Nallétamby & Ogg, 2014). Hence, the elderly have to make an assessment of whether the current 'place' is suitable to age or whether they have to move to a suitable 'place'. Due to the change in policy and care legislation, the elderly have been given a wide choice of freedom with regard to where they want to *age in place* (Elp et al., 2012). As a result, the market of housing for the elderly is in transition from a supply-driven market towards a demand-driven market (Pop et al., 2014). Despite the increased choice of freedom for the elderly, housing market research shows that the largest part of the elderly want and tend to stay put (Eskinasi, Groot, Middelkoop, Verwest, & Conijn, 2012; van Dam et al., 2013; Van Iersel et al., 2010). The elderly want and tend to stay put and therefore cause congestion on the local housing market, meaning that, for example, young families cannot move to suitable single-family homes and also have to stay put (van Dam et al., 2013; Van Iersel et al., 2010). As a result, the ageing in place policy is at odds with local housing policy to increase the residential mobility and offer starters the possibility to enter the local housing market (Renes & Jokovi, 2008). According to gerontologist the tendency to stay put is caused by the emotional attachment of the elderly to the current 'place' (Oswald & Wahl, 2013; Wiles et al., 2012). Scholars in the field of housing studies acknowledge the emotional attachment to the current 'place', but also add financial benefits of the current 'place' (Hooimeijer, 2007) or depletion of financial resources after reaching the retirement as reasons to stay put (Mutchler & Burr, 2003). For the elderly that make a move or are inclined to move, housing research indicates that the housing preferences of the new generation of elderly have changed compared to previous generations (Hooimeijer, 2007). Jong, Rouwendal, Hattum, & Brouwer (2012) discuss the underlying factors on why the housing preferences of the ageing population differ from previous generations of elderly. Other literature discusses the effect of the changes in Dutch care legislation on the current categorisation of housing for elderly, implying that the current categorisation of housing for the elderly does not fit the housing preferences of the ageing population (Van Galen & Willems, 2011). To add to this, research shows that the elderly are unknown with new housing models to age in place (Bureauvijftig. 2015: Veuger, 2016). Whether the elderly stays put or decides to move, all elderly have the freedom to define their own strategy to find a suitable 'place' to grow old. Gerontologist Stephen Golant (2011) describes this as strategy to find 'residential normalcy', which the elderly apply on their 'place'. The holistic emotion-based theoretical model describes action or mind strategies, which can support the elderly to find 'residential normalcy' when confronted with negative experiences considering the current residential setting (Golant, 2011). Some elderly apply mind strategies, for example, lowering goals and ambitions in order to find 'residential normalcy'. Other elderly apply action strategies, for example, modifying the current dwelling or moving to a suitable dwelling in order to find 'residential normalcy' (Golant, 2011). The model presented by Golant (2011) highlights the subjective image the elderly can have of their current 'place'. Where a professional with an objective view considers the 'place' to be unsuitable, the elderly may have applied mind strategies so that the 'place' is suitable in his or her experience. As a result, some elderly can occupy unsuitable 'places' that could have a negative effect on the prevention of deterioration of health and ageing with infirmities. Eventually, this could lead to potential higher public care costs for in the future (Martens, 2018). Thus, is the complete individual responsibility of the elderly for ageing in place in relation to housing desirable for municipalities? Martens (2018) answers this question with no, a

partnership between public and individual responsibilities in relation to housing should lie at the core of ageing in place policies.

#### 1.2 - Problem statement

Although ageing in place policies are aimed at supporting the elderly to stay put, it does not mean that municipalities must adopt a reactive attitude and that one can not longer play a role in facilitating individual choices in the field of housing (Martens, 2018). To add to this, facilitating the elderly to have choices of 'places' to age can increase their competence to preserve maximum independence at higher age (Boldy, Grenade, Lewin, Karol, & Burton, 2010). The literature review shows that the playing field of housing and care has made a significant transition since the decentralisation of the General Act on Exceptional Medical Expenses. Due to the changes in national policy and legislation, the binary perspective on housing for the elderly, in the conventional market or traditional institutions, has been expanded to include a potential spectrum of housing models to age in place. By disconnecting supportive functions from the traditional institutions, a new playing field has arisen for *housing models to age in place* between the traditional family home and the traditional institutions. Furthermore, public and individual responsibilities have shifted. The municipality has been given the responsibility to develop a vision on ageing in place and the elderly have become responsible for choosing a 'suitable' place to age. Martens (2018, p. 4) visualised the playing field of places to age and the partnership between public and individual responsibilities, see figure 2.

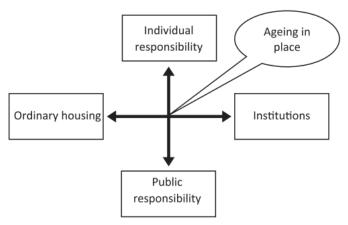


Figure 2: Ageing in place visualised by Martens (2018, p.4)

The literature review has shown that the current Dutch housing stock can be an obstacle to provide a place to age. The 'directing role' of providing a supportive 'place' has been transferred from the central government towards municipalities. Therefore, the municipalities have become responsible for developing supportive 'places' in cooperation with stakeholders. As mentioned by Martens (2018), the shortage of alternatives to the current dwelling can eventually increase the demand for care at home and consequently the need for *nursing homes* (Martens, 2018). This is against the odds of one of the goals of *ageing in place* policies, namely, the reduction of the costs for institutionalised care settings. The literature review displays that the new playing field offers the opportunity to develop *housing models to age in place*, which can result in a (potential) supply of *housing models to age in place*. To add to this, the new generation of elderly have different housing preferences compared to previous generations of elderly, which influences the (potential) demand regarding *housing models to age in place*.

Literature has shown that this (potential) demand cannot be matched with the current categorisation of housing for the elderly. The key issue here is that municipalities need to map out the local demand of the elderly in order to develop an adequate shared vision with stakeholders. However, the literature review shows that the stakeholders have their own perspective on the definition of a suitable 'place' to age. Therefore, comprehending the task and establishing a shared vision on the development of suitable 'places' becomes complex. For this research the following problem statement has been defined for municipalities:

The (potential) supply of *housing models to age in place* and the (potential) demand for places to age can not be coordinated without a shared definition of a suitable 'place' to age.

If stakeholders want to develop housing models to age in place for the 'new' ageing generation, one will need an overview on the (potential) demand for *models to age in place* in order to match it with the (potential) supply. Especially care institutions and housing associations that are currently confronted with vacancy in existing supply, but also investors and developers that are looking for business cases with a robust rate of return. Therefore, research should be done to gain information of the (potential) demand for *housing models to age in place* and how it can be matched with the (potential) supply.

#### 1.4 - Knowledge gap

The new playing field of housing and care grants the opportunity to develop new housing models to age in place. Current literature is unclear how these housing models to age in place need to look and feel. Because the market of housing for the elderly is in transition from a supply-driven market towards a demand-driven market, one should first get an understanding of the (potential) demand of the elderly in relation to housing models to age in place. To add to this, literature indicates that the housing preferences of the 'new' generation of elderly are different from the previous generation of elderly. But, it is unclear how this affects the behaviour of the elderly on the housing market in relation to models to age in place. Finally, literature lacks a shared definition of a suitable 'place' for the elderly to age. A shared definition of a suitable 'place' is necessary for stakeholders to comprehend the task and develop a shared vision on ageing in place in relation to housing.

#### 1.5 - Research objective

The objective of this study is to uncover the new spectrum of *housing models to age in place,* which are positioned between the ordinary family home and the traditional institution, through the development of an instrument that supports stakeholders to coordinate the (potential) demand and (potential) supply of *housing models to age in place.* The coordination task consists of three elements. First, uncovering the (potential) demand of *housing models to age in place.* Second, to uncover the new spectrum of *housing models to age in place.* Third, guiding stakeholders in the development and realisation of housing models to age in place based on the (potential) demand through a shared definition of suitable 'places' and a shared vision. To support this coordination task, information has to be gained on both the (potential) demand and (potential) supply of *housing models to age in place.* 

#### 1.5.1 - Scope of this research

The scope of this research is focussed on the Netherlands, however international literature and cases will be used to develop an instrument for *housing models to age in* 

*place*. The target group of this study is the group of over-55s. The focus will be on the over-55s with no to little psychical limitations, therefore excluding over-55s with specialist mental care and addiction care. The scope of the housing side of this study will focus on the conventional housing market, which excludes *nursing homes*.

#### 1.5.2 - Scientific and societal relevance

The social relevance of this research lies with the contribution to the policy goals of the Dutch government and the willingness of the ageing population to *age in place*. The goal of the Dutch government is to let elderly age in place and to decrease the costs of institutional expenses. Currently, ageing in place policies are based on reactive strategies by municipalities. Finding a way to coordinate the demand and supply of *housing models to age in place* can support municipalities to provide the elderly with housing models to age in place. This proactive approach can decreases the possibility of the elderly occupying 'places' that are not capable of supporting the elderly to age. The proactive approach could decrease the use of care at home and institutionalised care in the future.

The scientific relevance of this research lays with the contribution to literature on the role of housing in relation to the development of ageing in place policy. The transition from ageing in institutionalised settings towards ageing in the conventional housing stock has its implication on the design of the conventional housing stock. Researchers and experts have different perspectives on what kind of housing is suitable for the elderly to age. This study aims to contribute to this discussion by developing an instrument that guides stakeholders in the process of finding agreement on what housing model support the elderly to age in place. The instrument focuses on the physical aspects of housing, but also on other functions that can support the elderly to age in place, such as care and welfare. The instrument offers the possibility to create a linkage between housing policy and ageing in place policy.

#### 1.6 - Research questions

From the problem statement and knowledge gap, a research objective has been distilled. This research objective is accompanied with the following main research question:

# How can an instrument support the coordination task of Dutch municipalities in order to develop and realise housing models to age in place?

A set of sub-questions has been set up to answer the main question and to outline the structure of the research. Section 1.8 elaborates on how the sub-questions and chapters are related. The sub-questions are shown below.

#### **Sub-questions**

- 1. How did the demand to age in place of the over-55s develop?
  - a. How can the behaviour of the over-55s on the housing market help to comprehend the development of the demand to age in place?
  - b. How can stated housing preferences help to comprehend the demand to age in place?
- 2. What instrument can be designed that reflects what a housing model to age in place can entails?
  - a. How does a housing model support the elderly to age in place?
  - b. What notable remaining characteristics does a housing model have?
- 3. How do experts review the instrument?
  - a. How do experts review the developments on the Dutch market of housing and care?
  - b. What suggestions from the experts review can be included in the design of the instrument?

#### 1.7 - Theoretical framework

In this section the theoretical framework will be presented. Providing a supportive 'place' for elderly, by realisation of *housing models to age in place*, for the 'new' ageing generation is a complex task. The complexity of this task is caused by the lack of a shared definition of a supportive 'place' and because the housing preferences of the 'new' generation of elderly are different from the previous generation. First, theory on housing pathways will be used to sketch the development of the demand to age in place. Second, to get a better understanding of the preferences of the group of the current over-55s in relation to housing, theory on stated housing preferences is introduced.

#### 1.7.1 - Housing pathways

In theory, the development of a household and its corresponding housing preferences are predictable (Schilder & Conijn, 2013). The series of dwelling a household occupies during a certain timespan can be defined as a *housing career* (Schilder & Conijn, 2013). The concept of a *housing career* is built on the assumption that a household has a free choice on the market and opts to climb the housing ladder (Abramsson, 2012). In contradiction to the concept of a *housing career*, is the concept of *housing histories*. The concept of *housing histories* also focuses on the free will of households on the housing market, but emphasises on how constraints, for instance, position on the labour market, can limit the free will of households (Beer, Faulkner, & Gabriel, 2006). Both approaches attempt to uncover the housing outcome of households using different perspectives. The approaches emphasize on different factors that can influence the housing outcome of households, therefore providing an incomplete picture of how housing outcomes are formed (Beer et al., 2006).

The housing pathways approach by Clapham (2002) attempts to embrace a broad spectrum of factors on the housing market that can influence the housing outcome of households. Clapham (2002) introduces the concept of housing pathways, focussing on creating a link between the objective spectrum and subjective spectrum of housing. Housing pathways research takes all elements of the housing career and housing histories approach into account but expands its approach on the subjective definition of home in relation to personal events and interaction with the environment (Clapham, 2002). With this approach, the possibility exists that housing circumstances can change even when there is no change in dwelling or tenure (Clapham, 2002). This is comparable to elderly that try to find 'residential normalcy' as presented by gerontologist Stephen Golant (2011). The housing pathway approach supports the researcher to order the housing market incorporating physical characteristics of the dwelling as well as other factors such as changes in housing policy. Clapham (2002) build on the concept of housing pathways in relation to the ageing population, stating that the 'new' ageing population will have a strong desire to structure his/her own identity in relation to housing transition in later life than the previous ageing population. The behaviour of the elderly on the housing market needs to be taken into account when defining housing models to age in place. Additionally, the concept of housing pathways can be connected to the stated housing preferences to identify different housing pathways of the over-55s. This connection can be used to express the trajectories within the new spectrum of housing models to age in place.

#### 1.7.2 - Stated housing preferences

In this study, stated housing preferences will be used to express the choices and preferences, the over-55s have/make in relation to housing. Stated preferences, in contradiction to revealed preferences, are based on evoked preferences and

hypothetical choices (Jansen, Coolen, & Goetgeluk, 2011). Revealed preferences are based on the analysis of 'real' choices made by consumers on real markets (Jansen, Coolen, & Goetgeluk, 2011). The downside of stated preferences is that they are given in a certain point of time and most of the time under hypothetical circumstances. This means that they give an indication of potential behaviour, but the real choice can still differ from stated choices. Because the definition of *housing models to age in place* is still in its infancy in current literature, it is difficult to measure 'real' choices in relation to *housing models to age in place*. The stated housing preferences of the over-55s can be used to map out the trajectories of housing pathways in the future depending on the available data from the WoON2015 survey (CBS, 2016).

#### 1.8 - Research method and structure

The following section contains a small elaboration of what research methods are used and how all chapters relate to each other. Figure 3 visualises an overview of how the study is cultivated and how different chapters relate to each other. First, a short elaboration on the methods used for the data analysis and the development of the instrument.

#### 1.8.1 - Method

In this study, several research methods will be applied to design an instrument that can support stakeholders to coordinate the demand and supply of *housing models to age in place*.

First, a descriptive analysis of demographic and housing data will be applied. The descriptive analysis consists of showing the frequencies of different groups, for instance, age groups, or household groups. The goal of the analysis is to give an indication of the dimensions of different groups. In addition, a descriptive analysis of housing data will be performed. This will give an indication of the dimensions of groups related to aspects of housing. The housing data will also give an indication of the stated housing preferences of the over-55s. Both descriptive analyses can help to indicate the magnitude of the housing pathways of the over-55s.

Second, empirical research will be applied to gather qualitative data on the (potential) supply of *housing models to age in place*. The method used in this research is comparable to the method of structured, focused comparison by Yin & Heald (1975). The method is based on formulating general questions that are answered for every case selected for the research in order to collect qualitative data that can be systematic compared. This method grants the researcher the possibility to uncover common patterns that are applicable for multiple cases, which could remain undetected when analysing a single case (Yin & Heald, 1975). Once the data is collected, the researcher will search for distinctive variables within the data based on 'open coding'. Open coding is based on comparing the data for similarities and differences and develop conceptual labels (Corbin & Strauss, 1990). The labels are used to create variables that form the instrument for *housing models to age in place*. Chapter 3 provides extra information on the method used to develop the instrument.

Third, an expert review will be conducted among five experts in the field of housing and care in order to clarify the findings of the previous research method and collect empirical evidence in order to improve the instrument for *housing models to age in place*. The interview consist of a structured interview with questions regarding the changes in the Dutch field of housing and care, and questions regarding the instrument for *housing models to age in place*.

#### 1.8.2 - Research structure

This research consists of five chapters in addition to the introduction. In this section a small elaboration of all chapters can be found.

# Chapter 2 - Desk research and data analysis on housing pathways and stated housing preferences

The first sub-question will be answered in chapter two. A combination of desk research and data analysis will be used to explore the stated housing preferences in combination with housing pathways of the over-55s. The housing pathway approach of (Jansen et al., 2011) will be used to comprehend the development of demand for housing for elderly since the end of the Second World War. Hereafter WoON2015 data (CBS, 2016) will be used to explore the current housing situation and the stated housing preferences of the over-55s. The focus of the analyses will be on the underlying factors that influence the behaviour of the over-55s on the housing market. An attempt will be made to relate the housing pathways to the stated housing preferences of the over-55s to clarify the new spectrum of *housing models to age in place*. This chapter focuses on the demand side of *housing models to age in place*.

#### Chapter 3 - Desk research: The development of an instrument

The second sub question will be answered in chapter three. On the basis of the housing pathways identified in chapter two, the search for adequate housing models can start. Simply put, when chapter two concludes that there is only one housing pathway for the elderly then one housing model has to be sought. But, when there are multiple housing pathways, there will be several housing models to be sought. The first part of this chapter will dive deeper into the method to gather and analyse qualitative data. In addition, the framework of age-friendly homes by the European Union (2016) will be introduced, which will be used as a basis to organise the found qualitative data. The second part of the chapter will be aimed at analysing existing housing models that support the over-55s to age in place. Based on the analysis of existing models the first steps will be made to develop an instrument that supports the coordination of demand and supply of *housing models to age in place*.

#### **Chapter 4 - Review by experts**

The fourth chapter will answer the third sub-question. In this chapter, information will be gathered on how different expert review the developments on the Dutch market of housing and care. The expert review will also be used to validate the first version of the instrument. Based on the review of the experts, the first version of the instrument will be improved and presented.

#### **Chapter 5 - Synthesis**

Based on all previous chapters, the research question will be answered, substantiated by several application of the instrument. Furthermore, general recommendations will be presented.

#### **Chapter 6 - Discussion**

The final chapter will discuss the findings of this research in relation to theoretical and practical implications. Additionally, suggestions will be made for future research and logical steps for future researchers.

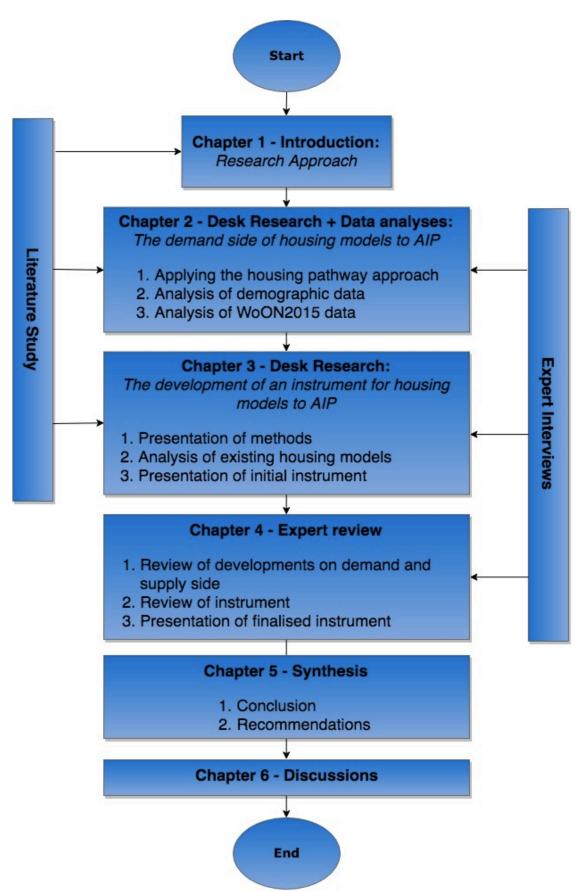


Figure 3: Structure of the study

### 2 - Housing pathways of the over-55s

The first part of this research consists of analysing the development of the demand to age in place and analyse the behaviour of the over-55s on the housing market. In order to comprehend the developments and the behaviour of over-55s on the housing market, the housing pathway approach by David Clapham (2002) will be introduced. The first paragraph discusses the theory of housing pathways by David Clapham (2002) and why the concept of housing pathways is relevant for this research. Paragraph 2.2 describes the elements that interact and shape the behaviour of the over-55s on the housing market since the Second World War. In paragraph 2.3 the underlying factors that influence the stated housing preferences of the over-55s on the housing market will be analysed using data from the Housing Research Netherlands survey 2015 (CBS, 2016). Paragraph 2.4 will conclude this chapter.

#### 2.1 - Housing pathways

This section will elaborate on the housing pathway approach by David Clapham (2002). The housing pathways approach was established by David Clapham (2002) originating from his critique on existing approaches to analyse the housing market, which will elaborated on in section 2.1.1. In his paper, Clapham makes a crude distinction between the policy, the economic, the geographical, and the sociological approach to analysing the housing market. Section 2.1.2 will introduce the housing pathways approach by Clapham and section 2.1.3 will elaborate on how the housing pathway approach will be used in this study.

#### 2.1.1 - Critique on existing approaches

The policy approach focuses on describing and studying government policy on the housing market, focusing on the legislative and institutional structure of the housing market (Clapham, 2002). The key assumption of this approach is that the government policy is decisive for the housing market outcome. The first drawback of this approach is the excess attention towards the government and the lack of emphasis on other actors on the housing market. The second drawback of this approach is that globally many governments are withdrawing from the housing market and therefore become less substantial in the field of housing. Focusing on the government policy alone therefore does not provide a full picture of the field of housing (Clapham, 2002).

The economic approach emphasises on the neo-classical economics on housing markets, which can be helpful determining choices made by households on the housing market (Heurkens, 2011). In contradiction to the policy approach, the economic approach emphasises on the relation between actors on the housing market. Additionally, the government intervention on the housing market is marginalised. In addition, general assumptions are made of human behaviours such as profit maximisation of companies and utility maximisation of consumers. A drawback of the economic approach is that it is complicated to fit housing markets where the public sector is present like the social housing market in the Netherlands. A second drawback of the economic approach is the lack of attention to the context in which the housing market is operating, which could result in research that claims to have found tools that can be applied in different countries disregarding the context of the housing market.

The geographical approach focuses on understanding the elements that influence the spatial distribution of housing (Clapham, 2002). Similar to the economic approach, the geographical approach pays attention to the choices made by households. Unlike the economic and policy approach, the geographical approach has a more complex

assumption of household behaviour (Clapham, 2002). For example, demographic and economic variables will influence the housing preferences of households and the housing preferences will differ throughout the course of life (Clapham, 2002). Clapham acknowledges that the geographical approach is beneficial and makes the first steps to admit the complexity of household behaviour. Nevertheless, a drawback of the geographical approach is that it attempts to seek a common proposition of household behaviour, for example regarding housing careers, without a comprehensive understanding of household behaviour and attitude. Additionally, a drawback of the geographical approach is how it approaches the constraints in choice on the housing market. The geographical approach acknowledges that some constraints are present in housing markets, but it is unknown how these constraints relate to the behaviour and attitude of households.

The final approach mentioned by Clapham is the sociological approach, which mainly emphasis on general sociological ideas on the housing market. The sociological approach mainly emphasis on the structured inequalities in distribution on the housing market, for example, skewed income-to-rent ratio. A positive aspect of the sociological approach is the acknowledgement of the concept of power, which suggests that not every household has the capacity of choice (Clapham, 2002). An example of the capacity of choice is that households with a low income will have a lower capacity of choice in comparison with households with a high income. Alike the economic and geographical approach, the sociological approach has the drawback that it only pays attention to the constraint of choice rather on the choice process on the housing market (Clapham, 2002). However, the sociological approach has given new insights into the relationship between the housing market and society.

In general, Clapham argues that the existing approaches have his/her individual strengths and have improved our knowledge on housing markets, in addition, the diversity in approaches offer useful perspectives. However, Clapham stresses the lack of focus on the behaviour of actors on the housing market in all approaches. Furthermore, all approaches portray the housing market as an objective system that every actor comprehends in the same way, disregarding differences in individual attitudes and behaviour (Clapham, 2002). In addition, (Clapham, 2002) argues that there is a decline in traditional institutions, for instance, decline of the influence of the church or trade unions, the increase of individualism and thus fewer marriages and a growing flexible labour market and more self-employment, which results in a strong differentiation in individual behaviour and attitudes. Clapham concludes his assessment by stating that the approaches focus on either the attitudes or behaviour of the actors or on constraints that limit action on the housing market. Thus no relation is made between the attitude and behaviour of actors and the constraints and opportunities that emerge on the market (Clapham, 2002).

#### 2.1.2 - A new approach

To overcome some drawbacks of the existing approaches, Clapham suggests using social constructionism as a basis to analyse the housing system in the current context. According to Clapham, the central element of social constructionism is that people form his/her social life through interaction. As stated by (Clapham, 2002):

'It is through interaction that individuals define themselves and the world they inhabit and so it is through interaction that the nature of the individual becomes apparent to themselves and to others.'

This means that every individual is constantly developing, evaluating and changing

social objects to get a grip on what is occurring in the world (Clapham, 2002). This process gives meaning to the world we live in and consequently defines how humans behave in particular situations, additionally through discourses 'sub-universes of meaning' emerge which create a variety of perspectives on how social groups see the world from different angles (Clapham, 2002). To relate this to the subject of this research, the current over-55s will interpret the world in a different way compared to over-55s of a decade ago.

As previously mentioned the detachment of the traditional institutions causes differentiation in the lifestyle of individuals and therefore Clapham suggests a new approach that focuses on the household but avoids the simplistic behaviour and attitudes assumed by the existing approaches. Furthermore, Clapham states that 'housing is increasingly viewed by households as a means to an end - personal fulfilment - rather than as an end in itself' (p.67). Clapham introduces the concept of a housing pathway, which is defined as: 'patterns of interaction (practices) concerning house and home, over time and space' (p.63). Clapham presents his concept as a way of framing though, which helps the researcher to arrange the housing market according to the meaning of housing perceived by households based on the interaction with the housing market and other aspects of life. The interaction with the other aspects of life can be defined as the set of social practices of housing. The housing pathway approach includes the concept of a housing career, which primarily focuses on the price, tenure, physical space, quality of the dwelling and quality of the neighbourhood (Clapham, 2002). The core of the housing career concept is focussed on the change in the meaning of housing because of a change in the set of physical elements, for example, a change in tenure. The change in the set of physical elements is caused by moving to a new dwelling, which is mostly triggered by life course events such as unemployment or marriage. In addition to the change of physical elements, the housing pathway approach suggests that social practices can change the meaning of home (Clapham, 2002). An example given by Clapham is that the households reaching the 'empty-nest' phase could prefer moving to a home that fits his/her new lifestyle, because of the shift from being a 'parent' to an 'empty-nester'. This example shows how social practice influences the meaning of the home, without changing the psychical elements of the house. So in summary, the definition of a house is a set of physical elements such as price, tenure and psychical space, while the definition of a home is based on the interaction with social practices in addition to the psychical elements of the house.

Clapham argues that individual households will follow a certain pathway of housing during his/her life course. When different households follow identical pathways 'motorways' are formed, for example, students that move to a dorm on campus. Households travelling on the pathways will encounter junctions on which they will have to make choices caused by life course events or government policy, some will choice for explored pathways while others pick new unexplored pathways (Clapham, 2002). Additionally, both the trajectory and the destination of the pathways are undefined and can change at any moment in time (Clapham, 2002). The housing pathway approach offers a broader framework to examine the choices made by consumers on the housing market.

#### 2.1.3. - Housing pathways and the ageing population

For this research, it is important to get an understanding of how the current group of over-55s shaped his/her historic housing pathway and how they shape his/her future housing pathway. First, an understanding must be perceived of the historic housing pathway the group of over-55s followed and secondly an attempt is made to map out the

future trajectory of the housing pathway. The current housing position of the group of over-55s is a result of housing pathway travelled. This journey is unique and shaped by choices individuals make during his/her life course. To get an understanding of the historic housing pathway several interaction elements will be discussed that can influence the individual choices made in the past. By comprehending the historic housing pathway, a better understanding can be perceived on the differences in behaviour between generations of elderly on the housing market.

#### 2.2 - Interaction elements

The first step is to identify the interaction elements that have shaped the housing pathways of over-55s. In 2014, Spiering conducted research on the development of residential care facilities (In Dutch: 'woonzorgcomplexen') in the period 1998-2010. Spiering (2014) identified three major elements that influenced the development of residential care facilities and housing preferences of elderly, namely institutional factors, social trends, and demographic developments. The research of Spiering (2014) focussed on the development of residential care facilities and there was little attention to the housing of preferences of the elderly. In this research, the three elements sketched by Spiering (2014) will be used and elaborated, but the focus will be shifted towards the relation of the elements to the housing preferences of the elderly.

#### 2.2.1 - Institutional factors

Institutional factors as described by Spiering (2014) are composed of *legislation*, *financing* and *path dependency*. For this study, it is important to understand the *path dependency* of the Dutch government that has triggered alterations in national care *legislation* and eventually the *financing* of the care system and the supply side of the housing for elderly. At last, it is substantial to comprehend the interaction of the institutional factors with how the housing for elderly in the Netherlands is organised. Therefore, it is necessary to draw up the history of housing for elderly in the Netherlands.

Path dependency was first described by economist Douglas North (1990) and entails the way organisations react to situations based on decisions and experience from the past. The current organisation of the Dutch health care system is a result of a path that has been chosen by the government decades ago. Originally, the Dutch economic and political system is embedded with the 'Rhineland' way of thinking. The 'Rhineland' way of thinking is based on long-term results, an active role of the central government, social consensus and the power of the collective (Bakker, Evers, Hovens, Snelderly & Weggeman, 2005). The Rhineland model is mainly present in North-Western European and Scandinavian countries. The counterpart of the 'Rhineland' way of thinking is the 'Anglo-Saxon' way of thinking. The 'Anglo-Saxon' way of thinking is based on a shortterm result, the dominant role of the business sector, shareholders value and individualisation (Bakker et al., 2005). The Anglo-Saxon model is present in the USA, the UK, Canada, and some countries that have British roots like Australia. For a comprehensive reflection on both systems, see (Bakker et al., 2005). After the Second World War, a period of rebuilding began with the Dutch government apprehending an active role on different fronts, mainly dealing with poverty under elderly and a housing shortage caused by the war (Spiering, 2014). The housing for elderly became a separate theme on the agenda of the Department of Public Works and Reconstruction as it was seen as a solution to the housing shortage (Mens & Wagenaar, 2009). The government subsidized all kinds of housing for elderly resulting in a growth of the supply of housing for elderly and financing from the government made the move to housing for elderly

attractable (Mens & Wagenaar, 2009). The housing for elderly was categorised as senior homes (In Dutch: 'Bejaardenwoningen'), guest homes (In Dutch: 'Pensiontehuizen of Bejaardenoorden') and *nursing homes*. The supply-driven development of housing for the elderly continued throughout the 60s, known as the 'Golden' years for the housing for elderly in The Netherlands. But at the end of the 60s, the downside of the large supply of housing of elderly became apparent, consisting of rising collective costs and the isolation of elderly from the society (Mens & Wagenaar, 2009). The first drastic changes appeared in the 70s, where the development of housing for elderly was shifted towards conventional housing stock instead of separate housing categories for elderly, also known as de-institutionalisation (Mens & Wagenaar, 2009). At the start of the 80s, the government is confronted with an economic downturn and had to make essential budget cuts, which would have a tremendous effect on the organisation of housing for elderly in the Netherlands. Under pressure of the economic downturn in the 1980s the Dutch economic and political system started to adopt elements of the Anglo-Saxon system, resulting in, for example, the privatization of energy companies and the Dutch Railways (Bakker et al., 2005). The first signs of Anglo-Saxon aspects in relation to the Dutch health care system became visible in the 80s, where the first budgets cuts on senior housing were made and the rhetoric of the government focussed on the own responsibility of elderly (Bakker et al., 2005). The de-institutionalisation that started in the 70s continued in the 80s and more research was done on how to provide adequate housing for elderly in the conventional housing stock, for example, research on *lifetime* homes (Mens & Wagenaar, 2009).

The path chosen by the government in 1980 eventually led to the changes in legislation that started in the 90s. In this period, the building blocks for the alterations in national care legislation were produced and eventually laid down from 2000 and onwards. The largest step made in this period was the introduction of the two-column model by the Commission Welschen, which entails separating the component housing and care in organisation and financing (Voordt & Terpstra, 1995). At the same time, the first suggestions were made to make the health insurer responsible for the deliverance and quality of care and thus the retrenchment of the central government. Also, the first experiments were conducted with separating the financing and organisation of care and housing, which led to the development of sheltered dwellings (in Dutch: 'aanleunwoningen') (Spiering, 2014). In 1998, the process of decoupling housing and care was initiated and responsibilities were transferred to health insurers, which was labelled as the 'grand operation'. The General Act on Exceptional Medical Expenses, which was introduced in 1968 to guarantee the quality and finance of care and housing for elderly, was modernised in 1989 and significantly altered in 2003 (Spiering, 2014). Because the General Act on Exceptional Medical Expenses covered a large variety of care and support, the system became unmanageable and too expensive for the central government (Ministerie van VWS, 2016). In the period 2000 towards 2015 the General Act on Exceptional Medical Expenses gradually replaced by the Long-term Care Act (in Dutch: 'de Wet Langdurige Zorg'), the Health Insurance Act (in Dutch: 'de Zorgverzekeringswet'), the Social Support Act and the Youth Law, for an elementary summary see Ministerie van VWS (2016). One of the goals of the alterations of national care legislation is to enable to provide essential care and services at home to support the elderly to age in place.

The *path dependency* of the government and the alternations in *legislation*, in the end, changed the *financing* of the healthcare system but especially the *financing* of housing for elderly. The dominant role of the government in the *financing* and

organisation of housing for the elderly since the end of the Second World War has moderately shifted towards a passive role of the central government and the diminishing of public *financing* for housing for elderly. The provision of housing for the elderly has slowly transferred from the public sector to the private sector over the last decades and it has become the full responsibility of the elderly to pick a place to age. Additionally, de-institutionalisation that slowly started in the 70s has increased significantly in the last decade because of the decoupling of housing and care. In the last decade, the decoupling of housing and care mostly affected the traditional care homes (Mandemaker & Crist, 2005). Currently, only people with a high care demand, consisting of multi-morbidity and thus complex care can be admitted in nursing homes, while elderly with a light care demand have to rely on the conventional housing stock. The transition has an influence on the way elderly frame his/her thought on their home nowadays compared to generations of elderly that lived during the period when the central government had a dominant role in the provision of housing for elderly. The financial incentive to move to a house for elderly that existed after the Second World War has gradually disappeared and social trends have evolved over the last decades, making ageing in place a preferable option compared to ageing in an institutional setting such as the *guest homes* as categorised after the Second World War. However, for some elderly, for example with a light care demand to whom an institutional setting may be preferable, the possibility to move to an institutional setting has disappeared. This means that the current dwelling has to suitable for the elderly to receive care at home or the elderly have to move to a dwelling that has the possibility to receive care.

#### 2.2.2 - Social trends

The second interaction factors are four social trends presented by Spiering (2014) namely, *labour participation*, *emancipation*, *individualism* and *privacy*.

The first social trend is an increase of labour participation of women, which is a result of the second social trend emancipation that started in the 60s, that leads to an increase of additional pension of elderly (Van Iersel et al., 2010). In contradiction to the generation of elderly after the war, the current generation of over-55s have higher prosperity when they reach the legal retirement age and will have different housing preferences (Iersel & Leidelmeijer, 2016). As mentioned by Clapham (2002) people that are disadvantaged on the labour market and have less money to spend, are also excluded from some lifestyle choices because they cannot afford it. This implies that people who have more to spend, for example, the current generation of over-55s, will have the possibility to make more lifestyle choices. If this is related to the housing pathways of Clapham, this could mean that prosperous over-55s have more pathways to choose from when a junction occurs. This could be expressed in a large differentiation of housing preferences under the group of elderly, however for now there is no evidence that can validate this hypothesis. Additionally, the educational levels have risen strongly after the Second World War and with educational reforms in the 60s, the educational levels increased even more, particularly with women (Hooimeijer, 2007). In research done by Jong et al. (2012) is shown that educational level has an influence on the housing preferences of the ageing population.

*Emancipation* increased the desire for the elderly to *age in place*, which is also influenced by the increase of life expectancy and self-reliance of elderly (Leidelmeijer et al., 2017). The number of over-55s that move is low than younger groups, but it is not ruled out that an over-55s will move (Van Iersel et al., 2010). In a later report by Iersel & Leidelmeijer (2016), it becomes apparent that more over-55s are orientating to make a move comparing studies from 1994 until 2015. This indicates that more over-55s are

currently reconsidering his/her thoughts on his/her current dwelling, which could be influenced by a recovering housing market or the increased attention of the media on *suitable housing* (Iersel & Leidelmeijer, 2016). However, there is no consensus on what kind of dwelling is suitable for whichever elderly (Leidelmeijer et al., 2017). Translating this to housing pathways, this could mean that the elderly will pick unique housing pathways that fit his/her own needs and preferences. Contrary to unique housing pathways are housing 'highways', which holds a large group of elderly that pick the same housing pathway, for instance, the move to a *nursing home* or *guest homes* after the Second World War. On the other side, a housing 'highway' that could be formed over the coming decades is that of elderly that stay put considering the lower moving rate of the over-55s.

One of the changes in social practices has been mentioned by Clapham (2002), namely a move towards *individualism*. The trend of *individualism* causes more individuals to stay alone throughout a longer period of his/her life, lowering the average number of people per household (Blijie, Gopal, Steijvers, & Faessen, 2016; Groetelaers, 2004; Iersel & Leidelmeijer, 2016). Another result of the move towards *individualism* is a lower number of marriages and an increase in divorce rate at higher age (Blijie, Gopal, Steijvers, & Faessen, 2016; Groetelaers, 2004; Iersel & Leidelmeijer, 2016). A closer look at household compositions will be discussed in the next paragraph. The lowering average number of people per household is also a factor that contributes to a larger diversity in housing pathways, simply said more people will search for a dwelling and thus more pathways will be travelled upon.

In the 90s the call for *privacy* grew under the group of elderly, resulting in the realisation of single-bedroom apartments in *nursing homes* and more separate dwellings for elderly (Boumeester, Dol, & Mariën, 2015; Hooimeijer, 2007). Spiering (2014) points out *privacy* as one of the factors that have increased the demand for living area amongst the elderly. *Privacy*, in combination with *autonomy*, is an important driver for the elderly to remain in the current dwelling to *age in place* instead of moving to a *nursing home* (Hooimeijer, 2007).

#### 2.2.3 - Demographic developments

Demographic developments described by Spiering (2014) consists of the *babyboom*, *ageing population* and *regional demographic decline*. The above-mentioned *household composition* will also be discussed in this paragraph. *Demographic* developments primarily give information on the magnitude of the group of over-55s, but also on how the housing pathways of this group formed in his/her early life. Because of this, some institutional factors and social trends regarding the early life of the over-55s will be mentioned in this paragraph.

As mentioned in the introduction, a large group of so-called 'babyboomers' was born after the Second World War that for a large part already has reached the legal retirement age in the Netherlands. As mentioned by Clapham (2002) every generation has its interaction with society, housing market and other factors when they grow up, shaping a unique housing pathway along the way. The babyboomers explored new paths in relation to the family formation than pre-war generations (CBS, 2012). The family-life cycle by Rossi (1995) assumes a traditional family-life cycle, which involves getting married or moving in together, having children, children moving out and eventually divorce or the death of a partner. Every step in the traditional family-life cycle could imply a change in stated housing preferences for example, because of the birth of a child an extra bedroom is needed. The babyboomers approximately started family formation in the period 1960-1990 (CBS, 2012). Until the mid-seventies, the production of

subsidized rental dwellings was higher than owner-occupied dwellings because of government policy to tackle the housing shortage since the end of the war (Schors, Alessie, & Mastrogiacomo, 2007). The pre-war generation, which formed families before the *babyboomers*, largely stayed within the subsidized rental sector because of financial benefits (Schors et al., 2007). In contradiction, the *babyboomers* profited from the large owner-occupied housing production and the prosperous conditions to buy them (CBS, 2012; Schors et al., 2007). Especially at the start of the nineties when the Dutch government focussed on stimulating home-ownership and the production of newly build owner-occupied dwellings exceeded the production of rental dwellings (Schors et al., 2007). The above-mentioned choices made by the pre-war generation and the *babyboom* generation is a good example of different choices groups make at junctions of housing pathways by Clapham.

