Housing and Ageing: Let’s Get Serious—“How Do You Plan for the Future while Addressing Immediate Chaos?”

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Abstract

This article presents findings from the Housing and Ageing programme conducted in 2018 that investigated how the housing sector can effectively plan for an ageing population. The project took a transdisciplinary approach to focus on new, critical insights into the process of decision making concerning housing and ageing across Scotland, England and Wales. A ‘Serious Game’ methodology was developed that explored over 200 policy maker, practitioner and service user perspectives. This was used as a framework to capture priorities, decisions, negotiations and processes that indicate how a ‘sense of place’ and ‘place belonging’ can influence the development of suitable housing for older people. Key housing provision challenges identified were tackling inequality, preserving autonomy, in(ter)dependence, empowerment and accessibility. Such challenges need consideration when strategically planning for the future. The findings recommend placing housing at the heart of service integration to support the co-production of decisions that emphasise the importance of working together across boundaries within social policy, service and stakeholder groups. A place-based approach can support the perception that we are all stakeholders in ageing.

Keywords

ageing policy; community; co-production; equalities; home; housing policy; housing practice; Serious Game methodology; service integration; strategic planning

Issue

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1. Introduction

Households led by those aged over 85 will double over the next 25 years in the UK (Office of National Statistics, 2016), making planning for future housing provision a top priority. However, the UK housing sector is “woefully underprepared” for an ageing population (Lords Select Committee, 2013; UK Parliament, 2017). The current picture of the housing sector includes perceptions of ‘crisis’ (Boyack, 2018), ‘generational conflict’ (Hoolachan & McKee, 2018) alongside the media reporting general ‘chaos’ around lack of adequate housing (ESRI in the Independent; see Doyle, 2018; see also “Housing марка”). This perception of ‘chaos’ is also embedded in the context of austerity (referring to the economic, political and policy climate post global economic crisis in 2008 that has seen a drive to reduce the amount of money the UK government spends on various services) and the political uncertainty arising from ‘Brexit’ in the UK. ‘Brexit’ refers to a United Kingdom referendum in 2016 where 52% of the people of the United Kingdom voted to leave the European Union. This has influenced the popular media term ‘Brexit,’ which at the time of this article submission is still being negotiated by the UK Government. These narratives and perceptions point towards the increasing challenges and conflict between resources given to addressing the immediate and future needs in the housing sector.

This article presents findings from a UK Housing and Ageing programme, led by the Universities of Stirling, Dundee and Heriot-Watt that brought academics, stakeholders, older people, practitioners, and policy makers together to address the current and critical topic of housing and ageing in the UK. A ‘Serious Game’—a bespoke, personalised, strategic exercise that captures priorities, decisions, negotiations and processes that relate to how a sense of place and belonging is created for older people—was created and delivered throughout 2018 to allow an examination of how participants negotiated potential obstacles for delivering housing and ageing strategies by 2030. This article outlines this creative methodology in more detail and presents the findings from the Housing and Ageing programme answering the key question: How do you plan for the future of an ageing population while also addressing immediate chaos?

Project implications for an ageing population in the housing sector include the need for homes that better support health and care needs (Government Office for Science, 2016). Estimates suggest that the older population will account for 60% of household growth by 2030 (Local Government Association, 2017, p. 4). The devolved nations of Scotland, Wales and England have planned for this in different ways, with specific strategies focused on housing and ageing. Our article outlines the current UK housing and ageing context and explores the wider implications of strategic planning around the key themes of negotiation, collaboration and integration to identify co-designed recommendations for the UK housing sector.

2. Housing and Ageing Policy in Scotland, England and Wales

Alongside the UK Government’s Housing Strategy, the devolved governments have several strategies that link to housing for older people in Scotland (such as the “Age, Home and Community 2012–2021” strategy; see Scottish Government, 2011a) and Wales (“Strategy for Older People 2013–2023”; see Welsh Government, 2013). Policy review groups emphasise an urgent need to focus on the implementation phase of these strategies and to set up possibilities for collaboration (Welsh Government Expert Group, 2017).

2.1. Policy in Scotland

“Age, Home and Community: A Strategy for Housing for Scotland’s Older People 2012—2021” was published by the Scottish Government and the Convention of Scottish Local Authorities in 2011 and revised in 2018 with the intention of presenting a vision for housing and housing-related support for older people. As well as the Scotland Act in 2016 devolving a range of social security powers to the Scottish Parliament, there has also been the formation of 31 new health and social care partnerships set up to deliver integrated health and social care services. The housing sector constitutes a key domain of policy integration between health and social care (McCall, Hoyle, & Gunasinghe, 2017). The introduction of self-directed support, following the Social Care Act of 2013, in Scotland, and the “Fairer Scotland” action plan of 2016, includes specific actions directed towards older people to help tackle poverty, reduce inequality and build a fairer and more inclusive Scotland. This highlights the increasingly devolved context for housing and ageing in the UK. For Scotland, when speaking to participants of the Housing and Ageing programme, the Minister for Local Government and Housing, Kevin Stewart (as cited in McCall et al., 2018, p. 3), noted that:

It’s never too early to start thinking about where and how we will live as we grow older. We should all be leading by example and thinking about our future housing requirements early enough to plan rather than reacting to a crisis situation when there are fewer choices available.

