

Out of Office: guidance on working from home as we age



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Design Age Institute

The Design Age Institute is the UK's national strategic unit for design and the healthy ageing economy.

We bring together designers, businesses, researchers and communities to help address the challenges and opportunities of an ageing society.

Based at the Helen Hamlyn Centre for Design at the Royal College of Art and funded by Research England, Design Age Institute partnership brings together skills and expertise from world-leading organisations in research, design, innovation and learning - the UK's National Innovation Centre for Ageing at Newcastle University, the Oxford Institute of Population Ageing, the International Longevity Centre UK and the Design Museum.



“If there were guidelines for people working at home, it would be a very useful reminder. Because I think we all know in our hearts what they might be but it’s just so easy to forget”.

Female home worker, age 69, living with a number of long-term health conditions

The global population is ageing with many countries having around 30% of their population aged 60 or over. According to the World Health Organisation, by 2030 1 in 6 people in the world will be aged 60 or over.

In the UK people aged over 50 make up a third of the workforce and nearly half of the adult population.

Many people are extending their working lives with higher retirement ages.

It is becoming increasingly important to support older adults to maintain their health and wellbeing while working.

Older adults may choose to work more flexible hours or engage with voluntary work. Home working can be a desirable option to support this but there is limited information available to advise on ‘healthy’ home working. We aim to address this through our research and provide guidance in this report.

Executive Summary

Design Age Institute commissioned Northumbria University and Loughborough University to explore the challenges and opportunities of working from home as we age. The research showed that more people are working later in life, with an increase in working from home. There is currently a lack of specific guidance for older people working from home in relation to setting up a work space, particularly taking into account different health conditions that people may be living with and that may require adaptations.

The information presented here was compiled through research and interviews with older adults who work from home and health professionals who advise on home working. The quotations included are taken from our interviews with participants. The aim was to develop recommendations that allow people to remain in work for longer or develop new enterprises post retirement, while promoting health and wellbeing and minimising potential complications associated with home working.

“I’m finding now that companies are employing people at an older age. I’m frequently working with people over 60. Over 65. Sometimes heading to 70. And there’s a lot more home working involved.”

Occupational Health Nurse

Sometimes, for some people, if they are working, that’s what keeps them going. We have got a lot of cases of people who are 80-something, and still work, and they find a purpose in life, even though they are beyond the retirement age. Because that’s what they enjoy doing.”