Consequently, the large group of babyboomers has a strong effect on the ageing population in the Netherlands. The group of over-65s is growing in the Netherlands and because of longer life expectancy the group of over-80s is also strongly growing, which is called 'double ageing' (in Dutch: 'dubbele vergrijzing') (Groot et al., 2013). A babyboomer born in 1946 will have approximately nineteen years to live when they reach the age of 65, resulting in a senior period that is comparable to the youth period (CBS, 2012). In comparison, the life expectancy of someone who reached the age of 65 in 1950 was around fifteen years. The life expectancy will grow with four to five years until 2060, contributing to even more over 80s (CBS, 2012). Demographic projections by the CBS show that the groups 75 - 84 years and 85 plus will show the largest growth in absolute numbers until 2060, see Appendix B. At the same time the first projections of the healthy life expectancy, which implies the lifespan of people without infirmities, also grows until 2030 (Duin & Stoeldraijer, 2014). This means that the ageing population is getting older but also stays healthier during his/her 'evening of life'. Meanwhile, the group of vulnerable elderly, elderly who have a higher risk of negative health outcomes, will remain about 25 per cent of the total over-65s until 2030, which comes down to growth from 700.000 towards 1 million vulnerable elderly in 2030 (van Campen, 2011). Vulnerable elderly have physical, psychic and/or social deficiencies that could eventually lead to significant health problems (van Campen, 2011). In total the group of elderly will expand, thus more elderly will follow certain housing pathways in the future. Additionally, because of the higher life expectancy, the housing pathway will be longer than older generations. In addition, the higher healthy life expectancy will probably postpone the junction where elderly have to make housing choices based on changes in his/her health status.

The final demographic development mentioned by Spiering (2014) is *regional demographic decline*. Overall the Netherlands is facing an increase of total population, but certain regions will face *regional demographic decline* in the coming years, which could imply a decline in absolute population or a decline in the number of households (Ritsema van Eck, Dam, Groot, & Jong, 2013). As mentioned by Leidelmeijer et al. (2017) rural areas facing *demographic decline* will encounter a stronger *ageing population* because younger people move away from rural areas because of more employment opportunities in urban areas. Municipalities that encounter *demographic decline* will have challenges to develop proper services, ranging from care to catering, because of a decline in the potential workforce (Ritsema van Eck et al., 2013; Veuger, 2014). Availability of services in areas with *demographic decline* can be uncertain than other areas and this could influence the way elderly frame his/her thought about his/her dwelling. What if services diminish and eventually disappear? Can the elderly stay put in

the current dwelling even when services diminish? Eventually, the diminishing of services could occur as a motive to move for elderly in areas with *demographic decline*. For now, there is no evidence that this motive is present within the group of elderly in areas with *demographic decline*.

The development of the *household composition* can also have an influence on what housing pathways will be formed. Projections of the CBS show that the number of households is expected to grow from 7.9 million towards 8.6 million households in 2060, which implies 700,000 extra pathways according to Clapham, and accordingly the percentage of over-55s is expected grow from 45 per cent towards 52 per cent (Appendix: B). The number of households that are over-55s is expected to grow with around 1 million households towards 2060, while the largest growth is expected to take place until 2030 (730,000 households). The largest growth is expected to be in the group of over-55s single-person households, which will grow with around 900,000 households, while the number of over-55s multi-person households will remain about the same until 2060. The number of unmarried over-55s is expected to grow considerably towards 2060 from around 400,000 towards 1.5 million unmarried over-55s. The group of 1.1 million unmarried over-55s is expected to consist of around 800,000 single-person households and 300,000 multi-person households.

#### 2.3 - The next junction on the housing pathway

So far, the development of the housing pathways of the over-55s has been analysed according to several interaction factors since the Second World War. However, the question remains, what factors can influence the current housing pathway of the over-55s? The projections indicate that the group of over-55s is growing and consequently the group is subject to interaction factors that are constantly influencing the way over-55s evaluate his/her current housing situation. Iersel & Leidelmeijer (2016) have shown that the group of over-55 that is considering a move has been growing from 1998 until 2015. But what factors are currently influencing the group of over-55s, which leads them to re-evaluate his/her current housing? Additionally, if the over-55s are re-evaluating his/her current housing situation, where are they looking for? So, on the one hand, this paragraph dives deeper into possible junctions that can occur for the over-55s and additionally tries to map out the possible trajectory of the new housing pathway.

The Housing Research Netherlands survey (in Dutch 'Woon Onderzoek Nederland, WoON) provides a 'picture' of the housing distribution and expected housing demand for the whole of Netherlands and other segments in a particular period (Jansen et al., 2011). The complexity with using the Housing Research Netherlands survey for analysing the housing pathway of the over-55s is that the data represents a certain point in time where the respondent has to translate his/her current thoughts on his/her dwelling to answer the questionnaire. The Housing Research Netherlands can be used to get an understanding of the psychical elements considering the house and some social practices regarding the home. The data collecting for the Housing Research Netherlands took place in the period between September 2014 and May 2015, which indicates as the period that the housing market showed the first signs of recovery after the credit crunch of 2011 (Blijie et al., 2016). It is important to notice that elderly that have been admitted into a nursing home are excluded from the data collected. For this research, the data from the Housing Research Netherlands 2015 will be used descriptively to get an understanding of the current housing situation and the stated housing preferences of the group of over-55, see Appendix C for extra information on the analysis. The Housing Research Netherlands survey 2015 is used to examine the current and desired *tenure* status, living area and number of rooms in relation to the group of over-55s. Additionally, a specific question on housing specially designated for the elderly will be examined. Respondents indicate whether a dwelling is categorised as housing specially designated for the elderly. When this is the case, the respondent can indicate within which category of housing for the elderly the dwelling falls. The categorisation within the WoON2015 questionnaire consists of 'old' housing categories such as *quest homes* and *nursing homes*. Appendix: C provides extra information on analysis.

#### 2.3.1 - Current housing situation

The current housing situation is the outcome of the historic housing pathway followed by the household. This section will briefly highlight the current housing situation of the over-55s to set a starting point for the remainder of the analysis.

During the Housing Research Netherlands recorded approximately 7.6 million households, of which 3.2 million households (42.1%) were 55 years or older (Appendix: C). The younger age-cohorts of the over-55s mostly inhabitant an owner-occupied dwelling, while over-55s older than 74 years are primarily housed in the rental sector, private or social (Appendix: C). As already discussed, the group of elderly that formed families before the babyboom generation did, a large portion formed families in the period when the social housing sector was more attractive than the owner-occupied sector. In comparison, the group of babyboomers formed families in the period the owner-occupied sector became more attractive. The housing pathway chosen by the groups, with the interaction factors in mind, can partially explain the current tenure status of the different age groups older than 55. The analysis of the average length of residence shows that households of the owner-occupied dwellings have the highest average length of residence in the current dwelling (Appendix: C). This indicates that the over-55s in owner-occupied dwellings are loyal to their owner-occupied dwelling. As mentioned by Hooimeijer (2007) the foremost reasons for people in the owner-occupied sector to stay put are lower housing costs because of mortgage repayments, higher moving costs than people in the rental sector and the freedom to customise the dwelling as desired. Especially this last reason is an important one for the ageing population, certainly when taking into account that there is a possibility that the health of elderly will deteriorate when age progresses. Those households in the owner-occupied sector will have a higher degree of freedom to customize his/her dwelling in comparison to households in the rental sector. This means that households of an owner-occupied dwelling are more likely to travel on their current housing pathway in comparison to households in the rental sector.

The analyses of the current *living area* and *number of rooms* demonstrated that households in the owner-occupied sector occupy larger dwelling in comparison to households in the rental sector (Appendix: C). Blijie et al. (2016) have shown that the average psychical space of dwellings in the owner-occupied sector are larger than dwellings in the rental sector over all building year cohorts since 1944 based on data in the WoON2015. In addition, the analyses of current *living area* and *number of rooms* show that higher age cohorts occupy smaller dwellings in respect to both *living area* and *number of rooms* (Appendix: C). This trend is also apparent when analysing the *living area* and *number of rooms* based on *tenure status* (Appendix: C). The analysis of the psychical size of the current dwelling compared to the previous dwelling shows that over 50 per cent of every age cohort made a move to downsize, figure 4. This means that the current dwelling is smaller in psychical size than the previous dwelling. This analysis is based on the over-55s that realised a move in the previous two years in respect of the

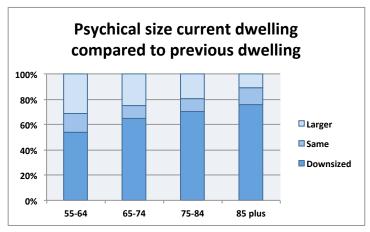


Figure 4: Psychical zie current dwelling compared to previous dwelling

WoON2015, see Appendix: C. According to the Housing Research Netherlands, around 480,000 households of over-55s are housed in *housing specially designated for the elderly*, which comes down about 15 per cent of the total households of over-55s. Of those who realised a move, 43 per cent of the total has made a move towards *housing specially designated for the elderly* (Appendix: C). Figure 5, displays that the move towards a dwelling specially designated for the elderly becomes more common as age increases.



Figure 5: Realised move towards housing specially designated for the elderly

It is remarkable that in the questionnaire of the WoON2015 still contained categories for the housing of elderly that are no longer financed such as *guest homes* and *care homes*. On the one hand, the real estate that was once build based on those categories still exist, but on the other hand, the model that were present inside of this real estate are no longer existing. Nevertheless, beyond that, figure 6 shows that the percentage of elderly in *housing specially designated for the elderly* increases with higher age cohorts. However, the largest portion of over-55s remains in the conventional housing stock.

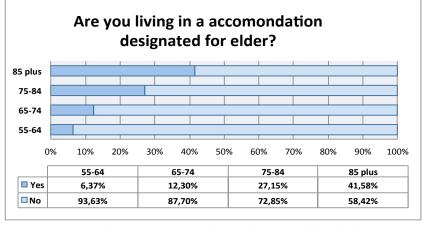


Figure 6: Are you living in a accomondation designated for elderly?

Households accommodated in housing specially designated for the elderly and households housed in the conventional stock both make use of services, for example, domestic help, nursing or personal care. In absolute numbers more households in the conventional stock make use of different services, this is explained by the small group housed in housing specially designated for the elderly than the households in the conventional stock (Appendix: C). That households in the conventional stock also make use of different services is also explained by the new care legislation, which makes it possible for households to receive domestic help, nursing and personal care at home. However, when comparing both groups, more households in the housing specially designated for the elderly make use of services in comparison to households in the conventional stock (Appendix: C). This can be explained by the fact that households are closer to certain services compared to households in the conventional stock. To add to this, the analysis also shows that the higher age cohorts make more use of domestic help, nursing and personal care at home (Appendix: C). This indicates that the need for services increases with age disregarding the 'place' the elderly is housed.

#### 2.3.2 - Re-evaluating current housing situation

Now that the picture of the current housing situation of the over-55s has been sketched, it is time to see which of the group of over-55s is re-evaluating his/her current housing situation. In this research, the group that is re-evaluating his/her current housing situation are similar to the group that is inclined to move within the Housing Research Netherlands survey. The idea behind this comparison is that the group that is inclined to move is overthinking his/her current housing situation because of there is a mismatch with his/her housing preferences, for example, an elderly currently has a garden that they cannot maintain because emerging infirmities. Before looking at the stated housing preferences of the group that is inclined to move, the underlying reasons why this group is inclined to move will be examined.

Approximately 725,000 households of the group of over-55s (23%) are reevaluating his/her current housing situation and, as figure 7 shows, the group of inclined to move decreases as age progresses. In the end, only 4,1 per cent (130,000 households) of the total number of households older than 55 years have moved according to the Housing Research Survey 2015 (Appendix: C). Couples without children and single-person households are the households that are predominantly re-evaluating his/her housing situation in all age cohorts (Appendix: C).

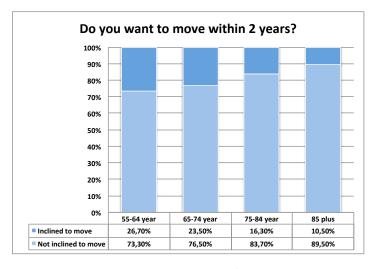


Figure 7: Do you want to move within 2 years?

Generally, the group that is not inclined to move indicates that they do not want to move because they are satisfied with their dwelling, living environment and do not want to leave their neighbourhood (Appendix: C). Within this group, there are households whose indication of health is 'bad' or 'sometimes good/ sometimes bad', who opt to remain in the current dwelling (Appendix: C). The group that is not inclined to move have positive thoughts on his/her dwelling and living environment, that keeps the group on the current housing pathway. The reasons to not be inclined to move such as 'I want to continue living at home' and 'I am too old to move' progressively increase over the age cohorts (Appendix: C). Within the group of over-55s that is inclined to move, almost 39 per cent give 'Health or need for care' as the main reason to be inclined to move (Appendix: C). This is remarkable because the current care legislation is it possible for households to receive care at home. The main reason for households to be inclined to move in the age cohort 55-64 year consists of 'Health or need for care' (21.10%), 'Financial' (13.70%), 'Dwelling' (26.00%) and 'Neighbourhood' (16.50%) (Appendix: C). In the higher age cohort the reason to be inclined to move shifts towards 'Health or need for care', which eventually is given as the main reason to be inclined to move almost 82 per cent of the cases in the group of over-85s (Appendix: C). This indicates that the group of over-55s is re-evaluating their current housing situation based on their health and doubting their current housing situation. This shows that the households are reorganising the meaning of the current housing based on the interaction with their health status. However, a large part of the group that is not inclined to move also shows concern about their health (Appendix: C). If the dwelling was a reason to be inclined to move, in almost 50 per cent of the cases the households in all age cohorts indicate that the dwelling is too large (Appendix: C). As shown in the analysis of the current psychical space of the dwelling, a large group of households eventually make the choice to downsize. The group that is not inclined to move will presumably stay on the housing pathway that they currently follow, while the group that is inclined to move is evaluating whether they should choose another pathway.

#### 2.3.3 - Trajectory of housing pathway

Based on those who are inclined to move, it is possible to sketch what trajectory the housing pathway will be after a household will encounter a junction. This assumes that those households that are not inclined to move will remain on his/her current housing pathway. The group that is inclined to move is portraying a desirable housing situation in their mind that fits their new housing preferences. This portrait of the desirable housing situation can be partially extracted from the stated housing preferences given during the WoON2015 research. Based the following stated housing, *desired tenure status, desired living area, desired number of rooms* and *desired dwelling specially designated for elderly,* an attempt will be made to formulate the possible trajectory of the housing pathway of the over-55s. This analysis is aimed to support the understanding of the development of demand for housing for elderly.

The analysis of the *desired tenure status* shows that the preference towards the rental sector increases according to higher age cohorts (Appendix: C). Households that are currently in the owner-occupied market are more likely to prefer to move within the owner-occupied market, while households in the social or private rental sector prefer moving within the rental sector. In addition, households in the higher age cohorts, regardless of the *current tenure status*, prefer the rental sector above the owner-occupied. The analysis of the *desired tenure status* based on the financial position of the households shows that the households in higher age cohorts prefer a move to the rental sector regardless of the accumulated income. A large part of the group with the highest

accumulated income, as formulated in this study, have no *desired tenure status*. This gives the impression that the households in the group with the highest accumulated income have higher freedom of choice than the lower income groups who do not have the financial capabilities to make all possible choices. This means that the lower income groups are bounded to limited possible housing pathways than the higher income groups. The analysis of the *desired tenure status* shows that the trajectory of housing pathway of a large number of households is pointing towards the rental sector, this housing pathway can be indicated as a housing highway because of the high numbers of households pointing in this direction. However, some households will follow a different pathway than those preferring a dwelling in the rental sector.

The analyses of the current *desired living area* and the *desired number of rooms* demonstrated that households prefer less psychical space when age progresses (Appendix: C). It is remarkable that almost a quarter of those inclined to move has *'no preference'* in relation to his/her *desired living area*. The trajectory of those who have *'no preference'* with respect to his/her *desired living area* remains unknown. The analysis of the *desired number of rooms* indicates that over 50 per cent prefer a dwelling with *'1-3 rooms'*. This shows that a large part of the households his/her trajectory of the housing pathways is pointing towards a dwelling with *'1-3 rooms'*.

The final analysis is aimed at the desire to move to housing specially designated for the elderly (Appendix: C). The analysis shows the desire for housing for elderly increases as the age increases. In addition, the desire for housing for elderly increases as the general indication of health becomes lower. In absolute numbers, the number of household that does not desire housing specially designated for the elderly is slightly larger than the households who desire housing specially designated for the elderly. However, formulating trajectories for housing specially designated for the elderly is complex. Because the questionnaire of WoON2015 contains categories of housing for the elderly that no longer exist the results are biased. In addition, almost 86 per cent of those who desire housing specially designated for the elderly indicate that they 'Want to live independently' at the dwelling specially designated for elderly. This suggests that this group wants to live independently at a dwelling with certain services nearby, as used to be with the traditional categories of housing for the elderly.

#### 2.4 - Conclusion

The goal of this chapter was to analyse the development of the demand to age in place. Because the housing market is in transition from a supply-driven market towards a demand-driven market, it is important to get an understanding of the behaviour of the elderly on the housing market prior to the development of the instrument. In order to do so, the housing pathway approach by David Clapham was introduced. The housing pathway approach offers a broader framework to examine the choices made by consumers on the housing market. The first part of the chapter focused on the historic housing pathways of the over-55s, which presented the different interaction factors that influence the way the over-55s evaluate his/her housing situation.

#### 2.4.1 - Housing pathways

The institutional factors display that the Dutch government had a large part in the financing of housing for elderly after the Second World War, this policy stimulated the elderly to move to housing for elderly as an solution to the housing shortages after the war. Financial incentives from the Dutch government ensured that certain fixed categories of housing for elderly were built and at the same time, the elderly were tempted to move to these categories. In this period, the housing pathways were 'laid down' by the government and the elderly followed them obediently. This top-down approach by the Dutch government to address the housing shortages focussed on the supply of fixed categories without taking the explicit demand for housing from elderly in mind. As a result, this period is characterised as a supply-driven period of housing for elderly. However, the supply of housing for elderly from the government had as a consequence that the expenses became too high. This in combination with the economic downturn, and adoption of certain Anglo-Saxon elements in the Dutch economic and political system, led to the start of de-institutionalisation. The financial flows of certain fixed categories were slowly closed and national policy shifted towards ageing in place. The shift towards ageing in place policy transfers the responsibility to find a suitable home to the elderly themselves. Due to the phasing out of fixed categories of housing for elderly and shifting the responsibility to the elderly, the elderly is put in the position to determine his/her own housing pathway. Due to the disappearance of the categories of housing for elderly, unique housing pathways are gradually replacing the fixed housing pathways between the current dwelling and the nursing home. Simply put, with the fixed categories of housing for elderly, the elderly had a fixed amount of options and thus a fixed amount of housing pathways to travel on, see figure 8. In contrary, the new spectrum of ageing in place has an unknown number of possible options, which can result in an unknown number of -currently unexplored- housing pathways. To add to this, in both situations it is possible to stay put in the current dwelling until death.

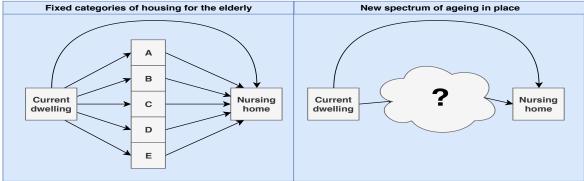


Figure 8: Fixed categories of housing for the elderly vs. new spectrum of ageing in place

The new spectrum offers more possible options to age in place between the current dwelling and the nursing home, however these are still unknown for the time being. As mentioned earlier, the responsibility for choosing a place to age lies with the elderly themselves. The housing pathway approach displays that the elderly are subject to different social trends, which lead to a higher desire to shape the housing pathway according to their lifestyle. For example, the higher prosperity among the elderly as a result of higher *labour participation*, gives the elderly a greater freedom of choice when they are inclined to move. On the other hand, a group remains that does not have much to spend and therefore has limited freedom of choice. Regardless of the size of the freedom of choice, the possibility for the elderly to shape their own housing pathways gives weight to the role of the elderly in the coordination of demand and supply of housing models to age in place. In contrary to the obedient and simplistic behaviour of the previous generation of elderly, the new generation of elderly has 'a mind of its own' and therefore complex behaviour in relation to choices on the housing market. To add to this, the demographic analysis shows that the number of households is increasing within the group of over-55s. This indicates that a larger number of households are faced with the consideration where to age in place, whether it is in the current dwelling or within the new spectrum of ageing in place. The complex behaviour of the new generation elderly and the increasing number of households deepens the complexity of the coordination task for municipalities. When municipalities want to take on a role in facilitating individual choices in the housing field, one has to take in mind that the complex behaviour of the new ageing population can lead to a heterogeneous (potential) demand for *models to age in place*.

#### 2.4.2- Stated housing preferences

Beside the interaction with institutional factors and social trends, the housing pathway approach also examines the interaction with the current 'place' and other aspect of life in order to make a consideration where to age in place. The data analysis of the WoON2015 aimed to uncover this evaluation process of the current 'place' and how it relates to the stated housing preferences of the over-55s.

In general, the largest portion of the group of over-55s indicates that they are concerned about their health. Even though the concern on health increases as age progresses, the largest part of the group of over-55s indicates that they want to stay put and mainly because the over-55s are satisfied with his/her current dwelling and living environment. Regardless of age, this also applies to the over-55s whose current indication of health status is 'bad' or 'sometimes good/sometimes bad'. Whether the current 'place' is already suitable to *age in place* or the elderly applied mind strategies to find 'residential normalcy', cannot be clarified with the current analysis. It is also important to point that the largest portion of the group of over-55s has an indication of health status that is positive and, taking in mind the 'double ageing', the health status will longer remain positive during the process of ageing. This does not alter the fact that the health status of the over-55s can suddenly change, so the 'healthy' over-55s still have to consider whether the current dwelling is suitable to age.

The largest portion of the group of over-55s that indicates that they are inclined to move indicates that 'Health or the need for care' is the main reason to be inclined to move. Looking back at Clapham, he states that 'housing is increasingly viewed by households as a means to an end - personal fulfilment - rather than as an end in itself' (p.67). Considering this statement, it seems that households are becoming aware of the probability that his/her current dwelling cannot support them when health deteriorates. For this group the concern has been transformed into a reason to re-

evaluate his/her current housing situation. In addition, also a group of over-55s is opting to downsize because the current dwelling is too large. Consciously or unconsciously, this group is also opting for a dwelling that suites their preferences during the process of ageing. Assuming that the group inclined to move is looking for a supportive 'place' then the group is considering taking a step into the new spectrum to age in place. When considering this step, the analysis shows in general terms that the over-55s wants to downsize, a dwelling in the rental sector and that the demand for housing specially designated for the elderly increases as the age increases. The traditional categories of housing for the elderly within the housing specially designated for the elderly are known for the availability of supportive functions and are therefore seen as suitable 'places' by the elderly to age. However, considering that some categories in the WoON2015 questionnaire no longer exist, the findings of the increase of demand for housing specially designated for the elderly as age increases is biased. However, almost 43 per cent of the group that has made a move, moved towards a dwelling specially designated for elderly. This indicates that, despite the fact that the questionnaire of the WoON2015 contains categories of housing for the elderly that are no longer financed; the demand for similar models within the new spectrum of ageing in place still remains.

#### 2.4.3 - Demand for ageing in place

The analysis of the development of the demand to age in place, through the housing pathway approach, shows that the elderly are -consciously and unconsciouslysearching for housing models that can support them in the process of ageing. The housing pathway approach displayed that the behaviour of the elderly on the housing market has become complex and less straightforward under influence of different interaction factors. The analysis shows that the demand for dwellings with supportive functions is still present, but also that a large portion of the elderly prefers to stay put. Thus, a part of the elderly is looking for a step into the new spectrum of ageing in place, however they are currently stepping into a 'void' because the traditional categories of housing for the elderly are no longer financed. Subsequently, the analysis provides too little information to give a 'look and feel' to housing models within this void. In order to take on the facilitating role in providing housing models for the elderly to age in place, the municipality and stakeholders must fill this void and take into account the heterogeneity of the (potential) demand for *models to age in place* is. The heterogeneity cannot be grasped by the fixed categories of housing for the elderly and therefore the instrument, which will be developed in the next chapter, should offer a broad framework in which various supporting functions are included. The framework can fill the void left by the disappearance of the fixed categories of housing for the elderly and support the municipality and stakeholders in the coordination of demand and supply of housing models to age in place. Defining a broad framework takes the freedom of choice of the elderly into account and grants municipalities, stakeholders and the elderly a helicopter view of the range of possibilities within the new spectrum of ageing in place. Simply put, increasing the knowledge on the range of destinations helps the municipalities, the stakeholders and the elderly to develop a mutual travel plan in order to reach the preferred destination.

## 3 - Developing an instrument for housing models to age in place

The previous chapter has shown that the new spectrum of ageing in place offers the elderly an unlimited amount of -currently unexplored- housing models to age in place. The institutional context in combination with the complex behaviour of the elderly on the housing market are gradually erasing the known housing pathways of the elderly during their evening of life. This 'void' increases the complexity for municipalities to develop appropriate *ageing in place* policy in order to proactively facilitate the elderly with alternatives to *age in place*. The 'void' in combination with the 'mind of its own' of the elderly creates a so-called 'institutional void' where there is no general agreement on rules and norms on which policies can be based (Hajer, 2003). In case of providing supportive 'places' for elderly, this 'institutional void' is characterised by the lack of agreement about what a suitable 'place' is for the elderly. The disappearance of the traditional categories of housing for the elderly makes this discussion even more complex.

To give partial interpretation to this 'void', an instrument will be developed in this chapter, which frames the unlimited housing models within the new spectrum to age in place. Because the previous chapter has shown that the analysis of the WoON2015 data holds too little information to give a 'look and feel' to housing models within this void, this chapter will focus on analysing existing housing models for the elderly in order to develop a framework that reflects what a housing model to age in place entails. Furthermore, the framework will be the first step towards a general agreement among stakeholders in the discussion on what a suitable 'place' is for the elderly. First, paragraph 3.1 will deal with the method used to analyse the existing housing models and provide information about the different steps that will be taken to develop the framework. Second, paragraph 3.2 will discuss the approach used to organise the gathered information based on the framework of age-friendly homes by the European Union (2016). Third, paragraph 3.3 will elaborate on the analysed models and paragraph 3.4 will discuss the design of the initial framework. Paragraph 3.5 will conclude the chapter by presenting the initial framework and discuss the basic functioning of the initial framework.

#### 3.1 - Methods

In order to design the *framework for housing models to age in place* a combination of methods will be applied. During the process of developing the framework the three research objectives have to be kept in mind, namely uncovering the (potential) demand and supply of *housing models to age in place*, and guiding stakeholders in the development and realisation of *housing models to age in place* through a shared definition of suitable 'places' and a shared vision. The purpose of the framework is to offer support in achieving the three goals mentioned. Therefore, three application of the framework will be formulated in order to support municipalities and stakeholders. The first application of the framework is aimed at supporting municipalities to uncover the (potential) demand of *housing models to age in place*. The framework can be used as a tool to gather data in relation to the housing preferences of the elderly. The second application is aimed at supporting municipalities to uncover the (potential) supply of *housing models to age in place*. The framework can be used as tool to gain information on new or existing housing models to age in place. The final application is aimed at supporting municipalities and stakeholders in the process of development and

realisation of *housing models to age in place*. The framework can be used as guidance for municipalities and stakeholders in the process of developing and realisation of *housing models to age in place*. In this chapter the basic functioning of the framework will be discussed, while in chapter 5 will elaborate on the three application of the framework.

The first step is to collect qualitative data in order to design a framework for housing models to age in place empirical research will be applied. The method used in this study is comparable to the method of structured, focussed comparison by Yin & Heald (1975). The method of *structured*, *focussed comparison* aims to collect comparable data, through asking a set of standardised question each case, in order to make a systematic comparison between multiple cases. The method is 'focussed' because the analysis examines only particular features of cases (Yin & Heald, 1975). The researcher develops the standardised questions asked per each case and the questions need to reflect a particular objective (Yin & Heald, 1975). In this chapter the objective is to collect data in order to frame the unlimited housing models to age in place. In this case there are two topics where data has to be collected for. First, it is important to know in what way the housing model supports the elderly. Second, information has to be gathered on characteristics of the housing model that are separate from supporting the elderly. To gather information on both topics two questions are asked for each existing housing model. First, how does the housing model support the elderly in to age place? Second, what notable remaining characteristics does the housing model have?

Second, once the data is collected, the researcher will search for distinctive variables within the data of each question based on 'Open Coding'. Open Coding is based on comparing the data for similarities and differences and develop conceptual labels (Corbin & Strauss, 1990). The labels are used to create variables that form the framework for *housing models to age in place*. In this study, the variables will be named *building blocks* because the different blocks together 'built' a *housing model to age in place* within the new spectrum. The building blocks will hold different options regarding a certain label. For example, a building block labelled as 'colour' holds the colours yellow, green, blue and red. In this way the models gets a single colour or a combination of colours through the building block 'colour'. The combination of different building blocks, which hold different options, allows the researcher to grasp the variety of housing models within the new spectrum of ageing in place.

Finally, the framework of age-friendly homes by the European Union (2016) will be used to formulate an approach for the researcher to select cases for the analysis and to organise the building blocks. In the following section the framework will be discussed and shown why the basic principles of the framework of age-friendly homes are useful for this study. Furthermore, critique on the concept will be discussed and a new approach to organise the building blocks within the framework for *housing models to age in place* will be presented. The new approach stipulates a structure that will be used to organise the building blocks.

#### 3.1.1 - Age-friendly homes

Because there is no "one-model-fits-all" housing model to support the elderly to *age in place,* traditional categories of housing for elderly fading away and the increase of the number of housing pathways, a new approach has to be sought to get an understanding of the (potential) supply of *housing models to age in place.* The European Union (2016) sees the ageing population, the so-called Silver generation, as an opportunity to innovate in the domain of age-friendly housing. The European Union (2016) assumes that, because of low replacement and renovation rates of the current housing stock, the current housing stock will not meet the growing demand for age-friendly homes.

Following the report of the WHO on the age-friendly city, The European Union in collaboration with the University of Utrecht consulted different stakeholders throughout Europe on the opportunities and challenges in the age-friendly housing domain of the age-friendly city (European Union, 2016). The domain of age-friendly housing consists of all relevant stakeholders, technologies, and their interactions that are involved in creating a suitable built environment for the ageing population or age-friendly homes and neighbourhoods (European Union, 2016). The European Union (2016) envisions the Silver generation, with higher prosperity levels and increasing active consumption, as possible drivers for the development of age-friendly housing. However, the European Union (2016) states that, because of the minimal knowledge and transparency on available technological solutions for age-friendly homes, the ageing population will not find adequate housing models to fit their needs.

One of the key findings from the consultation round by the European Union (2016) was that knowledge on initiatives and plans on the development and realisation of age-friendly homes is scattered and that there is a lack of a common vision to bridge different domains. In addition, stakeholders agree that there is a negative image surrounding the ageing process, in which many stakeholders only focus on negatives, such as illness, reduced mobility and disability. Creating a positive narrative on housing models to age in place or age-friendly homes, by offering clear value proposition for stakeholders, can seduce stakeholders to engage in the development and realisation of innovative age-friendly homes (European Union, 2016). The value proposition for the elderly lies within the chance to age in a place that suits his/her needs and enables them to fully blossom on his/her evening of life. While, for example, the value proposition for tech companies lies within the implementation of new and challenging technologies that support the elderly to age in place. The starting point, according to the European Union (2016), of this new narrative on age-friendly homes begins with defining common language that helps to translate the demand for the ageing population into the potential supply of new age-friendly homes. During the consultation round, participants highlighted six principles that at least should be addressed when developing a new narrative on age-friendly homes namely (European Union, 2016, p. 17):

"the social life world of older persons, homes rather than houses, the built environment as enabler, later life as an opportunity, older persons as co-creators and the life course perspective."

The interesting thing about these principles by the European Union (2016), is that some of the principles are relatable to the housing pathway approach by David Clapham (2002). The social life world of older persons is seen as a complex but important factor relating to how elderly interact with his/her home and community in later life, just like how Clapham sketches the importance of how households are constantly interacting with other aspects of life. For examaple, the loss of the partner can have a significant impact on the social life of the elderly. The participant of the European Union (2016) consultation round and Clapham are on the same line considering the home as a subjective experience, which is far more important than the only the psychical elements of a house. In addition, both Clapham and the participants of the consultation round, stress the importance of understanding how the life course perspective influences the current and desired housing situation in later life. Both see the future housing preferences of the ageing population as a result of experience gained during the life course, instead of a result based on age. For example, the current ageing generation can not be compared to the previous ageing generation because of the different interaction factors both generations faced. Finally, both see the built environment as an enabler. While Clapham focuses on only the dwelling as a means to reach personal fulfilment, the European Union includes other buildings and spaces in between such as sidewalks. Taking in mind the mentioned principles, the European Union (2016) developed a framework for an age-friendly home, see figure 9.

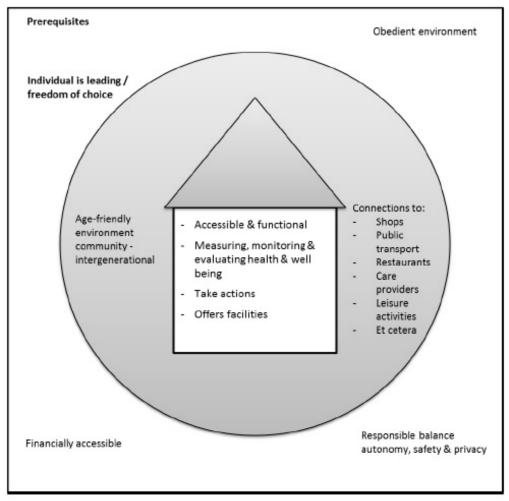


Figure 9: Framework of age-friendly homes (European Union, 2016, p.20)

The framework comes down to a psychical house that has four domains with a range of options that can increase the 'age-friendliness' of the house, see table one.

The range of options, which an age-friendly house should be able to offer to its

Domain	Description
Accessible and	An age-friendly home is accessible and functional for all people,
functional	regardless impairments.
Measure, monitors and evaluate health and wellbeing	Where needed, the house measures, monitors and evaluates the physical and mental constitution of its dweller, including his/her behaviour to gain knowledge, i.e. data needed, to undertake actions
Undertake actions	Based on the data obtained from measuring, monitoring and evaluating, the house is able to take several actions.
Offer facilities	An age-friendly home also offers facilities. It can for example prepare meals, offers daily (entertainment) activities, but also offer options to communicate with caregivers, medical professionals, people in the neighbourhood, friends & family.

inhabitants, can be seen as building blocks that inhabitants could add according to personal preferences and needs. For example, when the inhabitant is not capable of taking care of its own personal care, an option should be available to communicate with a caregiver. Because of the differences in personal preferences, the psychical house in combination with the additional building blocks becomes a subjective experience of an age-friendly home. The concept of an age-friendly home is deepened by adding the environment and the outside world that relate to the house as to domains that are included as the neighbourhood (European Union, 2016). This entails the connection with shops, public transport, and other facilities. The four domains of the house and the two domains of the neighbourhood can be combined, which results in the concept of an 'age-friendly' home (European Union, 2016). To make the concept of an 'age-friendly' home reality, The European Union (2016) formulates three prerequisites, namely freedom of choice, financially accessible and responsible balance between autonomy, safety and privacy.

## 3.1.1 - Critique on age-friendly homes

The European Union (2016) recommends using the initial set of dimensions and definitions as a starting point to enlarge the understanding of age-friendly homes in cooperation with relevant stakeholders based on shared language. Before enlarging the understanding of existing housing models, a short discussion on critique on the framework of age-friendly homes.

The initial goal of the framework by the European Union (2016) was to formulate an approach that seeks to 'mainstream' available housing models for the ageing population. The main critique on the current framework of age-friendly homes is that it mainly focuses on supporting the elderly in his/her dwelling by the implementation of technology because of the slow renovation and replacement rate of the current housing stock. Based on the four domains, application of technology can support the elderly to age in place, while the connection to the age-friendly environment provides possibilities to engage in the elderly his/her daily routine. However, looking at the current developments on so-called *Smart homes*, literature suggests that current technological developments are not (yet) capable of incorporating all technology into a fully functioning Smart home (Majumder et al., 2017). So yes, technology is one of the building blocks that can support the elderly to age in place, but putting it in the centre of the framework undermines the possible input of other building blocks that are able to support the elderly. With the current framework, only the available housing models with technology are highlighted, while available housing models without technology are undermined. In general, the framework of age-friendly homes provides a solid base that can be used as a starting point to create an instrument for housing models to age in place. The idea of taking a step back by making understandable objective building blocks and then giving stakeholders the freedom to fulfil them as desired fits the demand-driven market for the elderly in the Netherlands. In line with Clapham, this entails that more means can support the elderly to reach personal fulfilment than only the dwelling or technology. However, it is up to the elderly to pick out means that support them to age in place. This reflects the field of tension within the partnership of individual responsibility and the public responsibility. Which means does the elderly consider necessary to make his/her dwelling suitable and which means 'must' be available to label a dwelling as 'suitable' from the perspective of municipalities and other stakeholders? The framework of age-friendly homes is comparable to handing a colouring book to a child. The colouring book holds the borders of a drawing but it is the responsibility of the child to pick colours and give their own meaning to the drawing.

Therefore, giving meaning to the own *place to age*. This could entail that the child colours the grass blue, while the parents know that the colour of grass is green. However, in the case of 'suitable' dwellings, even the parents are discussing whether it is better to colour the grass green or yellow.

## 3.2 - A 'new' approach

Knowing that the development of a *housing model to age in place* is far more complex than a colouring book, lessons can be learned from colouring books that have already been coloured. First, one has to select 'used colouring books' and secondly find a way to organise findings. As mentioned by European Union (2016, p.19) 'sharing success stories' can be as important as quantified evidence of exiting housing models. In addition, why would one try to reinvent the wheel? However, the researcher cannot decide whether an existing housing model for the elderly is successful or not. Moreover, the aim of this analysis is not to make a judgement about how the book is coloured, but it is aimed to find out which colours are used and in what combinations. Therefore, thirteen globally known and established housing models for the elderly presented by Faulkner (2006) will be used a 'coat rack' as a starting point to gather data. The study of Faulkner (2006), which focuses on the implications of the ageing population in the city of Onkaparinga (Australia) on housing demands, describes thirteen potential housing models compiled from around the world to support the ageing population, see figure 10.