He pointed out that by 2030 there will be over 600,000 people aged 75 or over in Scotland, and emphasised the need to ensure and plan for suitable housing and services for individuals to continue living independently at home, maintaining their connections with people and place. The Scottish Government (2019) also launched a visionary housing policy for 2040 that prioritises planning for an ageing population.
2.2. Policy in Wales

Building on the Welsh Government’s “Strategy for Older People” (planned for 2003–2013 and 2013–2023), and the recognition of the centrality of good quality housing in supporting older people to live ‘independently,’ the Welsh Government commissioned an expert group on housing an ageing population to inform the Welsh policy approach. The group reported in 2017, recommending that there should be a better understanding of the housing preferences and choices of older people, closer partnership working, increased investment and financial incentives to stimulate the market and enable creative solutions across all tenures to be adopted, to build new homes and improve existing housing for older people, and increased access to information, technology, community equipment, aids and adaptations.

The Welsh Government’s national strategies “Prosperity for All” (implemented in 2017) and “A Healthier Wales” (in 2019) has been influenced by this report, which has sharpened the role played by housing in supporting the wellbeing of older people. In relation to ‘ageing in the right place’ (Golant, 2008, 2015) the Welsh Government has expanded housing ‘choice’ and ‘voice’ through initiatives in association with Care-and-Repair where case workers are helping older people to formulate moving plans and small scale aids and adaptations have been available through the new “Enable” scheme as part of a help-to-stay policy. Since 2012, over £150 million has been invested to improve over 27,000 homes, reduce energy bills and help households to heat their homes at a more affordable cost. However, challenges remain in encouraging the private sector to develop housing in some areas of Wales, to ensure a choice of affordable homes that are age and eco sustainable (Pamment, Jenkins, Morgan, Williams, & Willmott, 2019).

For Wales, as part of the Housing and Ageing programme Minister for Housing and Regeneration, Rebecca Evans, noted that the Welsh Government supported partnership and collaboration between the health, social care and housing sectors. Future-proofing housing stock is part of a strategic program of capital investment with housing at its core (McCall et al., 2018).

2.3. Policy in England

It is now more than a decade since the publication of Lifetime Homes, Lifetime Neighbourhoods (Department for Communities and Local Government, 2008). This was a game changer and set out the first ever national strategy on housing for older people in England. The Local Government Association suggests a shortfall of 400,000 well-designed, attractive accommodation for later living homes by 2035, and has called for a ‘residential revolution’ in planning and building suitable homes for an ageing population (Local Government Association, 2017). Recent planning guidance notes encourage local authorities to plan for accessible and adaptable housing for older and disabled people, including reference to the ‘age friendly’ HAPPI design principles (Ministry for Housing, Local Government and Communities, 2019). The UK Government has also launched a competition, Home of 2030, to drive innovation in the future provision of affordable, efficient and healthy green homes for all (HM Government, 2019).

The influential Housing our Ageing Population Panel for Innovation (HAPPI, n.d.) reports lay out a new foundation for ‘care ready’ homes that can adapt to accommodate the changing needs and aspirations of older people in urban and rural areas through a greater diversity of supply and quality design. This has been exemplified in a RIBA publication on age-friendly housing (Park & Porteus, 2018).

Within the overall UK context, the “Industrial Strategy: Grand Challenge” seeks to ensure that people can enjoy at least five extra healthy, independent years of life by 2035 (Department of Business, Energy and Industrial Strategy, 2019). This link between housing and health and wellbeing is vital, and it is recognised in the Innovate UK’s (2019) Healthy Ageing Challenge; housing plays a significant preventative role in enabling people to age well, stay well and live well while, at the same time, reducing the system pressures on health and social care services.

3. Housing, Ageing and Place

The role of housing in supporting an ageing population to live independently has become a key theoretical and policy driver (Sixsmith & Sixsmith, 2008; Sixsmith, Fang, Woolrych, & Sixsmith, 2017) of the devolved nations. To achieve this, housing supports are needed that enable older adults to live independently, located in a community of choice and surrounded by services and amenities that meet the often complex and changing requirements of old age (Greasley-Adams, Robertson, Gibson, & McCall, 2017; Woolrych & Sixsmith, 2017). If such supports are not available, then ageing-in-place can be a negative experience (Sixsmith & Sixsmith, 2008). Much existing research and housing development has focused on the design of Lifetime Homes and Neighbourhoods and associated physical design guidelines, however the concentration on housing as ‘bricks and mortar’ has largely overlooked the psycho-social notion of home and its connectedness within the context of community. Taking this more holistic view, ageing in the right place (Golant, 2015) would require housing, home and community to support a sense of place and belonging by creating psychological, social and environmental supports that provide a viable environment in which to age (Phillips, Walford, & Hockey, 2011). Sense of place and belonging is articulated through the availability and accessibility of facilities and opportunities for active living, social participation and meaningful involvement in the community. Here, preserving autonomy, independence, empowerment and accessibility in terms of the provisions of
home and community are key goals. However, the over-65 age group has different needs across different tenures alongside structural inequalities that reduce their housing choices (McCall, Satsangi, & Greasley-Adams, 2019). This makes a clear housing strategy and supporting process for an ageing population particularly difficult, as housing itself needs to be integrated into wider policies (such as health, social care, technology, planning) and involves a complex set of multifaceted outcomes such as ‘home,’ independence, empowerment, belonging and wellbeing.

The inclusion of housing within integrated care frameworks recognises the importance of homes to people’s wellbeing and the vital role that housing and home plays in improving people’s health. Living a purposeful life and social participation are also important aspects of living well across the life course (Greasley-Adams et al., 2017; Low & Molzahn, 2007) with a degree of control over the residential environment being fundamental to ageing well in place (Cutchin, 2003). Therefore, putting older people at the heart of local authority decision-making around where they live should be encouraged to support better quality of life.