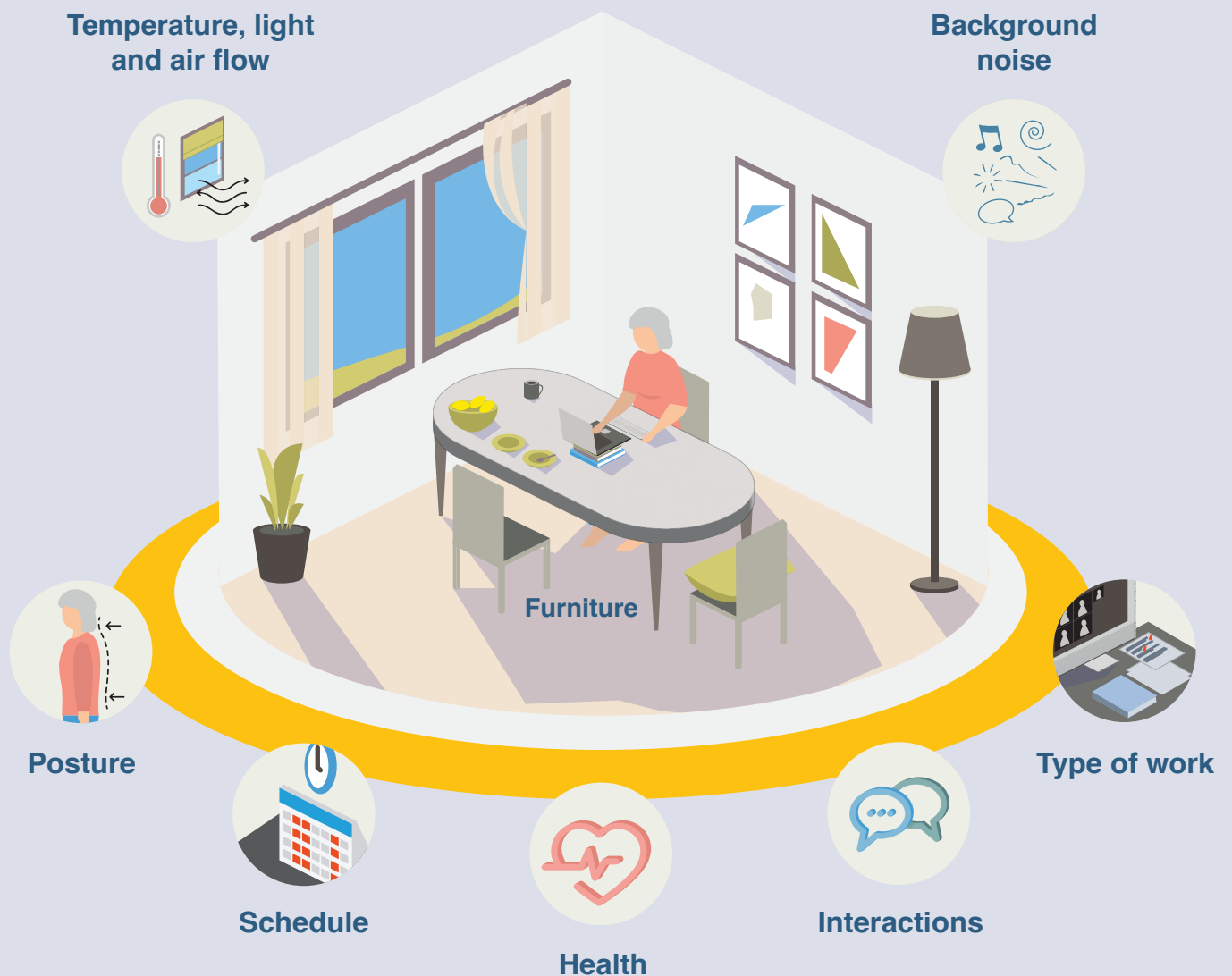
Physiotherapist

This document is divided into key aspects which are important in relation to health and wellbeing while working at home;

- Physical
- Sensory
- Cognitive
- Other things to consider

In the following sections, the recommendations can support all of us working from home, regardless of age, as well as those who are designing work environments. **However, the sections highlighted in pink have specific advice to be taken by those people who work full-time as longer working hours might negatively impact their health.**

Whatever your workstation set-up may be at home there are many things that you can try to support your health and wellbeing. Here are some key factors for your consideration:



Opportunities for working well from home

1. Separate your home-life from your work-life.
2. Use a dedicated room for work, preferably not shared, promoting privacy.
3. Have control over room temperature, light, noise, air quality and access to fresh air.
4. Situate your workstation in a bright room or close to a window. Ambient and natural light should ideally be combined to enhance legibility of screens and working materials.
5. Working with an uplifting view of a garden or nature can positively impact your mood.
6. The work space should be comfortably warm during the winter avoiding close proximity to a radiator. During summer, windows should be easy to open to allow cooling.
7. Create an environment that is a pleasure to be in. Add plants, pictures and objects that have a positive impact on your wellbeing.
8. Background noise should be minimal and adjusted to personal preferences and comfort levels.
9. Alarms, phone rings and other work related sounds should be adjusted to a comfortable level.
10. The floor surface should be sufficiently trip-resistant to prevent slips and falls and robust enough to withstand wear and tear from a desk chair.
11. Use furniture that is adjustable if possible allowing ease of sitting and standing postures.
12. Select comfortable and adjustable chairs with armrests and large, adjustable desks.
13. Create sufficient storage space for your needs.
14. Work related equipment and material should be within reach and cupboards or cabinets easy to open.
15. Organise your workstation to make it more efficient to use. Contrasting colours and transparent cabinets can be helpful to locate the items that you need.
16. Take short frequent breaks throughout the day - movement is key.
17. Establish healthy habits such as eating a balanced diet.
18. Take regular exercise and avoid a sedentary lifestyle.
19. Participate in training to use new technologies or develop new skills.
20. Raise awareness of the importance of workstation ergonomics and organisation of tasks.

Physical



Home working can sometimes mean a compromise in workstation set-up as spaces need to be flexible, they may have multiple uses or do not have specialist equipment¹.

“I’m a firm believer in not wanting to turn home into an office or work, so I suppose I would always see a workstation as temporary and ad hoc, rather than permanent.”