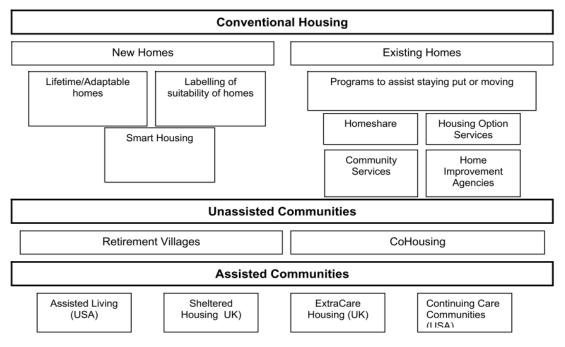


Figure 10: Housing models by Faulkner (2006, p.15)

Faulkner (2006) makes distinction between three housing model categories, specifically conventional housing, unassisted communities, and assisted communities. While most of the models mentioned by Faulkner are of a general nature, others are specifically linked to countries. The housing models by Faulkner (2006) will be described and connected to Dutch cases, other international cases and international literature. The housing models will be used to extract unique selling points of the models, based on two questions asked per case, in order to gather data. The idea behind retrieving the unique selling points is that the unique selling points can eventually be combined, for example, programs to

assist staying put or moving can be combined with *smart homes*. Therefore, on the one hand, it is useful to get an understanding of the individual housing model but on the other hand, it can be an added value to attempt to combine them. Once the data has been gathered and building blocks are formed, the building blocks have to be organised in a comprehensible manor. In line with the framework of age-friendly homes, the researcher will make use of dimension to organise building blocks. For the *framework of housing models to age in place*, two dimensions have been chosen that correspond with the two questions asked each case. Furthermore, in line with the framework of age-friendly homes, the centrepiece of the *framework for housing model to age in place* will be the psychical house, which will be labelled as *residential object*. The following sections will elaborate on the choices made regarding the *residential object* and the *dimensions*.

# 3.2.1 - Residential object

The first part of developing a framework on housing models to age in place is to define the centrepiece of the framework. Just like the concept for age-friendly homes, the framework will place the psychical house in the centre of the framework. The similarity between a dwelling in the conventional housing stock, a housing model to age in place and a room in a nursing home is the *residential object*. The *residential object* holds options regarding the psychical size of an object, such as living area and number of rooms. As in the conventional housing stock, the *residential object* can vary in living area and in number of rooms. In the Housing Research Netherlands Survey the *residential object* is divided into two categories, namely *independent dwellings and dependent dwellings* (Blijie et al., 2016; CBS, 2016). The definition of an *independent dwelling* is defined by Blijie et al. (2016) as building or part of a building, with a permanent residential function including a toilet, kitchen and bathroom, that are exclusively accessible by one household. An important note made by Blijie et al. (2016) is that an independent dwelling does not necessarily need to be occupied by someone who is capable of independently taking care of his/her basic needs and vice versa.

The category of the *dependent dwelling* can be divided into three sub-categories, that is *the independent residential unit, the dependent residential unit and the 'Occupied Other Spaces' (in Dutch:"Bewoonde Andere Ruimte (BAR)")* (Blijie et al., 2016). 'Occupied Other Spaces' are residential objects, which do not meet the minimum requirements of the current building regulations, for instance, vacation houses, trailers and caravans. 'Occupied Other Spaces' are left out in relation to the *housing models to age in place* because they do not meet the minimum requirements of the current building regulations. Residential units differ from independent dwellings because residential units share his/her front door, for example, student accommodations. *Independent residential units* have his/her own toilet and/or kitchen than *dependent residential units* where the toilet and/or kitchen are shared (Blijie et al., 2016). An overview of the division of categories and sub-categories within the residential object can be found in figure 11.

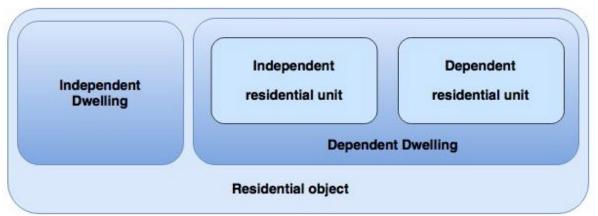


Figure 11: Sub-categories of the residential object (author)

#### 3.2.2 - Dimensions

Next, the *dimensions* surrounding the *residential object*, which give meaning to the psychical dwelling, will be discussed. The first dimension mentioned by the European Union (2016) refers to what a psychical house can offer to its inhabitants. The other two dimensions in the framework of the European Union are the *neighbourhood* and *the prerequisites*. In this study two questions are asked in order to gather data on existing housing models for the elderly.

The first question regards how the housing model supports the elderly to age in place. This could exist of options that the psychical dwelling has to offer, but also exist of options that the *neighbourhood* has to offer. For example, a good connection to care providers can support the elderly to age in place. Therefore the two *dimensions* presented by the European Union (2016) will be put together and named as the *internal dimension*. Building blocks that are distilled from the data found with the first question will be placed within the *internal dimension*.

The second question regards what remaining characteristics the housing models holds. This could exist of options that define the model, for example, the financial accessibility of the models, but do not support the elderly to age in place. Building blocks that are distilled from the data found with the second question will be placed within the *external dimension*.

The prerequisites freedom of choice and responsible balance between autonomy, safety and privacy form the basis of the current ageing in place policy and are therefore regarded as a given. With the current policy, the elderly have the freedom of choice to choose where they want to age in place. Furthermore, the elderly themselves must considerate whether the balance between autonomy, safety and privacy is responsible.

## 3.2.3 - The structure to organise building blocks

The basic idea of the different building blocks, together with the *residential object*, is that they will eventually 'built' a *housing model to age in place*. Other than the framework of age-friendly homes, the building blocks attempt to give an objective description of what the building block entails. The elderly have full autonomy and freedom of choice on how to interact with the building blocks. This could entail that a building block could be present but that some elderly do not interact with it, while others do interact with it.

Figure 12 shows the structure of the *framework for housing models to age in place*. The centrepiece of the framework is the *residential object*, which holds information on the category and psychical size of the dwelling. The *residential object* is a fixed building block that is present at every *housing model to age in place*. For the

framework, two dimensions have been chosen, namely the *internal dimension* and the *external dimension*. The *internal dimension* will hold building blocks that are (in) directly connected to the *residential object*. Just like the domains of the age-friendly homes, the building blocks in the *internal dimension* have the ability to directly or indirectly offer support to the elderly. An important feature of the building blocks is that they are dynamic in nature, which means that the elderly have the opportunity to interact with them if so desired. The *external dimension* will hold remaining building blocks that are connected to the residential object and/or building blocks in the *internal dimension*. The building blocks in the *external dimension* do not possess any abilities to offer support to the elderly but do possess information about the remaining characteristics of the models in general. In the following paragraph the existing housing models will be discussed and qualitative data will be collected. Subsequently, the collected data is analysed and distinctive variables are labelled. The labelled building blocks are placed within the relevant dimension to fill the framework.

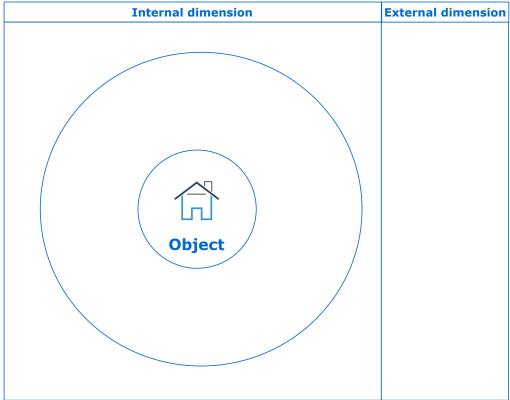


Figure 12: The sructure to organise building blocks

## 3.3 - The 'coat rack' of existing housing models for the elderly

As already mentioned, existing housing models from around the world as presented by Faulkner (2006) will be analysed to gather qualitative data to create a framework for housing models to age in place. To gather information on both dimensions two questions are asked each housing model. First, for the internal dimension: how does the housing model support the elderly in to age place? Second, for the external dimension: what notable remaining characteristics does the housing model have? See Appendix: D for the gathered data.

#### 3.3.1 - Conventional housing

Conventional housing is based on the intention of the elderly to age in place scattered throughout the community (Faulkner, 2006). Essential factors that lie at the core of ageing in place are the availability of support and service in the neighbourhood and the adaptability of conventional housing to remain suitable for the ageing population who could be confronted with functional limitations (Faulkner, 2006). The category of conventional housing is broken down into two sub-categories, namely, new homes and existing homes.

#### 3.3.1.1 - New homes

With possible changes in (psychical) ability of the ageing people in mind, Faulkner (2006) presents three housing models for new homes that could be beneficial for the individual and the community.

The first housing model Faulkner (2006) introduces is the *Lifetime Home*. The core of this model is to design conventional homes that have the capability to be easily and cost-effectively adapted as the needs of elderly change over time. In principle, every new home developed (or renovated) in the Netherlands needs to satisfy the minimal technical requirements set in the Building Regulations (in Dutch: 'Bouwbesluit'). Different initiatives in the Netherlands have developed packages of requirements that define a Lifetime Home such as 'Handboek voor toegankelijkheid' and 'Seniorenlabel'. In the course of time the packages were merged into 'Woonkeur 2015', which summarizes the requirements to develop new *Lifetime Homes* and sets requirements to make the current housing stock more *life-course proof* (in Dutch: 'levensloopbestendig'). However, these requirements are not included in the Building Regulations, which does not make them legally binding, making the requirements difficult to enforce by municipalities. In the UK minimum requirements for *Lifetime homes* have been imputed in *Lifetime Home* Standards and have become mandatory for new public financed housing since 2011 (Departement for Communities and Local Government, 2008). The UK aspired to enforce Lifetime Home Standards mandatory for all new housing in 2013, but unfortunately, the initiative is not widely supported by the private sector. The model of the *Lifetime home* focuses on an extra set of technical requirements in addition to the minimal technical requirements set in the Building Regulation.

The second housing model Faulkner (2006) presents is the *labelling of the suitability of homes for older people*. The model is meant to support the elderly to make a clear consideration when moving to a new (or renovated) dwelling based on the information provided by the label. In the Netherlands, a label, for example, *'Oppluslabel'* or *'Sterwoningen in sociale sector'* is given when the new (or renovated) home meets the requirements set by the label. To connect back to the first model, a *'Woonkeur'* label is given to a new (or renovated) home that meets the requirements. In the UK the *labelling of the suitability of homes for older* serves a deeper purpose in addition to the

information provided for the elderly. In the UK homes are labelled and detailed information on adoptions are registered locally which provide an overview of the adapted housing stock (Departement for Communities and Local Government, 2008). The register provides information to accurately quantify the current housing stock and makes it possible to match houses to specific requirements of people (Departement for Communities and Local Government, 2008). Labelling of the suitability of homes for older people translates the extra technical requirements to simple labels, which are easy to understand for the elderly.

The third housing model Faulkner (2006) demonstrates is the *Smart Home*. The core of Smart Homes is the application of technology to facilitate the elderly (Faulkner, 2006). As stated by Faulkner (2006, p.19): 'Smart home technology has the potential to provide numerous benefits to older and improve his/her quality of life.' The range of available technology for Smart Homes is large, see Majumder et al. (2017) for a comprehensive review-study on Smart Home technology. Aspects of Smart Homes, categorised by Majumder et al. (2017), consist of home automation, monitoring of resident's health, safety and security, and home environment. A Smart Home that holds all these aspects is yet to be developed (Majumder et al., 2017). A fitting example of a *Smart Home* is the *iZi*-project in The Hague. The project gives an opportunity for elderly to select and experiences different forms of technology that can facilitate them to age in place, an example of co-creation. On one hand, the elderly get the chance to find technology that fits his/her needs and on the other hand, developers of the technology receive feedback to improve his/her product. Although Faulkner positions Smart Homes as a concept under New Homes, the iZi-project shows that a great deal of technology is easily placed and removed in existing homes.

#### 3.3.1.2 - Existing homes

Housing models for existing homes are predominantly aimed at programs to assist ageing in place or moving to a suitable home (Faulkner, 2006). The basic idea of these programs is in line with the Dutch national care policy, which aims to let elderly age in place. Faulkner (2006) stresses the importance of proper information distribution amongst the elderly on a range of housing topics, for instance, home modifications, moving, accessing community services, and other support options. As concluded by Faulkner, Findlay, Barrington & Luszcz (2006), the elderly are often reluctant to make critical decisions on necessary living arrangements and therefore the proposed models can support the elderly in the decision-making process. Faulkner (2006) discusses four programs: *Housing Option Services, Community Services, Home Improvement Agencies*, and *Homeshare*.

The first housing model in the category existing homes that Faulkner (2006) demonstrates is *Housing Option Services*. *Housing Option Services* is a general term to depict a range of services that support the elderly to provide information on choices related to moving or 'staying put' (Faulkner, 2006). The range of services can stretch from arranging community services, providing information on modifications and eventually decide whether the elderly should move or stay (Faulkner, 2006). Dutch municipalities are currently responsible for *Housing Option Services*, the Social Support Act enacts that responsibility. The Social Support Act enables municipalities to select an approach that fits suits the needs of residents. For example, the municipality of The Hague in association with local housing corporation installed '*Doorstroommakelaars*' to support elderly with the decision-making process of moving or staying put (Gemeente Den Haag, 2015, 2017). In the UK an online questionnaire, called Housing Options for Older People (HOOP) (Elderly Accommondation Counsel, n.d.), is available since 1998

for elderly people to encourage them to think about his/her current housing situation. Additionally, the platform provides information on solutions to improve his/her current housing situations or offer alternatives for a potential move (Elderly Accommondation Counsel, 1999). HOOP is a national service, but in five regions in the UK the platform has been tailor-made in associations with local partners to give specific advice to local elderly.

The second housing model mentioned by Faulkner (2006) is intertwined with the first housing model for existing homes. Whereas the central point of attention of Housing Option Services is the provision of information, the housing model Community Services focuses on the actual provision of certain services that allow elderly to age in place (Faulkner, 2006). Community Services could imply domestic assistance, personal care, counselling, transport and support (Faulkner, 2006). The Netherlands has similar Community Services in place as Faulkner suggest. The services are financed through three major streams, namely the Social Support Act, The Healthcare Act and the Act Long-term Care. In the Dutch system the provision Community Services, for instance, domestic assistance, counselling, transport and support, are contracted to market parties through tender contracts with local municipalities (Ministerie van VWS, 2016). Additionally, municipalities are responsible for assessing whether residents can make use of community services through the Social Support Act (Ministerie van VWS, 2016). Personal care at home is part of the Healthcare Law and is organised between health insurers, care providers and insured (Ministerie van VWS, 2016). Health insurers 'purchase' care from care providers through procurement procedures, which is made available for insured that have a sufficient need for care at home (Ministerie van VWS, 2016). When personal care at home become to complex it is possible to get admitted at a nursing home, which is organised through the Act Long-term Care (Ministerie van VWS, 2016).

The third housing model discussed by Faulkner (2006) is *Home Modification Services*. Just like *Community Services*, *Home Modification Services* are intertwined with the *Housing Option Services*. The goal of the housing model as presented by Faulkner (2006) is to establish agencies that are specialised at home modifications and provide occasional home maintenance for elderly. In the Netherlands, the central government and municipalities provide information on housing modification and additionally some modifications are compensated. However there is no central coordination to establish agencies and this void is left open for market parties to fill.

The final housing model in relation to existing homes that Faulkner (2006) presents is *Homeshare*. The basic idea of *Homeshare* is that people share his/her home with another person in exchange for services. The model is primarily useful for elderly that have a small personal network and need support with household task or other services (Faulkner, 2006). *Homeshare* allows the elderly to stay part of the community and offers alternative housing for younger people. Additionally, the model reduces the reliance on community services by elderly and increases the understanding between different generations (Faulkner, 2006). In at least thirteen countries around the world *Homeshare* programmes are active but strongly differentiate in size and operation years (International Homeshare, 2013). For example, the USA was the birthplace of *Homeshare* models in the 1970s, whereas the Dutch initiative 'SOlink' was founded in 2009. A similar model called '*Woonstudent*' initiated in a nursing home in Deventer, where students are offered a discounted accommodation in return for a certain amount of volunteer work (Turner, 2016). The difference with the model set by Faulkner is that with '*Woonstudent*' the elderly and student live in the same accommodation and do not

share the conventional home of the elderly. Other examples of *Homeshare* in the Netherlands are known as *Informal care* or *kangaroo housing* (In Dutch: 'mantelzorg- of kangoeroewoning'). An informal care house is a small moveable residential object that is, for example, placed in the garden of a family (RLI, 2014). The basic idea is that the elderly, most of the time a relative of the family, occupies the residential object in order to receive informal care from the family. The *kangaroo house* is almost similar to the *informal care house*, however, the residential object is not moveable and attached to the residential object of the family (Van Iersel et al., 2010).

#### 3.3.2 - Unassisted communities

The next housing models Faulkner (2006) discusses are summarised in the category unassisted communities. Faulkner makes a distinction between *Retirement Villages* and *CoHousing*. As the name of the category suggests the models presented consist of agglomerations of independently living elderly without direct care or support available.

Retirement Villages depict a range of complexes of independent dwellings or independent residential units on mutual ground with extra facilities, for instance, social and leisure activities (Croucher, 2006; Faulkner, 2006). Retirement Villages offer the possibility for elderly to independently age in place in a secured environment and simultaneously grant the opportunity to enjoy his/her own lifestyle (Faulkner, 2006). Within a *Retirement* Village public or private parties are responsible for the organisation of activities and additional facilities, such as, restaurants, spas, putting green, library and so on (Croucher, 2006). Retirement Villages are placed under the category unassisted communities, because these villages are based on self-care schemes and most of the villages lack on-site care facilities. In other words, residents of Retirement Villages have to make use of the same care schemes as residents in conventional homes. If the villages do have on-site care facilities they are put in the category assisted communities under Continuing Care Retirement Communities, this housing model is discussed further in this chapter. Retirement Villages are known in the UK, Australia, and New Zealand, but there is no evidence of a 'real' *Retirement Village* in the Netherlands. A comparable case that is present in the Netherlands is the service flat. Although there has never been an unambiguous definition for *service flats*, the *service flat* distinguishes itself by its (often) exclusive appearance with collective facilities, such as catering, laundry and domestic assistance (Lupi et al., 2015). Obtaining the residential object can be done in various ways, there are flats where residents have the choice to buy or rent the dwelling (Lupi et al., 2015). In some cases, access requirements have been set for obtaining a dwelling, for example, a minimum or maximum age (Lupi et al., 2015). In addition, the collective facilities are usually made available by entering into a contract with the provider of the flat (Lupi et al., 2015). Both Australia and New Zealand have established regulatory bodies that structure the legal framework of Retirement Villages (Hope, n.d.). In Australia and New Zealand the retirement industry was sparked by the government through the initiation of a not-for-profit system embedded in legislation, which resulted in low upfront costs to help elderly to buy into Retirement Villages and set standards that are applicable to all villages (Hope, n.d.). The Associated Retirement Community Operators (ARCO) is a body in the UK that sets standards for Retirement Villages, however this body is not embedded in national legislation and therefore villages are not obliged to comply to the standards set by ARCO (2017).

The second model by Faulkner (2006) in the category unassisted communities is *CoHousing*. With *CoHousing* elderly live independently in the same area and intentionally participate in a community that organises itself (Faulkner, 2006). *CoHousing* models can vary in size, setting, and participants. Routines, activities and support are organised by

the community and are therefore self-supporting to a certain level, creating a sense of place, security and belonging (Faulkner, 2006). The involvement of participant during the development of *CoHousing* models can also vary. Models exist where participants initiate CoHousing models and are already involved during the design and build phase of an accommodation, known as Collective Private Commissioning (in Dutch: 'Collectief Particulier Opdrachtgeverschap') (Spiering, 2014). As mentioned by Spiering (2014), not all participants are capable of organising the whole process, so with most *CoHousing* models the participants are only involved after completion of the accommodation, for example, the Dutch co-housing model *Feeling at home* (in Dutch: "Thuishuis") (Tinker, Ginn, & Ribe, 2013; Veuger, 2015). The model of CoHousing originated in Denmark and the Netherland and has become successful throughout Europe (Croucher, Hicks & Jackson, 2006; Faulkner, 2006). CoHousing models are present in different setting, namely (loosely translated) Dotted CoHousing (In Dutch: 'gestippeld wonen') and Harmonica CoHousing (In Dutch: 'harmonica wonen') (SEV, 2008). With Dotted CoHousing the independent dwellings or units of participants can be scattered throughout an accommodation and with Harmonica CoHousing the independent dwellings or units of participants are clustered within an accommodation (SEV, 2008). As mentioned above on of the core ideas of CoHousing models is to intentionally participate in a community, but for most CoHousing models there are additional admission requirements, such as, age, cultural background, or other beliefs. The most common form of admission requirement is age, whereas with Senior CoHousing models a minimum age is set to for example over-55s. A counterpart of Senior CoHousing is Intergenerational CoHousing, where Intergenerational CoHousing models are accessible for both young and old (Faulkner, 2006). In the Netherlands cases are known where admission requirements are based on cultural background, diet, sexuality and religion (Omslag, 2005).

#### 3.3.3 - Assisted communities

The final category Faulkner (2006) describes is assisted communities, which entails forms of housing where some level of care or support is included. Assisted communities are also known as 'supported housing', which reflects agglomerations of independently living elderly within a complex or scheme that offers service to assist them (Thomas et al., 2013). Thomas et al. (2013) mention that every country uses different labels for 'supported housing' and the following presented by Faulkner hold substantial similarities, in addition to the differences in organisation per country. Faulkner (2006) discusses four potential housing models from the US and UK in this category, namely Assisted Living, Sheltered Housing, Extra Sheltered Housing and Continuing Care Communities.

The first housing model Faulkner (2006) discusses in the category assisted communities is *Assisted Living*, which is a common housing model used in the USA. *Assisted Living* comes down to a licensed non-medical residential facility where a certain level of care and support is directly available (Faulkner, 2006). At first glance *Assisted Living* facilities look similar to nursing homes, but as discussed by Stone (2000) there are three key elements that distinguish *Assisted Living* from nursing homes. The first element Stone (2000) describes is the focus on independence, freedom and privacy. This entails that the elderly have the freedom to shape his/her own daily schedule and the possibility to lock his/her door and use a separate bathroom. The second element focuses on the setting of the dwelling the resident inhabits. Stone (2000) states that the dwelling should have an apartment setting, which comes down to owning an independent dwelling or independent residential unit. The final element provided by

Stone (2000) emphasis on the direct availability of care or support, depending on the needs of the elderly. In the US there is no national agreement on the amount of care or support that need to be available to acquire the title Assisted Living facility (Stone, 2000). Licensing of Assisted Living facilities is regulated on state level and this results in a strong differentiation in available care or support and living costs between Assisted Living facilities throughout states, where some facilities offer limited arrangements and others the full spectrum of arrangements (Stone, 2000). The differentiation in living costs between states can result in states where Assisted Living can become unaffordable for groups with lower or moderate income (Faulkner, 2006). The amount of care and support provided within Assisted Living facilities is build around the core idea of maximum-independence of the elderly (Croucher et al., 2006; Stone, 2000). In some states Assisted Living facilities only offer non-medical support, for instance, assistance with activities of daily living, while in some states Assisted Living facilities are obliged to have some level of medical care (Spillman, Liu, & McGilliard, 2002). This creates ambiguity for providers and elderly, because the dividing line between Assisted Living facilities and a nursing home becomes insignificant. A Dutch housing model that is quite similar to Assisted living is the Sheltered dwelling (in Dutch: 'Aanleunwoning'). These are characterised by clustered dependent dwellings, which are situated near care homes or nursing homes (Pop et al., 2014; Spiering, 2014). The residents of the sheltered dwelling are able to make use of services and care provided by the care or nursing home if desired. However, with the de-institutionalisation of care homes, the pre-existence of sheltered dwellings is under pressure (Pop et al., 2014).

The second and third housing model described by Faulkner (2006) in the category assisted communities are Sheltered Housing and Extra Sheltered Housing, which are both known in the UK. Both models are based on a range of clustered dependent or independent dwellings with shared facilities and direct services available. In the UK local authorities and housing associations provide most Sheltered Housing facilities, while the private sector plays a minor role (Jones, Howe, Tilse, Bartlett & Stimson, 2010). In the UK Sheltered and Extra Sheltered Housing are available in the rental and owner-occupied sector, additionally residents pay a structural service fee and additionally a fee for facultative services (Faulkner, 2006). The difference between Sheltered and Extra Sheltered Housing is the available of 24-hour support from social care or health teams at Extra Sheltered Housing (Faulkner, 2006). While Sheltered Housing facilities are designed for reasonable fit and active elderly, Extra Sheltered Housing facilities are designed to be easy accessible for elderly with wheelchairs or walking frames (Hanson, 2001). At most *Sheltered Housing* facilities 24-hour emergency assistance is available, but there is no medical staff directly on-site (Faulkner, 2006). This implicates that elderly living in *Sheltered Housing* facilities will eventually have to move to a nursing home when his/her need for care becomes to complex (Hanson, 2001). In contradiction, elderly at Extra Sheltered Housing facilities can usually stay put when the need for care increases, however Extra Sheltered Housing also have his/her boundaries concerning the amount of care they can offer (Hanson, 2001).

The final housing model in the category assisted communities discussed by Faulkner (2006) are *Continuing Care Retirement Communities (CCRS's). CCRS's* are in line with *Retirement Villages*, but offers care directly on-site (Faulkner, 2006). Where elderly in *Retirement Villages* can make use of the same care schemes as elderly in *Conventional Housing*, *CCRS's* have these services on-site. In most *CCRS's* it is possible to acquire a dwelling by buying or renting one. In addition to the mortgage or renting cost, elderly pay a structural fee, sometimes in combination with a one off entry payment, for

maintenance, services and care (Faulkner, 2006). This fee remains the same even when the need for care increases, comparable to an insurance (Faulkner, 2006). Additionally, *Continuing Care Communities* have nursing homes on-site offering elderly the possibility to move to a nursing home when care becomes too complex (Faulkner, 2006).

## 3.4 - Forming and organising building blocks

In the previous paragraph thirteen housing models by Faulkner (2006) have been discussed and (if possible) connected to Dutch cases. The next step in developing the framework for a *model to age in place* is to formulate building blocks based on the information gathered in the previous paragraph, see Appendix: D.

# 3.4.1 - The forming of building blocks within the internal dimension

Based on the qualitative data gathered with the question: 'how does the housing model support the elderly in to age place?', overlap between the models is identified and the labels for building blocks within the internal dimension are formulated.

The highest overlap identified between the housing models is found on the term *service*. These *services* have to do with the possibility to acquire knowledge on housing models or community services through *housing options services*. In addition, *services* have to with the possibility to receive a range of non-medical assistance like housekeeping, catering or laundry services, reception, technical service and help with shopping, which are available through *community services* or integrated within models such as *retirement villages*, *assisted living*, (Extra) sheltered housing and continuing care communities. Furthermore, services regarding the improvement of the current dwelling through *home improvement services*, such as placing a new bathroom or removing thresholds. Services are available in different compositions, where some models have a full spectrum of services some only offer a small package of services. The options with overlap regarding the term *services* are part of the building block labelled as *Service*.

The second overlap found between the models is on the term *care*. *Care* can consist of care through *community services*, informal care within *homeshare* models, health monitoring and 24-hour on-site staff that are present in *assisted living* models, 24-hour emergency assistance in *(Extra) sheltered housing* and the possibility to receive nursing care on-site, such as present in *extra sheltered housing* and *continuing Care communities*. As Vegter (2006) care has become available at every *residential object* in the Netherlands with the changes in national care legislation, therefore care received through community services will not be taken up in the building block. The remaining care facilities are part of the building block with the label *Care*. The difference between the building block *service* and *care* is that options within the building *service* are aimed at non-medical services, while the building block *care* is aimed at medical services.

The third overlap identified between the models is discovered on the term *social*. In several models the possibility to participate in social activities have been identified, either intentionally, such as with *homeshare* and *cohousing* models, or voluntary, such as with *retirement villages*. The spectrum of social activities is broad, entailing organised activities, like coffee mornings, bingo or play bridge, such as present in *retirement villages* and *serviceflats*. Furthermore, the availability of communal areas offers people the option to meet each other, such as with *retirement villages*, *assisted living* models, (*extra*) *sheltered housing* and *continuing care communities*. The building block will be labelled *Social Participation*.

The fourth overlap found between the models is on the term *building regulations*. Several extra construction requirements to a building can support the elder when infirmities arise, such as with *lifetime homes*, these can be expressed through easy

understandable labels, such as with *labelling of the suitability of homes for older people*. The additional building regulations can be taken into account during construction, such as with *lifetime homes, extra sheltered housing* and *continuing care communities* or can be applied later by *Home Improvement Agencies*. In order to distinguish standard building regulations with extra construction requirements, the building block will be labelled *Additional construction regulation*.

The fifth overlap identified between the models is on the term *spatial layout*. In general, the new homes and existing homes as presented by Faulkner (2006) are scattered in nature. For example, the *lifetime home* and *smart home* can be single dwellings scattered throughout a neighbourhood. However, the (un)assisted communities such as *retirement villages* and *sheltered housing* are based on agglomeration of dwellings. In addition, one should ask itself how the model is connected with the rest of the world, even though models call themselves a community. After all, location and setting can also be important for the elderly. To give an extreme example, a *Retirement Village* located in the middle of the desert gives a whole other perspective to ageing in place than a *Retirement Village* near a city. The building block will be labelled *Spatial component*.

The final overlap discovered between the models is on the term *technology*. *Technology* can be applied in dwellings to support the elderly to age in place. *Technology* can consist of home automation, monitoring of resident's health, safety and security, and home environment, such as with the *smart home*. Home Improvement Agencies are able to place simple forms of *technology* to support the elderly to age in place and some models have incorporated *technology* to facilitate independence and create a safe environment, such as with *continuing care communities*. This building block will be labelled as *Technology*.

# 3.4.2 - The forming of building blocks within the external dimension

The external dimension will filled with building blocks formulated through the overlap of terms in data gathered by the question: 'what notable remaining characteristics does the housing model have?', see Appendix: D.

The highest overlap discovered between the models is on the term *type of provider*. The *type of provider* interrelates with different building blocks within the *internal dimension* of the framework. As shown, the elderly are free to pick his/her own *provider* when receiving care at home, such as with *community services*. In addition, private or public parties can own the real estate that holds the *residential object*, such as with *retirement villages*, *assisted living* and *(extra) sheltered housing*. Also, the organisation of service and care facilities can differ per type of provider. At some models, such as *retirement villages*, *assisted living*, *(extra) sheltered housing* and *continuing care communities* most building blocks of existing models are organised by professional organisations. With other models, such as *homeshare* and *cohousing*, some building blocks of models are organised by volunteers or family. This building block will be labelled *Provider*.

The second overlap found between the models is on the term *tenure status*. The *tenure status* interrelates with the *residential object*. The *tenure status* occurs in the classic forms, such as social housing, private rental and owner-occupied. With the *retirement village*, there is a possibility of leasing the residential object. Also, with some models there is a mix of *tenures* present, giving freedom of choice for the elderly. This building block will be labelled as *Tenure Status*.

The third overlap identified between the models is on the term *contract*. The *contract* interrelates with different building blocks in the *internal dimension*. The most

apparent example is the *contract* residents have to enter to make use of service facilities in a *service flat*. Another example is students at the model '*Woonstudent*' sign a contract that, in return for their services, they will receive deduction on their living costs. Some models enable the residents to make use of care, services, or maintenance based on structural fees, while other facilities are facultative, such as with *(extra) sheltered housing* and *continuing care communities*. This building block will be labelled *Contract*.

The final overlap discovered between the models is on the term *entrée* requirements. With some models, certain minimum requirements are set for residents to enter a model. This could entail that a minimum or maximum age limit is set, such as with retirement villages. Residents have to show that they are willing to participate in the model, such as with cohousing. Furthermore, some cohousing schemes even set requirements to cultural background, diet, sexuality and/or religion. In addition, within some continuing care communities set requirements in the form of a single entrée fee. This building block will be labelled as *Admission requirements*.

## 3.5 - Initial instrument

As mentioned at the beginning of this chapter, the goal of this is to get a better understanding of the new spectrum of ageing in place and build an instrument that frames the unlimited housing models for the elderly. Furthermore, the framework is the first step on finding agreement on what a supportive 'place' is for the elderly. The framework of age-friendly homes by the European Union is a good example of an instrument that seeks to offer room for as many options as possible to support the elderly to age in place. The framework acts as a basis to create a dialogue between stakeholders to apply technological options to age in place according to the preferences and needs of the elderly. However, because not only technology can support the elderly to age in place, existing housing models have been analysed in order to design a broader framework that reflects what a housing model to age in place entails. Through analysing of 'coat rack' of cases presented by Faulkner (2006), qualitative data has been collected and based on 'Open Coding', six building blocks surrounding the residential object within the internal dimension and four building blocks in the external dimension have been identified, see figure 13. The building blocks placed in the internal dimension present building blocks that support the elderly to age in place, while the building blocks placed in the external dimension provide information on the remaining characteristics of the housing model.

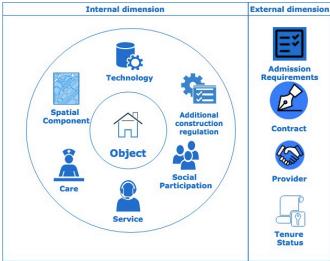


Figure 13: Framework for housing models to age in place

The diverse building blocks, with various options, are able to design a variety of housing models within the new spectrum of ageing in place. The *residential object* is a fixed building block with fixed characteristics that are present in every *housing model to age in place*. The building blocks within the *internal dimension* show that there are different options to support the elderly to age in place. Furthermore, the building blocks in the *external dimension* display that housing models to age in place have a variety when it comes down to remaining characteristics. The combination of the *residential object* and the building blocks in the *inter- and external dimension* reflect what a *housing model to age in place* entails. Within each building block, several options or combination of options are available to define the building block, see table two for an overview of

(potential) options within building blocks.

Fixed building block  Residential object    Category: Independent dwelling, independent residential unit or dependent residential unit.	(potential) options within	amework for housing models to age in place
Residential object    Category: Independent dwelling, independent residential unit or dependent residential unit.   Living area: square meters		
Rooms: number  Options  24-hour on-site care staff  24-hour emergency staff Health monitoring Nursing facilities on-site Housekeeping Catering service Laundry service Hairdresser Pedicure Reception Technical service Assistance with groceries  Social participation Spatial component  Technology  Technology  Care robotics  Care Staff  24-hour emergency staff Health monitoring Nursing facilities on-site Housekeeping Catering service Laundry service Hairdresser Pedicure Reception Technical service Assistance with groceries  Communal area with organised activities: Coffee mornings, Bingo, bridge Location: Connection to public transport, location within community Setting: single residential object or agglomeration of residential objects  Home automation Domotics Care robotics		residential unit.
Building blocks  Care  24-hour on-site care staff  24-hour emergency staff  Health monitoring Nursing facilities on-site  Housekeeping Catering service Laundry service Hairdresser Pedicure Reception Technical service Assistance with groceries  Social participation  Spatial component  Communal area with organised activities: Coffee mornings, Bingo, bridge Location: Connection to public transport, location within community Setting: single residential object or agglomeration of residential objects  Home automation Domotics  Care robotics		
Care  24-hour on-site care staff  24-hour emergency staff Health monitoring Nursing facilities on-site Housekeeping Catering service Laundry service Hairdresser Pedicure Reception Technical service Assistance with groceries  Social participation  Spatial component  Communal area with organised activities: Coffee mornings, Bingo, bridge Location: Connection to public transport, location within community  Setting: single residential object or agglomeration of residential objects Home automation Domotics  Care robotics	Duilding blocks	
Care    24-hour emergency staff	Building blocks	
Health monitoring     Nursing facilities on-site     Housekeeping     Catering service     Laundry service     Hairdresser     Pedicure     Reception     Technical service     Assistance with groceries     Social participation     Spatial component     Communal area with organised activities: Coffee mornings, Bingo, bridge     Location: Connection to public transport, location within community     Setting: single residential object or agglomeration of residential objects     Home automation     Domotics     Care robotics		
Nursing facilities on-site	Care	, and the second se
Service    Housekeeping   Catering service   Laundry service   Hairdresser   Pedicure   Reception   Technical service   Assistance with groceries		
Service    Catering service   Laundry service   Hairdresser   Pedicure   Reception   Technical service   Assistance with groceries		
Laundry service   Hairdresser   Pedicure   Reception   Technical service   Assistance with groceries		
Hairdresser   Pedicure   Reception   Technical service   Assistance with groceries		
Pedicure Reception Technical service Assistance with groceries  Communal area with organised activities: Coffee mornings, Bingo, bridge Location: Connection to public transport, location within community Setting: single residential object or agglomeration of residential objects Home automation Domotics Technology Care robotics		
Technical service Assistance with groceries  Communal area with organised activities: Coffee mornings, Bingo, bridge Location: Connection to public transport, location within community  Setting: single residential object or agglomeration of residential objects  Home automation Domotics  Care robotics	Service	
Assistance with groceries  Communal area with organised activities: Coffee mornings, Bingo, bridge  Location: Connection to public transport, location within community  Setting: single residential object or agglomeration of residential objects  Home automation  Domotics  Care robotics		Reception
Social participation Communal area with organised activities: Coffee mornings, Bingo, bridge Location: Connection to public transport, location within community Setting: single residential object or agglomeration of residential objects Home automation Domotics Care robotics		Technical service
Cocation: Connection to public transport, location within community   Setting: single residential object or agglomeration of residential objects   Home automation   Domotics   Care robotics		
Setting: single residential object or agglomeration of residential objects  Home automation Domotics Care robotics	Social participation	Communal area with organised activities: Coffee mornings, Bingo, bridge
Home automation Domotics Care robotics	Snatial component	
Domotics Technology Care robotics	Spacial component	Setting: single residential object or agglomeration of residential objects
Technology Care robotics	Technology	Home automation
100111011010		1 11 11
<b>Door spy (</b> in Dutch: 'deur spion')		
		Door spy (in Dutch: 'deur spion')
Alarm system		Alarm system
Additional construction Labels: Thressholdless (in Dutch: 'drempelloos') Dutch examples of labels:	Additional construction	<b>Labels:</b> Thressholdless (in Dutch: 'drempelloos') Dutch examples of labels:
regulation Seniorenwoning, Woonkeur, Oppluslabel & Sterwoning	regulation	Seniorenwoning, Woonkeur, Oppluslabel & Sterwoning
Minimum age limit	Admission requirements	Minimum age limit
Maximum age limit		
Admission requirements Minimum demand for care		Minimum demand for care
Maximum demand for care		Maximum demand for care
Contract Presence of contract to make use of options within building blocks.	Contract	
Provider Provider(s) of building blocks residential object, care, service and social participation.	Provider	
Social housing		Social housing
Tenure status Private rental	Tenure status	Private rental
Owner-occupation		Owner-occupation

Table 2: Options within building blocks

#### 3.5.1 - The functioning of the framework

In order to get a better understanding of the basic functioning of the framework, an existing housing model to age in place has been analysed according to the initial framework. The housing model that has been analysed is known as a *serviceflat* and is comparable to the *retirement village* mentioned by Faulkner (2006). The *serviceflat* 

'Waalsdorp' is part of Foundation Pro Senectute who own different care real estate throughout the Netherlands <sup>1</sup>. The serviceflat 'Waalsdorp' is located in the neighbourhood Benoorderhout in The Hague and consists of 113 rental apartments, see photo 1 and 2.