4. Participation and Co-Production

To understand the integrated role of housing and the needs of older people, research has begun to centralise the voices of older people themselves. Elements of representation, co-production and co-design methods have successfully produced insights into the priorities and resources existing within different communities (Greasley-Adams et al., 2017; Matthews et al., 2015). From this research, home and neighbourhood has been shown to contribute to a ‘good’ life in older age (Bowling et al., 2003; Greasley-Adams et al., 2017). However, as suggested earlier quality of life is impacted adversely if people age in a place where there is insufficient access to appropriate services, experience social isolation and/or live in housing that is physically unsuitable for their changing needs (Vanleeuwerberghe, De Witte, Claes, Schalock, & Verte, 2017). In this way, housing, health and social care are inextricably linked in maintaining a good life in later years.

Co-production is a term that is increasingly used when discussing citizen engagement and is used as a model within the delivery of public services. It aims to create an equal and reciprocal relationship or exchange between service users and service providers (Realpe & Wallace, 2010). The overarching principles of co-production for public service reform in Scottish policy involve prioritising spending on prevention, public service providers working in partnership with communities, public services being built around people and communities, and focusing on continuous improvement (McGeachie & Power, 2015). In Wales, core principles of co-production in public services have been identified as individuals, families, communities and services working together to design and deliver products and services (Phillips & Morgan, 2014), while in England the Local Government Association (2019) defines co-production as ‘fundamentally about seeing people as assets…no longer passive recipients of services, but…equal partners in designing and delivering activities to improve outcomes.’

Co-production is now considered to be instrumental in improving services by both the Scottish Government and Scottish local authorities (Loeffler, Power, Bovaird, & Hine-Hughes, 2013). The Older People’s Commissioner in Wales has produced guidance on how to embed co-production nationally and locally (Ageing Well in Wales, 2015; Older People’s Commissioner for Wales, 2014a) as well as a toolkit for older people on how to engage effectively with local authorities (Older People’s Commissioner for Wales, 2014b). In England, the value of co-produced approaches in service design and delivery is widely acknowledged in health and social care sectors (Department of Health London, 2010).

Collaborative ways of providing housing are becoming more commonplace to build community resilience through co-producing and co-creating locally driven housing solutions for older people (Stevens, 2016). This commitment to co-production is embedded in strategies for housing and older people (Scottish Government, 2011a, 2011b; Welsh Government, 2013). Mechanisms for capturing and evaluating such information are therefore necessary but can be difficult to execute in practice, especially when the issues are complex and require considerable thought beyond individual experience into future visualisation of possibilities. This was the inspiration for our ‘Serious Game’ methodology, which centralises the involvement of older people as essential voices amongst a range of stakeholders to explore perceptions of housing in addition to understanding expectations.

5. The Serious Game: Methodology

The innovative ‘Serious Game’ methodology was based on the design, development and facilitation of a face-to-face participatory game to explore through serious play the potential long-term impacts of different policies and decision-making processes behind it. Games are particularly good at synthesising complex issues, thereby making them more accessible to lay persons or non-experts. Looking at the development of ‘Serious Games,’ this can involve learning, promoting knowledge, skills, social skills and even behavioural change while also promoting an enjoyable experience (Boyle et al., 2016). This results in a co-production process, which Mitlin et al. (2019) argue is essential to generating insight to urban transformation as it addresses unequal power relationships. The project gained ethical approval from the University of Stirling on 29 March 2018 and adopted a comprehensive transdisciplinary approach. The approach is designed to transcend disciplinary perspectives by attending to knowledge integration, teamwork processes and working across sectoral boundaries to tackle real world problems (Boger...
et al., 2017). The game is not a simulation, and so has a significant level of abstraction, but instead is designed to facilitate discussion and reflection. The project enabled participants to think through housing problems for older people, negotiating different stakeholder opinions and agendas to collectively integrate knowledge from academia, policy, and practice and lived experiences of home, housing and ageing to construct housing solutions based on consensus.

The game was collaboratively developed with games designer Stone Paper Scissors and initially piloted with the research team and then conducted in three workshops in 2018 (two games were played at each event), including with service providers (housing, health and social care professionals) in March, older people (mainly including people over 65 years of age, but also community representative groups and organisations) in April and policy makers (such as ministers, civil servants and experts and bodies who influence policy) in May. Overall results of the game were presented at a final conference event in July, where the recommendations were co-designed then shared via an online report (McCall et al., 2018). Participants were recruited via group networks, organisational invitations, social media and snowball sampling. The participants were from across the UK, but mainly Scotland. On average, 50 people attended each workshop with 80 attendees at the final conference, totalling over 200 policy makers, practitioners and service users.

5.1. The Serious Game

The game centres on a fictional town called Hopetown, which is set out on a large board-game-style map (the design was informed by literature, ageing and housing evidence, discussion with experts) and mirrors the layout of a typical small scale UK town. Hopetown was designed to be a generic small town, so participants could apply their own local and personalised knowledge (see Figure 1). The game represents different areas/neighbourhoods with diverging environmental quality ratings, different housing types available (e.g., bungalows to supported living), rural and urban areas and supporting infrastructure (transport, roads etc). To stay in a home, a person either has to have enough personal income (green tile) or subsidy (blue tile). In some areas of the town certain housing types are unavailable but can be built and added by participants.

The aim of the game is to work together to improve the wellbeing of fictional older people in Hopetown. Each ‘counter’ (i.e., person) on the board had an individual name and wellbeing track (Figure 2). Wellbeing increased if older people were in appropriate housing, a lifetime home or had access to support services. Wellbeing decreased if people had to move, if they were placed in a lower quality environment and if they did not have access to appropriate services.