Home worker, age 78, living with arthritis

Some people prefer a dedicated workspace which is separate to other parts of the home;

“On my days off I didn't want to be looking at my work set-up, because to me that means that I'm still at work. It was really important to me to be able to lock it away in another room so when I wasn't at work, I didn't see it.”

Home worker, age 68, living with arthritis

Be conscious of posture²⁻⁵ when setting up a workstation. For older adults, particularly for those with a musculoskeletal disorder (pain or reduced movement due to a problem of

of the bones, joints or soft tissues), the workstation set-up should minimise physical discomfort⁵⁻⁶.

Care should be taken to optimise posture, aiming to achieve a position which supports the back and avoids excessive twisting or reaching. Well-designed chairs and adjustable desks can be helpful but some people also find low cost, pragmatic solutions to improve their workstation:

“I devised a plinth to raise the iPad in its resting position to a point where it was comfortable for me to look and be seen and not have it jiggling about or insecure. It was a nice position.”

Home worker, age 78, living with arthritis

“And sometimes, you know, it’s really simple. For somebody who was struggling with a space for a monitor, we came up with sitting the laptop on a whole pile of paper packs. Getting it exactly to the height they wanted, and then having an external keyboard and mouse. So, it wasn’t expensive, fancy equipment. It was what worked for them.”

Occupational health nurse

Frequently changing your posture and taking regular breaks is vitally important wherever we work²⁻⁵ to avoid remaining static in one position. Movement is key to maintaining a healthy body and to minimise the effects of any existing health conditions.

“I try to compensate for that by doing exercises on my chair and doing as much movement as possible.”

Home worker, age 73, living with arthritis

Alternating between sitting and standing is ideal as it provides an opportunity to keep muscles strong and joints subtle while also avoiding being sedentary for long periods which holds risk for everyone, but in particular as we age. Some health conditions, such as arthritis, can be exacerbated by sitting in one position for too long. If it is not practical to stand at regular intervals, gently stretching in your seat to ‘reset’ your position is beneficial.

“Well, as far as the arthritis goes, I just have to stand up and move around... But basically just movement, I think. Just getting up and remembering to move around is the key thing.”

Home worker, age 68, living with arthritis

Some studies also show that home working can encourage people to work longer in one position without taking regular breaks, so it is even more important to have a system in place which reminds you to take a break¹.

I completely forget about my posture when I’m into an interesting piece of work. And then I feel it later on in the day, or in the night, on my neck. My neck is affected as I’m continuously looking down at the keyboard.”

Home worker, age 69, living with diabetes and osteoporosis

Care should also be taken to reduce risk from falls or other injuries. Try to avoid clutter which may become a trip hazard and have shelves at safe heights, neither too high nor too low, to avoid over bending or reaching.



For full-time workers, consider getting adequate furniture for long hours of work ¹⁷ - a comfortable office chair and an adjustable desk - stand/sit desk whenever possible ^{13,14}. Setting them up correctly is important too:

- allowing arms to rest on the desk and feet on the floor**
- adjust the monitor to be positioned at eye level and keyboard to correct the arm/wrist posture.**

Consider monitoring your sitting time and remind yourself of breaks and the need for regularly changing your posture.

Also, you could benefit from increasing physical activity levels on working days.

Sensory



It is important to consider temperature, ventilation, lighting and noise levels in the area that you are working in⁵⁻⁶.

Several studies highlighted that as we age it is harder to cope with noise that is generated from conversations between colleagues, telephone calls and laughter in open-plan offices^{7-8, 12}.

Older adults' productivity can be more impacted by colleagues' talking and distractions compared to younger colleagues⁹. This could also apply to distractions in the home environment by the activities of daily living such as family interruptions, pets, home deliveries, cooking or noisy domestic appliances. Therefore for some people it may be helpful to have a dedicated room for working in¹⁰.

It is also important to consider and understand older adults' sensory needs or preferences. For example bright, full spectrum lighting (lighting that emulates the optimum quality of natural light) is highly recommended, particularly for people who might be experiencing macular degeneration. Colour palettes in domestic interiors and even smells can either enhance or impair a sense of wellbeing and either promote or interrupt concentration.