At first glance, the flat looks like an ordinary flat but the application of the framework shows that the housing model holds several functions that support the elderly to age in

place, the results are presented in table three. The results show that the 'colouring' of building blocks influences the composition of other building blocks. For example, the setting of 113 residential objects causes a differentiation in living area and number of rooms of each residential object. In addition, this example shows that the *object* is residential directly to multiple connected service and social participation

options, such as, communal areas with organised activities and a



Photo 2: Facade of the serviceflat 'Waalsdorp' (author)



Photo 1: Main entrance (author)

beauty salon. The examples of the options within the *internal dimension* show the dynamic nature of the building blocks. For example, the presence of 24-hour on-site care staff does not entail that a 'healthy' elderly is obligated to interact with the options. However, when health deteriorates, the option is directly available to support the elderly. Furthermore, the building blocks in the *external dimension* provide information on the remaining characteristics of the housing model. For example, all residential objects are private rental and most options within the *internal dimension* are available through an all-inclusive contract. However, some options are not included in the contract and are optional, for example, the a la carte restaurant. The analysis shows that the combination of the *residential object* and building blocks within the *inter-* and

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<sup>&</sup>lt;sup>1</sup> https://www.pro-senectute.nl/

external dimension defines one of the multitudes of options within the new spectrum of ageing in place. Before diving deeper into the applicability of the framework in relation to the coordination of demand and supply of housing models to age in place, the framework will be validated by experts in the field of housing and care in the next chapter.

Framework for hou	ising models to age in place applied to existing housing model	
Name: Pro Senectute 'Waalsdorp' located in The Hague, Netherlands		
Fixed building block	Fixed characteristics	
	Category: Independent dwelling(s)	
Residential object	Living area: 84 - 117 square meters	
	Rooms: 2 and 3 rooms dwelling(s)	
Building blocks	Options	
Care	24-hour on-site care staff	
our c	Catering service: a la carte restaurant	
	Beauty salon	
	Roomservice	
	Hairdresser	
Service	Pedicure	
	Reception	
	Physiotherapist	
	<b>Technical service:</b> maintenance of building and technical installations	
	Communal area with organised activities: bridge and other daily	
Social participation	activities	
	Communal area to undertake activities: fitness, library	
	<b>Location:</b> Benoorderhout, integrated in district with basic facilities within	
	walking distance	
	Nearest public transportation stop: 250 meter	
Spatial component	Nearest general practitioner: 850 meter	
	Nearest grocery store: 300 meter	
	Setting: agglomeration of 113 residential objects	
	Door spy (in Dutch: 'deur spion')	
Technology	Alarm system	
Additional construction	<b>Labels:</b> Thressholdless (in Dutch: 'drempelloos') and wheelchair accessible	
regulation	Labers. The essilonatess (in Duten, arempenous) and wheelenan accessible	
	No or minimum demand for care: When care demand becomes too high, an	
Admission requirements	appropriate solution will be sought to move the elderly.	
	All-inclusive contract for residential object, service, social	
Contract	participation and care. Some options are optional, for example, a la	
	carte restaurant.	
Provider	Residential object, care service, social participation and care are	
Provider	provided by Pro Senectute	
Tenure status	Private rental	

Table 3: Framework applied to existing housing model

## 4 - Review of the instrument

The previous chapter has been dedicated to the design of a framework in order to get an understanding the new spectrum of ageing in place. The initial result is a framework of housing models to age in place, solely based on existing models and literature. In this chapter, the developments in the Dutch system of housing and care will be discussed from a practical perspective and the framework will be review. The review of the framework is aimed at validating the completeness and comprehensibility of the framework. Therefore, possible addition or alterations to the framework will be presented in the final paragraph of this chapter. The group of reviewers consist of five experts [A, B, C, D, E], see Appendix: E for the summaries of the interviews. The experts are selected based on their experience in the field of housing and care in the Netherlands, see table four.

ID.	Stakeholder
A	Care provider
В	Concept developer
C	Knowledge Centre Housing & Care
D	Interest group Dutch elderly
E	Municipality

Table 4: Stakeholders expert review

# 4.1 - Review general

The first part of the review was aimed at the developments in the Dutch system of housing and care that sparked the demand for *ageing in place*. The first part can be divided into four components, namely, decoupling of housing and care, differentiation of housing models to age in place, ageing in place and development of (new) housing models to age in place.

## 4.1.1 - Decoupling housing and care

One of the drivers that contribute to the increase in demand for ageing in place was the de-institutionalisation that slowly started in the 70s. The process of deinstitutionalisation has taken flight in recent years, especially on the diminishing of care homes, but all experts agree that the process is not finished yet. At first glance, the process seems to be completed because the new law and regulations are in force, but the execution of law and regulations by stakeholders and the impact on the elderly is underestimated, according to the care provider, knowledge centre, interest group and *municipality*. In addition, according to the *concept developer*, most stakeholders have not altered their way of thinking yet, for example, the current laws and regulations offer flexibility in the field of ageing in place, but often is still thought in institutional housing of the elderly. The *Knowledge Centre for Housing & Care* was once established to prepare stakeholders for the decoupling of housing and care, unfortunately practise shows that stakeholders still encounter difficulty comprehending the new law and regulations/ Furthermore, the decoupling of housing and care goes a step further than only the diminishing of certain housing categories, such as the care home. In many cases, the impact on the elderly is underestimated. The group of elderly that once were entitled to the care home, is now dependent on the current housing situation, according to the care provider and municipality. Instead of receiving support from a 'known' institute, the elderly are 'suddenly' dependent on their environment. This is often underestimated

and because of this, a certain group of elderly have fallen between two stools, according to the *care provider* and *municipality*. The *municipality* indicates that some elderly have never had the time or the awareness to anticipate on the decoupling of housing and care, because of which they are now housed in 'unsuitable' dwellings. In addition, the *interest group* and *municipality* expect that in the future a part of the nursing home will be deinstitutionalised, for example, under influence of new technologies. This could entail that a new group, with even higher care demands, will become dependent on their current dwelling to *age in place*.

The decoupling of housing and care has opened up the playing field to develop new housing models to age in place. The concept developer, knowledge centre, interest group and municipality agree that the decoupling of housing and care a higher degree of freedom has created a higher degree of freedom to develop housing model to age in place. However, the care provider disagrees, because the development of new models was, and will always be, a go or no-go based on the possible rate of return for developers. The higher freedom of degree to develop housing models to age in place, is according to the concept developer, interest group and municipality, due to the disappearance of the fixed funding streams of housing for the elderly and because the elderly themselves have become responsible for spending the their housing costs. However, practice shows that the development of new models mainly occurs in the 'luxury segment', because of which the supply for the elderly with a 'less-stocked wallet' is lagging behind, according to the concept developer and knowledge centre. For the lower segment, the interest group mentions that there is often a lack of courage and innovation among stakeholders such as municipalities, housing associations, and care institutions. In addition, the *interest group* states that other stakeholders must have the will to corporate and dare to look beyond their own 'domain fence'. Furthermore, the interest group states that stakeholders must dare to interact with the elderly themselves, which often results in the most 'beautiful' models. The concept developer and the *knowledge centre* notice that in the 'luxury segment', private entrepreneurs, sometimes called 'cowboys', and investors enter the playing field. The 'cowboys' sometimes create a 'gut feeling' with the knowledge centre, because it is unclear whether the 'cowboys' participate in order to create 'good' models or because the only in for the money?

#### 4.1.2 - Differentiation of housing models to age in place

One of the drivers that increase the diversity of demand for housing models to age in *place* is the differentiation of the housing preferences of the elderly. Although the data in chapter two has not explicitly shown that there is any differentiation, it is clear that the elderly opt to 'age in place'. The knowledge centre indicates that not being able to accurately predict the demand is because the elderly are unfamiliar with the possibilities of housing models to age in place. In addition, the elderly often think that there are no options because the care home has disappeared. The *care provider* indicates that the elderly need to be aware that 'ageing in place' does not necessarily has to be in the current dwelling, this can also realised in an adapted home within the own neighbourhood. It has become clear, however, that many underlying factors contribute to the creation of unique housing pathways among the elderly. The concept developer, knowledge centre and interest group agree that the group of elderly has grown and the diversity within the group has grown, partly due to larger financial possibilities. However, the *municipality* states that a large group of the elderly currently owns an owner-occupied dwelling and therefore enjoy tax benefits that may be lost during a move.

Apart from the fact that the elderly do not want to move because of the financial advantages of their current dwelling, the matching of supply and demand is complex as long as one continues to use the traditional categories of housing for the elderly. Experts agree that the current categories no longer fit within the current market. As mentioned by the *concept developer*, this is because there more different models that all have different names. Furthermore, the *knowledge centre* and *municipality* agree that the elderly are used to think in 'traditional categories', which do not fit their current housing preferences anymore. Nevertheless, the *care provider* states that because stakeholders keep thinking in fixed categories, the coordination between supply and demand for *models to age in place* is complex. The *care provider* argues that the elderly are not interested in how particular models are financed, which is clear with the traditional categories, the elderly are focussed on finding a decent place to age. The *interest group* argues that is why one should not talk about housing of the elderly but start a dialogue with the elderly to discover how one wants to age in place.

## 4.1.3 - Ageing in place

The challenge with ageing in place is that there is no "one-model-fits-all" solution. In line with Clapham, the assumption is made that ageing in place entails more than the dwelling. In the Netherlands, the term residential care concept (in Dutch: 'woonzorgconcept') is often used to indicate housing models to age in place, assuming that ageing in place only consists of a residential and a care component. All experts agree that ageing in place includes more than only the two above-mentioned components. As mentioned by the knowledge centre and interest group, the residential object can be seen as the base from where the elderly can participate in the community. The residential object is depicted as a means to lead a 'good life', according to the concept developer and interest group, but according to the municipality, also as a prerequisite for ageing in place. The interest group states that the care component has become less important because all forms of care are available at home. The welfare component surrounding the residential object is important for the elderly, for example, the availability of facilities to meet people in the neighbourhood, especially if the chance of loneliness increases due to the loss of relatives, according to the care provider, concept developer, knowledge centre and *municipality*. The interaction with the neighbourhood is also important, interactions with development within the neighbourhood and the sense of feeling safe within the neighbourhood, according to the care provider and knowledge centre. It also differs each person what is considered important, one considers the residential component important, the other the care component, but for those who feel lonely, the welfare component might be important, according to the *municipality*. In general, the goal is to age in place and this is important for everyone, the elderly or other target groups, according to the *interest group*. Everyone achieves this in their own way, whether it is through the means of housing or through the means of care.

## 4.1.4 - Development of (new) housing models to age in place

The new playing field of *housing models to age in place* grant a certain degree of freedom for the elderly but also for stakeholders who are involved with the development and realisation of *housing models to age in place*. As shown by the European Union (2016), one of the complexities with the development of new models based on technology was the scattering of information throughout different domains. Therefore, what complexities do stakeholders encounter in the process of developing (new) *housing model to age in place* on the Dutch market?

The complexities encountered by the consulted experts consist of a broad range of subjects, some of which fall outside the scope of this thesis. Examples of complexities that the concept developer, knowledge centre and municipalities encounter that fall outside the scope are problems with fire safety, parking standards around models, zoning plans, levies on municipal taxes or differences in the duration of contracts between different stakeholders. However, the experts mentioned several subjects that partially validate the need for the framework for housing models to age in place. The disappearance of the traditional categories of housing for the elderly leaves a void and experts state that stakeholders continue to 'think' in the traditional way, according to the interest group and concept developer, or in the traditional categories, according to the care provider. In addition, the interest group states that there is a lack of 'entrepreneurship and guts' at traditional parties, such as housing associations, municipalities and care institutions. The interest group states that this can only be broken if a cultural change takes place. Furthermore, the group of initiators, both private and commercial, has grown strongly in recent years, according to the municipality. Private parties often have lack of knowledge, experience, and finances, which means that they often miss developments, according to the municipality. In addition, the interest group states that stakeholders think too 'compartmentalised' and one does not dare to look over the 'fence' of their domain. For example, the nursing home is seen as the institute that is responsible of taking care of the elderly and stakeholders tend to forget that the elderly are also part of the conventional housing market, according to the care provider. As a result, the care provider and knowledge centre argue that the elderly are often underexposed and not involved in vision formation of municipalities, while it is a very important group within each municipality. Strictly adhering to the own domain also results in that stakeholders are unfamiliar with the possibilities in the field of housing models, according to the *interest group*. The *concept developer* argues that stakeholders often differ from insight when it comes to physical elements of the dwelling, for example, living area, and number of rooms, causing development to slow down. Finally, the process of development is often delayed because stakeholders speak their 'own language', resulting in a so-called 'dialogue of the deaf' between stakeholders, and because the different worlds work at their own pace, according to the knowledge centre and *municipality*. This final remark is strongly related to one of the fundamentals of the framework for age-friendly homes by the European Union. The lack of 'shared' language is one of the drivers for the creation of the framework of age-friendly homes. The lack of agreement on what 'place' is suitable for the elderly is one of the reason to design the framework for housing models to age in place.

#### 4.2 - Review framework

The second part of the review was aimed at the review of the framework. The second part can be divided into three components, namely, the *framework in general*, the *building blocks*, and *possible addition to the framework*.

#### 4.2.1 - Framework in general

The first component of the review deals with the first impression of the framework. Experts indicate that the framework looks clear and complete at first glance, especially because of the clear visualisation of the building blocks. Furthermore, experts indicate that the current building blocks together can form a *housing model to age in place*. Furthermore, the *care provider* argues that it is important that stakeholders acknowledge the coherence between building blocks. One building block can be 'fantastic', but without any coherence, it becomes worthless, according to the *care* 

provider. In practice, the coordination between the building blocks is often lacking, according to the *care provider*, which can be linked to the 'compartmentalised' thinking of stakeholders. The goal of the framework is clear according to all experts and it is indicated that the framework can be a useful instrument to coordinate the development of a model when multiple stakeholders are involved, according to the *municipality*. Furthermore, all experts indicate that the framework can be used to guide the dialogue between stakeholders on the development of (new) *housing models to age in place*.

All experts indicate that the framework can offer support for the coordination between supply and demand for *housing models to age in place*. However, the framework may not be declared 'sacred', according to the care provider. The care provider states that stakeholders should always attempt to look beyond the individual building blocks and take into account the mutual coherence between building blocks. The framework can be used as a guideline to summarize the diversity of demand among the elderly in an orderly manner and thereby find a better alignment between demand and supply, according to the *concept developer* and *knowledge centre*. Furthermore, it will probably be that in a group the elderly with a higher income it is easier to fill in certain building blocks compared to the group with a lower income, according to the municipality. Finally, the *interest group* suggests adding prerequisites to the framework. Based on these prerequisites, it is possible to give substance to building blocks in a more effective way, according to the interest group. For example, the model should consist of only dwellings in the social housing sector. For this example, this will automatically influence the rest of the building blocks because those dependent on the social housing sector have less to spend compared to groups in the owner-occupied sector.

#### 4.2.2 - Review of building blocks

The second component of the review deals with the individual building blocks presented in the framework. For the review, the building blocks are filled with options that were found during the analysis of success stories in chapter three, see Appendix: D. The experts were asked if the current building blocks are comprehensible and if buildings blocks are missing. All experts indicate that all building blocks are comprehensible with the options that were found during the analysis of the success stories. Furthermore, general notions were made on several building blocks and some notions were made on the relation between building blocks.

A comment made on the *residential object* was the relation to the *spatial component*. The *concept developer* and *knowledge centre* asked how the *residential object* was situated, for example in a complex or as an individual object. In addition, the concept developer raised the question if the *residential object* also provides information on the interior of a complex, because in practice most models are developed within complexes. This shows the importance of the coherence between building blocks as previously suggested by experts.

The *care provider* made a comment on the building block '*care*' that care entails more than '*care in stones*' like the presence of nursing facilities (in Dutch: ' *zorg in stenen*'). However, the *interest group* and the *municipality* indicate that '*care in stones*' is a distinctive factor for models, because with current care legislation all forms of care are available at the *residential object*. For the building block '*care*', one must also take into account that the *residential object* meets certain *additional construction regulation* so care can be delivered properly, for example, wider doors and/or no-threshold, according to the *interest group*.

For the building block *service*, comments were made on the relation with the *spatial component* of the model. Again, the importance of understanding the coherence

between building blocks becomes apparent. With the development of a model, the *care provider* and *knowledge centre* argue that all stakeholders should be aware of services those are already present in certain areas. For example, the addition of a hairdresser to a model while there is a hairdresser around the corner is unnecessary, according to the *care provider*. For this reason, it will be necessary to make an assessment in each individual development about which services are necessary in relation to the *spatial component*. This also means that the trade-off in a city is different from the trade-off in a rural area.

For the building block *social participation*, the same comments were made as for the building block *service*. Again, the importance of the relationship with the *spatial component* is argued by the *care provider* and *concept developer*. For example, a meeting centre can be incorporated into the model but it can also be available close to the model, according to the *care provider*. Furthermore, a meeting place does not have to be a special meeting centre. It can also be a supermarket, a pharmacy, or a general practitioner, so-called triple-A locations in Dutch (in Dutch: 'Albert Heijn, Apotheek & Arts'), according to the *care provider*. The *care provider, knowledge centre, interest group* and *municipality* agree that the organisational aspect of the building block *social participation* is significant to comprehend. Especially when a meeting centre is nearby, it can be useful to collaborate, according to the *care provider*, or otherwise try to integrate a nearby meeting centre into the model, according to the *interest group*.

The building block *additional construction regulation* has already shortly been discussed at the building block *residential object*. Again, the *concept developer, knowledge centre* and *municipality* argue the importance of the relation between the *additional construction regulation* and the complex in its totality. The *municipality* argues that during the development of *housing models to age in place*, all stakeholders must find equilibrium in how much adjustments have to be in place to support the elderly. For example, not every elderly requires a dwelling that is suitable for wheelchairs and can *age in place* in a dwelling that is only suitable for a walker.

The building block *technology* shows some differences in insight on the application of *technology*. Nevertheless, all experts agree that *technology* is a means with a potential for future models. However, on the one hand, *technology* is seen as an opportunity to relieve or replace personnel, according to the *care provider*, while *technology* is also seen as a threat for the human aspect and interaction, according to the *municipality*. In addition, there are opportunities to implement *technology* during the realisation of models, according to the *interest* group. Forms of *technology* can already be in place but not active yet, once the elderly need support, *technology* can be activated, according to the *interest group*.

The importance of the *spatial component* in relation with other building blocks has already been discussed multiple times. In practice, the *care provider* argues that the *spatial component* is often underexposed. The availability of facilities, such as triple-A location, in the area can influence the composition of the model, according to the *concept developer*, *knowledge centre* and *interest group*. If the presence of facilities is insufficient, the *interest group* and the *municipality* argue that the connection via public transport nodes can serve as a solution. Therefore, stakeholders should have a good overview of the area a new model is going to be developed.

A comment made on the *admission requirements* is that can consist of a mix of requirements, for example, income in combination with a minimal demand for care [B]. The complexity with setting *admission requirements* is that it can result in difficult situations for both the elderly and other stakeholders. For example, models with

admission requirements aimed at a maximum demand for care, an elderly that just moved into the model can be forced to move because he/she exceeds the maximum demand for care, according to the knowledge centre. In addition, municipalities and housing associations make a part of the social housing stock available to residential groups, often for a certain nationality, and then go against the policy of 'appropriate allocation' (in Dutch: 'passend toewijzen'), according to the municipality. Finally, the interest group argues that the admission requirement is a prerequisite, for example, a new housing model for ageing in place for a target group. The care provider, knowledge centre and interest group agree that the building block contract is important for the elderly, certainly in relation to different providers. The elderly are confronted with multiple providers, for example, a contract with a care institution, a contract with the housing association and another contract with a provider of domestic help. This can create complex situations for the elderly and therefore one should provide clarity. In addition, it is important to clarify beforehand what kind of contracts there are between stakeholders, according to the municipality. In theory, the elderly have a freedom of choice to choose a healthcare provider, but in practise, the elderly are 'forced' to receive care from a healthcare provider that is part of the model, according to the *municipality*.

The *care provider* argues that the building block *provider* shows similarities with the building block *contract*. However, it is important to have an overview of the underlying relationships between stakeholders that are part of a model, according to the *interest group*. If multiple stakeholders are involved, it is necessary to record which stakeholder is responsible for what building block or part of a building block, according to the *municipality*.

The *municipality* made a comment on the *tenure status* is that there is a limited amount of models in the owner-occupied sector. Furthermore, a number of legal aspects arise from the *tenure status* that is important in the development of *models to age in place*, according to the *interest group*. As previously discussed, the *tenure status* can also be a prerequisite that can be used to effectively give substance to the building blocks.

#### 4.2.3 - Possible addition to the framework

The final component of the review focused on the completeness of the framework and if the framework can be expanded. In addition, experts provided input on possible other purposes for the framework.

The care provider, concept developer and municipality agree that the framework is currently complete in outline. The knowledge centre and interest group suggest to deepen the framework further is by adding prerequisites. For example, affordability can be added to the prerequisite to effectively give substance to the building blocks, according to the knowledge centre. The knowledge centre also suggests deepening the framework by clearly distinguishing stakeholders for each building block during the development and realisation. The purpose of the building block provider is to provide a description of the involved stakeholders, which almost entails the same as the suggestion made by the knowledge centre.

Finally, the experts were asked to come up with possible other purposes for the framework. The following suggestions will not be elaborated in this thesis due to a shortage of time and resources. However, these suggestions will be discussed as further research in chapter six. First, the *care provider* and *concept developer* made the suggestion to use the framework as an instrument to support the development of vision with regard to *housing models to age in place*. Secondly, the *concept developer* made the suggestion to use the framework to create models within the remaining institutionalised settings in the Netherlands, for instance, to develop a new nursing home model. Thirdly,

the framework can be used as a communication tool towards the elderly, according to the concept developer, knowledge centre and interest group. The framework can provide information on what is possible on the market of ageing in place, this allows one to encourage the elderly to think about their current housing situation and eventually take a step towards a housing model to age in place. For example, it could be invoked as a filter on a comparison site for dwellings, according to the knowledge centre. Fourthly, the concept developer, the municipality and interest group made the suggestion to use the framework as a frame of reference to compare initiatives and identifying differences between models. In this context, it can be distinguished for each building block which stakeholder is involved during development and realisation, according to the interest group.

## 4.3 - Adjustments to the initial framework

The expert review has highlighted the practical perspective on the developments on the Dutch market of housing and care, and the framework for *housing models to age in place*.

# 4.3.1 -Developments on the Dutch market of housing and care

During the expert review the Dutch market of housing and care has been highlighted from a practical perspective. It became evident that the decoupling of housing and care has left its mark at the contemporary market, both the demand and the supply side.

In general, both elderly and other stakeholders are not yet accustomed to the 'new' market and still think in the traditional categories of housing for the elderly. The group of elderly is unfamiliar with the new possibilities to age in place, while the stakeholders on the supply side are still sticking to the traditional categories of housing for the elderly. In addition, the decoupling of housing and care has not yet been completed and new issues have arisen around ageing in place. For example, some elderly have never had the awareness or time to anticipate the decoupling of housing and care, and are now occupying 'unsuitable' dwellings. Experts agree that ageing in place entails more than only a residential and care component, and that there is no 'onemodel-fits-all' answer on how to let elderly age in place. Furthermore, the experts agree that there is an increasing (potential) diversity in demand on housing models to age in place, primarily because of the larger financial capabilities of the elderly. Although there is more room for new developments of housing models to age in place, these mainly take place in the higher financial segments and the lower financial segment is lagging behind. The experts have mentioned a broad range of complexities that occur during the development of new housing models to age in place, but the most interesting one is the occurring of the 'dialogue of the deaf' between stakeholders, which is caused by the lack of agreement on what a suitable 'place' is for the elderly.

# 4.3.2 -Adjusted framework for housing models to age in place

In general, experts agree that the framework is complete in outline. The experts indicate that the current building blocks together can form a *housing model to age in place*. Furthermore, the experts indicate that the framework for *housing models to age in place* forms a basis that can support the development of models when multiple stakeholders are involved and is capable of dealing with the 'dialogue of the deaf'. Although it is important that stakeholders keep in mind that they have to look beyond the individual building blocks and acknowledge the underlying coherence of building blocks, otherwise one 'fantastic' building block can become worthless. To expose the underlying coherence of building blocks and enhance the framework, two adjustments will be made to the initial framework.

The first adjustment is to add a 'front portal' labelled as prerequisites. The goal of this 'front portal' is to beforehand select certain options that are *prerequisites* to develop a new housing model to age in place. Therefore, the prerequisites are only present during the process of development and realisation of new housing models to age in place. During this process certain desired options can already be known at the start of the process. For example, a prerequisite could be that a communal area has to be taken into account because there is no communal area in the neighbourhood. The prerequisite directly selects the option communal area within the building block social participation, which automatically leads to the question of how the communal area is arranged, for example, who is the provider? The prerequisites support the municipality and stakeholders to expose underlying coherence of certain desired options at the start of the first consultation rounds. The *prerequisites* can be formulated in different ways. For example, a municipality can formulate prerequisites in their Housing Vision, which have to be taken into account when developing a new housing model to age in place. For example, all new housing models to age in place need to be barrier-free or in a certain neighbourhood a *housing model to age in place* designated for the social housing market has to be developed. The municipality can formulate prerequisites by applying the framework to uncover the demand side of housing models to age in place and through analysing existing housing models to age in place. In addition, stakeholders can also formulate prerequisites. For example, a housing association can perform their own research on the demand of housing models to age in place, which results in a set of prerequisites. Combining the prerequisites of the municipality and stakeholders at the start of the process and place them in the framework can support the municipality and stakeholders to translate the prerequisites into options within building blocks. This supports the municipality and stakeholders to create shared language. As mentioned by the experts, the 'dialogue of the deaf' frequently occurs because stakeholders speak their 'own language'. The framework offers municipalities and stakeholders a tool to deal with the 'dialogue of the deaf' and smoothen the development and realisation process of housing models to age in place.

During the expert review it became evident that the coherence between housing models to age in place and its surrounding environment is often underestimated. Therefore, three building blocks in the internal dimension will interrelate with the spatial component, see figure 14. This places more emphasis on the interaction between the spatial component and the building blocks care, social participation and service. The spatial component still serves as a building block that is able to support the elderly, however it could hold care, service or social participation options that do not necessary have to be in place directly at the *residential object*. For example, when nursing facilities are openly available around the corner it is unnecessary to develop nursing facilities in a new housing model to age in place. This creates a dichotomy in the care, social participation and service options, namely direct options and indirect options. Direct options are directly connected to the residential object, while indirect options are available within the spatial component. This does not account for technology and additional construction regulation, because the options within these building blocks directly apply to the *residential object*. Furthermore, the *setting* of the housing model has been moved from the spatial component to the residential object, because the setting directly applies to the residential object. In the next chapter, three applications, to apply the framework in order to support the coordination between demand and supply of *housing models to age in place,* will be presented.

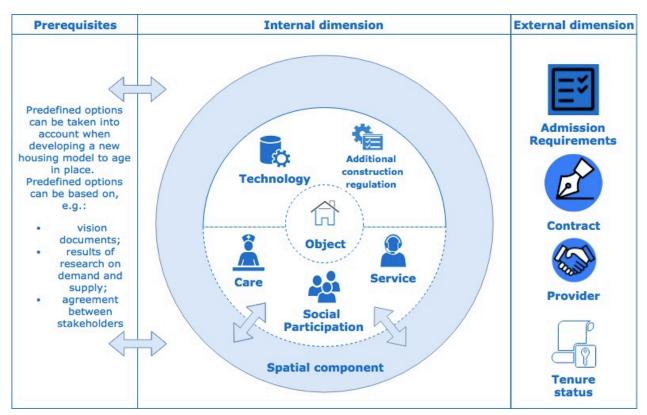


Figure 14: Visualistion of framework for housing models to age in place

# 5 - Synthesis

In this chapter the main findings of this study will be presented in order to answer the main research question:

How can an instrument support the coordination task of Dutch municipalities in order to develop and realise housing models to age in place?

Before presenting the applications of the framework, paragraph 5.1 will elaborate on the main findings of the previous chapters and how different applications relate to these findings. The first application of the framework will focus on the demand for *housing models to age in place*, which will be presented in paragraph 5.2. Paragraph 5.3 will focus on the application of the framework in relation to the supply of *housing models to age in place*. The final application of the framework is aimed at the guidance of stakeholders in relation to the discussion on what a supportive 'place' is for the elderly, which is presented in paragraph 5.4. Paragraph 5.5 will conclude the chapter with recommendations.

# 5.1 - Main findings

For the first step in this research, the housing pathway approach by David Clapham and descriptive data-analyses were performed to get an understanding on the development of the demand to age in place in the Netherlands. According to the housing pathway approach of David Clapham several interaction factors were analysed that influenced the historic housing pathways of the over-55s. On the one hand alterations in policy and legislation influenced how the over-55s frame their thought on their current housing situation, but on the other hand, underlying social trend have influenced the individual behaviour of the over-55s. Furthermore, the gradual de-institutionalisation of housing for the elderly and the adoption of the Anglo-Saxon way of thinking, in combination with the increase in labour participation, emancipation, individualism and call for privacy are slowly changing the supply-driven market of housing for elderly towards a demanddriven market over the course of time. With the shift towards an ageing in place policy, finalised by the decoupling of housing and care, the over-55s has become responsible to pick a place to age. Where the housing pathway of the elderly were paved into fixed housing categories after the Second World War, the elderly has now become responsible for the their own housing pathway in their 'evening of life'. The housing pathway approach displayed that the behaviour of the elderly on the housing market has become complex and less straightforward under influence of different interaction factors. The analysis shows that the demand for dwellings with supportive functions is still present, but also that a large portion of the elderly prefers to stay put. Thus, a part of the elderly is looking for a step into the new spectrum of ageing in place, however they are currently stepping into a 'void' because the traditional categories of housing for the elderly are no longer financed. Subsequently, the analysis provides too little information to give a 'look and feel' to housing models within this void. Therefore, the first application of the framework is aimed at collecting data on the 'look and feel' of housing models to age in place.

During the second step in this research, empirical research was conducted to uncover the new spectrum of ageing in place and fill the 'void' left by the disappearance of the traditional housing categories for the elderly. The focus was on what housing model supports the elderly to age in place. Unfortunately, Wiles et al. (2012) have shown that there is no 'one-model-all' answer to the question: what is the ideal place for

the elderly to age? Following this finding, a new understanding of the (potential) supply of *housing models to age in place* was sought using the fundamentals of the age-friendly homes by European Union (2016). Through analysing international well-known established models presented by Faulkner (2006), qualitative data was gathered on the unique selling points of individual models and subsequently overlap between models was sought in order to create a framework for *housing models to age in place*. Although the initial framework had to be validated, the basic functioning of the framework showed that the framework could be used to analyse existing housing models for elderly. Therefore, the second application of the framework is aimed at building a frame of reference according to existing housing models.

The final step in this research consisted of validating the findings of the first two steps of the research through expert reviews. During the expert review, it became evident that both the demand and the supply side of models to age in place are still unaccustomed to the new playing field of housing and care. On the demand side, the elderly are unfamiliar with the new possibilities to age in place, while on the supply side stakeholders are sticking with the traditional categories of housing for the elderly. As a result, a group of elderly are currently housed in dwellings that cannot (fully) support the elderly to age in place. Furthermore, developments of housing models to age in place are primarily taken place in higher segments of the market and developments in the lower segment of the market are lacking behind. One of the complexities that occur during the development of housing models to age in place is the 'dialogue of the deaf' between stakeholders because of the lack of agreement on what a suitable 'place' is for the elderly. Experts indicate that the current framework for housing models to age in place can be used as a basis to find agreement on what a suitable 'place' is for the elderly in order to deal with the 'dialogue of the deaf'. Therefore, the third application of the framework is aimed at dealing with the 'dialogue of the deaf'.

The first application is focussed on the demand side of *housing models to age in place*, the second application is aimed at the supply side of *housing models to age in place*, and the third application is aimed at the guidance of stakeholders in relation to the discussion on what a supportive 'place' is for the elderly.

## 5.2 - Developing a 'look and feel' of housing models to age in place

The first application of the framework is focussed on structurally collecting data on preferences of the elderly on local scale in relation to *housing models to age in place*. The framework can be used as a tool to gather data of the preferences of the elderly in relation to *housing models to age in place*, see appendix F for an example questionnaire to gather data. On the one hand, the framework can be used to gather data on the housing preferences of the elderly, but on the other hand, the framework is able to collect data on the preferences regarding supportive functions. Findings based on the data collected on the preferences of the elderly in relation to *housing models to age in place* can be used to define *prerequisites*, which can be taken into account when developing a *housing model to age in place*. By exposing the demand for *housing models to age in place* through the use of the framework, the municipality is provided with data that can be used for both housing and ageing in place policy. This offers municipalities the possibility to organise policy integration in a more efficient way.

# 5.3 - Building frame of reference

The second application of the framework is aimed at creating a frame of reference for municipalities on *housing models to age in place*. Currently, the new spectrum of ageing in place is mostly unexplored and therefore municipalities have an incomplete frame of

reference on housing models to age in place within their municipality borders. Therefore, the framework can be used to enhance the frame of reference on housing models to age in place by analysing existing housing models within municipality borders. The framework offers a 'template' for municipalities to structurally organise information on existing housing models to age in place, see appendix F for an example used by the municipality of The Hague. As a result, information can be organised on a desired scale and a clear frame of reference can be built. However, further research must be done in order to find a way to organise the frame of reference of neighbouring municipalities. For example, a certain supportive function could be available across the municipality border, which is lacking in the neighbouring municipality. Extending the reference framework strengthens the knowledge position of municipalities in the field of models to age in place. The municipality learns what models are present, what supportive functions they offer and whether they function. At the same time, the municipality learns where supportive functions are lacking and where it may be necessary to proactively facilitate the development of supportive functions. In general, the municipality gains knowledge on the spatial component of the framework. This knowledge can be used to develop policy in the field of housing and/or ageing in place in order to proactively create supportive 'places' for the elderly. However, in the most ideal situation, the knowledge on lacking supportive functions must be held against the findings of the data gathered on the demand side of housing models to age in place. After all, the market of housing models to age in place is in transition towards a demand-driven market. Therefore, some supportive functions can be lacking because there is no demand for them.

# 5.4 - Dealing with the 'dialogue of the deaf'

The final application of the framework is focuses on the guidance of stakeholders in relation to the discussion on what a supportive 'place' is for the elderly. The research has shown that stakeholders are finding their way within the new spectrum of ageing in place. On the one hand, the elderly are given the freedom of choice to pick their on housing pathway during their 'evening of life, while on the other hand, the stakeholders have the freedom of choice to develop models. The presented framework for housing models to age in place attempts to bring both worlds together in order to create places to age that match the demand of the elderly. The framework provides a starting point for 'shared language' on housing models to age in place in order to guide the dialogue between stakeholders involved with the development of housing models to age in place. The framework can be used as a guidance in order to break the 'dialogue of the deaf' that frequently occurs between stakeholders during the development of housing models to age in place. This application of the framework can be compared to a structured interview with the same questions asked in the same order each interview. In this case, the same building blocks are discussed in the same order each consultation round between stakeholders. The application of the framework does not resolve the 'dialogue of the deaf' completely, because there will always be participants of consultation rounds that are new to the development. But through repeating the process the occurrence of the 'dialogue of the deaf' will decrease.

#### 5.5- Recommendations for stakeholders

During this research, the first steps were taken to develop a framework that supports the coordination of demand and supply of *housing models to age in place*. Below, several recommendations for stakeholders in the field of *housing models to age in place* are presented.

The first recommendation is focused on bridging the domains of different stakeholders. During the expert review, it became apparent that stakeholders think too 'compartmentalised'. While the framework offers an instrument to bridge the domains, it still requires a cultural change to bridge the domains. This means that the stakeholders have to show entrepreneurship and guts to successfully develop new housing models to age in place. The municipality will have to take a proactive and facilitating role in order to stimulate stakeholders to 'look over their own fence'.

The second recommendation is aimed at the stakeholders during the development process of housing models to age in place. As suggested by the European Union (2016), the elderly must be seen as co-creators in the process of developing new models. As the expert reviews have shown, stakeholders are reluctant to let the elderly participate during the development of new models. However, developments were the elderly are actively involved during the development leads to the realisation of successful models. Therefore, the elderly should be involved actively involved in the development of housing models to age in place. Again, municipalities should take on a facilitating role in order to actively involve the elderly during the development of housing models to age in place.

The third recommendation is aimed at the collection of data during the Housing Survey Netherlands. The questionnaire of the WoON2015 contained traditional housing categories for elderly that are no longer financed by the Dutch government. A first glance at the questionnaire of the WoON2018 shows that still some traditional categories are included. Furthermore, the questionnaire suggests that extra services are only available at *housing specially designated for the elderly*. It is recommended to drop the categorisation of housing for elderly and focus, for example, on building blocks that can support the elderly to *age in place*, which can also be present around the dwelling and not exclusively at specially designated for the elderly. This means that quantitative data in respect to *housing model to age in place* can be collected on a larger scale among Dutch elderly.

The final recommendation is aimed at the rhetoric of the government in relation to *ageing in place*. Currently, the rhetoric is primarily aimed at *ageing in place* in the current dwelling, despite the possibility that the dwelling is not an ideal *place to age*. Therefore, the government should encourage the elderly to re-evaluate their current housing situation in relation to *ageing in place* by means of changing the rhetoric around *ageing in place*. This entails that *ageing in place* can be in the current dwelling, but also in another dwelling in or outside the own neighbourhood.

## 6 - Discussion

This research aimed to create an instrument to coordinate the demand and supply of housing models to age in place. This chapter will discuss the research based on four aspects, namely, social relevance, scientific relevance, limitations, and further research.

#### 6.1 - Societal relevance

This research has shown that there is currently a 'void' between the demand and supply of housing models to age in place. The societal relevance of this study lies in the provision of a framework that is able to support the coordination between demand and supply of housing models to age in place in the Netherlands. The framework offers the municipalities a tool to get a better understanding of the new spectrum to age in place, both from the demand side and the supply side. Through this tool, the municipality can proactively support the elderly with finding and developing suitable 'places' to grow old. This decreases the chance of the elderly being housed in unsuitable 'places', which eventually could lead to higher use of care and institutional care. In addition, the framework offers the opportunity to facilitate consultation between stakeholders in a more efficient way. Through the use of the framework as guidance, consultation rounds can be streamlined so that less public funds are spent on consultation without progress.

#### **6.2 - Scientific relevance**

The scientific relevance of this study is threefold. First, the use of the housing pathway approach of David Clapham contributes to the understanding of the housing pathways of the over-55s in relation with ageing in place. Second, the research contributes to the discussion on what a suitable 'place' is for the elderly. Finally, the research offers an instrument to analyse and integrate housing and ageing in place policy.

First, the housing pathway approach displayed that a part of the over-55s in the Netherlands are 'leaving' their traditional housing pathways and more unique housing pathways are forming towards the new spectrum of ageing in place. The findings based on the housing pathway approach are in odds with traditional housing theories. For example, the *housing career*, which claims that households have a free choice on the market and opts to climb the housing ladder. In contrary, the housing pathway approach indicates that these housing pathways are not as linear as the traditional housing theories claim. Therefore, unexplored housing pathways gradually replace the traditional straightforward housing pathways of the elderly. Furthermore, the complex behaviour of the elderly on the housing market in combination with the new spectrum of ageing in place creates a 'void'. The research offers a framework that supports municipalities and stakeholders to sketch out the unlimited and unexplored housing pathways within this new spectrum of ageing in place in order to facilitate the elderly to age in place and fill the 'void'.