There are a range of people in this town (represented by counters with names, wealth, and well-being ratings; e.g., Figure 3). These counters could be moved by participants, or given services, or subsidised if their wealth was not enough to live in current housing.

The services available in the game ranged from care, fixed health services, community transport, housing adaptations and blank tiles for participants to add what they thought were priority services. Service providers had the chance to improve the overall environment for older people or the population in Hopetown, but each had a budgetary cost attached. Limited (and declining) funding was provided in each of the three rounds of the game by the policy maker group.

5.2. Playing the Serious Game

Participants in each workshop were randomly allocated to four groups with different roles and remits (policy makers, older people, developers and service providers). Figure 1. Participants playing the ‘Serious Game.’
Each group had a designated facilitator, as well as a note taker drawn from the research team whose task it was to document the process through observational field notes. The aim of the game is to work together across the four teams to improve the quality and wellbeing of the older individuals in the town. Each team have specific objectives and powers over the game board (see figure 4). However, to deliver those objectives each team also relies on negotiating with the other teams (for example, developers must have planning permission from policy makers, service providers must have a budget to deliver services, policy makers must have approval from older people’s team). Through this negotiation, insight is provided into participant priorities.

5.3. Data Collection

All data was recorded by the note takers and written up as observational notes and reflections (training and instructions for data capture were given for consistency).

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**Figure 2.** Wellbeing track for people in Hopetown.

**Figure 3.** An example of a counter on the board representing a fictional character, Irene.

**Figure 4.** Four groups are allocated for each game: Policy makers, Service deliverers, Older People’s team (who represent older people/community in Hopetown) and Housing Developers.
Data was also generated from written notes with associated reflections created by the note takers alongside blog summaries from participants at the end of each workshop.

5.4. Data Analysis

Taking a qualitative approach, notes were taken of the discussions between and across stakeholder groups and the rationale behind decisions made and solutions formulated constituted the project data. The data was collected, transcribed verbatim as appropriate, and then thematically analysed inductively going back and forward between data and theory using a reflexive thematic analysis (Braun & Clarke, 2013). The deductive coding (implemented separately by two research team members using QSR nVivo) used the following guiding framework for analysis (Figure 5).

The data gathered was also coded inductively as key themes were constructed that went beyond the scope of the original framework, such as a theme on inequality. The findings and a summary report were presented at the final conference event in July 2018. Over 80 participants then co-designed a set of recommendations to help support delivery of policy and practice at the final conference event. The findings below refer to different team notes (older people, policy maker, service user group and developers’ teams) in different workshops (either the practitioner, service user or policy maker focused workshops). In each workshop, games ran simultaneously, so there are multiples of each team (referred to as game 1 or 2 in each workshop).

6. Findings: Enabling Future Planning of Housing for Older People

Findings highlighted that service provision, policy making, development, social participation and meaningful involvement in the community are central to generating a sense of place. Several key interlinked strategic aims for ensuring that older people have adequate future housing emerged during the workshops: autonomy, independence, empowerment and accessibility in terms of housing provision.

However, the tensions between different group perspectives were highlighted in the negotiation process. For example, an experience from one of the older people’s teams concerning the provision of community services was that although they did not wish for a community hub, policy makers developed it anyway without consultation. This indicated that it was very difficult to balance the wants, needs and expectations of all four groups. Trying to understand and negotiate with other sectors and to take on board their perspectives and different needs was challenging. Effective action in terms of policy and planning were hampered by the lack of knowledge and understanding of the diversity of the older population.

Instead, decision-makers in the game at times resorted to stereotyping and perceived wisdoms: As was commonly voiced amongst participants, ‘all older people want to continue living in their own homes and neighbourhoods,’ and older people’s wellbeing was simply measured against their ability to stay living in their own homes, leaving the complexity of the concept of wellbeing undisclosed. There were also, however, instances of such simplistic discourses being challenged, with groups evolving and challenging each other on language and understandings.

In this process there were examples of good communication, but also of communication breakdown. This could occur between the policy makers and older people’s team, as well as between developers and the rest of the teams. Service providers could be an ignored group within the game:

Main challenge is having meaningful engagement with other stakeholders—we were neglected, until the very end when used as a stop gap, didn’t realise we were needed so were ignored. (Practitioner workshop, game 1, service provider team)

There was constant negotiation over power and team dynamics, prioritising the perspectives of those with financial weight at the expense of other actors around the table, as exemplified in a dialogue among the older people’s team in game 1:

![Figure 5. Thematic framework for the Housing and Ageing programme.](image-url)
Participant 1: Let’s start with the most important team.

Participant 2: The people.

Participant 1: People with the money.

Similarly, developing partnerships predicated upon trust and reciprocity between stakeholders was a priority to discussing specific policy and practice interventions:

There was a lot of discussion over everyone, every group stood round the table and argued. A lot of energy was used up during this round (round 1), and there was a failure to develop relationships built on trust and respect. (Policy maker’s workshop, game 2, developer’s team)

Many of the teams noted that they wanted more collaboration but said that time was restricted to do so with all stakeholders. Negotiation with developers regarding location of housing (need) versus best place for them to build (profit) was a barrier. The relationship with the developers and communication was an interesting and consistent challenge throughout the game:

We approached the policy makers and they were extremely hostile to us. They insisted we have community consultation—but when asked if they had a vision or done any of their own consultation, they said their priorities were the community’s priorities. (Policy maker’s workshop, game 2, developer’s team)

Positive outcomes for the game happened when groups worked together effectively to establish goals:

Discussions were quite disorganised but mostly focused on co-creation. The developers discussed building a partnership with service providers to provide easy access to support for tenants. The need to keep people in their areas was also frequently discussed. (Policy maker’s workshop, game 2, developer’s team)

Here we see that there was a strong ‘ageing-in-place’ agenda applied by participants to the game. The powerful nature of collaboration came across very strongly. Co-production was discussed as an initial strategy, but this was seen as a challenge to implement.