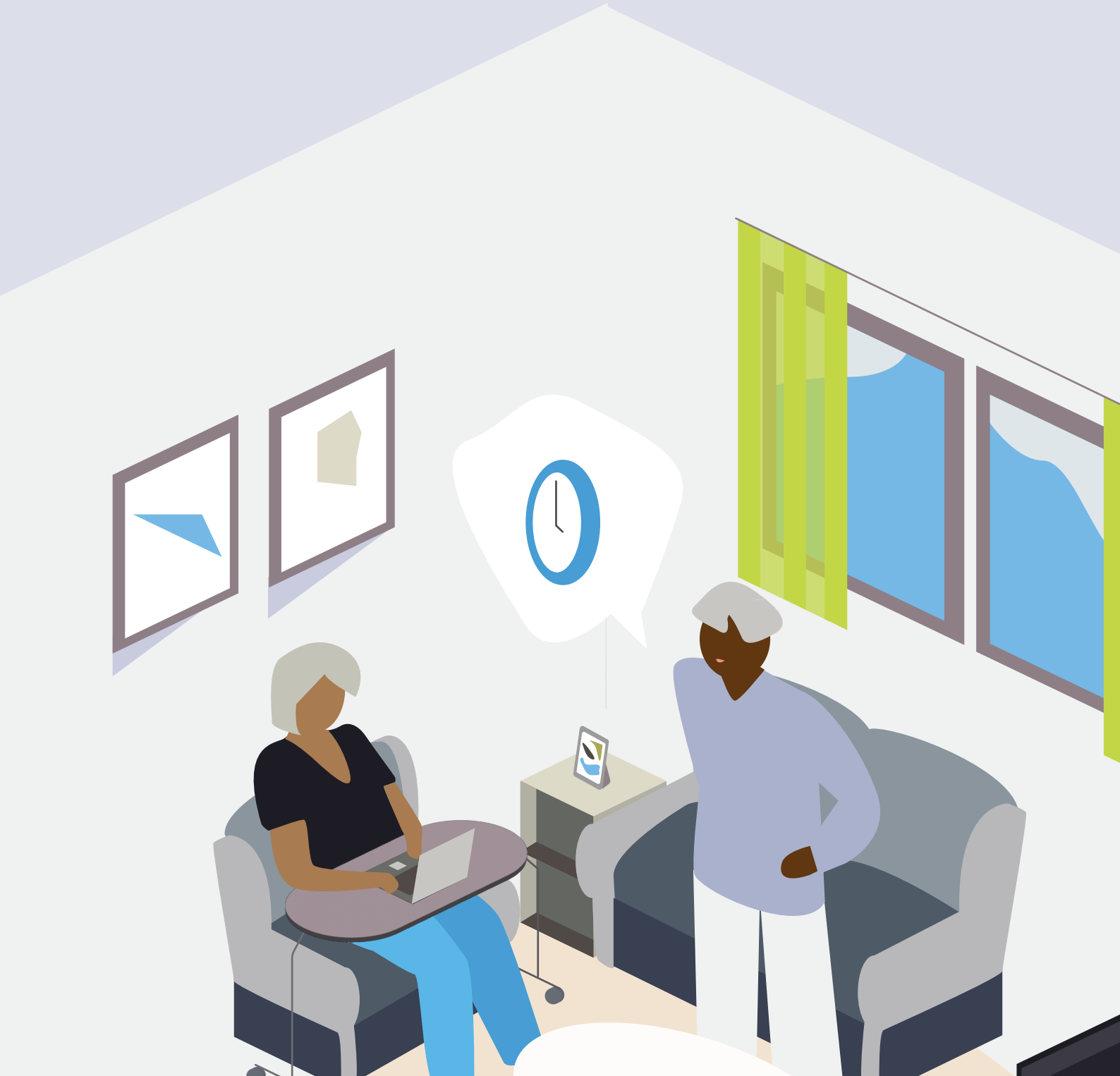
For full time workers, aim for room temperature between 21 and 24°C (ideally 22°C)

13,14

Consider positioning your desk correctly in relation to window(s) to avoid glare on the monitor.

Also, consider air quality - adequate air flow creates a comfortable environment.

Cognitive



How we organise our working environment and work patterns can influence how we feel, our levels of concentration and how well we are able to do our work.

Working from home offers greater flexibility in our working hours, although as previously stated it can often lead to people working longer hours or taking fewer breaks. Establishing a routine with scheduled work and break times is known to increase efficiency and reduce fatigue⁴⁻⁵.

“When your home is your workplace, you need to maintain a work-life balance. When you wake up you are already at work, and when you finish you are already at home. You need to create boundaries between the two. Otherwise you can be tempted to carry on and do a bit more.”