Second, the research contributes to the ongoing scientific debate on what a suitable 'place' is for the elderly. This research provides empirical evidence that a suitable 'place' cannot be summarised in a word, label or sentence. This research shows that different options can make a 'place' suitable for the elderly and that there is no 'holy grail' to provide a suitable 'place' for all elderly. Therefore, this research supports the no 'one-model-fits-all' point of view as argued by Wiles et al. (2012). Furthermore, multiple terminologies are used in different studies to indicate a single housing model to age in place, or in contradiction, a single terminology is used to indicate multiple housing models to age in place. This research offers a framework that moves away from the

multiple terminologies and provides a framework, which objectively describes housing models to age in place.

Finally, the transition from ageing in institutionalised settings towards ageing in the conventional housing stock has its implication on policy regarding housing and ageing in place. This research provides a framework that focuses on physical aspects of housing, but also on functions that support the elderly to age in place. Therefore, the framework offers a tool that supports municipalities to efficiently integrate both policy domains. The framework can be used to analyse the new spectrum of ageing in place in order to formulate policies taking both housing and ageing in place perspectives into account.

#### 6.3 - Limitations

This paragraph elaborates on the limitations of this research. The limitations of the data, the design of the framework and the use of the framework are discussed.

Although the framework has been developed for municipalities on a local scale, the demographic data and the WoON2015 has been analysed on a national scale. At the start of this study, the intention was to study local data, but unfortunately this data was unavailable. Therefore, the choice was made to analyse data on national scale in order to continue the study. Due to this limitation, the objective of the study to formulate a 'shared' vision on ageing in place between stakeholders on a local scale has not been achieved. The objective to formulate a 'shared' vision on ageing in place will be further discussed in paragraph 6.4. During the development of the framework, qualitative data was collected by means of desk research. This was done by one researcher and based on a 'coat ranch' of 13 internationally known models. Additionally, cases and literature were connected to the 13 internationally known models based on the knowledge of the researcher and available relations in his network. Therefore, other models could be unintentionally left out entailing that the data collection was incomplete. In addition, the two questions asked per models were formulated and answered by one researcher based on the age-friendly homes framework of the European Union (2016). Therefore, one could argue that the answer given to the questions are not completely objective.

Furthermore, the current framework has been built up highlighting only the supply side of *housing models to age in place*. However, important information could have also been distilled from the demand side of *housing models to age in place*. Unfortunately, due to limitations in time and resources, limited research was done on the demand of the elderly in relation to *housing models to age in place*. In addition, the framework has been validated by five experts due to limitations in time and resources. Therefore could be argued that validation of the framework can be ambiguous. However, the answers of the experts should respect conforming their experience within the sector and their compliance to contribute to the subject. Furthermore, the framework has only been validated for the Dutch market for housing and care. Although the framework has been developed with the support of international models, one should be cautious to generalise the framework.

Finally, on the one hand, experts have validated the model, but on the other hand, no conclusions can be drawn on if stakeholders are willing to use the framework in order to support coordination of the demand and supply of *housing models to age in place*. Although, for example, the municipality of The Hague has received a tool to build a frame of reference. At the time of writing, it is unclear to what extent the tool has already been used.

### 6.4- Further research

This research aimed at providing an instrument to support the coordination of demand and supply of *housing models to age in place*. During the expert review, several suggestions were made on other purposes for the framework that need further research. The recommendations on further research are aimed at the research on the demand for *housing models to age in place*, developing a shared vision on *housing models to age in place*, using the framework to develop new models in the institutionalised setting, using the framework as a communication tool and how to organise the frame of reference of neighbouring municipalities.

First, currently, there is no to limited data available on the demand for *housing models to age in place* on local scale. When research is done on models, the Dutch elderly are regularly presented with traditional models resulting in results that are not applicable in practice. Therefore, additional research should be done on *housing models to age in place*, for instance, with the use of the presented framework in this study. The research offers a first step in designing a study to gather data regarding the demand for *housing models to age in place*.

Second, the suggestion was made that the framework can be used as a means to create a 'shared' vision on *housing models to age in place* for municipalities to incorporate in their Housing Vision. In addition, as mentioned before, it is important to incorporate stakeholders as well as the elderly within this process. Research can be done on developing a 'shared' vision on *housing models to age in place* in order to support municipalities and stakeholders to develop policy in order to develop supportive 'places' for the elderly.

Third, research can be done on how the framework can be applied in the institutional setting and for certain target groups. In this research, the nursing home and several target groups were left outside of the scope. However, research can be done on how the framework can be used to develop new models regarding the nursing home or other target groups. In addition, it is possible, for example, to transform vacant real estate through the use of the framework.

Fourth, the suggestion was made to use the framework as a communication tool towards the elderly. During the expert reviews it became evident that a lot of elderly are unaware of the new possibilities to age in place within the new spectrum. For example, the framework can be invoked as a filter on a comparison site for dwellings. Therefore, research can be done on how the framework can be deployed as a communication tool to inform the elderly on the possibilities of ageing in place within the new spectrum.

Finally, that a municipality develops a frame of reference is a first step in gaining knowledge on the spectrum of ageing in place. However, research should be done on how neighbouring municipalities can share and organise their frames of reference. It would be a wasted of public funds to develop a housing model with new supportive functions, when an existing housing model is available across the border of a neighbouring municipality.

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### **Appendix A: Scientific paper**

### A Dutch framework for housing models to age in place

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### Abstract

The global population is ageing at a rapid pace and *ageing in place* policies are implement in various countries. Under influence of the increase of heterogeneity within the group of elderly in relation to housing and disagreement on what 'place' is are suitable to age, the coordination between demand and supply of supportive 'places' to age becomes a complex task. This paper presents a framework for housing models to age in place that supports the match between demand and supply of models on the Dutch market. Based on the analysis of 13 well-known established housing models, quantitative data was collected and a framework as to reflect what a housing model to age in place entails. The paper describes three applications of the framework in order to support the coordination between demand and supply of *housing models to age in place*. Future research can be done on how to develop a 'shared' vision based on the framework for *housing models to age in place* in order to support municipalities and stakeholders to develop policy in order to develop supportive 'places' for the elderly.

**Keywords:** Ageing in place, housing pathways, housing models, framework, Netherlands

### 1. Introduction

The global population is ageing at a rapid accordingly many countries implement ageing in place policies to prevent unmanageable growth of costs of institutionalised care settings (Wiles, Leibing, Guberman, Reeve, & Allen, 2012; World Health Organization, 2007). Ageing in place is aimed at allowing the elderly to live independently and stay part of the community (Wiles et al., 2012). Like other countries, the government also shifted towards ageing in place policies to reduce the costs of institutionalised care settings (Hooimeijer, 2007). Therefore, policies and services are increasingly aimed at supporting the elderly in 'place', where 'place' consists of the dwelling and its surrounding environment (Van Bilsen, Hamers, Groot, & Spreeuwenberg, 2008). Thereby the interaction between the ageing body and the built environment becomes increasingly important, where it is the challenge to develop a supportive 'place' (Gilroy, 2008).

In the Netherlands, the ageing in place policy gradually transferred the task of providing a supportive 'place' for the elderly towards the municipalities (VNG, 2014). The Dutch Ministry of Health, Welfare and Sport (2018) presented an action program for municipalities and stakeholders to contribute to the quality of life of the elderly with an action point aimed at the development of a supportive 'place'. The action point calls for coordination between municipalities, care

organisations, housing associations, market parties and the elderly to map out housing preferences of the elderly and translate them into a municipal housing vision, and performance agreements between municipalities and housing associations (Ministerie van VWS, 2018). Houben (2001) typifies this form of co-ordination in relation to the implementation of ageing in place policy as 'managed co-ordination', where municipalities are responsible for inter-sectorial co-ordination and develop a shared vision on ageing in place. The goal of this shared vision in relation to the supportive 'place', is that the elderly are housed into dwellings that fit their housing preferences, but are also 'suitable' to age in place (Ministerie van VWS, 2018). Furthermore, literature suggests that the current dwelling may not always be the best option in relation to the quality of life for the elderly (Hillcoat-Nallétamby & Ogg, 2014). Due to the change in policy and care legislation, the elderly have been given a wide choice of freedom with regard to where they want to age in place (Elp, Zaal, & Zuidema, 2012). Despite the increased choice of freedom for the elderly, housing market research shows that the largest part of the elderly want and tend to stay put (Eskinasi, Groot, Middelkoop, Verwest, & Conijn, 2012; van Dam, Daalhuizen, de Groot, van Middelkoop, & Peeters, 2013; Van Iersel, Leidelmeijer, & Buys, 2010). As a result, some elderly can occupy unsuitable 'places' that could have a negative effect on the prevention of deterioration of health and ageing with infirmities. Eventually, this could lead to potential higher public care costs for in the future (Martens, 2018). However, what place is ideal for elderly to grow old? Wiles et al. (2012, p.365) answers this question by stating that there

"one-model-fits-all". Literature no shows that researchers and experts have their own definition of what 'places' are suitable for the elderly (Atrive, 2016; Leidelmeijer, Iersel, & Leering, 2017; Pop, Heijs, & Meerman, 2014; Post, Poulus, van Galen, & van Staalduinen, 2012; Van Galen & Willems, 2011). Municipalities also have their own interpretation on what 'place' is suitable for the elderly to age (Ipso Facto, 2012). The European Union (2016) indicate that further research is needed to develop a framework that creates 'shared language' in order to support the elderly to find adequate places to age or housing models to age in place.

For this paper the following research question has been formulated:

"How can a framework support the coordination between demand and supply of housing models to age in place?"

This paper will explore the abovementioned research question by developing a framework based on the Dutch market of housing for elderly. The design of the framework will be based on combination of the analysis of the demand side and supply side of housing models to age in place. The next section will discuss housing theory in order to formulate a theoretical basis for this paper. In the third section, the method to develop and validate the framework will be discussed. The fourth section will discuss the results and the fifth section will focus on answering the research question. Section six will conclude the paper with a discussion. For the literature a combination of scientific literature, business reports and other sources were used to get a good overview of ageing in place in relation to housing. Scopus, Science Direct and Google Scolar were used to find literature. In these

databases search terms or combination of terms like ageing in place, housing for elderly and housing models were used.

### 2. Theory

Housing the theory argues that development of a household and its corresponding housing preferences are predictable (Schilder & Conijn, 2013). The series of dwelling a household occupies during a certain timespan can be defined as a housing career (Schilder & Conijn, 2013). The concept of a housing career is built on the assumption that a household has a free choice on the market and opts to climb the housing ladder (Abramsson, 2012). In contradiction to the concept of a housing career, is the concept of housing histories. The concept of housing histories also focuses on the free will of households on the housing market, but emphasises on how constraints, for instance, position on the labour market, can limit the free will of households (Beer, Faulkner, & Gabriel, 2006). Both approaches attempt to uncover the housing outcome of households using different perspectives. The approaches emphasize on different factors that can influence the housing outcome ofhouseholds, therefore providing an incomplete picture of how housing outcomes are formed (Beer et al., 2006).

The housing pathways approach by Clapham (2002) attempts to embrace a broad spectrum of factors on the housing market that can influence the housing outcome of households. Clapham (2002) introduces the concept of housing pathways, focusing on creating a link between the objective spectrum and subjective spectrum of housing. Housing pathways research takes all elements of the housing career and housing histories

approach into account but expands its approach on the subjective definition of home in relation to personal events and interaction with the environment (Clapham, 2002). With this approach, the possibility exists that housing circumstances can change even when there is no change in dwelling or tenure (Clapham, 2002). The housing pathway approach supports the researcher to order the housing market incorporating physical characteristics of the dwelling as well as other factors such as changes in housing policy. Clapham (2002) build on the concept of housing pathways in relation to the ageing population, stating that the 'new' ageing population will have a strong desire to structure his/her own identity in relation to housing transition in later life than the previous ageing population. The potential complex behaviour of the elderly on the housing market therefore needs to be taken in order to efficiently coordinate the demand and supply of housing models to age in place.

### 3. Method

In this study, several research methods are applied in order to design an instrument that can support stakeholders to coordinate the demand and supply of *housing models* to age in place.

First, a descriptive analysis of demographic and housing data in combination with the housing pathway approach are applied in order to uncover the demand side of housing models to age in place. The descriptive analysis consists of showing the frequencies of different groups, for instance, age groups, or household groups. The goal of the analysis was to give an indication of the dimensions of different groups. In addition, a descriptive analysis of housing data was

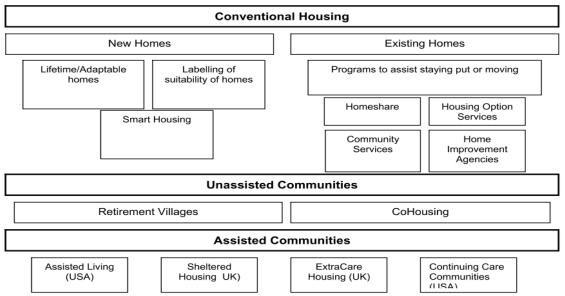


Figure 4: Housing models by Faulkner (2006, p.15)

performed. This will give an indication of the dimensions of groups related to aspects of housing. Both descriptive analyses can help to uncover the demand side of *housing models to age in place*. The target group of this analysis are the over-55s in the Netherlands.

Second, empirical research will be applied to gather qualitative data on the supply side of housing models to age in place. The method used in this research is comparable to the method of structured, focused comparison by Yin & Heald The method is based (1975).formulating general questions that are answered for every case selected for the research in order to collect qualitative data that can be systematic compared. The objective is to collect data in order to frame existing housing models to age in place. In this case there are two topics where data has to be collected for. First, it is important to know in what way the housing model supports the elderly. Second, information has to be gathered on characteristics of the housing model that are separate from supporting the elderly.

To gather information on both topics two questions are asked for each existing housing model. First, how does the housing model support the elderly in to age place? Second, what notable remaining characteristics does the housing model have? This method grants the researcher the possibility to uncover common patterns that are applicable for multiple cases, which could remain undetected when analysing a single case (Yin & Heald, 1975). Once the data is collected, the researcher will search for distinctive variables within the data based on 'open coding'. Open coding is based on comparing the data for similarities and differences and develop conceptual labels (Corbin & Strauss, 1990). The labels are used to create variables that form the framework for housing models to age in place. Based on the age-friendly homes framework of the European Union (2016) a structure for the framework was designed in order to organise the variables. In line with the framework of age-friendly homes, the researcher will make use of dimension to organise building blocks. As mentioned by European Union (2016, p.19) 'sharing success stories' can be as important as

quantified evidence of exiting housing models. In addition, why would one try to reinvent the wheel? However, researcher cannot decide whether an existing housing model for the elderly is successful or not. Moreover, the aim of this analysis is not to make a judgement about the function of the existing models, but it is aimed to find out how the existing models are built up. Therefore, thirteen globally known and established housing models for the elderly presented by Faulkner (2006) will be used a 'coat rack' as a starting point to gather data. The housing models by Faulkner (2006) will be described and connected to Dutch cases, other international cases and international literature. See Appendix I and II for the gathered information on housing models and the formation of the building blocks.

For the framework of housing models to age in place, two dimensions have been chosen that correspond with the two questions asked each case. The first question regards how the housing model supports the elderly to age in place. This could exist of options that the psychical dwelling has to offer, but also exist of other options. Building blocks that are distilled from the data found with the first question will be placed within the internal dimension. The second question regards what remaining characteristics the housing models holds. This could exist of options that define the model, for example, the financial accessibility of the models, but do not support the elderly to age in place. Building blocks that are distilled from the data found with the second question will be placed within the external dimension. For the framework, two dimensions have chosen, namely been the internal dimension and the external dimension. The internal dimension will hold building

blocks that are (in) directly connected to the residential object. Building blocks within the internal dimension have the ability to directly or indirectly offer support to the elderly. An important feature of the building blocks is that they are dynamic in nature, which means that the elderly have the opportunity to interact with them if so desired. The external dimension will hold remaining building blocks that are connected to the residential object and/or building blocks in the internal dimension. The building blocks in the external dimension do not possess any abilities to offer support to the elderly but possess information about do the remaining characteristics of the models in general. See figure 2 for the structure of the initial framework.

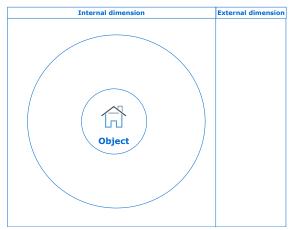


Figure 2: Structure of framework

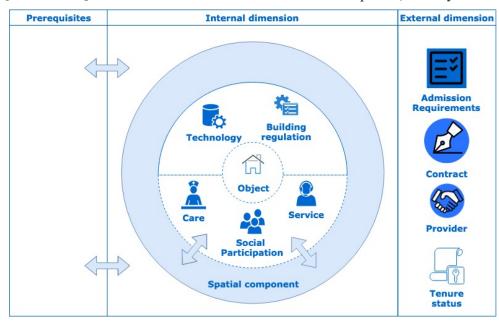
Third, an expert review will be conducted among five experts in the field of housing and care in order to clarify the findings of the previous research method and collect empirical evidence in order to enhance the instrument for *housing models to age in place*. The interview consist of a structured interview with questions regarding the changes in the Dutch field of housing and care, and questions regarding the

instrument for housing models to age in place.

### 4. Result

The result of the first analysis on the development of the demand to age in place, through the housing pathway approach, shows that the elderly are consciously and unconsciously- searching for housing models that can support them in the process of ageing. The housing pathway approach displayed that the behaviour of the elderly on the housing market has become complex and less straightforward under influence different interaction factors. The analysis shows that the demand for dwellings with supportive functions is still present, but also that a large portion of the elderly prefers to stay put. As a result, the heterogeneity of the (potential) demand for models to age in place has increased. This means that the new spectrum of ageing in place has an unknown number of possible options, which can result in an unknown number of -currently unexplored- housing pathways. Furthermore, the analysis of the housing data holds too little information on the 'look and feel' of housing models to age in place. Therefore, the framework is mainly based on the analysis of existing housing models, as presented next.

The result of second and third steps of the methodology are incorporated in the final framework for housing models to age in place, as presented in figure 3. The basis functioning of the framework is as follows. The combination of the residential object and the building blocks in the inter- and external dimension reflect what a housing model to age in place entails. Within each block, several building options combination of options are available to define the building block, where the prerequisites can be predefined options that need to be included in the model, see Appendix III for an overview of the options. The diverse blocks are able to 'built' a variety of housing models within the new spectrum of ageing in place. This places more emphasis on the interaction between the spatial component and the other building blocks in the internal dimension. All building blocks in the internal dimension will be placed within the spatial component The spatial component still serves as a building block that is able to support the elderly, however it could hold care, service or social participation options that do not necessary have to be in place directly at the residential object. This creates dichotomy in the care, social participation and service options, namely direct options



and indirect options. Direct options are directly connected to the residential object, while indirect options are available within the spatial component. This does not account for technology and building regulations, because the options within these building blocks directly apply to the residential object. Based on the main findings, three applications of framework have been defined in order to support the coordination of the demand and supply of housing models to age in place in the Netherlands.

### 5. Conclusion

The research question formulated for this paper was:

"How can a framework support the coordination between demand and supply of housing models to age in place?"

The designed framework provides the combination of three applications to support the coordination of demand and supply of *housing models to age in place* in the Netherlands.

The first application of framework is focussed on structurally collecting data on preferences of the elderly on local scale in relation to housing models to age in place. The framework can be used as a tool to gather data of the preferences of the elderly in relation to housing models to age in place. Findings based on the data collected on the preferences of the elderly in relation to housing models to age in place can be used to define prerequisites, which can be taken into account when developing a housing model to age in place. By exposing the demand for housing models to age in place through the use of the framework, the municipality is provided with data that can

be used for both housing and ageing in place policy.

The second application of the framework is aimed at creating a frame of reference for municipalities on housing models to age in place. Currently, the new spectrum of ageing in place is mostly unexplored and therefore municipalities have an incomplete frame of reference on housing models to age in place within their municipality borders. Therefore, framework can be used to enhance the frame of reference on housing models to age in place by analysing existing housing models within municipality borders. The framework offers a 'template' for municipalities to structurally organise information on existing housing models to age in place.

The final application of framework is focuses on the guidance of stakeholders in relation to the discussion on what a supportive 'place' is for the elderly. The framework provides a starting point for 'shared language' on housing models to age in place in order to guide the dialogue between stakeholders involved with the development of housing models to age in place. The framework can be used as a guidance in order to break the 'dialogue of the deaf' that frequently occurs between stakeholders, because of different interpretations of what 'places' are suitable for the elderly. application of the framework can be compared to a structured interview with the same questions asked in the same order each interview. In this case, the same building blocks are discussed in the same order each consultation round between stakeholders. Through repeating process the occurrence of the 'dialogue of the deaf' will decrease.

### 6. Discussion

The housing pathway approach displayed that a part of the over-55s in the Netherlands are 'leaving' their traditional housing pathways and more unique housing pathways are forming towards the new spectrum of ageing in place. The findings based on the housing pathway approach are in odds with traditional housing theories. For example, the housing career, which claims that households have a free choice on the market and opts to climb the housing ladder. In contrary, the housing pathway approach indicates that these housing pathways are not as linear as the traditional housing theories claim. Therefore, unexplored housing pathways gradually replace traditional the straightforward housing pathways of the elderly.

During the development framework, qualitative data was collected by means of desk research. This was done by one researcher and based on a 'coat ranch' of 13 internationally known models. Additionally, cases and literature were connected to the 13 internationally known models based on the knowledge of the researcher and available relations in his network. Therefore, other models could be unintentionally left out entailing that the collection was incomplete. data addition, the two questions asked per models were formulated and answered by one researcher. Therefore, one could argue that the answer given to the questions are not completely objective.

Although the framework has been developed for municipalities on a local scale, the demographic data and the housing data have been analysed on a national scale. At the start of this study, the intention was to study local data, but unfortunately this data was unavailable.

Therefore, the choice was made to analyse data on national scale in order to continue the study. Due to this limitation, the goal to formulate a 'shared' vision on ageing in place between stakeholders on a local scale has not been achieved. Future research can be done on how to develop a 'shared' vision based on the framework for *housing models to age in place* in order to support municipalities and stakeholders to develop policy in order to develop supportive 'places' for the elderly.

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# Appendix B: Demographic data CBS

All data shown in the Appendix B: [Demographic Data CBS] has been retrieved from CBS Statline<sup>2</sup> and has been altered by the author. household types The goal of this appendix is to show the magnitude of the growing group of over-55s and how this related to the development of

## **Demographic projections**

around 60 per cent towards 2060 and shows the largest grow in the period between 2020 until 2030. The group 45-54 shows the largest numbers with the previous cohort is added. The final column shows the difference in percentage and absolute numbers per group numbers per group and the percentage of the total population. Additionally a column with the difference in percentage and absolute Table 4 shows the demographic development (including migration) of the Netherlands from 2018 until 2060. The table shows absolute decline in percentage and absolute numbers until 2060. However, the group 75-84 shows the largest growth in absolute numbers, accumulating to almost 600.000. The group 75-84 grows 85 plus is the only group that continuously grows until 2060, the group will be around three-and-a-half times bigger than 2018. between 2018 and 2060. The total population will grow with around seven per cent, accumulation to around 1.25 million. The group of

	20	2018		2020	0			2030	30			20	2040			20	2050			,	2060		Tot. Diff. 1	Tot. Diff. With 2018
rotal -	1718	17182442		17333820	820			1793	17934678			1829	8293320			1837	18370350			184	18438032		6,81%	1255590
ears (	Abs.	% of tot.	Abs.	% of tot.	% diff	diff abs.	Abs.	% of tot.	% diff	diff abs.	Abs.	% of tot.	% diff	diff abs.	Abs.	% of tot. % diff	% diff	diff abs.	Abs.	% of tot.	% diff	diff abs.	% diff	diff abs.
)-14	2760253	16,06%	2721310	15,70%	-1,41%	-38943	2789313	15,55%	2,50%	68003	2967495	16,22%	6,39%	178182	2863225	15,59%	-3,51%	-104270	2869486	15,56%	0,22%	6261	3,96%	109233
L5-25	2118537	12,33%	2131324	12,30%	%09,0	12787	1997834	11,14%	-6,26%	-133490	1955966	10,69%	-2,10%	-41868	2142579	11,66%	9,54%	186613	2088296	11,33%	-2,53%	-54283	-1,43%	-30241
25-34	2160280	12,57%	2215240	12,78%	2,54%	54960	2291650	12,78%	3,45%	76410	2145844	11,73%	-6,36%	-145806	2112336	11,50%	-1,56%	-33508	2304032	12,50%	9,08%	191696	6,65%	143752
35-44	2063779	12,01%	2048977	11,82%	-0,72%	-14802	2227491	12,42%	8,71%	178514	2290366	12,52%	2,82%	62875	2145290	11,68%	-6,33%	-145076	2112717	11,46%	-1,52%	-32573	2,37%	48938
15-54	2548427	14,83%	2458366	14,18%	-3,53%	-90061	2033080	11,34%	-17,30%	-425286	2185638	11,95%	7,50%	152558	2247644	247644   12,24%	2,84%	62006	2104884	11,42%	-6,35%	-142760	-17,40%	-443543
5-64	2291638	13,34%	2366238	13,65%	3,26%	74600	2368604	13,21%	0,10%	2366	1956706	10,70%	-17,39%	-411898	2105147	11,46%	7,59%	148441	2171790	11,78%	3,17%	66643	-5,23%	-119848
5-74	1870775	10,89%	1935277	11,16%	3,45%	64502	2161951	12,05%	11,71%	226674	2185121	11,94%	1,07%	23170	1820678 9,91%		-16,68%	-364443	1977065	10,72%	8,59%	156387	5,68%	106290
75-84	996680	5,80%	1068229	6,16%	7,18%	71549	1528772	8,52%	43,11%	460543	1783339	9,75%	16,65%	254567	1851060	10,08%	3,80%	67721	1586543	8,60%	-14,29%	-264517	59,18%	589863
35 plus	125126	0,73%	132247	0,76%	5,69%	7121	180738	1,01%	36,67%	48491	316247	1,73%	74,98%	135509	424913	2,31%	34,36%	108666	566115 3,07%	3,07%	33,23%	141202	352,44%	440989

Table 4: Demographic projections

<sup>&</sup>lt;sup>2</sup>http://statline.cbs.nl/Statweb/

## Projection of household composition

or cohabitation agreement. Examples of other households are a brother and sister that live together, living with a boarder or foster child. and other households. Other households consist of households where there is no relation in the form of marriage, registered partnership, displays the number of single-person households and of multi-person households, which consists of couples, single-parent households author). The total number of households is expected to grow from 7.9 million to approximately 8.6 million households. While the total person households is expected to remain around the 4.8 million households and the group of over-55s will reach around 2.4 million Table 5 shows the projected development of total households in the Netherlands from 2018 towards 2060 by the CBS (altered by the In addition, the over-55s will represent around 60 per cent of the group single-person households in 2060. The total number of multinumber of households grows, the percentage of over-55s grows to over 52 per cent of the total number of households. Table 5 also households and declines towards 2.25 million in 2060 The largest growth is expected at the group single-person households, which will grow from 1.4 million towards 2.3 million households

			2018	2020	2030	2040	2050	2060
		Total	7858279	7966674	8369440	8531786	8606153	8629269
Total ho	Total households	55 plus	3573814	3727713	4308383	4433444	4508693	4560775
		% of tot.	45,48%	46,79%	51,48%	51,96%	52,39%	52,85%
		Total	3008177	3086030	3435094	3651283	3770405	3793515
Single-perso	Single-person households	55 plus	1457809	1539573	1930608	2155451	2268053	2305577
		% of tot.	48,46%	49,89%	56,20%	59,03%	60,15%	60,78%
	Total Multi passas	Total	4850102	4880644	4934346	4880503	4835748	4835754
	Households	55 plus	2116005	2188140	2377775	2277993	2240640	2255198
	поизенова	% of tot.	43,63%	44,83%	48,19%	46,68%	46,33%	46,64%
		Total	4268515	4296802	4354650	4299337	4250379	4257195
	Couple	55 plus	1973513	2037670	2202031	2112015	2068484	2082502
Multi-person households		% of tot.	46,23%	47,42%	50,57%	49,12%	48,67%	48,92%
Islaid-berson nodsenords		Total	539632	541253	534509	534799	537036	529398
	Single-parent households 55 plus	55 plus	131078	138455	160783	149157	153677	153317
		% of tot.	24,29%	25,58%	30,08%	27,89%	28,62%	28,96%
		Total	41955	42589	45187	46367	48333	49161
	Other households	55 plus	11414	12015	14961	16821	18479	19379
		% of tot.	27,21%	28,21%	33,11%	36,28%	38,23%	39,42%

Table 5: Projection of household composition

### **Projection of civil status**

expected to encounter a small growth until 2030 and will decline to around 1.7 households in 2060. 55s is expected to grow from 400.000 towards 1.5 million households. The number of married or registered partnerships households is Table 6 displays the projection of the civil status of all households and the over-55s. The table shows that the number of unmarried over-

0							
		2018	2020	2030	2040	2050	2060
	Total	7858279	7966674	8369440	8531786	8606153	8629269
Household Total	55 plus	3573814	3727713	4308383	4433444	4508693	4560775
	% of tot.	45,48%	46,79%	51,48%	51,96%	52,39%	52,85%
	Total	2675810	2774141	3159914	3445154	3714327	3894354
Unmarried	55 plus	405249	458296	785903	1082763	1346946	1535362
	% of tot.	15,14%	16,52%	24,87%	31,43%	36,26%	39,43%
	Total	3367090	3351825	3279967	3164874	3067046	3039079
Married/Registered partnership 55 plus	55 plus	1850972	1897588	1964115	1810212	1718821	1700481
	% of tot.	54,97%	56,61%	59,88%	57,20%	56,04%	55,95%
	Total	755080	761912	801216	788619	716154	615750
Widowed	55 plus	726070	735854	785007	774046	702847	604094
	% of tot.	96,16%	96,58%	97,98%	98,15%	98,14%	98,11%
	Total	1060299	1078796	1128343	1133139	1108626	1080086
Divorced	55 plus	591523	635975	773358	766423	740079	720838
	% of tot.	55,79%	58,95%	68,54%	67,64%	66,76%	66,74%

Table 6: Projection of civil status

strongest growth (800.000 households) is expected to be in the group of unmarried single-person households, but the number of unmarried multi-person households is also expected to grow with around 300.000 households towards 2060. the total number of unmarried households and the distribution over the single- and multi-person households. The table shows that the The number of unmarried households could imply that fewer multi-persons households are formed. Table 7 displays the projection of

		2018	2020	2030	2040	2050	2060
	Total	2675810	2774141	3159914	3445154	3714327	389435
Unmarried Household total	55 plus	405249	458296	785903	1082763	1346946	
	% of tot.	15,14%	16,52%	24,87%	31,43%	36,26%	
	Total	1639695	1686565	1901082	2101378	2306628	2447589
nmarried single-person	55 plus	311638	348256	563261	775897	975471	
:	% of tot.	19,01%	20,65%	29,63%	36,92%	42,29%	
	Total	1036115	1087576	1258832	1343776	1407699	1446765
household	55 plus	93611	110040	222642	306866	371475	
1	% of tot.	9,03%	10,12%	17,69%	22,84%	26,39%	

Table 7: Projection of unmarried households

### **Appendix C: WoON2015 Analysis**

This part of the appendix holds information retrieved from analysing the data collected for the Housing Research Netherlands survey 2015. The main conclusions are translated into the main text and the remaining of the appendix holds general information on consideration made for the analysis. All data shown is retrieved from the dataset from the Housing Research Netherlands survey 2015 and altered by the author. The dataset holds different weight factors that can be used to generalise the data to population, household, or new household composition. The first two weight factors are used to generalise the population and household composition, while the new household composition weight factor takes household formation after moving into account (Vondenhoff, 2015). For this research, the focus will be on households. It is important to notice that people admitted in institutions are excluded from the survey (Vondenhoff, 2015).

### The group of over-55s in WoON2015

The first step is to identify how the group of over-55s is represented in the total dataset. The dataset consist of 62,668 respondents throughout the Netherlands of which 41,2 per cent (24,848 respondents) represents the group of over-55s. Table 8 shows the unweighted frequencies of the respondents divided over five groups. For the remainder of the data analysis the group of 17 towards 54 years will be excluded. If the representation of the age cohort of 85 years and older becomes too small in certain analysis, then the age cohort of 75 towards 84 years and 85 years and over will be added together. In some analysis, the group of over-55s will be analysed as a whole.

Year	Frequency	Percent	Cumulative
17-54	36820	58,8	58,8
55-64	10704	17,1	75,8
65-74	8954	14,3	90,1
75-84	4775	7,6	97,7
85 plus	1415	2,3	100
Total	62668	100	

**Table 8: Unweighted frequencies of the respondents** 

Table 9 displays the frequencies of the groups when the weight factor for household composition is applied. The dataset represents around 7.6 million households of which 42.1 per cent represents the group of over-55s.

Years	Frequency	Percent	Cumulative
17-54	4431614	57,9	57,9
55-64	1317407	17,2	75,1
65-74	1050413	13,7	88,8
75-84	626789	8,2	97
85 plus	231689	3	100
Total	7657912	100	

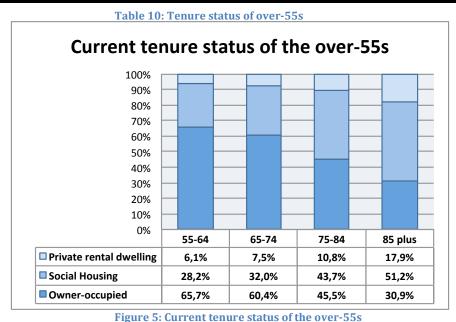
Table 9: Number of households within dataset (weighted)

### **Current housing situation of the over-55s**

The first step in this analysis is to provide a picture of how the group of over-55s is currently housed. The analysis will be focussed on *tenure status*, *living area*, *and number of rooms* and if the over-55s are living in *housing specially designated for the elderly*. The analysis of the current group of over-55s will also focus on the use of services, such as *domestic help*, *personal care*, and *nursing care*. Another analysis will focus on what concerns the current group of over-55s regardless if they are inclined to move or not.

The first element discussed in this paragraph is the current *tenure status* of the over-55s. The analysis of the current *tenure status* shows that the younger groups within the group of over-55s are more likely to be present in the owner-occupied sector than older groups, see figure 4 and table 10. For this analysis, the household composition weight factor has been applied.

Years	Owner-occupied	<b>Social Housing</b>	Private rental dwelling	Total
55-64	864381	370262	80378	1315021
65-74	633883	336060	78746	1048689
<i>75-84</i>	284512	272944	67332	624788
85 plus	71392	118260	41342	230994
Total	1854168	1097526	267798	3219492



The analysis of the average length of residence indicates that the group of over-55s present in the owner-occupied sectors has higher average length of residence than the group of over-55s that is present in the social housing or private rental sector. Table 11 and figure 5 visualise the results of this analysis.

	55-64	65-74	75-84	85 plus	Total
Owner-occupied	22,5	27,6	32,7	35,9	29,7
Social housing	18,5	22,3	21,3	19,9	20,5
Private rental	17,4	23,9	24,4	23,6	22,3
Total	19,5	24,6	26,1	26,5	24,2

Table 11: Average length of residence (years)

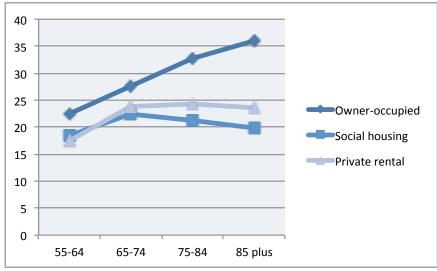


Figure 6: Averege length of residence (years)

Another factor that can partially explain the *tenure status* of the over-55s is the income position of the household. Figure 6 and table 12 provides an overview of the current tenure status based on the accumulated income (Box 1, 2 and 3) and age of the household. Table 12 gives an overview of the current tenure status based on accumulated income and age. The accumulated income (Box 1,2 and 3) is based on the aggregated income of the whole household in 2014. The accumulated income has been recoded into three even groups.

The figure shows that disregarding age, the number of households in the owner-occupied sector is higher subsequently to a higher accumulated income. The figure also shows that the older age cohorts are less present in the owner-occupied sector disregarding accumulated income.

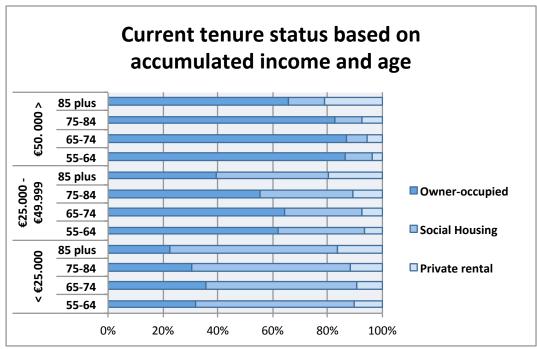


Figure 7: Current tenure status based on accumulated income and age

		Owner-occupied	<b>Social Housing</b>	Private rental
0	55-64	95094	174471	30499
€25.000	65-74	119532	185487	31190
€25	75-84	100365	190818	37878
V	85 plus	32065	87417	23697
- 6	55-64	279100	140792	29289
£25.000 ·	65-74	297273	132156	33575
€25.	75-84	123929	75053	23940
ψ Ψ	85 plus	27806	28563	13930
^	55-64	490188	54999	20590
000	65-74	217077	18417	13981
€50. (	75-84	60218	7074	5514
£	85 plus	11521	2280	3715

Table 12: Current tenure status based on accumulated income and age

### **Current living area**

The second analysis is aimed at the current *living area* of the over-55s. Table 13 and figure 7 display the current living area of different age cohorts. The living area has been recoded in three even groups.

	< 89 m2	90-119 m2	120 m2 >	Total
55-64	323947	410975	582484	1317406
65-74	275115	327124	448174	1050413
75-84	233877	197074	195838	626789
85 plus	119732	64995	46961	231688
Total	952671	1000168	1273457	3226296

Table 13: Current living area

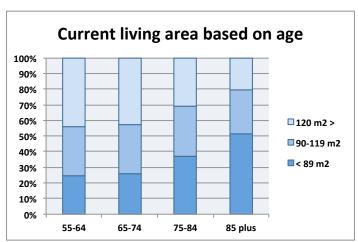


Figure 8: Current living area

Table 14 provides an overview of the current living area based on current tenure status and age cohort. Figure 8 displays the current living area based on current tenure status and age cohort in a bar chart. The bar chart shows that the more than 50 per cent of the over-55s in the social housing sector are located in dwellings smaller than 89 square meters in comparison, while more than 50 per cent of the over-55s in the owner-occupied sector are located in dwellings larger than 120 square meters.

		< 89 m2	90-119 m2	120 m2 >	Total
و ر	55-64	87705	252318	524358	864381
Owner- occupied	65-74	63255	174481	396148	633884
NC DX	75-84	33410	87656	163446	284512
0 0	85 plus	10886	24029	36477	71392
pp	55-64	204693	134007	31562	370262
Social	65-74	180739	127715	27607	336061
So	75-84	169902	88618	14424	272944
Σ.	85 plus	87444	28178	2639	118261
0	55-64	31010	24327	25041	80378
Private	65-74	31097	24928	22721	78746
Private rental	75-84	30566	20546	16220	67332
_	85 plus	21402	12789	7151	41342
	Total	952109	999592	1267794	3219495

Table 14: Current living area based on current tenure status and age cohort

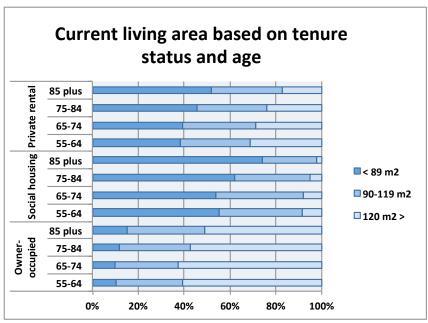


Figure 9: Current living area based on current tenure status and age cohort

### **Current number of rooms**

The third element that helps to get an overview of how the over-55s are housed is the *number of rooms*. For this analysis, the categories for the current number of rooms have been brought back to three categories to keep tables and figures manageable. Figure 9 and table 15 displays the distribution of the current number of rooms based on age cohorts.