The two main actions and strategic decisions that the groups decided on to tackle and promote the voices of older people were (1) collaboration in the decision making process and (2) devolving decision making power to the older people’s group. The policy makers team saw this as a success:

The team agreed that this was actually a wise decision and again they elected to give half of their budget to the older people, who in turn allocated it to the service providers and the developers. The team allocated most of the money left over after spending on public works to the people. They did this because they felt the older people should have autonomy over their spending. (Practitioner workshop, game 2, policy makers team)

But from the older people’s teams it was perceived to be negative at times as they interpreted the policy makers as trying to shirk responsibility for decisions and strategy. There was also the ‘lip-service’ attached to consulting the older people’s groups. Many participants reflected that this mirrored real life. There was also miscommunication in the negotiation process:

Player 4 goes to PM’s [Policy Makers] table to request budget. PMs ask if the SPs [Service Providers] have consulted the Older People [OP] group to see what their needs are. Player 4 says they have (they haven’t—so far the SP team hasn’t engaged with the OP team). Player 4 re-joins SP table. Facilitator prompts group to consult with OP team but they don’t. (Practitioner workshop, game 2, service providers team)

Participants took on actions, thinking and understandings and expected ‘norms.’ Because of this, policy makers and developers’ groups dominated and consultation with older people could be tokenistic. It was difficult to come to a consensus within a group, and almost impossible to bring about a consensus between groups in the short time available for discussion and deliberation. When discussions around the table became too complex, some people disengaged and walked away. However, when the voices of older people were integrated this resulted in the wellbeing of the people of Hopetown going up:

They all agree that hearing local voices is essential in order to understand where they would want to live, could afford to live, and what their wellbeing was. (Practitioner workshop, game 1, older peoples’ team)

Decision-making was best when all groups were gathered around the table together. This can initially feel overwhelming for some participants, particularly the older people, but an integrated and collaborative approach provided the best outcomes for the older people in the game in terms of housing provision and wellbeing. What brought the group together was a consensus and a focus on place:

We want developers to keep people in their areas—‘retention of place.’ (Policy maker’s event, game 2, service providers)

Ageing in the right place, not ageing-in-place...again stressing that infrastructure is key to successful ageing communities. (Policy maker’s event, game 1, developer’s team)
The findings indicated two key elements: (1) True co-production and collaboration was challenging but had the best outcomes; and (2) different groups of stakeholders found consensus with a place-based approach through collaboration, which could break down barriers in language and link diverse priorities.

7. Housing for Older People: “How Do You Plan for the Future while Addressing Immediate Chaos”?

The challenges between establishing a consensus between groups also highlighted a conflict between resources given to addressing the immediate needs and desires of the current population of older people, and those of future generations of older people. One of the frequent tensions in the early game iterations was whether to strategically fund preventative services, or to fund transport to a central hub or to locate services in the neighbourhoods, or to provide home-based services. Strategies had to be revised as individuals’ needs became more pressing. This was largely due to the real impact of decision-making in the game: people became homeless or sick. One player in the older people’s group commented: ‘We’ve got homeless people all over the place!’ Preventing this therefore became the driving force for a lot of decision-making in the second and third round. Visionary strategies got lost in this process, with a participant asking: “How do you plan while also addressing immediate chaos?”

The game was open enough that any future could be created. The game allowed players to envision what a more equitable society could look like, to implement any desired strategy or service. The following exchange illustrates, however, that for the most part players remained grounded in and limited by ‘reality’ in their vision for the future:

Participant 1: I believe everyone should be on the same standard of housing

Participant 2: That’s not how it works

Participant 1: Aye, I know that’s not how it works.

There was constant negotiation between the strategic aims of improving wellbeing, quality of life, etc. with dealing with the current issues of people’s incomes not being adequate to house them in their current home and homelessness. One group of service providers found themselves addressing the higher priority needs of older adults, with fewer resources left over to tackle more preventative health and social care agenda:

The team had started focusing on prevention, and this was going well, but then [they] managed to get some more money to fund services for the most in need and in decline—preventative [measures] now forgotten and can’t be funded. (Practitioner workshop, game 2, service providers)

Groups found it a challenge to be change agents and think beyond the micro and individual level. More time was needed to develop a long-term sustainability plan to engage other third-sector groups. With a lack of understanding and recognition of conflicting challenges it was very easy to lose sight of person-centeredness.

No group tackled inequality even though it was raised as a specific issue as it was both an immediate challenge and needed a full strategic focus. Even with initial strategic decisions that prioritised tackling inequality, people had to react to the current needs, demands and chaos:

While subsidies focused on the lower income older people, the service provision (e.g., advice) seemed to be targeted at more affluent older people (e.g., financial advice on re-mortgaging/equity release). Those on lower incomes were much more likely to have to move house/ neighbourhood than the more affluent who were supported to remain in their affluent village/ neighbourhood. (Policy makers event, game 1, older people’s team)

Visions are compromised because councils are always dealing with more immediate problems and conflicting priorities of the different stakeholders. (Stakeholder workshop, game 2, policy maker’s team)

Decided to focus on community voice—but these community services were the first to go once the budget was tight, which the team felt was realistic. (Stakeholder workshop, game 1, older people’s team)

Another conflict was felt between the policy makers’ whole city approach to addressing inequalities, and the other groups’ primary concern with improving a particular neighbourhood for the older people living there, or area-based interventions. However, all groups agreed that more investment was needed in the more deprived areas, and that the more affluent areas would look after themselves no policy attention was needed in these areas:

During general chat it seems that the main concern of the older people and service provider teams is to develop/improve the lower quality areas. Policy makers are unwilling to spend a lot of money in a small area. Would rather distribute more widely. There seems to be a tension between longer term strategic thinking and short-term reactions to older people unable to afford where they currently live. Time runs out before round is resolved! (Practitioner workshop, game 2, service provider team)

Inequality was a very consistent theme, with groups motivated by values such as investment in the poorer ar-
The interactions between the different groups and participants saw challenges to conventional thinking, assumptions and norms. The stakeholders playing the game that began from different perspectives were engaged in a learning process, which saw the language they were using evolve and become more nuanced to consider different perspectives.

The overall conclusion and focus on versatility and flexibility in housing also linked to the finding that there was, overall, limited vision in regard to planning for the future of housing and ageing. The ‘Serious Game’ set out a fictional town, and participants tended to be more critically engaged than visionary. Although there were no restraints as to what could be implemented, the overall planning and implementation tended to stay within the confines of current housing practice and policy. Clear conflicts in the findings that participants were negotiating included:

1. Tackling inequality vs staying at home.
2. Targeted services for individuals vs improving overall environment.
3. Ambitious future focused strategies vs immediate need.
4. Developing on a needs-based analysis vs new innovative housing developments.
5. Proactive budgeting for services vs devolved power to older peoples group.

The final co-designed recommendations saw participants try to address this, such as by linking housing to wider structures in health and housing through a commissioner for ageing. However, a consensus of a future vision needs to be built through ongoing communication, discussion and prioritisation of planning processes. This would mean people investing in the important perception that we are all stakeholders in ageing.

Current restraints in implementing visionary housing and ageing strategies were shown clearly in the failure to prioritise and implement tackling inequality in Hopetown. Tackling both inequality and enabling the desire for people to stay at home seemed to be a key challenge. Although all groups were led by redistributive visions, especially at the beginning of the ‘Serious Game,’ this was always circumvented by the reality of keeping people at home as long as possible. Strategies that encouraged equality and focused on poorer areas in the town were almost universally abandoned as groups battled to address the ‘immediate chaos’ of addressing pressing needs such as homelessness. This suggests the current approach to housing and ageing could reinforce structural inequalities in the ageing population and does not facilitate planning for the future.

9. Conclusion

The Housing and Ageing programme shows that creating future housing for older people has to include visionary...
individuals and groups capable of an integrated service approach. Future strategy must have a multi-pronged approach: on the one hand servicing current needs, and on the other creating ambitious strategies that centralise tackling structural barriers. Strategic thinking for the future has to be prioritised, and cross boundaries between key services. By mainstreaming ageing into all other policy areas, some of this vision can also be implemented in social policy, housing, planning, health and social care. In this way, a place-based approach could support awareness that everyone is a stakeholder in ageing (not just older people, or particular services).

Placing housing at the heart of service integration is potentially a way to overcome the stagnation in a ‘woefully underprepared’ housing sector for ageing (Lords Select Committee, 2013; UK Parliament, 2017). The narratives and perceptions relating to the increasing challenges and conflict over resources highlight the need to plan for the future as well as addressing immediate chaos. The creative approach taken in the programme shows that through negotiation, co-production and breaking down barriers between services such as housing, health and social care can support planning for the longer term and support investment in early intervention and prevention. The ‘Serious Game’ worked well in breaking down language barriers and silos between stakeholders and services and we recommend developing this on a wider scale. Working from a place-based approach, such as with Hopetown, enables us to consider a more holistically what supported people to age-well-in-the-right-place and live interdependently.

We believe a place- and housing-based approach to ageing can open avenues for service integration. The most important step to making that happen would be breaking down the barriers we saw between policy makers, service providers, developers and people living in communities. A unifying focus on ageing that can work across silos and boundaries could support more integration, partnership, collaboration and inclusion, bringing everyone together for the essential work of preparing for ageing, and seeing house and home as central within communities.

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Conflict of Interests

The authors declare no conflict of interests.

References

Ageing Well in Wales. (2015). Age-friendly communities resource hub. Ageing Well in Wales. Retrieved from http://www.ageingwellinwales.com/en-resource-hub/afc-resources

Housing our Ageing Population Panel for Innovation. (n.d.). Housing our Ageing Population Panel for Innovation (HAPPI). Housing Learning and Improvement Network. Retrieved from https://www.housinglin.org.uk/Topics/browse/Design-building/HAPPI

Boger, J., Jackson, P., Mulvenna, M., Sixsmith, J., Sixsmith, A., Mihailidis, A., . . . Martin, S. (2017). Principles for fostering the transdisciplinary development of assistive technologies. Disability and Rehabilitation: Assistive Technology, 12(5), 480–490.

Bowling, A., Gabriel, Z., Dykes, J., Dowding, L. M., Evans, O., Fleissig, A., . . . Sutton, S. (2003). Let’s ask them: A national survey of definitions of quality of life and its enhancement among people aged 65 and over. Journal of Aging and Human Development, 56(4), 269–306.