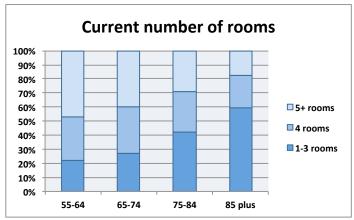


Figure 10: Current number of rooms

	1-3 rooms	4 rooms	5+ rooms	Total
55-64	285162	409360	620500	1315022
65-74	286987	343590	418112	1048689
75-84	262762	182535	179491	624788
85 plus	137318	52421	41256	230995
Total	972229	987906	1259359	3219494

Table 15: Current number of rooms

Table 16 and figure 10 display the current number of rooms based on the current tenure status and age. Figure 10 displays that the higher age groups occupy dwellings with a lower number of rooms irrespective of the tenure status. Figure 10 shows the absolute numbers of the current number of rooms based on the accumulated income and age.

		1-3 rooms	4 rooms	5+ rooms	Total
. 5	55-64	96295	230632	537454	864381
ner pie	65-74	91725	192942	349216	633883
Owner- occupied	75-84	57538	86798	140176	284512
Ö	85 plus	20137	21868	29388	71393
_ 60	55-64	153932	156267	60064	370263
Social	65-74	161264	127717	47079	336060
Soc	75-84	168179	77417	27348	272944
4	85 plus	90997	21078	6185	118260
d)	55-64	34935	22461	22982	80378
/ate	65-74	33998	22931	21817	78746
Private rental	75-84	37045	18320	11967	67332
	85 plus	26184	9475	5683	41342
	Total	972229	987906	1259359	3219494

Table 16: Current number of rooms based on the current tenure status and age

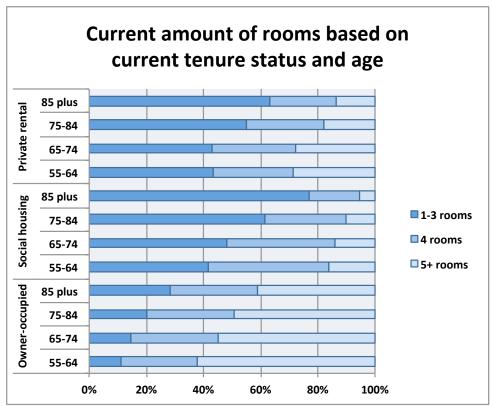
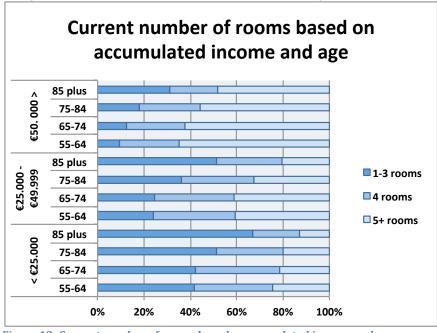


Figure 11: Current amount of rooms based on current tenure status and age

Figure 11 demonstrates that the higher age cohorts occupy dwellings that have a lower number of rooms irrespective of the accumulated income. It also shows that the groups with a higher accumulated income occupy dwellings with a larger number of rooms regardless of the age cohort. The absolute numbers of this analysis found in table 17.



 $Figure \ 12: Current \ number \ of \ rooms \ based \ on \ accumulated \ income \ and \ age$ 

		1-3 rooms	4 rooms	5+ rooms	Total
000	55-64	125763	101195	73106	300064
5.00	65-74	142527	121025	72657	336209
€25	75-84	169084	93713	66263	329060
v	85 plus	95613	29034	18532	143179
- 6	55-64	107050	160437	181695	449182
€25.000 · €49.999	65-74	113031	160097	189876	463004
£25. €49.	75-84	80478	69885	72559	222922
₩ <b>₩</b>	85 plus	36231	19795	14274	70300
٨	55-64	52350	147728	365700	565778
000	65-74	31428	62468	155580	249476
€50. (	75-84	13200	18937	40669	72806
	85 plus	5474	3592	8450	17516
	Total	972229	987906	1259361	3219496

Table 17: Current number of rooms based on accumlated income and age

### Size of current dwelling compared to previous dwelling.

The WoON2015 data offers the possibility to compare the psychical size of the current dwelling with the previous dwelling. Those who realised a move in the past two years during the data collection of the WoON are able to fill in this question. The group that realised a moved is shown in table 18. The table shows that only a small percentage (4.15%) of the total group of over-55s realised a move in the past two years.

	55-64	65-74	75-84	85 plus	Total
Did not move	1254659	1014807	601311	221760	3092537
Moved	62748	35606	25478	9928	133760
Total	1317407	1050413	626789	231688	3226297

Table 18: Psychical size of the current dwelling compared to previous dwelling

Table 19 shows the absolute number of what kind of move the over-55s made in respect of the psychical space of his/her dwelling.

	55-64	65-74	75-84	85 plus	Total
Downsized	32665	21892	17473	7555	79585
Same	9371	3669	2610	1305	16955
Larger	18837	8337	4855	1069	33098
Total	60873	33898	24938	9929	129638

Table 19: What kind of move in relation to psychical size of the dwelling

Figure 12 shows over 50 per cent of every age cohort made a move to downsize.

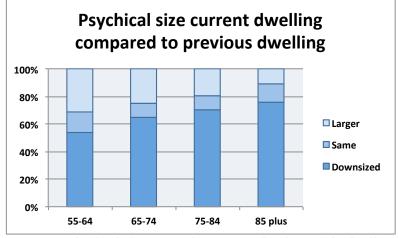


Figure 13: What kind of move in relation to psychical size of the dwelling

### Housing for elderly

The Housing Research Netherlands survey 2015 offers the possibility to examine in what type the over-55s are housed, but the categories show overlap and give biased results. Table 20 gives an overview of the absolute number of over-55s that are housed in *housing specially designated for the elderly*. The largest part of the over-55s that are housed in *housing specially designated for the elderly* is located in the social housing sector (73.4%), while 17.6 per cent of the *housing specially designated for the elderly* is part of the owner-occupied housing stock and only 9 per cent of the private rental stock. The admission requirements for the *housing specially designated for the elderly* primarily consist of health requirement (16%) and/or age limits (53%), but in 31 per cent of the cases there are no admission requirements. According to the Housing Research Netherlands survey 2015 the most present service at the *housing specially designated for the elderly* is catering service (21%), followed by the use of care (16.1%) and the use of nursing (13.4%). However in 13.8 per cent of the cases there are no service available and striking is that in 11.7 per cent of the cases households are not aware of what kind of services there are available.

	Yes	No	Total
55-64	83752	1231270	1315022
65-74	128951	919739	1048690
75-84	169646	455142	624788
85 plus	96048	134946	230994
Total	478397	2741097	3219494

Table 20: Absolute numbers of over-55s housed in housing specially designated for the elderly

Table 21 shows that households housed in *housing for elderly* are generally housed in the social housing sector. 17.6 per cent of the households are housed in the owner-occupied sector, while 9 per cent is housed in the private rental sector.

	Frequency	Percent
Owner-occupied	84017	17,6
Social housing	351236	73,4
Private rental	43143	9,0
Total	478396	100

Table 21: Housing for the elderly in relation to tenure status

Table 22 gives an overview of the admission requirements for the *housing for elderly*. In more than half of the cases, there is a certain age limit to gain access to the *housing for elderly*. In around 31 per cent of the cases, there are no requirements, while in only 16 per cent of the cases the health status of the household is used as a requirement.

	Percentage
Health	15,80%
Age	53,44%
None	30,76%
Total	100,00%

Table 22: Admission requirements for the housing for the elderly

Table 23 demonstrates what services are available at the current *housing for elderly* within the Housing Research Netherlands survey. The most common service is 'catering service' followed by the 'use of care'. Striking is the fact that in around 12 per cent of the cases households of *housing for elderly* do not know which services are available.

	Percentage
Other services	3,27%
Domestic help	8,41%
Don't know which services are available	11,66%
Recreational activities	12,37%
Use nursing	13,37%
No services available	13,83%
Use of care	16,12%
Catering services	20,97%
Total	100,00%

Table 23: What services are available at the current housing for elderly?

### Realised moves towards dwellings specially designated for elderly

Table 24 displays the absolute numbers of households that have made a move towards a dwelling specially designated for elderly in the previous two years. Approximately 57 per cent has not choses to move towards a dwelling specially designated for elderly.

	55-64	65-74	75-84	85 plus	Total
Yes	16542	14422	16944	9167	57075
No	45239	21184	8534	695	75652
Total	61781	35606	25478	9862	132727

Table 24: Realised a move towards dwelling specially designated for the elderly

### Use of services

The analysis of the use of services is focuses on services, such as domestic help, personal care, and nursing care. It is important to notice that only the group that indicates that they a certain health problems fill in the questions on health services. Therefore, the number of households is only 1.35 million instead of the 3.2 million total households that are over-55s. In addition, a distribution between households in housing specially designated for eldery (HSDFE) and households in the conventional stock has been made. Table 25 demonstrates the use of domestic help over the different age cohorts. Figure 13 translates the absolute numbers of table 25 in a bar chart, clearly indicating that the use of domestic help increases subsequently to the age cohorts. This also applies for the use of personal care (table 26 and figure 14) and nursing care (table 27 and figure 15). It is reasonable to state that with increasing age, the chance of occurring infirmities increases and that the elderly need support with daily activities, such as cleaning the house. The use of nursing care is lower in absolute numbers compared to domestic help and personal care, while personal care is lower in absolute numbers compared to domestic help. The use of service between households in housing specially designated for the elderly and households in the conventional stock shows a small difference. For all services a higher percentage of the households in the housing specially designated for the elderly use the services than households in the conventional stock, however the difference is subtle.

		Yes	No	Total
55-	HSDFE	11649	33839	45488
25 9	Conv.	58386	380788	439174
65-	HSDFE	22597	44349	66946
69	Conv.	66388	295747	362135
75-	HSDFE	61641	37211	98852
	Conv.	92975	116939	209914
85 plus	HSDFE	48827	7891	56718
8  d	Conv.	52588	20729	73317
	Total	415051	937493	1352544

Table 25: Does the household make use of domestic help?

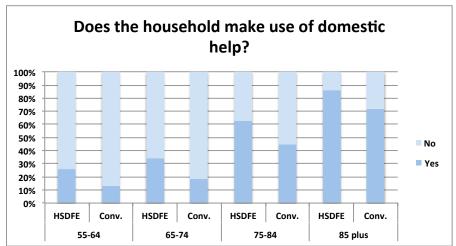


Figure 14: Does the household make use of domestic help?

		Yes	No	Total
55-	HSDFE	4536	40952	45488
13. 9	Conv.	13484	425690	439174
65-	HSDFE	8389	58558	66947
69	Conv.	22758	339377	362135
75-	HSDFE	25396	73456	98852
75	Conv.	30703	179211	209914
85 plus	HSDFE	32486	24232	56718
85 plu	Conv.	24173	49144	73317
	Total	161925	1190620	1352545

Table 26: Does the household make use of personal care (minimal) once a week?

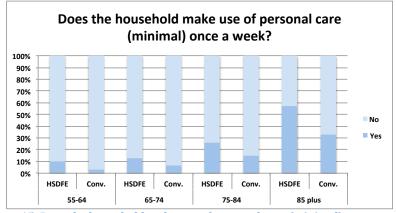


Figure 15: Does the household make use of personal care (minimal) once a week?

		Yes	No	Total
55-	HSDFE	1682	43806	45488
29	Conv.	8103	431071	439174
55-	HSDFE	5256	61690	66946
65.	Conv.	9412	352723	362135
75-	HSDFE	13746	85106	98852
75.	Conv.	14629	195285	209914
85 plus	HSDFE	18104	38615	56719
8 Ip	Conv.	14270	59047	73317
	Total	85202	1267343	1352545

Table 27: Does the household make use of nursing care (minimal) once a week?

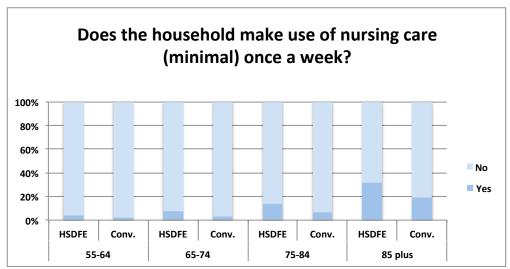


Figure 16: Does the household make use of nursing care (minimal) once a week?

### Concerns of the group over-55s

The final analysis of the current group of over-55s is aimed at what concerns the group of over-55s. Table 28 shows that over the whole group of over-55s the group is mainly concerned about *'Health'* followed by *'developments in the society'* and *'work'*. The analysis of the concerns of the group over-55s shows that the largest part of the group is concerned about his/her health. The age cohort 55-64 years has the most concerns about work, but at the higher age cohorts, the concern about health becomes the predominant concern.

	Frequency	Percentage
Work	670967	15,40%
Family	430946	9,89%
Health	1183419	27,16%
Safety	416531	9,56%
Developments in the neighbourhood	100029	2,30%
Develepments in the society	850930	19,53%
Developments in the economy	111214	2,55%
Developments in the health care system	166462	3,82%
Induration of the society	169462	3,89%
External threaths	161503	3,71%
Other reason	96111	2,21%
Total	4357574	100,00%

Table 28: Concerns of the group of over-55s

Table 29 demonstrates the distribution of the concern of the group of over-55s over the different age cohorts. 'Work' is the biggest concern of the age cohort 55-64 years, followed by 'Health' and 'Developments in the society'. After reaching the legal retirement, age for most the concern 'Work' decreases and the concern about 'Health' increases. 'Health' stays the biggest concern for the age cohorts after the age cohort 55-64.

	55-64	65-74	75-84	85 plus
Work	22,40%	10,05%	6,71%	5,66%
Family	9,94%	9,01%	11,18%	10,76%
Health	21,41%	30,49%	34,67%	40,39%
Safety	8,90%	10,13%	10,70%	9,01%
Developments in the neighbourhood	2,16%	2,51%	2,45%	1,88%
Develepments in the society	19,23%	20,63%	19,02%	17,28%
Developments in the economy	2,88%	2,41%	2,01%	1,85%
Developments in the health care system	3,36%	4,68%	3,75%	3,34%
Induration of the society	4,35%	3,99%	2,95%	1,67%
External threaths	3,72%	3,71%	3,38%	4,56%
Other reason	1,64%	2,38%	3,20%	3,60%
Total	100,00%	100,00%	100,00%	100,00%

Table 29: Concerns of the over-55s over different age cohorts

### The group of over-55s inclined to move

For this research, the group of inclined to move has been categorised as inclined to move and not inclined to move. Table 30 displays the original answer categories and the categories as chosen by the author. The core idea of the adjusted categories is that there is a group that is re-evaluating his/her housing situation, the ones that are inclined to move, and the group that is not, the ones that are not inclined to move.

	Question 20.1: Do you want to move within 2 years?					
	Orginal Categories	-	Adjusted Categories			
1	Definitly not	1	Not inclined to move			
2	Possibly, perhaps	2	Inclined to move			
3	Would like to, can't find anything	2	Inclined to move			
4	Certainly	2	Inclined to move			
5	I have already found an accomondation	1	Not inclined to move			
6	Don't know	1	Not inclined to move			

Table 30: Original categories vs. adjusted categories

The result of the adjusted categories distributed over different age groups with household weight factor applied is shown in figure 16. The figure shows that the group that is inclined to move decreases as age increases.

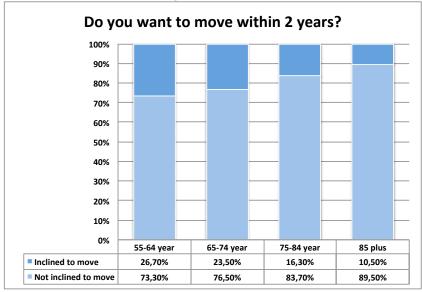


Figure 17: Do you want to move within 2 years?

Table 31 shows the distribution of the indication of health status over both groups. The overview shows that the over-55s with 'bad' and 'sometimes good/sometimes bad' health status indicate that they are not inclined to move and prefer to stay put.

	Not inclined to move	Inclined to move	Total
Very good	291206	69823	361029
Good	1253582	348395	1601977
Fine	545272	160694	705966
Sometimes good/			
Sometimes bad	275711	95047	370758
Bad	135646	50921	186567
Total	2501417	724880	3226297

Table 31: Indication of health status

Table 32 provides an overview of the household composition from those who are inclined to move. For this overview, couples with and without children are unbundled, because the couples without children are significantly larger than the group with children. The couples without children are the largest group of inclined to move, followed by the single-person households.

	Single-person	Couple	Couple with children	Single-Parent	Other	Total
55-64	120768	150487	51961	26631	2141	351988
65-74	84177	146628	9775	3650	2149	246379
<i>75-84</i>	51056	44889	1425	3253	1553	102176
85 plus	17099	5065	270	1339	565	24338
Total	273100	347069	63431	34873	6408	724881

Table 32: Inclined to move over household composition

Table 33 gives an overview of the realised moves in different age cohorts. Around 130,000 households older than 55 years have made a move in the period 2012-2014 according to the Housing Research Netherlands survey. This is only 4.1 per cent of the total number of households in the category over-55s.

	55-64	65-74	75-84	85 plus	Total
Did not move	1254659	1014807	601311	221760	3092537
Moved	62748	35606	25478	9928	133760
Total	1317407	1050413	626789	231688	3226297

Table 33: Realised moves in different age cohorts (absolute numbers)

Table 34 demonstrates the distribution of the concerns of the group over-55s over the inclined to move and not inclined to move. The total in table 34 does not correspond with the total number of household over-55s because the respondents were able to fill in multiple concerns. It shows that the concern on 'Health' is about the same in percentage in both groups. However, the group not inclined to move and concerned on 'Health' is around 2.5 times as big as the group inclined to move and concerned on 'Health'.

	Not inclined	Inclined	Not inclined	Inclined to
	to move	to move	to move %	move %
Work	462101	208866	14,82%	16,85%
Family	318221	112725	10,21%	9,09%
Health	848009	335410	27,20%	27,05%
Safety	296317	120214	9,50%	9,70%
Developments in the neighbourhood	59482	40547	1,91%	3,27%
Develepments in the society	618554	232376	19,84%	18,74%
Developments in the economy	81898	29316	2,63%	2,36%
Developments in the health care system	123601	42862	3,96%	3,46%
Induration of the society	116512	52950	3,74%	4,27%
External threaths	123972	37531	3,98%	3,03%
Other reason	69082	27029	2,22%	2,18%
Total	3117749	1239826	100,00%	100,00%

Table 34: Concerns of the over-55s over inclination to move

### Reasons not inclined to move

The largest part of the group of over-55s indicates that they are not inclined to move. But what is the underlying reason for this group to stay put? The questionnaire of the offers respondents the possibility to give multiple reasons (12 in total) over two questions on why respondents are not inclined to move. For this research, the reasons have been bundled and an overview across different age groups has been made, see table 35. For this analysis, the household weight factor has been applied.

Reasons not to move	55-64	65-74	75-84	85 plus
I am satisfied with my house	36,73%	36,83%	34,90%	34,98%
I am satisfied with my living environment	28,89%	28,73%	27,70%	26,91%
I do not want to leave this neighbourhood	18,20%	19,53%	21,40%	20,02%
I have not been here that long	2,50%	2,26%	2,52%	2,04%
I want to continue living at home	3,36%	8,06%	9,97%	11,35%
I want to be close to my work, company or study	6,89%	1,04%	0,36%	0,17%
I prefer renovating	0,06%	0,07%	0,00%	0,00%
Moving costs too much	0,95%	0,77%	0,48%	0,18%
I probably can not find a suitable home	0,22%	0,16%	0,14%	0,00%
Housing market is currently unfavourable	0,38%	0,29%	0,08%	0,00%
I am too old to move	0,16%	0,89%	1,48%	3,74%
Friends and family live close by	0,71%	0,49%	0,37%	0,20%
Many facilities nearby	0,17%	0,21%	0,08%	0,05%
Remaining	0,76%	0,67%	0,52%	0,37%
Total	100,00%	100,00%	100,00%	100,00%

Table 35: Reasons not inclined to move

Table 35 displays that the most common reason not to move is because of the satisfaction the owner has with the current dwelling. The second reason is the satisfaction with the current living environment, followed by the objection to leave the current neighbourhood. The data shows that the chosen reasons are about the same regardless of the age group. The only reason that increases as the age increases are 'I want to continue living at home' and 'I am too old to move'. The decrease of 'I want to be close to my work, company or study' as age increases is logically explained because most people retire when they reach the legal retirement of 65 and thus the need to live close to work disappears.

### Reasons inclined to move

Even though the group of over-55s that is inclined to move is considerably smaller than the group of over-55s that is not inclined to move, it is still useful to get an understanding on why they want to move. In the first place the respondents are asked to point out if the inclination to move occurred because marriage or moving in together, divorce or because someone wants to live independently. Table 36 demonstrates that around 18 per cent of the over-55s is inclined to move because of marriage or moving in together, while only 1.7 per cent are inclined to move because of divorce and 1.5 per cent because they want to live independently. The remaining respondents were asked to indicate which other reason made them inclined to move.

	Frequency	Valid Percent
Marriage or moving in together	19077	18,2
Divorce	1787	1,7
Want to live independently	1543	1,5
None of these reasons	82242	78,6
Total	104649	100

Table 36: Reasons inclined to move

The questionnaire gives the opportunity for respondents to give multiple reasons, but subsequently respondents are asked to give the main reason for his/her inclination to move. Table 37 displays the frequencies of the main reason to be inclined to move. Almost 39 per cent of the households provide 'Health or need for care' as the main reason they are inclined to move.

Main reason to move	Frequency	Valid Percen
Health or need for care	277493	38,9
Study	267	0
Work	15310	2,1
Financial	64355	9
Dwelling	154237	21,6
Neighbourhood	91038	12,8
Closer to friends, family or acquaintance	56404	7,9
Other reason	53717	7,5
Total	712821	100

Table 37: Main reason to be inclined to move

Table 38 provides the distribution of the main reason over the age groups. The household weight factor has been applied. Where the *dwelling* is the most mentioned reason to be inclined to move in the age group 55 until 64, *health or need for care* becomes the most mentioned reason for the over-65s to be inclined to move.

Main reason to move	55-64	65-74	75-84	85 plus
Health or need for care	21,10%	45,60%	66,70%	81,70%
Study	0,10%	0,00%	0,00%	0,00%
Work	4,30%	0,30%	0,40%	0,00%
Financial	13,70%	6,50%	2,60%	1,20%
Dwelling	26,00%	20,90%	14,30%	5,20%
Neighbourhood	16,50%	11,70%	5,80%	5,10%
Closer to friends, family or acquaintance	8,20%	8,70%	6,30%	3,70%
Other reason	10,10%	6,20%	3,90%	3,20%
Total	100,00%	100,00%	100,00%	100,00%

Table 38: Main reason to be inclined to move in age cohorts

If the dwelling was pointed out as a reason to be inclined to move, the respondents were given the possibility to specify why the dwelling is a reason to be inclined to move. Table 39 provides an overview of the reasons given on why the dwelling is a reason to be inclined to move. The household weight factor has been applied. The group of over-85s has been bundled with the group of 75 towards 84 years, because the group of over-85s is too small for this analysis. The table shows that the main reason why the dwelling is the reason to be inclined to move is because the dwelling is too large for all age groups.

and reason to be informed to move is because the avening is too large for an age grow				
Why is the dwelling a reason to move	55-64	65-74	75 plus	
The current dwellint is too small	8,00%	9,40%	6,50%	
The current dwelling is too large	48,50%	46,50%	57,60%	
Want a rental dwelling	0,60%	1,70%	0,00%	
Want a owner-occupied dwelling	2,20%	0,30%	0,00%	
Want a garden	3,10%	2,90%	0,40%	
Wants no garden	4,30%	5,60%	5,40%	
Other type of dwelling	18,50%	18,00%	16,00%	
Current dwelling is poorly insulated for heat or sound	4,60%	3,80%	0,00%	
The current dwelling is badly maintained	3,40%	5,40%	2,20%	
Other reason	6,70%	6,30%	11,90%	
Total	100,00%	100,00%	100,00%	

Table 39: Why the dwelling is a reason to move?

### Stated preferences of over-55s inclined to move

In line with the descriptive analysis of the current group of over-55s the analysis will focus on the *desired tenure status, living area, number of rooms* and *housing for elderly.* For the analysis of the group of over-55s that is inclined to move has been used and the new household weight factor has been applied. The number of new households can be less than the number of current households because of marriage, moving in together or moving to another country. In addition, some respondents do not have enough knowledge on his/her stated housing preferences that they can fill in the questionnaire. Additionally, the group of over-85s has been bundled with the group of over-75s because the group was too small for most analysis. In some analysis the current tenure status is used, this variable holds the category *'unknown'*. This category is excluded because of the small occurrence to keep tables and figures manageable.

### **Desired tenure status**

The first analysis is aimed at the desired tenure status of the group over-55s that is inclined to move. Table 40 shows the desired tenure status based on three age cohorts. The first analysis focuses on the *desired tenure status* of the group over-55s. Figure 17 illustrates the preference towards rental sector increases, while the preference for the owner-occupied sector decreases

	Rental	Owner-occupied	No preference	Total
55-64	107128	78774	58023	243925
65-74	95631	39776	40285	175692
75 plus	58734	9067	15546	83347
Total	261493	127617	113854	502964

Table 40: Desired tenure status

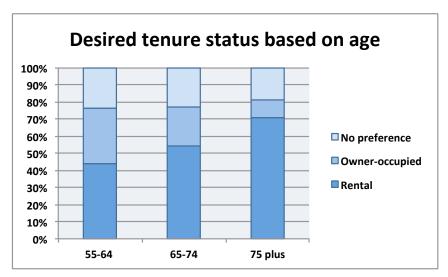


Figure 18: Desired tenure status based on age

The Housing Research Netherlands survey does not provide the opportunity for respondents to give a line of reasoning on why they prefer the rental sector above the owner-occupied sector. Based on the housing pathway approach one can argue that elderly in the higher age cohorts are also evaluating the burden of buying a new house, which could entail taking out a new mortgage and being responsible for the maintenance of your dwelling. However, the Housing Research Netherlands survey cannot support this hypothesis based on the available data. However, the Housing Research Netherlands survey offers the possibility to analyse whether the *current tenure status* has influence on the desired *tenure status*. Table 41 demonstrates the desired tenure status based on the current tenure status and age. The discrepancy between the total households between table 40 and table 41 is caused by the exclusion of the category 'unknown'. Figure 18 displays the absolute numbers of table 41 in to a bar chart.

		Rental	Owner-occupied	No preference	Total
Owner- occupied	55-64	24561	70185	46873	141619
	65-74	29995	37133	37894	105022
	75 plus	21789	8447	14446	44682
Social housing	55-64	60752	3303	5931	69986
	65-74	49314	1648	1478	52440
	75 plus	27644	112	410	28166
Private rental	55-64	17733	4645	3841	26219
	65-74	14205	995	914	16114
	75 plus	9257	509	647	10413
	Total	255250	126977	112434	494661

Table 41: Desired tenure status based on current tenure status and age

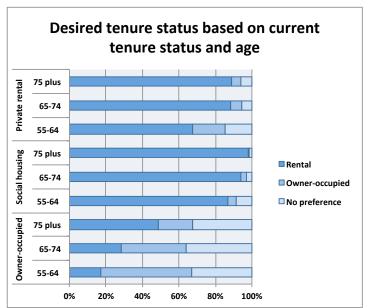


Figure 19: Desired tenure status based on current tenure status and age

Table 42 displays the desired tenure status based on accumulated income and age. Figure 19 translate the absolute numbers from table 42 in to a bar chart. The figure shows that disregarding financial position the households within higher age cohorts prefer a move to the rental sector.

		Rental	Owner-occupied	No preference	Total
000.	55-64	43356	8373	7385	59114
· ω	65-74	37348	6948	5138	49434
€2	75 plus	31375	1958	5716	39049
00	55-64	42055	21765	19242	83062
€25.000 - €49.999	65-74	43960	14902	20081	78943
£2 €4	75 plus	21818	3531	5682	31031
00	55-64	21717	48636	31396	101749
€50.000 ^	65-74	14322	17925	15067	47314
<b>(5</b> )	75 plus	5541	3579	4148	13268
	Total	261492	127617	113855	502964

Table 42: Desired tenure status based on accumulated income and age

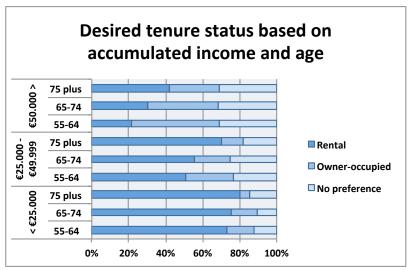


Figure 20: Desired tenure status based on accumulated income and age

### **Desired living area**

The second analysis performed is aimed at the *desired living area* of the over-55s. The analysis of the *desired living area* shows that the highest age cohort prefer dwellings categorised as 89 square meters or less, see figure 12. The other two age cohorts display almost identical preferences regarding *desired living area*. For this analysis the variable for desired living area has been categorised into four categories, as can been seen in table 43 and figure 20.

	0-89 m2	90-119 m2	120 m2 >	No preference	Total
55-64	70255	50914	65527	57229	243925
65-74	51888	42648	41129	40027	175692
75 plus	34630	19107	8582	21027	83346
Total	156773	112669	115238	118283	502963

Table 43: Desired living area based on age

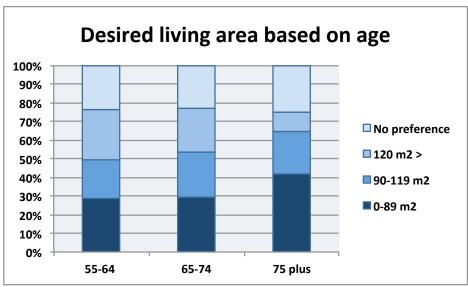


Figure 21: Desired living area based on age

The analysis of desired living area based on age and current living area shows that in the higher age cohorts the households prefer smaller dwellings than his/her current dwelling, see table 44 and figure 21 The analysis of *desired living area* based on age and current living area that in all age cohorts there is a group that prefers a smaller dwelling

compared to his/her current dwelling, but as age progresses a larger part prefers a smaller dwelling compared to his/her current dwelling. Additionally, the analysis of desired living area based on accumulated income and age indicates that the higher income groups prefer dwellings in the higher desired living category disregarding age. The analysis of desired living area based on accumulated income and the current living area demonstrates that the higher income groups prefer a move to a dwelling with a living area comparable to the current dwelling.

		0-89 m2	90-119 m2	120 m2 >	No preference	Total
64	0-89 m2	29948	10186	5706	16254	62094
55-6	90-119 m2	21232	18245	17816	18411	75704
2	120 m2 >	19075	22483	42005	22563	106126
4	0-89 m2	17909	7968	4614	9835	40326
65-74	90-119 m2	20415	11783	8497	14837	55532
9	120 m2 >	13564	22897	28018	15356	79835
snld	0-89 m2	12810	2584	1607	4943	21944
	90-119 m2	12332	5725	1564	7683	27304
75	120 m2 >	9489	10798	5412	8401	34100
	Total	156774	112669	115239	118283	502965

Table 44: Desired living area based on age and current living area

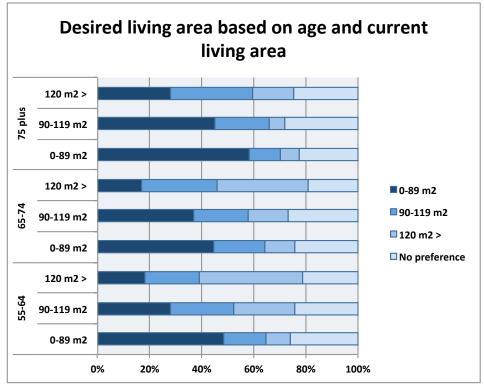


Figure 22: Desired living area based on age and current living area

The analysis of desired living area based on accumulated income and age demonstrates that disregarding age the higher income groups prefer the higher desired living area categories above the smaller categories, see table 45 and figure 22.

		0-89 m2	90-119 m2	120 m2 >	No preference	Total
00	55-64	26874	9459	8943	13838	59114
> 5.0(	65-74	19969	9440	6420	13606	49435
€2!	75 plus	19335	7868	1989	9857	39049
000	55-64	26254	19579	17060	20169	83062
	65-74	24646	20676	15665	17956	78943
<b>£25</b> <b>£49</b>	75 plus	12879	7403	3186	7563	31031
.000	55-64	17127	21877	39524	23222	101750
0.0	65-74	7273	12532	19043	8465	47313
€50,	75 plus	2417	3836	3408	3607	13268
	Total	156774	112670	115238	118283	502965

Table 45: Desired living area based on accumulated income and age

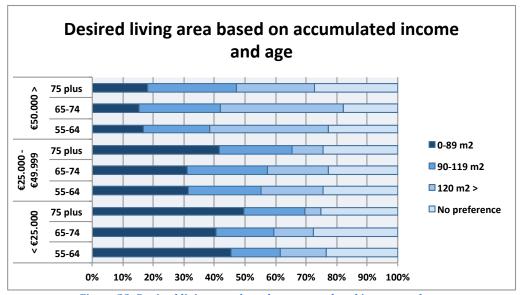


Figure 23: Desired living area based on accumulated income and age

The analysis of the desired living area based on accumulated income and current living area displays that the higher income groups prefer moving to a dwelling that has a comparable living area to his/her current dwelling, see table 46 and figure 23.

		0-89 m2	90-119 m2	120 m2 >	No preference	Total
000	0-89 m2	35898	9332	5123	17313	67666
ν ις	90-119 m2	18623	7902	6091	11367	43983
€2	120 m2 >	11992	9490	7397	8935	37814
000.	0-89 m2	20213	7421	5688	12545	45867
5.00	90-119 m2	24114	16255	9656	17762	67787
€25, €49,	120 m2 >	18036	23065	21360	16136	78597
00	0-89 m2	4879	3851	2297	2043	13070
€50.000	90-119 m2	7805	10358	13017	11936	43116
€5	120 m2 >	9854	23844	46224	21198	101120
	Total	151414	111518	116853	119235	499020

Table 46: Desired living area based on accumulated income and current living area

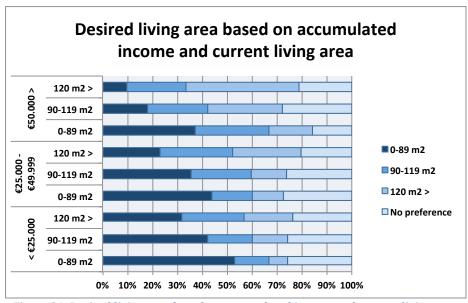


Figure 24: Desired living area based on accumulated income and current living area

#### **Desired number of rooms**

The third analysis focuses on the *desired number of rooms* in relation to the group over-55s that is inclined to move. The analysis of the *desired number of rooms* indicates that the higher age cohorts prefer the first category of number of rooms, see figure 24. For this analysis the same categorisation of number of rooms has been used as with the analysis of the current number of rooms, see table 47. In absolute numbers the first category *'1-3 rooms'* is preferred over the other category disregarding age.

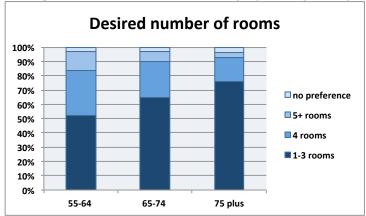


Figure 25: Desired number of rooms

	1-3 rooms	4 rooms	5+ rooms	no preference	Total
55-64	126603	76634	32389	8299	243925
65-74	114042	44268	12516	4866	175692
75 plus	63056	14286	2607	3399	83348
Total	303701	135188	47512	16564	502965

Table 47: Desired number of rooms

The analysis of the desired number of rooms based on age and the current number of rooms shows that the higher age groups increasingly prefer the first category of desired number of rooms, see table 48 and figure 25.

		1-3 rooms	4 rooms	5+ rooms	no preference	Total
4	1-3 rooms	39041	14153	1927	1785	56906
55-64	4 rooms	40649	20866	4378	2105	67998
2	5+ rooms	41020	41605	25887	4409	112921
74	1-3 rooms	31970	5559	2471	1084	41084
65-7	4 rooms	43366	10957	1379	1578	57280
9	5+ rooms	36753	27751	8665	2205	75374
blus	1-3 rooms	23959	1008	58	1108	26133
	4 rooms	19660	2659	1200	826	24345
75	5+ rooms	19351	10619	1348	1465	32783
	Total	295769	135177	47313	16565	494824

Table 48: Desired number of rooms based on age and current number of rooms

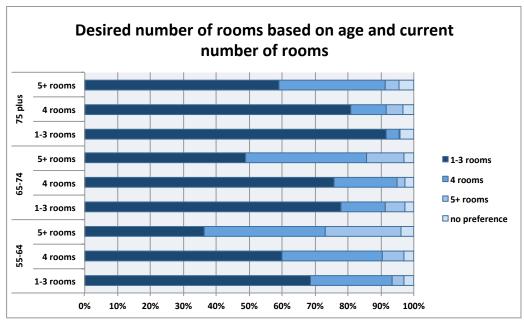


Figure 26: Desired number of rooms based on age and current number of rooms

The analysis on desired number of rooms based on accumulated income and the current number of rooms demonstrates that all income groups prefer to move to a dwelling with less rooms when they currently own a dwelling with four or more room, see table 49 and figure 26.

		1-3 rooms	4 rooms	5+ rooms	no preference	Total
00	1-3 rooms	52661	7857	1523	1310	63351
> 5.0	4 rooms	38093	6832	2409	944	48278
€2	5+ rooms	21956	9046	4079	1730	36811
.000	1-3 rooms	32495	8906	2636	1960	45997
	4 rooms	43907	14361	2600	2062	62930
€25 €49	5+ rooms	41862	26927	11082	2783	82654
.000	1-3 rooms	9587	4968	1523	400	16478
0.0	4 rooms	21810	13884	2694	1464	39852
€50,	5+ rooms	32221	43929	21376	3410	100936
	Total	294592	136710	49922	16063	497287

Table 49: Desired number of rooms based on accumlated income and current number of rooms

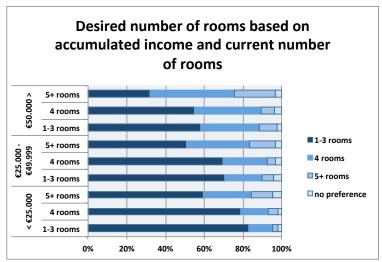


Figure 27: Desired number of rooms based on accumlated income and current number of rooms

## Desired dwelling specially designated for elderly

The analysis of the desired housing of elderly shows that desire for housing for elderly increases subsequently to age, see table 50. However in absolute numbers the group that desire a dwelling specially designated for elderly is bigger in age cohort 55-64 and 65-74. Around 45 per cent of the over-55s that is inclined to move desires a dwelling that is specially designated for elderly.

	Yes	No	Total
55-64	74268	155312	229580
65-74	91152	77565	168717
75 plus	47424	20001	67425
Total	212844	252878	465722

Table 50: Is the desired dwelling specially designated for the elderly?

Figure 27 displays that the desire to move to *housing specially designated for the elderly* increases when age progresses. Where 30 per cent of the age cohort 55-64 years indicates that they want to move to *housing specially designated for the elderly*, almost 70 per cent of the age cohort 75 years and older indicates that they desire a move to *housing specially designated for the elderly*.