Boyack, S. (2018). Housing crisis ‘not a short-term issue.’ Scottish Federation of Housing Associations. Retrieved from https://www.sfha.co.uk/news/news-category/sfha-news/news-article/housing-crisis-not-a-short-term-issue

Boyle, A., Hainey, T., Connolly, T. M., Gray, G., Earp, J., Ott, M., . . . Pereira, J. (2016). An update to the systematic literature review of empirical evidence of the impacts and outcomes of computer games and serious games. Computers & Education, 94, 178–192. https://doi.org/10.1016/j.compedu.2015.11.003

Braun, V., & Clarke, V. (2013). Successful qualitative research: A practical guide for beginners. London: Sage.

Cutchin, M. P. (2003). The process of mediated aging-in-place: A theoretically and empirically based model. Social Science and Medicine, 57(6), 1077–1090. https://doi.org/10.1016/s0277-9536(02)00486-0

Department of Business, Energy and Industrial Strategy. (2019). The Grand Challenge missions (Policy paper). London: UK Government. Retrieved from https://www.gov.uk/government/publications/industrial-strategy-the-grand-challenges/missions

Department for Communities and Local Government. (2008). Lifetime homes, lifetime neighbourhoods: A national strategy for housing in an ageing society. London: Department for Communities and Local Government Department of Health Department for Work and Pensions. Retrieved from http://www.cpa.org.uk/cpa/lifetimehomes.pdf

Department of Health London. (2010). Practical approaches to co-production: Building effective partnerships with people using services, carers, families and citizens. London: Department of Health.

Doyle, K. (2018, November 13). Brexit fallout will add to chaos in our troubled housing sector, says ESRI. Independent. Retrieved from https://www.independent.ie/business/brexit/brexit-fallout-will-
add-to-chaos-in-our-troubled-housing-sector-says-esri-37522654.html

Golant, S. M. (2008). Commentary: Irrational exuberance for the aging in place of vulnerable low-income older homeowners. *Journal of Aging and Social Policy*, 20(4), 379–397.

Golant, S. M. (2015). *Aging in the right place*. Baltimore, MD: Health Professions Press.

Government Office for Science. (2016). *Future of an ageing population*. London: Government Office for Science. Retrieved from https://www.ageing.ox.ac.uk/files/Future_of_Ageing_Report.pdf

Greasley-Adams, C., Robertson, J., Gibson, G., & McCall, V. (2017). *A good life in later years: A co-produced research project*. Glasgow: Life Changes Trust.

HM Government. (2019). Home of 2030: Affordable, efficient and healthy homes for all. *Home of 2030*. Retrieved from https://www.homeof2030.com

Hoolachan, J., & McKee, K. (2018). Inter-generational housing inequalities: Perspectives from ‘Baby Boomers’ versus the ‘Millennials.’ *Urban Studies*, 56(1). https://doi.org/10.1177/0042098018775363

Housing market falls victim to political chaos. (2019, January 17). *Evening Standard*. Retrieved from https://www.standard.co.uk/comment/comment/evening-standard-comment-housing-market-falls-victim-to-political-chaos-a4041481.html

Innovate UK. (2019). Healthy ageing challenge. *Innovate UK*. Retrieved from https://innovateuk.blog.gov.uk/2019/10/03/healthy-ageing-trailblazers

Local Government Association. (2017). *Housing our ageing population. Learning from councils meeting the housing need of our ageing population*. London: Local Government Association. Retrieved from https://www.local.gov.uk/sites/default/files/documents/S.1%20-%20housing20our%20ageing%20population_07_0.pdf

Local Government Association. (2019). Co-production. *Local Government Association*. Retrieved from https://www.local.gov.uk/topics/devolution/engaging-citizens-devolution/approaches-civic-and-democratic-engagement/co

Loeffler, E., Power, G., Bovaird, T., & Hine-Hughes, F. (Eds.). (2013). *Co-production of health and wellbeing in Scotland*. Birmingham: Governance International.

Lords Select Committee. (2013). Ready for ageing? *Parliament UK*. Retrieved from http://www.parliament.uk/business/committees/committees-a-z/lords-select/public-services-committee/report-ready-for-ageing

Low, G., & Molzahn, A. E. (2007). Predictors of quality of life in old age: A cross-validation study. *Research in Nursing and Health*, 30(2), 141–150.

Matthews, P., Astbury, J., Connelly, S., Brown, L., O’Brien, D., Brown, J., & Wester, H. (2015). *Doing and evaluating community research: A process and outcomes approach for communities and researchers*. Stirling: Arts and Humanities Research Council, University of Stirling.

McCall, V., Hoyle, L., & Gunasinghe, S. (2017). *Bringing together health, social care and housing services for older people: An evaluation of the 415 Hub and Cluster Innovation project*. Stirling: University of Stirling and Wheatley Group.

McCall, V., Satsangi, M., & Greasley-Adams, C. (2019). The legacy of the Right to Buy and the differentiation of older home owners. *Social Policy and Society*, 19(2), 225–241.

McCall, V., Sixsmith, J., Woolrych, R., Phillips, J., Robertson, J., Rutherford, A., . . . Porteus, J. (2018). *Housing and ageing: Linking future strategy to future delivery for Scotland, Wales and England 2030*. Glasgow: Scottish Universities Insight Institute and Social Policy Association.

McGeachie, M., & Power, G. (2015). *Co-production in Scotland: A policy overview*. Edinburgh: Joint Improvement Team. Retrieved from http://www.coproductionscotland.org.uk/index.php/download_file/view/305/648

Ministry for Housing, Local Government and Communities. (2019). Housing for older and disabled people. *Ministry for Housing, Local Government and Communities*. Retrieved from https://www.gov.uk/guidance/housing-for-older-and-disabled-people

Mitlin, D., Bennett, J., Horn, P., King, S., Makau, J., & Masimba Nyama, G. (2019). Knowledge matters: The potential contribution of the co-production of research to urban transformation (GDI Working Paper 2019–039). Manchester: University of Manchester.