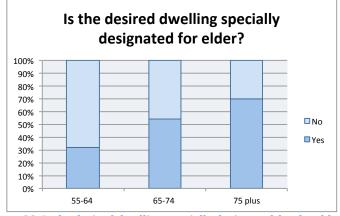


Figure 28: Is the desired dwelling specially designated for the elderly?

In absolute numbers the age cohort 55-64 years and 65-74 are larger compared to the group of 75 years and over. In total approximately 45 per cent of the total households that is inclined to move desires a housing specially designated for the elderly, which accumulates towards about 220,000 households. Table 51 gives an overview of the

distribution of the desire for housing for elderly in relation to the general indication of the households' health situation. It shows that when the indication of the health status becomes lower, a larger part of the group desires a dwelling specially designated for elderly.

	Yes	No	Total	% Yes
Very good	15985	31265	47250	33,83%
Good	89545	135783	225328	39,74%
Fine	55753	43461	99214	56,19%
Sometimes good/				
Sometimes bad	32245	27523	59768	53,95%
Bad	19315	14846	34161	56,54%
Total	212843	252878	465721	45,70%

Table 51: Desire for a dwelling specially designated for the elderly in relation with general indication of the households' health indication

The analysis also shows that households with a lower indication of health status have a higher desire for *housing specially designated for the elderly*. However near the half of the households that desires *housing specially designated for the elderly* indicates that his/her health is good or very good. Of those who desire a dwelling specially designated for elderly, almost 86 per cent indicates that they want to live there independently, see figure 15. This high percentage is most likely a result of the different interaction factors mentioned in this chapter, such as the chance in legislation. Around 44 per cent indicates that they desire the availability of extra beds or rooms with care services available and around 64 per cent of the households indicate that they desire an alarm system at his/her dwelling specially designated for elderly. The analysis of the other desired services shows that the group of over-55s is inconclusive on the other services they desire at the *housing specially designated for the elderly*.

## Desired dwelling specially designated for elderly

The analysis of the desired services consists of two parts. The first desired services are shown in table 52. The second desired services consist of two services and one general statement for living at housing specially designated for the elderly, see table 52. Table 52 shows that the reception is the least favoured service, while the concierge, recreation area and collective catering service are equally wanted. Almost 24 per cent of the household does not want any of the mentioned services.

	Count	Percentage
Concierge	57770	24,95%
Reception	25808	11,15%
Recreation area	46495	20,08%
Collective catering service	46816	20,22%
None	54622	23,59%
Total	231511	100,00%

Table 52: Desired services in a dwelling specially specially designated for the elderly

Table 53 shows that almost 44 per cent of the households desire the availability of beds or rooms with care services. Around 64 per cent desires an alarm system in the dwelling specially designated for elderly. Approximately 86 per cent of the household state that they want to live independently at the dwelling specially designated for elderly.

	Yes	No	Total	% Yes
Beds or rooms with care service	58554	75070	133624	43,82%
Alarm system	136267	76576	212843	64,02%
U want to live independently	182305	30539	212844	85,65%

Table 53: Desired other services in a dwelling specially designated for the elderly

# Appendix D: Housing models for elderly

To expand the framework of the European Union, existing housing models for elderly by (Vondenhoff, 2015) have been analysed. Based on general terms, used to describe housing models for elderly, desk research has been conducted to obtain information on existing housing models to age in place.

S t	i S		characteristics?	Are there any notable remaining		place?	What supports the elderly to age in	Comparable cases	3. Smart Homes	Are there any notable remaining characteristics?		H place?	What supports the elderly to age in	Comparable cases		characteristics?	Anothoro and notable some	place?	What supports the elderly to age in	Comparable cases	1. Lifetime homes
to age in Is a form of services that can be indirectly available at a residential object and	ces	tenure status, technology can be applied.	dwelling in the conventional housing stock. This means that, disregarding	aining The implementation of technology can, in theory, be applied to every	a door spy.	taking care or supporting the elderly, for example domotics, alarm system or	to age in The availability of certain technology at a dwelling increases the capability of	Izi-woning		aining xxx	elderly.	technical requirements to simple labels, which are easy to understand for	to age in Labelling of the suitability of homes for older people translates the extra	Seniorenwoning, Woonkeur, Oppluslabel, sterwoningen.	2. Labelling of the suitability of homes for older people	uning		to support the elderly when infirmities arise, such as wider doors so that a wheelchair can pass through.	to age in  An extra set of building requirements can be present and offer the possibility	Levensloopbestendige woning	

The model of <i>homeshare</i> enables the elderly to age in place because of the informal care given by students or family. On the one hand, the elderly get	What supports the elderly to age in place?
Mantelzorgwoning, Kangeroewoning, Woonstudent, S0link,	Comparable cases
	7. Homeshare
are free to make changes to his/her dwelling.	
corporation to modify the dwelling, while elderly in the owner-occupy sector	
the dwelling. Elderly in the social housing sector are dependent on the	characteristics?
Modification to a dwelling is in some way dependent to the tenure status of	Are there any notable remaining
execute, such as placing a new bathroom or removing thresholds	
ways. Simple low-tech solutions can be placed or building modifications can	
order to let the elderly age in place. This can be accomplished in different	place?
The home improvement agencies can add measurements to the dwelling in	What supports the elderly to age in
	Comparable cases
	6. Home Improvement Agencies
current care legislation.	characteristics?
The elderly have the freedom of choice to pick the provider of care with	Are there any notable remaining
others will make use of care at home or both.	
and care that are available. While some elderly make use of domestic help,	
care is large and the elderly do not have to interact with all possible services	
	place?
Service and care ontions are indirectly available at the residential object. The	What supports the elderly to age in
Social support Act (WMO), Healthcare law (ZVW), Act Long-term Care (WLZ)	Comparable cases
	5. Community Services
XXX	Are there any notable remaining characteristics?
elderly to acquire knowledge on other housing models presented by Faulkner, such as community services and home improvement agencies.	piace:

	Ar ch		T		ch Ar Pic 8.	Ar	
10. Assisted Living	Are there any notable remaining characteristics?	What supports the elderly to age in place?	Comparable cases	9. CoHousing	8. Retirement Villages Comparable cases What supports the elderly to age in place? Are there any notable remaining characteristics?	Are there any notable remaining characteristics?	
	The organisation of the model is in some cases carried by volunteers only. While in some cases, when participants are not capable of organising the model, professionals are involved. In may of the CoHousing models admission requirements are set, for example, cultural background, diet, sexuality and religion.	The core idea of Cohousing is that elderly intentionally support each other. This can be done in a clustered form or a more separated form.	Gemeenschappelijk voor ouderen, Gemeenschappelijk voor mix, Thuishuis, Particulier wooninitiatief,		Serviceflats  The availability of facilities/services on mutual ground as the residential object, such as catering service, domestic help, laundry service, use of quest rooms, reception, hairdresser, pedicure, restaurant, café, caretake 'huismeester', technical service. The spectrum of facilities/services is large and thus every elderly can enjoy his/her own lifestyle. Also, residents are free to participate in activities and meet people.  Social Activities: play golf, play bridge, coffee mornings, play billiards, bingo, The type of provider of the residential object can be public or private. In addition, the provider of facilities can also be either public or private. The residential object can be obtained as an owner-occupied dwelling or rental dwelling or occupied under lease. In many cases residents have to sign a contract to make use of services/facilities. In some cases residents have to meet requirements to get access to the model, for example minimum age or maximum age.	Students sign a contract in order to receive deduction on their living costs (woondstudent).	opportunity to have more social interaction. Especially for those that have a small social network.

Comparable cases What supports the elderly to age in	Aanleunwoning The direct availability support, meals, housekeeping, transport, personal
place?	care, social and recreational activities. In some cases the whole spectrum of care is available, such as personal care, health monitoring, 24-hour on-site
	staff. Also, because the care and support are clustered, it is more accessible for the elderly. If a need for care arises, they are directly connected to the care facilities.
Are there any notable remaining characteristics?	In some cases in the US, the elderly need to be able to afford a dwelling in an assisted living facility. In the Netherlands, the <i>sheltered dwellings</i> are mostly
	owned by housing associations, which make them accessible for people with a low income.
11. Sheltered Housing	
Comparable cases	XXX
What supports the elderly to age in	Shared facilities, 'organising social activities and gatherings for residents' Services available scheme festate manager
Are there any notable remaining	Available in rental and owner-occupied sector
characteristics?	Mostly owned by local authorities and housing associations
12. Extra sheltered housing	
Comparable cases	XXX
What supports the elderly to age in	The model is made accessible for people with a wheelchair or walking
place?	frames.
	Services available, laundry, quest facilities, warden
	24-hours care services, even possibility to stay put when care becomes
	complex
Are there any notable remaining	Available in rental and owner-occupied sector
characteristics?	Mostly owned by local authorities and housing associations
13 Continuing Care Communities	Additional fees for structural services and fees for facultative services
13. Continuing care communities	

Comparable cases	XXX
What supports the elderly to age in	'Dwellings incorporate design features, equipment and technology to
place?	facilitate independence and provide a safe environmentmixture of tenures.' (Vondenhoff, 2015)
	Whole spectrum of care facilities and services is available on mutual ground, 'catering facilities comprehensive communal services, restaurants,
	lounges, activity rooms, library, computer suite, health suite, consultation room, help with shopping, cleaning and possibly making meals
	Social and leisure activities/facilities - shop, hairdressing, chiropody, cash
	machine, post box.  Mohility and access assistance communal huggy or shared nool car' (CRS)
	2016)
	On-site nursing care
Are there any notable remaining	Dwellings available in owner-occupied and rental sector
characteristics?	Structural fee to make use of care, services and maintenance.
	Sometimes a one off entry fee

## **Appendix E: Expert Review**

ID.	Name interviewee	Function
A	Alex Reede	Director of care institution Stichting Eykenburg
В	Helouise Engeldal	Conceptdeveloper at WoonZorg Nederalnd
С	Yvonne Witter	Adviser at Aedes -Actiz Kenniscentrum Wonen-Zorg
D	Liane den Haan	Director at ANBO (interest group for Dutch elderly)
E	Nienke Miedema	Policy maker 'Wonen & Zorg' municipality Rotterdam

# **Inleiding**

## **Aanleiding:**

Door de veranderingen in het zorgstelsel en de groeiende wil van ouderen om thuis te blijven wonen is het domein van wonen en zorg flink veranderd. Daarnaast ontstaat door de 'dubbele' vergrijzing, een groeiende groep ouderen die langer vitaal oud worden, een grotere groep ouderen die tegelijkertijd verschilt met vorige generatie ouderen. Deze verschillen uiten zich bijvoorbeeld in de woonwensen van de nieuwe generatie ouderen. Het nieuwe stelsel biedt meer vrijheid aan marktpartijen om concepten op het gebied van wonen en zorg te ontwikkelen en in te spelen op de diversiteit aan woonwensen van de nieuwe generatie ouderen. Op dit moment is er geen consensus over welke type woning het 'beste' is voor ouderen om zelfstandig oud te kunnen worden, dit verschilt sterk per individu. Het groeiende (potentiele) aanbod van nieuwe concepten in combinatie met de groeiende (potentiele) vraag naar nieuwe concepten is niet of nauwelijks te matchen met de huidige categorisering van concepten.

#### Voorstel:

Allereerst is het voorstel om af te stappen van het begrip woonzorgconcepten. In het huidige zorgstelsel is het component  $zorg^3$  in theorie in (bijna) elke vorm te verkrijgen in elke woning binnen Nederland. Daartegenover staat natuurlijk wel dat niet elke woning geschikt is of geschikt gemaakt kan worden om elke vorm van zorg te kunnen faciliteren. Omdat thuis zelfstandig oud worden voor elk individu op een andere manier wordt ingevuld, is daarom het tweede voorstel om verder te kijken dan alleen wonen en zorg. Op basis van internationale literatuur is het framework voor concepten om thuis (zelfstandig) oud te worden opgesteld wat zeven hoofd bouwstenen/variabele en vier overige bouwstenen bevat, waarbij het object centraal staat.

Framework voor concepten om thuis (zelfstandig) oud te worden

#### Kern

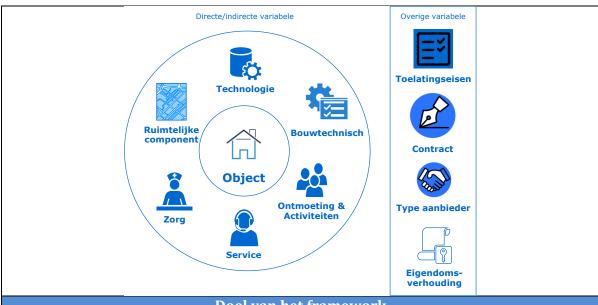


Binnen het framework staat het *object* centraal. Het *object* bevat kenmerken zoals woonobject (zelfstandige woning, zelfstandige wooneenheid of onzelfstandige wooneenheid), woonoppervlakte, aantal kamers en andere kenmerken van de woning. Het *object* wordt omringd door zes hoofdbouwstenen.

#### Hoofdbouwstenen

<sup>&</sup>lt;sup>3</sup> Zorg onderverdeel in : 24-uurs zorg, zorg op afroep, zorg op afspraak. Zie Vegter, M. (2006). Beleggers en wonen en zorg: Onderzoek naar investeringen van institutionele beleggers in woonzorgcombinaties voor ouderen. Technische Universiteit Delft.

Zorg	De hoofdbouwsteen zorg beschrijft zorgfaciliteiten die mogelijk aanwezig zijn bij een concept. Zoals eerder beschreven zijn de meeste vormen van zorg te verkrijgen bij elke woning in Nederland, daarom gaat het bij deze hoofdbouwsteen over faciliteiten ter plekke zoals kamers met de mogelijkheid tot verpleging of een 24-uurs zusterpost. Hierbij is ook belangrijk wie de verantwoordelijkheid draagt van de organisatie van de faciliteiten.
Service	De hoofdbousteen <i>service</i> beschrijft alle servicefacilitietien die mogelijk aanwezig zijn bij een concept. Denk aan wasservice, kapper, pedicure, huismeester, receptie, maaltijdvoorziening en/of recreatie zaal. Hierbij is ook belangrijk wie de verantwoordelijkheid draagt van de organisatie van de faciliteiten.
Ontmoeting & Activiteiten	De hoofdbouwsteen <i>ontmoeting &amp; activiteiten</i> beschrijft de mogelijkheden om bij een concept mensen te ontmoeten en/of te participeren in activiteiten. De organisatie van van deze bouwsteen kan op verschillende manier plaatsvinden, namelijk vanuit bewoners zelf, vanuit vrijwilligers, vanuit een professionele organisatie of een combinatie van.
Bouwtechnisch	De hoofdbouwsteen <i>bouwtechnisch</i> gaat in op extra bouwtechnische eisen bovenop de verplichte bouwtechnische eisen vanuit het Bouwbesluit. Bekende voorbeelden in Nederland zijn het Woonkeur of Oppluslabel die een extra eisen pakket afspiegelen. Maar het kan ook een typologie bevatten zoals gelijkvloers of drempelloos.
Technologie	De hoofdbouwsteen <i>technologie</i> beschrijft verschillende technologieen die ouderen ondersteunen bij het langer zelfstandig thuis wonen. Voorbeelden van technologieen zijn domotica, deurbel met camera of alamering.
Ruimtelijke component	De hoofdbouwsteen <i>ruimtelijke component</i> beschrijft de setting en locatie van het concept. Waar is het concept precies gelegen? In een wijk met of zonder voorzieningen? En hoe is de setting van het concept? Gaat het om een wooneenheid of een complex met meerdere wooneenheden?
	Overige bouwstenen
Toelatingseisen	De overige bouwsteen <i>toelatingseisen</i> beschijft de mogelijke eisen van toelating met betrekking tot het concept. Is er sprake van een minimum leeftijd, een minimale zorgvraag of maximale zorgvraag?
Contract	De overige bouwsteen <i>contract</i> gaat in op de mogelijke contracten die bewoners moeten afsluiten om gebruik te kunnen maken van bijvoorbeeld zorg en/of service.
Type aanbieder	De overige bouwsteen <i>type aanbieder</i> beschrijft de aanbieders van het vastgoed, de zorgfaciliteiten, de servicefaciliteiten en de ontmoeting & activiteiten. Voor het vastgoed kan dit een private partij, een corporatie en in sommige gevallen de gemeente zijn.
Eigendoms- verhouding	De overige bouwsteen <i>eigendomsverhouding</i> gaat in op de manier waarop het object te verkrijgen is. Dit kan zijn sociale huur, private huur of koop.



#### Doel van het framework

Het hoofddoel van het framework is informatie ordenen bij het ontwikkelen van nieuwe concepten. Omdat bij het ontwikkelen van concepten meerdere partijen betrokken zijn, is het wenselijk dat betrokken partijen overeenstemming hebben over de invulling van de verschillende bouwstenen. Daarbij is de uitdaging om de informatie te koppelen aan de juiste bouwstenen, het framework biedt daarvoor een handvat voor alle betrokken partijen. Voor de bouwstenen geldt dat ze niet (altijd) zichtbaar of actief aanwezig hoeven te zijn, ook zijn sommige bouwstenen sterker gerelateerd aan andere bouwstenen dan anderen. Ook zijn sommige bouwstenen helemaal niet aanwezig bij concepten

Vragenlijst expert interview			
Onderwerp:	Framework voor concepten om thuis (zelfstandig) oud te worden		
Datum:	18-12-2018		
Locatie:	Stichting Eykenburg, Den Haag		
Geïnterviewde:	Dr. A. Reede   Bestuurder Stichting Eykenburg		
Interviewer: Loek van Bergen en Henegouwen			
Tijdsduur:	60 minuten		

# 1. Introductie

- Hoe lang bent al werkzaam in uw huidige functie?
- 11 jaar in functie als bestuurder van zorginstelling Stichting Eykenburg
- 2. Heeft u daarvoor een functie gehad met betrekking tot wonen en/of zorg?

Sinds 1994 bestuurder in de zorg. Ouderenzorg, psychiatrie en ziekenhuiszorg.

## Wat voor invloed heeft het scheiden van wonen en zorg op uw huidige functie?

Niet zozeer voor mij als bestuurder, maar meer voor de mensen. In eerste instantie ging men er vanuit dat door het scheiden van wonen zorg mensen langer zelfstandig thuis zouden blijven wonen. Dat was echter niet het geval, want we werden geconfronteerd met de afbouw van verzorgingshuizen. Mensen gingen vanuit een instituut thuis wonen, en dat is een heel ander iets. Aan het wegvallen van die begeleiding vanuit instituten, werd helemaal geen aandacht aan besteed. Mensen die thuis gingen wonen sloten niet zelf verzekeringen af, sloten geen contract voor gas, water en licht af en hun eigen huisinrichting regelen. Daardoor moet een groep langer zelfstandig thuis wonen die eigenlijk onbekend was met zijn/haar eigen verantwoordelijkheid. Daar hoorde je vanuit de overheid eigenlijk niets over, je hoorde alleen maar dat men langer zelfstandig thuis ging wonen. Het scheiden van wonen en zorg is goed, het is niet zo zwart wit als het lijkt. Je moet naar het totaal kijken, de omgevingsfactoren. Sec het gebouw is niet waar het alleen om gaat. Het gaat ook om de sociale context. Ouder worden levert bepaalde dingen op, bijvoorbeeld je verliest mensen om je heen, dus je krijgt eenzaamheid. Ook dat hoort bij het proces ouder worden en daar moet je op inspelen wil je zelfstandig thuis kunnen wonen.

4. In hoeverre bent u het eens met de volgende stelling:
Het scheiden van wonen en zorg is nu volledig afgerond is. (hogere
zzp's/zorgprofielen uiteindelijk ook extramuraliseren) (Eens/Oneens; waarom?)

Oneens, het scheiden van wonen en zorg gaat niet alleen over het uit faseren van verzorgingshuizen. Zoals geschetst bij vraag 1 wordt men nu geconfronteerd met vraagstukken die ontstaan door het scheiden van wonen zorg. Daarbij is er nog steeds behoefte aan tussenvormen, maar dit is niet meer per definitie een verzorgingshuis.

5. In hoeverre bent u het eens met de volgende stelling:
Het scheiden van wonen en zorg geeft meer vrijheid om nieuwe concepten om
thuis (zelfstandig) oud te worden te ontwikkelen, resulterend in een groter
(potentieel) aanbod van concepten. (Eens/Oneens; waarom?)

Oneens, ontwikkelaars kijken naar een bepaald rendement. Rendement is meer van doorslag dan de ontwikkelingen in het scheiden van wonen en zorg.

6. In hoeverre bent u het eens met de volgende stelling:

De diversiteit in woonwensen van de nieuwe generatie ouderen zorgt voor een grotere (potentiele) vraag naar nieuwe concepten. (Eens/Oneens; waarom?)

Eens, vroeger had je ouderen op het platteland die ouder werden en een huisje bijbouwde bij je familie om daar oud te worden. In de stad ging je naar een verzorgingshuis. Het palet is wel nu veel groter geworden. Mensen wonen zelfstandiger. Dat hoeft niet altijd in hun eigen woning. Dat kan ook in een aangepaste woning in hun eigen woonwijk. De variaties zijn toegenomen.

7. In hoeverre bent u het eens met de volgende stelling:
Het grotere (potentiele) aanbod van nieuwe concepten en de grotere
(potentiele) vraag naar concepten is niet of nauwelijks te matchen met de
huidige categoriseren van concepten. (Eens/Oneens; waarom?)

Eens, als je in hokjes blijft denken dan werkt het niet. De klant is niet geïnteresseerd in van welke financieringsvorm er sprake is. De klant is geïnteresseerd in waar die zelfstandig kan blijven wonen.

8. In hoeverre bent u het eens met de volgende stelling:
Thuis (zelfstandig) oud worden behelst meer dan alleen wonen en zorg.
(Eens/Oneens; waarom?)

Eens, gaat ook over de hele context waarin een ouderen zich bevindt. Men moet kijken naar de ontwikkelingen in de buurt maar ook binnen het sociale netwerk van mensen. Wanneer binnen je sociale netwerk mensen wegvallen, kan bijvoorbeeld vereenzaming ontstaan.

9. In hoeverre bent u het eens met de volgende stelling:
Een woning fungeert als middel om thuis (zelfstandig) oud te worden.
(Eens/Oneens; waarom?)

Eens, de woning hoeft niet per se je eigen woning te zijn. Het kan ook een ander object zijn waar je zelfstandig oud kan worden.

# 10. Welke problemen ondervinden partijen bij het overleg over (nieuwe) concepten?

- -Partijen denken te veel in hokjes.
- -Zorginstellingen hebben corporaties en gemeenten nodig om concepten te realiseren, maar bijv. bij maken van prestatieafspraken tussen corporaties en gemeenten, worden zorginstellingen niet betrokken. Zorginstellingen kunnen samen met corporaties wel iets aan concepten ontwikkelen, de 10 procent die corporaties vrij mogen toewijzen, maar dit is marginaal.
- -Bij het opstellen van visies spelen ouderen geen rol. De gemeente ziet het verpleeghuis als de plek en verantwoordelijke voor ouderenzorg.

# 2. Framework

## 1. Wat is uw algemene indruk van het framework?

Goed om verschillende bouwstenen te onderscheiden, maar belang zit hem in de samenhang van de bouwstenen. Een bouwsteen kan fantastisch zijn, maar als er geen samenhang is heb je er niets aan.

**2.** In hoeverre bent u het eens met de volgende stelling:

De verschillende bouwstenen kunnen samen een concept om thuis (zelfstandig) oud te worden vormen. (Eens/Oneens; waarom?)

Eens, in de praktijk schort het in de afstemming tussen de bouwstenen. Er moet meer gekeken worden naar het concept in totaliteit i.p.v. naar individuele bouwstenen.

3. In hoeverre bent u het eens met de volgende stelling:

De doelstelling van het framework is duidelijk. (Eens/Oneens; waarom?)

Eens, mits de afstemming tussen de bouwstenen duidelijk is.

**4.** *In hoeverre bent u het eens met de volgende stelling:* 

Het framework vormt een basis voor de discussie over (nieuwe) concepten. (Eens/Oneens; waarom?)

**Eens** 

**5.** *In hoeverre bent u het eens met de volgende stelling:* 

Het framework vormt een basis om vraag en aanbod van concepten beter te matchen. (Eens/Oneens; waarom?)

Eens, maar je moet het framework niet heilig verklaren. Het gaat om de verbanden tussen de bouwstenen. Men moet niet te veel inzoomen op individuele bouwstenen, maar kijken naar de samenhang van bouwstenen.

## 4. Wat vindt u van de bouwsteen Object?

Duidelijk.

## 5. Wat vindt u van de bouwsteen Zorg?

Kan uitgebreider, zorg is meer dan alleen zorg in stenen (zoals faciliteiten). Zorg is een bijdrage leveren aan onze cliënten die ouderen worden zodat ze waardevolle en zinvolle dag hebben.

## 6. Wat vindt u van de bouwsteen Service?

Belangrijk is dat bij service gekeken wordt naar hoe het geïntegreerd is in de wijk. Wanneer je een kapper om de hoek hebt, is het eigenlijk niet nodig om een kapper binnen je concept te ontwikkelen.

## 7. Wat vindt u van de bouwsteen Ontmoeting & Activiteiten?

Duidelijk, maar ook weer van belang om goed te kijken naar de integratie in een wijk. Is er een ontmoetingscentrum in de buurt, dan is het beter om daar een samenwerking mee te realiseren i.p.v. het zelf in je concept te ontwikkelen.

## 8. Wat vindt u van de bouwsteen Bouwtechnisch?

Duidelijk.

## 9. Wat vindt u van de bouwsteen Technologie?

Gaat met sprongen vooruit en belangrijk bij concepten. Zeker met de druk op de arbeidsmarkt voor zorg en welzijn, zal men meer moeten gaan inzetten op technologieën die werk uit handen kunnen nemen.

## **10.** Wat vindt u van de bouwsteen Ruimtelijke component?

Duidelijk, er wordt te weinig gekeken naar het ruimtelijke component waarin een concept gekeken wordt.

## 11. Wat vindt u van de bouwsteen Toelatingseisen?

Duidelijk.

#### 12. Wat vindt u van de bouwsteen Contract?

Contracten lopen heel erg door elkaar. Ouderen huren bij een corporatie, verkrijgen zorg van een zorginstelling en misschien huishouding van een andere partij. Belangrijk om daar duidelijkheid in te verschaffen.

## 13. Wat vindt u van de bouwsteen Type aanbieder?

Duidelijk, lijkt een beetje op Contract.

## 14. Wat vindt u van de bouwsteen Eigendomsverhouding?

Duidelijk, maar voornamelijk voor gemeenten.

## 15. Ontbreken er bouwstenen?

Nee, je kan altijd nog gaan uitdiepen maar je moet het op hoofdlijnen houden.

## 16. Kunt u een mogelijke andere doelstelling bedenken voor het framework?

Wat is je visie op woonvormen.

# 3. Afronding

## 1. Wat is uw eigen visie op het beleid van wonen en zorg?

Bij de prestatieafspraken tussen gemeenten en corporaties moet ook ruimte komen voor het toewijzen van woningen op basis van zorgindicatie. Het toewijzen gaat nu op inkomen of (medische) urgentie, maar niet op daadwerkelijke zorg indicaties.

Een bepaalde bewustwording die de politiek aan de ouderen moet gaan opleggen. Heel veel mensen blijven wonen in de woning waarin ze de kinderen hebben gekregen, daardoor bezitten ze vaak een te grote woning. Er zou een maatschappelijke bewustwording moeten worden gecreëerd, waarbij het normaal is om een stap terug te doen. Dit is aan de ene kant een stukje eigen verantwoording, maar ook het uitvoeren van Sesamstraat politiek (het blijven herhalen van)speelt hierbij een rol.

Gebruik van WMO moet niet gemeente gebonden zijn. Wanneer je een bepaalde vorm van zorg uit de WMO ontvangt zou je dat mee moeten kunnen nemen naar een andere gemeente. In plaats van het allemaal opnieuw te moeten aanvragen.

Ontmoetingsplaatsen kunnen ook Albert Heijn, Apotheek of Arts zijn. De zogenaamde triple-A locaties.

Nederland moet zich richten op het integreren van doelgroepen in concepten op wijk niveau.

Structureel op ambtelijk niveau kwartaal overleg zou zijn tussen zorgaanbieders, gemeenten en corporaties moet niet alleen over probleemgevallen gaan maar ook over vormen van een gezamenlijke visie op verschillende elementen.

## 2. | Heeft u nog op- of aanmerking in het algemeen?

Thuis betekent niet altijd in je eigen woning, maar kan ook in je eigen woonomgeving zijn. Bijv. Twee straten.

## 3. Heeft u nog vragen aan mij?

XXXXX

Vragenlijst expert interview				
Onderwerp:	Framework voor concepten om thuis (zelfstandig) oud te worden			
Datum:	19-12-2018			
Locatie:				
Geïnterviewde:	H. Engeldal   Conceptontwikkelaar WoonZorg Nederland			
Interviewer:	Loek van Bergen en Henegouwen			
Tijdsduur:	60 minuten			

## 1. Introductie

1. Hoe lang bent al werkzaam in uw huidige functie?

4 jaar als conceptontwikkelaar bij WoonZorg Nederland

2. Heeft u daarvoor een functie gehad met betrekking tot wonen en/of zorg?

Al 14 jaar bij WoonZorg Nederland

3. Wat voor invloed heeft het scheiden van wonen en zorg op uw huidige functie?

Groot, in mijn huidige functie doe ik het beheer van de intramurale complexen, waarbij partijen langdurig complexen huren van WoonZorg Nederland. Daar merk je dat door de verandering in wet en regelgeving durven mensen geen lange contracten meer aan te gaan. Zo zie je ook dat sommige partijen wel langdurige contracten aan willen gaan, maar voorbereidt is op eventueel scheiden wonen en zorg.

**4.** *In hoeverre bent u het eens met de volgende stelling:* 

Het scheiden van wonen en zorg is nu volledig afgerond is. (hogere zzp's/zorgprofielen uiteindelijk ook extramuraliseren) (Eens/Oneens; waarom?)

Oneens, er wordt nog te vaak gedacht in intramuraal zelfstandig wonen. Terwijl er met de huidige wet en regelgeving flexibeler mee omgegaan kan worden.

**5.** *In hoeverre bent u het eens met de volgende stelling:* 

Het scheiden van wonen en zorg geeft meer vrijheid om nieuwe concepten om thuis (zelfstandig) oud te worden te ontwikkelen, resulterend in een groter (potentieel) aanbod van concepten. (Eens/Oneens; waarom?)

Eens, omdat het verzorgingshuis niet meer bestaat hebben ouderen meer keuze vrijheid om zelf te bepalen waaraan ze hun woonlasten aan uitgeven. Zeker in de luxere segmenten gaan mensen. Veel particulieren initiatieven en beleggers die zich op het speelveld gaan bewegen.

**6.** *In hoeverre bent u het eens met de volgende stelling:* 

De diversiteit in woonwensen van de nieuwe generatie ouderen zorgt voor een grotere (potentiele) vraag naar nieuwe concepten. (Eens/Oneens; waarom?)

Eens, er komt een grote doelgroep aan met een grote diversiteit. Deze groep heeft ook een meer financiële mogelijkheden.

**7.** *In hoeverre bent u het eens met de volgende stelling:* 

Het grotere (potentiele) aanbod van nieuwe concepten en de grotere (potentiele) vraag naar concepten is niet of nauwelijks te matchen met de huidige categoriseren van concepten. (Eens/Oneens; waarom?)

Eens, maar er zijn wel heel veel nieuwe concepten op komst. Deze hebben veel verschillende benamingen

**8.** *In hoeverre bent u het eens met de volgende stelling:* 

Thuis (zelfstandig) oud worden behelst meer dan alleen wonen en zorg. (Eens/Oneens; waarom?)

Eens, daarbij ontbreekt vooral het welzijn component wat voornamelijk in verzorgingshuizen voor kwam. Daar was het mogelijk om te ontmoeten, samen eten, etc.

9. In hoeverre bent u het eens met de volgende stelling:
Een woning fungeert als middel om thuis (zelfstandig) oud te worden.
(Eens/Oneens; waarom?)

Eens, een woning is niet perse een doel. Mensen willen gewoon 'lekker leven'. En de woning kan daar aan bijdragen. De woning is een van de middelen om gewoon 'lekker leven'.

# 10. Welke problemen ondervinden partijen bij het overleg over (nieuwe) concepten?

- -Heel vaak bouwkundige zaken, zoals brandveiligheid. Allerlei richtlijnen voor als mensen intramuraal wonen en allerlei regels als mensen zelfstandig wonen, maar een richtlijn voor een combinatie is er niet.
- -Bestemmingsplannen, hoe wordt een concept op een bestemmingsplan aangegeven. Wordt het bestemd als wonen, wonen met zorg of maatschappelijk. Hoe ga je om met gemeentelijke belastingen en heffingen. Als je heel makkelijk wilt switchen met eenheden binnen het gebouw
- -Bij zorgpartijen en corporaties denken vaak nog op de oude manier van voor het scheiden wonen en zorg.
- -Veel verschillende meningen over woonoppervlaktes, aantal kamers.
- -Zorgpartijen worden niet meer lang gecontracteerd bij zorgverzekeraars. Daardoor hebben ze geen zekerheid en durven geen langdurige contracten met corporaties af te sluiten.
- -Bouwkosten: transformatie is een flinke uitdaging
- -Hoeveelheid algemene ruimte, wil men voornamelijk op wonen zitten? Of meer richting wonen en ontmoeten.

# 2. Framework

## 1. Wat is uw algemene indruk van het framework?

Ziet er goed uit. WoonZorg Nederland heeft zelf ook een poging gedaan om individuele elementen van concepten te bekijken. Maar dit framework lijkt completer.

2. In hoeverre bent u het eens met de volgende stelling:

De verschillende bouwstenen kunnen samen een concept om thuis (zelfstandig)
oud te worden vormen. (Eens/Oneens; waarom?)

#### Eens

3. In hoeverre bent u het eens met de volgende stelling:

De doelstelling van het framework is duidelijk. (Eens/Oneens; waarom?)

## Eens

4. In hoeverre bent u het eens met de volgende stelling:

Het framework vormt een basis voor de discussie over (nieuwe) concepten.

(Eens/Oneens; waarom?)

#### Eens

5. In hoeverre bent u het eens met de volgende stelling:

Het framework vormt een basis om vraag en aanbod van concepten beter te
matchen. (Eens/Oneens; waarom?)

Eens, als de behoefte bekend is kan het framework inderdaad als leidraad gebruikt kunnen worden in gesprek met een gemeente over nieuwe concepten. Daarbij moet rekening gehouden worden dat verschillende ouderen verschillende wensen hebben en het framework zou je kunnen gebruiken om een goede afstemming te vinden.

## 4. Wat vindt u van de bouwsteen Object?

Duidelijk, maar zit het object dan altijd in een complex? Vaak met ontwikkelen van concepten wordt het in complexen gedaan.

## 5. Wat vindt u van de bouwsteen Zorg?

Helder.

#### 6. Wat vindt u van de bouwsteen Service?

Ook helder.

#### 7. Wat vindt u van de bouwsteen Ontmoeting & Activiteiten?

Kan ik niet veel aan toevoegen, duidelijk.

#### 8. Wat vindt u van de bouwsteen Bouwtechnisch?

Duidelijk, maar gaat het alleen in op het woonobject of ook op de extra bouwtechnische eisen van complexen zelf?

## 9. Wat vindt u van de bouwsteen Technologie?

Redelijk duidelijk, maar zit hier ook zaken in als brandveiligheid voor complexen?

#### 10. Wat vindt u van de bouwsteen Ruimtelijke component?

Belangrijk om goed te kijken wat de voorzieningen zijn bij een concept. Dit kan invloed hebben op hoe je je concept inricht.

## 11. Wat vindt u van de bouwsteen Toelatingseisen?

Goed omschreven. Kan ook een mix zijn van eisen. Inkomen is ook een belangrijke factor, zeker in de sociale huur.

## 12. Wat vindt u van de bouwsteen Contract?

Hier zou je in kunnen opnemen of je intramuraal woont(met indicatie) of dat je zelfstandig woont (met een eigen huur contract).

## 13. Wat vindt u van de bouwsteen Type aanbieder?

Ook duidelijk.

## 14. Wat vindt u van de bouwsteen Eigendomsverhouding?

Private huur kan je beter omschrijven als vrije sector huur, verder duidelijk.

## 15. *Ontbreken er bouwstenen?*

Nee

## 16. Kunt u een mogelijke andere doelstelling bedenken voor het framework?

Het framework kan ook ingezet op intramurale huisvesting worden ingezet.

Je kan het framework zou je ook kunnen kijken naar wat verschillen zijn tussen concepten.

Je kan het framework ook gebruiken in de communicatie naar ouderen. Als je het framework op een gerichte manier inzet kan je ouderen misschien beter aansporen om na te denken over een volgende verhuisstap. Dit omdat het framework duidelijkheid verschaft over wat er mogelijk is.

Je zou het framework kunnen gebruiken voor beleidsontwikkeling of strategie ontwikkeling. Vaak blijft het beleid omtrent wonen en zorg een beetje vaag, een bestuurder die roept 'we moeten aantrekkelijke concepten ontwikkelen'. Met het framework zou je daar meer handen en voeten aan kunnen geven.

# 3. Afronding

## 1. Wat is uw eigen visie op het beleid van wonen en zorg?

Ik zou graag zien dat er veel verschillende concepten zijn. Waarbij de ouderen met verschillende wensen uit verschillende concepten. Dit is kleinere gemeentes lastiger omdat je daar niet het hele palet aan concepten kan aanbieden, maar dan zal je goed moeten aanvoelen wat de vraag van de ouderen ter plaatsen zijn. Meer flexibiliteit in het verzilveren van je zorgindicatie, ga je intramuraal wonen of blijf je zelfstandig wonen op basis van je indicatie. Ook dat ouderen flexibeler zijn in welke zorg, services ouderen (ook al wonen ze intramuraal) zouden kunnen afnemen.

Ik ben er niet specifiek voor dat het zelfstandig wonen per se in de eigen woning is. Zeker met het oog op thuiszorg, waarbij de zorg hele routes moet afleggen i.p.v. geclusterd zoals in een verzorgingshuis.

De gemeente moet vanuit de verantwoordelijkheid van de WMO hun verantwoordelijkheid moeten pakken bij de ondersteuning van ouderen.

Een wijk zo inrichten dat je binnen je eigen buurt kan blijven wonen 'zorgzame wijk'.

Overheid moet meer aandacht besteden aan stimuleren van doorstromen ouderen. Het onder de aandacht brengen dat ouderen bewust moeten worden van hoe ze ouder willen worden.

Zorgen dat je vastgoed flexibel is. Niet dat je over tien jaar met een stuk vastgoed zit wat niet aan te passen is waardoor je eigenlijk kapitaal vernietigd.

## 2. Heeft u nog op- of aanmerking in het algemeen?

Ik vind het goed in elkaar zitten voor een student.

3. Heeft u nog vragen aan mij?

XXXXX

Vragenlijst expert interview		
Onderwerp:	Framework voor concepten om thuis (zelfstandig) oud te worden	
Datum:	20-12-2018	
Locatie:	Aedes Den Haag	
Geïnterviewde:	Y. Witter   Adviseur bij Aedes -Actiz Kenniscentrum Wonen-Zorg	
Interviewer:	Loek van Bergen en Henegouwen	
Tijdsduur:	60 minuten	

# 1. Introductie

1. Hoe lang bent al werkzaam in uw huidige functie?

13,5 jaar

## 2. Heeft u daarvoor een functie gehad met betrekking tot wonen en/of zorg?

Sociale gerontologie en sociologie gestudeerd

Bij de nationale ouderenbonden gewerkt tussen 1996 tot 2005 op het terrein van wonen, zorg en welzijn.

## 3. Wat voor invloed heeft het scheiden van wonen en zorg op uw huidige functie?

Het Kenniscentrum wonen-zorg is opgericht om de verschillende werelden (gemeenten, corporaties, ouderen, welzijns- en zorgorganisatie) bij elkaar te brengen. Trainingen voor alle partijen om te laten leren van elkaar. Partijen ondervinden nog steeds problemen met het begrijpen van de nieuwe wet en regelgeving, hier bellen ze Aedes vaak voor.

**4.** *In hoeverre bent u het eens met de volgende stelling:* 

Het scheiden van wonen en zorg is nu volledig afgerond is. (hogere zzp's/zorgprofielen uiteindelijk ook extramuraliseren) (Eens/Oneens; waarom?)

Oneens. Het zat er heel lang aan te komen en is de laatste jaren in een stroomversnelling geraakt, maar nog niet helemaal afgerond.

**5.** *In hoeverre bent u het eens met de volgende stelling:* 

Het scheiden van wonen en zorg geeft meer vrijheid om nieuwe concepten om thuis (zelfstandig) oud te worden te ontwikkelen, resulterend in een groter (potentieel) aanbod van concepten. (Eens/Oneens; waarom?)

Eens, dit gebeurt zeker in de praktijk. Heel veel particuliere ondernemers stappen erin, ook veel zogenaamde 'cowboys' proberen mee te doen. Bij de 'cowboys' speelt vaak een onderbuik gevoel op, willen ze 'goede' concepten neer zetten of doen ze het alleen voor het geld. Helaas zie je dat er veel meer aanbod is voor mensen met een goed gevulde beurs in tegenstelling tot mensen met een smallere beurs. Voordeel: Het palet van woonvariaties is uitgebreid, Nadeel: er ontstaat een flinke tweedeling tussen woonvariaties voor rijk en woonvariaties voor armen.

6. In hoeverre bent u het eens met de volgende stelling:

De diversiteit in woonwensen van de nieuwe generatie ouderen zorgt voor een grotere (potentiele) vraag naar nieuwe concepten. (Eens/Oneens; waarom?)

Eens, groep ouderen groeit en daarbij de diversiteit. Alleen omdat ouderen vaak niet weten wat de mogelijkheden zijn blijft de voorspelling van de vraag vaak onduidelijk. Belangrijk dat er goede voorlichting is voor ouderen over wat er mogelijk is qua woonvariaties. Ouderen denken vaak nog in de oude categorieën omdat men niet weet wat er wel mogelijk is. Vaak hoort men dat omdat het verzorgingshuis niet meer bestaat, niets meer mogelijk is.

**7.** *In hoeverre bent u het eens met de volgende stelling:* 

Het grotere (potentiele) aanbod van nieuwe concepten en de grotere (potentiele) vraag naar concepten is niet of nauwelijks te matchen met de huidige categoriseren van concepten. (Eens/Oneens; waarom?)

Eens, dit heeft ook te maken met voorlichting aan ouderen maar ook gemeenten. Zoals bij vraag 6 aangeven, vaak denken mensen nog in de oude categorieën waardoor het matchen moeilijk wordt.

8. In hoeverre bent u het eens met de volgende stelling:
Thuis (zelfstandig) oud worden behelst meer dan alleen wonen en zorg.

(Eens/Oneens; waarom?)

Eens, het is vooral welzijn . Woon je prettig, heb je een leuke buurt, zijn er voorzieningen. Heb je kansen op ontmoeting. Kan je doen wat je wilt doen, kan je dat vanuit je woning doen. Is het betaalbaar. Dit is per persoon verschillend.

9. In hoeverre bent u het eens met de volgende stelling:
Een woning fungeert als middel om thuis (zelfstandig) oud te worden.
(Eens/Oneens; waarom?)

Eens, maar de combinatie met externe factoren is ook erg belangrijk. Hoe zit het met de voorzieningen in je buurt? Voel je je veilig in je buurt?

- 10. Welke problemen ondervinden partijen bij het overleg over (nieuwe) concepten?
- -Partijen verstaan elkaar niet. Partijen spreken een andere taal en werken op een ander tempo. Veel verschil in opvattingen. Tijdens overleggen wordt vaak langs elkaar heen gepraat omdat ze verschillende talen spreken.
- -Zorgorganisaties kunnen niet lang vooruit kijken omdat ze contracten moeten afsluiten om zorg in te kopen bij zorgverzekeraars. Dit zorgt ervoor dat bijvoorbeeld het aangaan van een langdurig huurcontract met corporaties onzeker wordt.

## 2. Framework

1. Wat is uw algemene indruk van het framework?

Lekker duidelijk. Op eerste oogopslag zit alles erin. Overzichtelijk door het gebruik van symbolen.

2. In hoeverre bent u het eens met de volgende stelling:

De verschillende bouwstenen kunnen samen een concept om thuis (zelfstandig)

oud te worden vormen. (Eens/Oneens; waarom?)

**Eens** 

3. In hoeverre bent u het eens met de volgende stelling:

De doelstelling van het framework is duidelijk. (Eens/Oneens; waarom?)

#### **Eens**

**4.** *In hoeverre bent u het eens met de volgende stelling:* 

Het framework vormt een basis voor de discussie over (nieuwe) concepten. (Eens/Oneens; waarom?)

#### Eens

**5.** *In hoeverre bent u het eens met de volgende stelling:* 

Het framework vormt een basis om vraag en aanbod van concepten beter te matchen. (Eens/Oneens; waarom?)

Eens, hier kan je met ouderen over praten. Maar ook met partijen die mogelijk betrokken zijn bij ontwikkelingen.

## 4. Wat vindt u van de bouwsteen Object?

Duidelijk. Gaat het object ook in op bijvoorbeeld de inrichting van het complex? Mocht een object zich in een complex bevinden?

## 5. Wat vindt u van de bouwsteen Zorg?

Duidelijk, zorg hoeft niet aanwezig te zijn in een concept. Het kan bijvoorbeeld ook om de hoek zitten.

## 6. Wat vindt u van de bouwsteen Service?

Duidelijk, dit is een belangrijk punt bij het transformeren van verzorgingshuizen. Heel veel van deze faciliteiten zijn vaak helemaal weg, maar kunnen een goede bijdrage leveren voor ouderen. Ze hoeven ook niet per se direct in een concept te zitten, zolang ze maar in de buurt zitten.

## 7. Wat vindt u van de bouwsteen Ontmoeting & Activiteiten?

Heel belangrijk, vaak gemeenschappelijke ruimtes waar de discussie ontstaat wie er voor betaald? Ook hier geldt dat het fijn is als het direct aanwezig is, maar het kan zich ook in de buurt bevinden.

## 8. Wat vindt u van de bouwsteen Bouwtechnisch?

Duidelijk, belangrijk dat hier op gelet wordt. Niet alleen voor de toegankelijkheid van woningen, maar ook van complexen. Wanneer het aan de onderhandelingstafel gebruikt wordt is het handig om het bouwtechnisch te noemen, maar voor ouderen zou je het beter label kunnen noemen.

## 9. Wat vindt u van de bouwsteen Technologie?

Duidelijk, zit veel potentie in. Belangrijk dat ouderen hier in ondersteunt worden.

## 10. Wat vindt u van de bouwsteen Ruimtelijke component?

Duidelijk, de triple-A (arst, apotheek, albert heijn) wordt alleen maar belangrijker.

#### 11. Wat vindt u van de bouwsteen Toelatingseisen?

Duidelijk, kunnen lastige situaties ontstaan bij bijvoorbeeld concepten met een maximale zorgvraag. Wat als je ergens gaat wonen en ineens veel slechter wordt dan zal je weer moeten verhuizen.

#### 12. Wat vindt u van de bouwsteen Contract?

Duidelijk, belangrijk dat ouderen dit helder hebben. Hier kunnen veel vervelende situaties door ontstaan.

## 13. Wat vindt u van de bouwsteen Type aanbieder?

Duidelijk.

## 14. Wat vindt u van de bouwsteen Eigendomsverhouding?

Duidelijk.

## 15. Ontbreken er bouwstenen?

Betaalbaarheid en mobiliteit.

Mobiliteit zou eventueel onder ruimtelijke component geschaard kunnen worden.

Betaalbaarheid kan meer gezien worden als een voorwaarde voor het ontwikkelen van een concept. Dan moet dus voor het starten van het ontwikkelen bekend zijn voor welke doelgroep ontwikkeld gaat worden. Hiermee kan dan rekening worden gehouden bij het invullen van de bouwstenen.

## 16. Kunt u een mogelijke andere doelstelling bedenken voor het framework?

Als een soort filter op Woonz.nl. Zo zouden mensen kunnen op basis van filters woningen vinden die passen bij hun wensen.

# 3. Afronding

## 1. Wat is uw eigen visie op het beleid van wonen en zorg?

Steeds minder ouderen hebben kinderen. Steeds meer ouderen zijn alleenstaand. Over het netwerk om de ouderen heen maak ik me zorgen. Mensen blijven te lang thuis wonen en in een isolement kunnen raken. Maar ook mensen die beginnende dementie hebben, blijven te lang thuis wonen. Daardoor wordt de kans op incidenten alleen maar groter. Ook wordt de druk voor mantelzorgers steeds groter, naarmate ouderen langer thuis blijven wonen. Op dit moment is er een tekort aan tussenvormen voor eerder genoemde groepen. Er moeten meer variaties komen alleen het aanbod reageert op dit moment te traag om de groep die tussen wal en schip valt op te vangen. Meer vormen moeten terugkomen die bepaalde functies van het oude verzorgingshuis hebben.

Meer richten op inclusieve woonwijken, alleen vaak worden er op gemeentelijk niveau beslissingen genomen die tegenover de visie van inclusieve woonwijken en zelfstandig langer thuis wonen(zoals het weghalen van buslijnen).

Betrek ouderen meer met visievorming op het gebied van zelfstandig thuis wonen. Niet alle gemeenten betrekken ouderen bij het opstellen van beleid op het gebied van zelfstandig thuis wonen.

Doelgroepen niet te veel over een kam scheren. Vaak worden ouderen samengevat in bijv. 50+, men moet zich goed bedenken dat vanaf 50 tot ongeveer 95 twee generaties zitten waarin hele diversiteit zit.

## 2. Heeft u nog op- of aanmerking in het algemeen?

XXXXX

3. Heeft u nog vragen aan mij?

XXXXX

Vragenlijst expert interview				
Onderwerp:	Framework voor concepten om thuis (zelfstandig) oud te worden			
Datum:	15-01-2019			
Locatie:	ANBO Woerden			
Geïnterviewde:	L. den Haan   Algemeen directeur ANBO			
Interviewer: Loek van Bergen en Henegouwen				
Tijdsduur:	60 minuten			

## 1. Introductie

1. Hoe lang bent al werkzaam in uw huidige functie?

14 jaar

2. Heeft u daarvoor een functie gehad met betrekking tot wonen en/of zorg?

Ja, directeur van COC Nederland (Belangenorganisatie voor groep LHTBI). Daar werd aandacht besteed aan het huisvesten van deze groep.

3. Wat voor invloed heeft het scheiden van wonen en zorg op uw huidige functie?

Wij zitten heel erg in het lobby en beleidstraject, maar aan de andere kant zitten we ook aan de cliënt kant. De markt loopt nog heel erg achter op het gebied van scheiden wonen en zorg en daarom is er veel werk in het lobbyen en het beleidstraject. Maar bij de cliënt zit vooral de complexiteit in het uitleggen van wat scheiden wonen en zorg inhoudt. Deze complexiteit speelt niet alleen een rol bij ouderen, maar ook kinderen van ouderen die geconfronteerd worden met het vraagstuk.

4. In hoeverre bent u het eens met de volgende stelling:
Het scheiden van wonen en zorg is nu volledig afgerond is. (hogere
zzp's/zorgprofielen uiteindelijk ook extramuraliseren) (Eens/Oneens; waarom?)

Oneens, is nog lang niet afgerond. Je kan wetten of beleid maken, maar nu moet het nog in de uitvoering gerealiseerd worden. Ook is de verwachting dat een deel van het verpleeghuis uit gefaseerd gaan worden. Het verpleeghuis wordt steeds meer een soort 'Hospice Plus', dus tijd dat men verblijft wordt steeds korter. Mensen willen steeds later de stap maken naar het verpleeghuis en daar zullen bepaalde tussenvormen het gat moeten opvullen.

5. In hoeverre bent u het eens met de volgende stelling:
Het scheiden van wonen en zorg geeft meer vrijheid om nieuwe concepten om
thuis (zelfstandig) oud te worden te ontwikkelen, resulterend in een groter
(potentieel) aanbod van concepten. (Eens/Oneens; waarom?)

Eens, dat kan maar dan moet je wel als corporaties, zorgbestuurders en gemeenten samen willen werken. Daarnaast moet men over hun eigen domeinschutting heen durven te gaan. Actoren moeten innovatief zijn en lef tonen. Daarnaast moeten partijen ook de interactie aan durven gaan met ouderen, omdat door die interactie mooie concepten ontstaan.

6. In hoeverre bent u het eens met de volgende stelling:
De diversiteit in woonwensen van de nieuwe generatie ouderen zorgt voor een grotere (potentiele) vraag naar nieuwe concepten. (Eens/Oneens; waarom?)

Eens.

7. *In hoeverre bent u het eens met de volgende stelling:* 

Het grotere (potentiele) aanbod van nieuwe concepten en de grotere (potentiele) vraag naar concepten is niet of nauwelijks te matchen met de huidige categoriseren van concepten. (Eens/Oneens; waarom?)

Eens, je moet het niet hebben over ouderen huisvesting. Je moet vragen hoe men wilt wonen. Hoe men over 10, 20 jaar wilt wonen. Soms is dat te realiseren in de huidige woning, maar vaak is het beter te realiseren in een concept.

8. In hoeverre bent u het eens met de volgende stelling:
Thuis (zelfstandig) oud worden behelst meer dan alleen wonen en zorg.
(Eens/Oneens; waarom?)

Eens, wonen is heel belangrijk. Dat is de basis, je moet je fijn en veilig en prettig voelen in je eigen huis. Zorg is niet zo belangrijk, want zorg kan je tegenwoordig overal leveren. Daarbij is welzijn ook een belangrijk component.

9. In hoeverre bent u het eens met de volgende stelling:
Een woning fungeert als middel om thuis (zelfstandig) oud te worden.
(Eens/Oneens; waarom?)

Eens, het doel is gelukkig leven. En het doel is op een fijne manier ouder worden. Dit geldt voor ouderen, maar ook voor veel andere doelgroepen (zoals jongeren met handicap). Wonen is een middel of zorg is een middel om fijn te kunnen leven.

10. Welke problemen ondervinden partijen bij het overleg over (nieuwe) concepten?

Wet en regelgeving

Verkokerd denken door partijen vinden het lastig om over de schutting van hun eigen domein te kijken. Partijen vinden het snel een gedoe wanneer meerdere actoren betrokken worden bij het ontwikkelen van concepten.

Onbekendheid met materie

Cultuuromslag is nog niet gerealiseerd.

Gebrek aan ondernemerschap en lef bij corporaties, gemeenten en zorginstellingen.

Corporaties, gemeenten en zorginstellingen denken te traditioneel.

## 2. Framework

## 1. Wat is uw algemene indruk van het framework?

Alles zit erin. Welke bouwstenen zijn belangrijk voor welke partijen zou leuk zijn om te onderzoeken.

**2.** In hoeverre bent u het eens met de volgende stelling:

De verschillende bouwstenen kunnen samen een concept om thuis (zelfstandig) oud te worden vormen. (Eens/Oneens; waarom?)

#### Eens

**3.** *In hoeverre bent u het eens met de volgende stelling:* 

**De doelstelling van het framework is duidelijk.** (Eens/Oneens; waarom?)

## Eens

**4.** *In hoeverre bent u het eens met de volgende stelling:* 

Het framework vormt een basis voor de discussie over (nieuwe) concepten. (Eens/Oneens; waarom?)

#### Eens

**5.** *In hoeverre bent u het eens met de volgende stelling:* 

Het framework vormt een basis om vraag en aanbod van concepten beter te matchen. (Eens/Oneens; waarom?)

Eens, mits je een stuk voorwaardes toevoegt. Aan de hand van de voorwaardes kunnen de bouwstenen ingevuld worden.

## 4. Wat vindt u van de bouwsteen Object?

Duidelijk, mensen hebben het niet vaak over de grootte van de woning. Meer over technologie die in een woning zou kunnen komen.

## 5. Wat vindt u van de bouwsteen Zorg?

Duidelijk, zorg kan je overal leveren. In het bouwen van de woning moet men wel rekening houden dat er zorg geleverd kan worden (bredere deuren, geen drempels).

## 6. Wat vindt u van de bouwsteen Service?

Duidelijk, hier zou je ook van mobiliteit onder kunnen scharen. Bijvoorbeeld een buurtbus.

## 7. Wat vindt u van de bouwsteen Ontmoeting & Activiteiten?

Duidelijk, betrek meerdere partijen erbij. Zorg ervoor dat je welzijnsorganisaties binnen je concept kan krijgen. Welzijnsorganisaties hebben nog vaak hun eigen onderkomen, dit zou gecombineerd moeten worden met concepten.

#### 8. Wat vindt u van de bouwsteen Bouwtechnisch?

## Duidelijk.

## 9. Wat vindt u van de bouwsteen Technologie?

Duidelijk, heel veel technologieën kunnen al worden aangelegd tijdens de bouw. Die technologieën hoeven niet actief te zijn en hoeven pas actief gemaakt te worden wanneer men het nodig heeft.

## 10. Wat vindt u van de bouwsteen Ruimtelijke component?

Duidelijk, voor ouderen moeten bepaalde voorzieningen(Art, Albert Heijn, Apotheek) binnen maximaal 500 meter van hun woning zitten. Of er moeten goede OV-voorzieningen zijn.

## 11. Wat vindt u van de bouwsteen Toelatingseisen?

Duidelijk, deze zal je waarschijnlijk al bepalen tijdens het opstellen van je voorwaardes voor een concept.

## 12. Wat vindt u van de bouwsteen Contract?

Duidelijk, heel complex voor ouderen. ANBO krijgt hier vaak vragen over vanuit ouderen. Voor ouderen is het vaak onduidelijk waar ze precies voor tekenen.

## 13. Wat vindt u van de bouwsteen Type aanbieder?

Duidelijk. Handig om de onderliggende relaties van aanbieders binnen een concept in kaart te krijgen.

## 14. Wat vindt u van de bouwsteen Eigendomsverhouding?

Duidelijk, hier vloeien ook een aantal juridische aspecten uit die belangrijk zijn bij het ontwikkelen van concepten

## 15. *Ontbreken er bouwstenen?*

Er ontbreken geen bouwstenen, maar misschien een duidelijke behoefte bepaling zijn voorgaand aan het inzetten van het framework.

## 16. Kunt u een mogelijke andere doelstelling bedenken voor het framework?

Communicatie naar ouderen om concepten te verduidelijken.

Het framework kan ook verduidelijken welke partijen aan het realiseren van een concept mee moeten doen. Per bouwsteen zou bepaalt kunnen worden welke partij betrokken wordt.

# 3. Afronding

## 1. Wat is uw eigen visie op het beleid van wonen en zorg?

In Nederland moeten partijen af van het verkokerd denken. Bijvoorbeeld corporaties die denken ik moet alleen woningen bouwen of zorginstellingen die alleen zorg moeten leveren. Partijen moeten zich gezamenlijk een bijdrage leveren om ouderen prettig zelfstandig oud te laten worden. Daar is een grote cultuuromslag voor nodig en daar zet de ANBO zich voor in. Dat begint met gemeenten die een geïntegreerde visie hebben over hoe ouderen prettig ouder kunnen worden. Daar is wonen een onderdeel van, daar kan zorg een onderdeel van zijn, de leefomgeving en activiteiten in de buurt. Dan ben je als geheel bezig met een ander doel. Je bent niet bezig met een X aantal woningen bouwen of bij hoeveel huishoudens moet ik zorg leveren.

## 2. Heeft u nog op- of aanmerking in het algemeen?

#### XXXXX

## 3. Heeft u nog vragen aan mij?

#### XXXXX

Vragenlijst expert interview				
Onderwerp:	Framework voor concepten om thuis (zelfstandig) oud te worden			
Datum:	17-01-2019			
Locatie:	Gemeente Rotterdam			
Geïnterviewde:	N.A. Miedema   Beleidsadviseur Wonen & Zorg			
Interviewer:	Loek van Bergen en Henegouwen			
Tijdsduur:	60 minuten			

# 1. Introductie

1. Hoe lang bent al werkzaam in uw huidige functie?

3 jaar

2. Heeft u daarvoor een functie gehad met betrekking tot wonen en/of zorg?

Ja, bij WoonZorg Nederland gewerkt als beleidsadviseur voor 5 jaar.

3. Wat voor invloed heeft het scheiden van wonen en zorg op uw huidige functie?

Door het wegvallen van verzorgingshuis vallen veel zorgbehoevende ouderen tussen wal en schip. Daardoor zullen er voor de zorgbehoevende die vroeger naar het verzorgingshuis doorstromen ook opties moeten komen. De gemeente staat hierdoor voor de taak om dit op wijkniveau in te richten en dit is een flinke uitdaging.

**4.** In hoeverre bent u het eens met de volgende stelling:

Het scheiden van wonen en zorg is nu volledig afgerond is. (hogere zzp's/zorgprofielen uiteindelijk ook extramuraliseren) (Eens/Oneens; waarom?)

Oneens, door de ontwikkelingen op het gebied van technologie ontstaan er steeds meer mogelijkheden om mensen langer zelfstandig thuis te laten wonen. Het lijkt er daardoor op dat nog een gedeelte van verpleeghuis uit gefaseerd gaat worden, waardoor ook ouderen met hogere zzp's/zorgprofielen afhankelijk worden van woningen op de woningmarkt. Daarnaast lopen veel huidige ouderen achter op het scheiden van wonen en zorg, de wat oudere groep ouderen heeft nooit bewust kunnen anticiperen op het verdwijnen van het verzorgingshuis en hebben daardoor bepaalde aanpassingen aan hun woning of zijn zich niet bewust van verhuismogelijkheden.

**5.** *In hoeverre bent u het eens met de volgende stelling:* 

Het scheiden van wonen en zorg geeft meer vrijheid om nieuwe concepten om thuis (zelfstandig) oud te worden te ontwikkelen, resulterend in een groter (potentieel) aanbod van concepten. (Eens/Oneens; waarom?)

Eens, men is minder gebonden aan de vaste financieringsstromen vanuit de centrale overheid. Ouderen bepalen nu zelf waar ze hun woonlasten aan uitgeven en dat geeft actoren meer vrijheid om een groter aanbod te gaan ontwikkelen

**6.** *In hoeverre bent u het eens met de volgende stelling:* 

De diversiteit in woonwensen van de nieuwe generatie ouderen zorgt voor een grotere (potentiele) vraag naar nieuwe concepten. (Eens/Oneens; waarom?)

Eens, men wil niet meer wonen in het traditionele verzorgingshuis met een kamer van 15 vierkante meter. Ouderen willen de mogelijkheid om hun kinderen of kennissen te kunnen ontvangen in hun eigen kamer. Als er een goed alternatief zou zijn voor bijv. het traditionele verzorgingshuis zouden ouderen daar zeker geïnteresseerd in zijn. Probleem is alleen wel dat bijvoorbeeld ouderen in koopwoningen genieten van fiscale voordelen en niet zo snel naar een andere woning zullen verhuizen omdat de woonlasten dan ineens erg stijgen.

7. *In hoeverre bent u het eens met de volgende stelling:* 

Het grotere (potentiele) aanbod van nieuwe concepten en de grotere (potentiele) vraag naar concepten is niet of nauwelijks te matchen met de huidige categoriseren van concepten. (Eens/Oneens; waarom?)

Eens, met de huidige categorisering kan je misschien nog wel de absolute aantallen matchen. Maar de kwaliteit en de wensen van ouderen sluiten alleen niet meer aan de huidige categorieën. De oude categorieën hoeven niet per se afgeschreven te worden, maar men zal er wel iets ander mee moeten doen(transformeren) om het aantrekkelijk te maken voor ouderen.

**8.** *In hoeverre bent u het eens met de volgende stelling:* 

Thuis (zelfstandig) oud worden behelst meer dan alleen wonen en zorg. (Eens/Oneens; waarom?)

Eens, andere factoren zijn vaak belangrijker voor mensen dan alleen het stukje wonen of het stukje zorg. Bijvoorbeeld bij eenzaamheid speelt de mogelijkheid tot ontmoeting een grote rol, dit kan men realiseren in de buurt of direct bij een concept.

9. In hoeverre bent u het eens met de volgende stelling:
Een woning fungeert als middel om thuis (zelfstandig) oud te worden.
(Eens/Oneens; waarom?)

Oneens, het is iets noodzakelijks en daardoor meer een voorwaarde dan een middel. De woning is wel de basis van alles als het gaat om zelfstandig oud te kunnen worden.

# 10. Welke problemen ondervinden partijen bij het overleg over (nieuwe) concepten?

Er zijn heel veel verschillende initiatiefnemers zowel commercieel als particulier. Particuliere groepen zijn vaak groepen ouderen die samen wat willen of bijvoorbeeld kinderen die iets anders willen voor hun ouders in verpleeghuizen. Maar een heleboel mensen weten niet hoe ze het realiseren van een concept moeten aanpakken, dit komt vaak door gebrek aan kennis en ervaring. Daarnaast is bij particulieren ook vaak het probleem dat er geen tot weinig financiële middelen zijn.

Voor commerciële partijen is het lastig om in de stad concepten uit de regio te realiseren omdat in de stad vaak een gebrek aan ruimte is of sprake van dure grond. In de stad moet het vaak compact en in de hoogte, veel partijen willen dan in de rand van de stad iets realiseren terwijl de opgave juist in het centrum en omringende gebieden ligt.

Corporaties nemen weinig initiatief binnen de gemeente Rotterdam om concepten te realiseren. Corporaties zitten vaak nog met oud vastgoed (bijv. oude verzorgingshuizen) die getransformeerd dienen te worden i.p.v. het daadwerkelijk realiseren van nieuwe vastgoed. In Rotterdam wordt het oude vastgoed vaak ingezet om Bijzondere doelgroepen (verslavingszorg, daklozen) te vestigen. Dit is vaak makkelijker te realiseren voor corporaties vergeleken met het transformeren naar zelfstandige woningen.

Zorginstellingen hebben geen middelen om of vastgoed te transformeren voor nieuwe concepten of om geheel nieuw vastgoed te bouwen.

Problemen ontwikkeling van concepten zijn vaak zaken over brandveiligheid, parkeernorm. Bij het een verpleeghuis gelden andere regels voor brandveiligheid in vergelijkring met zelfstandige woningen. Bij zelfstandige woningen geldt ook een andere parkeernorm vergeleken met het verzorgingshuis, terwijl je bij een nieuw concept eigenlijk probeert dezelfde doelgroep te huisvesten.

Problemen met bijvoorbeeld verkoop van gemeentelijk vastgoed (scholen, sportcomplexen) en grond is dat particuliere initiatief nemers buiten de boot vallen bij het verkrijgen van vastgoed. Rotterdam heeft het beleid dat gemeentelijk vastgoed en grond verkocht wordt aan de hoogste bieder. Hierdoor gaat grond vaak naar beleggers omdat particuliere initiatieven niet de financiële middelen hebben.

Daarnaast heeft de gemeente Rotterdam vaak problemen met het in stand houden van concepten. Hierbij komt vaak voor dat de initiële afspraken bij het ontwikkelen van het concept niet nagekomen worden bij de uiteindelijke realisatie. Of concepten worden wel gerealiseerd, maar verdwijnen alweer na een paar jaar.

De verschillende partijen die betrokken zijn bij de ontwikkeling van de concepten. De vastgoed wereld is alleen een hele andere wereld dan de zorg wereld en dit zorgt nog wel eens dat men verschillende talen spreekt. Hierdoor begrijpen partijen elkaar niet of nauwelijks.

# 2. Framework

## 1. Wat is uw algemene indruk van het framework?

Leuk, ziet er mooi uit. Compleet.

2. In hoeverre bent u het eens met de volgende stelling:

De verschillende bouwstenen kunnen samen een concept om thuis (zelfstandig)
oud te worden vormen. (Eens/Oneens; waarom?)

Eens.

**3.** *In hoeverre bent u het eens met de volgende stelling:* 

**De doelstelling van het framework is duidelijk.** (Eens/Oneens; waarom?)

Eens, zeker met het afstemmen tussen meerdere partijen kan het werken op een effectieve manier invulling te geven aan een concept.

4. In hoeverre bent u het eens met de volgende stelling:

Het framework vormt een basis voor de discussie over (nieuwe) concepten.

(Eens/Oneens; waarom?)

Eens, wanneer je het framework gebruikt als leidraad tijdens een discussie kan het zeker als basis fungeren.

5. In hoeverre bent u het eens met de volgende stelling:

Het framework vormt een basis om vraag en aanbod van concepten beter te
matchen. (Eens/Oneens; waarom?)

Eens, in principe hebben alle groepen behoefte aan een fijne plek om te wonen maar door het verschil in inkomen zal je goed moeten zoeken hoe je bepaalde bouwstenen invult met elkaar. Doordat sommige mensen meer te besteden hebben zal je bepaalde bouwstenen (vooral extra services) op een makkelijkere manier kunnen aanbieden in vergelijking met mensen met een lager inkomen.

4. Wat vindt u van de bouwsteen Object?

Duidelijk, logisch dat het object centraal staat binnen het concept.

5. Wat vindt u van de bouwsteen Zorg?

Omdat ouderen in Nederland tegenwoordig ook 24-uurszorg thuis kunnen krijgen zouden eventuele extra faciliteiten een concept kunnen onderscheiden.

6. Wat vindt u van de bouwsteen Service?

Dit zal niet voorkomen bij alle concepten zoals de serviceflat. Alleen dit concept loopt niet meer omdat de kosten zijn te hoog voor het pakket services waarvan ouderen misschien enkele services gebruiken.

7. Wat vindt u van de bouwsteen Ontmoeting & Activiteiten?

Duidelijk, vooral het stukje organisatie wat er aan vast zit is belangrijk.

8. Wat vindt u van de bouwsteen Bouwtechnisch?

Hierbij is belangrijk dat een balans gevonden wordt in hoeverre je een bouwtechnisch gereed maakt om zelfstandig oud te kunnen worden. Niet iedereen hoeft een rolstoelvriendelijke woning te hebben. Voor veel ouderen is alleen rollatortoegankelijk voldoende. Een probleem wat veel voorkomt is het stallen van scootmobielen, veel vastgoed is niet gebouwd om een grote hoeveelheid scootmobielen te stallen. Vanwege brandveiligheid mogen de scootmobielen niet op galerijen of gangen staan, maar hier zijn veel gebouwen niet op gebouwd.

9. Wat vindt u van de bouwsteen Technologie?

Heel interessant en spannend voor de gemeente. Er is een groep die heel sterk dat de inzet van technologie de volledige oplossing is om zelfstandig oud te kunnen worden, daarentegen is er ook een groep die er totaal niet in geloofd. Mensen die er niet in geloven zien vaak hoge implementatie kosten als barrière en door constante technologische vooruitgang loop je eigenlijk altijd achter op de nieuwste technologie. Daarnaast zijn sommige mensen tegenstander omdat technologie vaak gezien wordt als een vervanger voor het menselijke aspect of contact.

10. Wat vindt u van de bouwsteen Ruimtelijke component?

Bij nieuwe initiatieven is het belang dat men rekening houdt waar men een concept gaat realiseren. Het realiseren van concepten voor ouderen in Rotterdam gebeurt in voorkeur ongeveer 200 meter van een OV-knooppunt. Bij bijvoorbeeld gemeentelijk vastgoed die op onaantrekkelijke locaties liggen kan men het verkopen aan de hoogste bieder, maar bij locaties die op aantrekkelijke locaties liggen is de gedachte om het vastgoed aan te bieden aan een bepaalde doelgroep.

## 11. Wat vindt u van de bouwsteen Toelatingseisen?

Voor sommige concepten kan dit erg van belang zijn. Bijvoorbeeld woongroepen waar op basis van nationaliteit wordt toegelaten. Lastige met woongroepen is dat ze vaak een onderdeel zijn van sociale voorraad en daarom zal je dus uit woningnet moeten halen om ze speciaal toe te wijzen aan een woongroep. Hierdoor moet je dus van het beleid afstappen om passend toe te wijzen en daardoor krijgt niet iedereen meer dezelfde kansen om een toegelaten te worden tot een woning.

## 12. Wat vindt u van de bouwsteen Contract?

Het is belangrijk voor alle partijen om vooraf duidelijk te hebben wat voor contracten er worden afgesloten met welke partijen. Zeker voor zorgaanbieders bij een concept is het bijvoorbeeld wenselijk dat mensen ook bij hun de zorg afnemen. In theorie heeft iedere ouderen de vrijheid om zelf een zorgaanbieder te kiezen, maar in de praktijk zie je wel dat bij sommige concepten gezegd wordt; als je hier wilt wonen zal je ook zorg bij ons moeten afnemen.

## 13. Wat vindt u van de bouwsteen Type aanbieder?

Als er meer partijen betrokken zijn bij een concept wordt het belangrijk om goed vast te leggen wie waar verantwoordelijk voor is.

## 14. Wat vindt u van de bouwsteen Eigendomsverhouding?

Duidelijk, als je kijkt naar de praktijk zijn er maar weinig concepten in de koopsector.

#### 15. Ontbreken er bouwstenen?

Nee, het lijkt compleet.

#### 16. Kunt u een mogelijke andere doelstelling bedenken voor het framework?

Het framework kan ook ingezet worden als toetsingskader. Om initiatieven te kunnen toetsen op basis van de bouwstenen.

Gespreksleidraad bij overleg tussen partijen.

# 3. Afronding

## 1. Wat is uw eigen visie op het beleid van wonen en zorg?

Er moet zeker iets komen tussen wonen in de huidige woning en het verpleeghuis. Aan de ene kant kunnen ouderen best verspreid blijven wonen binnen een wijk, mits je goede voorzieningen kan faciliteren. Maar aan de andere kant is het makkelijker om voorzieningen te faciliteren wanneer mensen geclusterd zelfstandig wonen.

## 2. Heeft u nog op- of aanmerking in het algemeen?

Het afstappen van het begrip woonzorgconcepten is interessant. Zeker omdat er vaak gevraagd wordt om lijstjes met woonzorgconcepten aan te leveren, maar dit is nogal een complexe taak. Vooral omdat de definitie onduidelijk, voornamelijk doordat zorg overal te verkrijgen is en geen onderscheidt meer geeft met een 'normale' woning. Binnen gemeente Rotterdam zijn er mensen die de term 'tussenvoorziening' gebruiken, alleen deze term wordt vaak geassocieerd met het huisvesten van psychiatrische doelgroepen.

## 3. Heeft u nog vragen aan mij?

XXXXX

# **Appendix F: Examples of the application of the framework**

, te periodix i i zx	Example questionnaire
Fixed building block	Fixed characteristics
Residential object	What category dwelling do you prefer?  A. Independent dwelling, B. Independent residential unit C. Dependent residential unit D. No preference  What size living area do you desire?  A. 0-89 square meters B. 90-119 square meters C. 120 or more square meters D. No preference  How many number of rooms do you desire  A. 1-3 rooms B. 4 rooms C. 5 or more rooms D. No preference  What setting do you desire?
	A. Single residential object  B. Agglomeration of residential objects
Building blocks	C. No preference Options
Care	What (direct) care options do you desire? (Combination of options is possible)  A. 24-hour on-site care staff B. 24-hour emergency staff C. Health monitoring D. Nursing facilities on-site E. No preference F. None above
Service	What (direct) service options do you desire? (Combination of options is possible)  A. Catering service B. Laundry service C. Hairdresser D. Pedicure E. Reception F. Technical service G. Assistance with groceries H. No preference I. None above
Social participation	Do you prefer the presence of a communal area with organised activities?  Yes/No (If yes, what kind of activities?)
Spatial component	What location for the housing model to you prefer? (basic facilities; supermarket, general practioneer, pharmacy, public transport node)  A. On a closed private property (for example, property of institution)  B. Integrated with community with basic facilities within walking distance (200m)  C. Integrated with community without basic facilities within walking distance (200m)  D. No preference
Technology	What (direct) technological options do you desire? (Combination of options is possible)  E. Home automation  F. Domotics  G. Door spy  H. Alarm system  I. None above
Additional construction	Do you prefer any additional construction regulation to be present?

regulation	(examples: Thressholdless (in Dutch: 'drempelloos') Dutch examples of
regulation	
	labels: Seniorenwoning, Woonkeur, Oppluslabel & Sterwoning
	Yes/No (if yes, what kind of additional construction regulation?)
	Do you prefer any admission requirements for the housing model?
	(Combination of options is possible)
	A. Maximum age limit
A destruction or anti-construction	
Admission requirements	B. Minimum age limit
	C. Minimum demand for care
	D. Maximum demand for care
	E. No preference
	What kind of contract do you prefer in order to make use of options?
	A. No contract, all options are optional
Contract	B. Partial contract, some options are not included in the contract
	C. All inclusive contract, all options are included
	D. No preference
	How do you prefer the options to be organised
B 11	A. A professional organisation organises all options
Provider	B. A combination of professionals and volunteers organise the options
	C. No preference
	What tenure status do you prefer?
	A. Social housing
Tenure status	B. Private Rental
	C. Owner-occupied
	D. No preference

Example framework used as a frame of reference by the municipality of The Hague

Framework voor een concept om (thuis) zelfstandig oud te worden	
Object	Hoe ziet het object eruit? Is er sprake van zelfstandige of onzelfstandige wooneenheden? Wat zijn de oppervlaktes en hoeveel kamers hebben de wooneenheden? Zijn er openbare ruimtes aanwezig?
Zorg	Zijn er (directe) zorg mogelijkheden aanwezig? Zo ja, wat en hoe is dit georganiseerd?
Service	Zijn er service mogelijkheden aanwezig? Zo ja, wat en hoe is dit georganiseerd? Bijv. Receptie, klusjesman, kapper, restaurant, pedicure
Ontmoeting & Activiteiten	Zijn er mogelijkheden tot ontmoeting of activiteiten aanwezig? Zo ja, wat en hoe is dit georganiseerd?
Ruimtelijke component	Waar is het object gesitueerd? Zijn er bepaalde voorzieningen aanwezig in de buurt? Bijv. OV, Supermarkt, Huisarts, Apotheek
Technologie	Welke technologie is aanwezig? Bijv. domotica, deurspion, zorgrobot
Bouwtechnisch	Voldoet het object aan extra technische eisen boven op het Bouwbesluit zoals Woonkeur?
Toelatingseisen	Zijn er toelatingseisen aanwezig voor dit concept? Bijv. Inkomen, leeftijd, minimale zorgbehoefte.
Contract	Wordt er een contract afgesloten om zorg, service of overige diensten af te nemen? Zo ja, wat voor contract?
Type aanbieder	Wie is/zijn de aanbieder(s) van het vastgoed, zorg en overige (service) diensten?
Eigendomsverhouding	Welke eigendomsverhoudingen zijn aanwezig in het concept? Sociale huur, part. huur en/of koop? Of een mix?