Office of National Statistics. (2016). National population projections: 2016-based statistical bulletin. *ONS*. Retrieved from https://www.ons.gov.uk/peoplepopulationandcommunity/populationandmigration/populationprojections/bulletins/nationalpopulationprojections/2016basedstatisticalbulletin

Older People’s Commissioner for Wales. (2014a). Best practice guidance for engagement and consultation with older people on changes to community services in Wales. *Older People’s Commissioner for Wales*. Retrieved from http://www.olderpeoplewales.com/en/publications/guidance/14-07-01/Best_Practice_Guidance_for_Engagement_and_Consultation_with_Older_People_on_Changes_to_Community_Services_in_Wales.aspx#.XGwhwuSwnIU

Older People’s Commissioner for Wales. (2014b). Effective engagement for local authorities. *Older People’s Commissioner for Wales*. Retrieved from http://www.ageingwellinwales.com/en/resource-hub/afc-resources

Pamment, L., Jenkins, P., Morgan, K., Williams, P., & Willmott, R. (2019). Independent review of affordable housing supply. *Government Wales*. Retrieved from https://gov.wales/independent-review-affordable-housing-supply

Park, J., & Porteus, J. (2018). *Age-friendly housing: Future design for older people*. London: RIBA Publishing.

Phillips, J., Walford, N., & Hockey, A. (2011). *How do un...
familiar environments convey meaning to older people? Urban dimensions of placelessness and attachment. *International Journal of Ageing and Later Life*, 6(2), 73–102.

Phillips, A., & Morgan, G. (2014). Co-production within health and social care: The implications for Wales? *Quality in Ageing and Older Adults*, 15(1), 10–20.

Realpe, A., & Wallace, L. M. (2010). *What is co-production?* Coventry: The Health Foundation. Retrieved from [http://personcentredcare.health.org.uk/sites/default/files/resources/what_is_co-production.pdf](http://personcentredcare.health.org.uk/sites/default/files/resources/what_is_co-production.pdf)

Scottish Government. (2011a). *Age, home and community: A strategy for housing for Scotland’s older people 2012–2021*. Scottish Government. Retrieved from [https://www.gov.scot/publications/age-home-and-community-a-strategy-for-housing-for-scotlands-older-people-2012-2021](https://www.gov.scot/publications/age-home-and-community-a-strategy-for-housing-for-scotlands-older-people-2012-2021)

Scottish Government. (2011b). *Reshaping care for older people: A programme for change 2011–2021*. Edinburgh: Scottish Government. Retrieved from [https://www.gov.scot/publications/reshaping-care-older-people-2011-2021](https://www.gov.scot/publications/reshaping-care-older-people-2011-2021)

Scottish Government. (2019). *Housing to 2040*. Scottish Government. Retrieved from [https://consult.gov.scot/publications/reshaping-care-older-people-2011-2021](https://consult.gov.scot/publications/reshaping-care-older-people-2011-2021)

Scottish Government. (2020). *The strategy for older people in Wales, 2013–2023*. Welsh Government. Retrieved from [https://www.gov.wales/topics/health/publications/socialcare/strategies/older/?lang=en](https://www.gov.wales/topics/health/publications/socialcare/strategies/older/?lang=en)

Sixsmith, A., & Sixsmith, J. (2008). *Ageing-in-place in the United Kingdom*. *Ageing International*, 32(3), 219–235.

Sixsmith, J., Fang, M. L., Woolrych, R., & Sixsmith, A. (2017). Ageing well in the right place: Partnership working with older people. *Working with Older People*, 21(1), 40–48.

Stevens, J. (2016). *Growing older together: An overview of collaborative forms of housing for older people*. Birmingham: Housing LIN. Retrieved from [https://www.housinglin.org.uk/finder.cfm?i=10064](https://www.housinglin.org.uk/finder.cfm?i=10064)

UK Parliament. (2017). *Housing for older people inquiry*. UK Parliament. Retrieved from [http://www.parliament.uk/business/committees/committees-a-z/commons-select/communities-and-local-government-committee/inquiries/parliament-2017/housing-for-older-people-17-19](http://www.parliament.uk/business/committees/committees-a-z/commons-select/communities-and-local-government-committee/inquiries/parliament-2017/housing-for-older-people-17-19)

Vanleerbergh, P., De Witte, N., Claes, C., Schalock, S., & Verte, D. (2017). The quality of life of older people aging in place: A literature review. *Quality of Life Research*, 26(11), 2899–2907. [https://doi.org/10.1007/s11136-017-1651-0](https://doi.org/10.1007/s11136-017-1651-0)

Welsh Government. (2013). The strategy for older people in Wales, 2013–2023. Welsh Government. Retrieved from [https://gov.wales/topics/health/publications/socialcare/strategies/older/?lang=en](https://gov.wales/topics/health/publications/socialcare/strategies/older/?lang=en)

Welsh Government. (2017). *Prosperity for all: The national strategy*. Welsh Government Expert Group. (2017). *Our housing AGEnda: Meeting the housing aspirations of older people in Wales*. Cardiff: Welsh Government.

Woolrych, R., & Sixsmith, J. (2017). Delivering age-friendly environments: Social justice and rights to the city. *Scottish Planner*, March(169), 10–11.

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