Physiotherapist

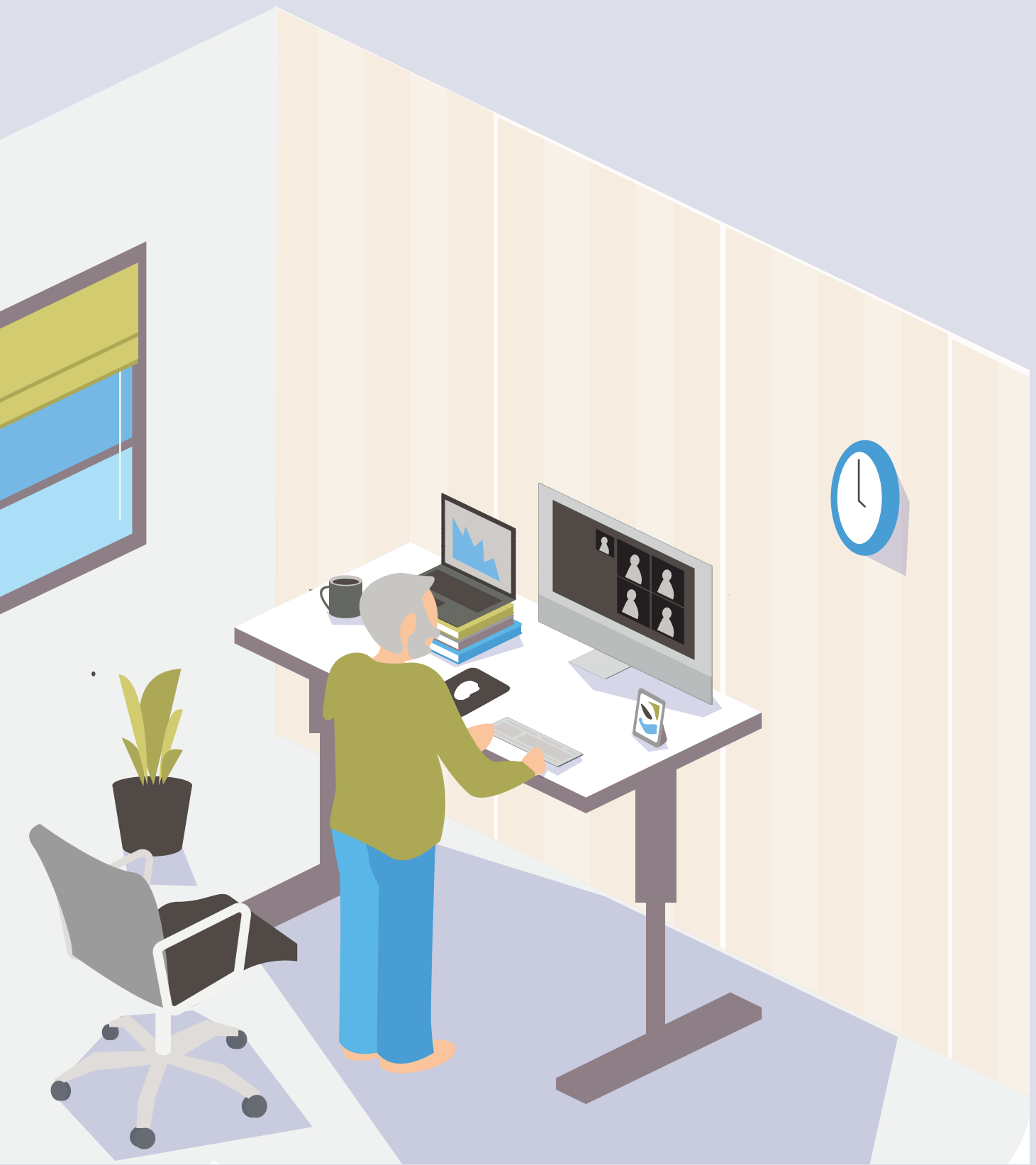
A literature review showed that older adults may have difficulty with concentration levels and fatigue¹¹.

People can find it helpful to identify tasks which require greater levels of concentration (reading a long and detailed document for example) and prioritise these for times of the day when they feel more alert and less tired. This is a technique known as pacing where daily activities are planned out to minimise fatigue.

Technology can help us to manage the demands of our role, but it can also add stress if people are not properly supported and offered appropriate training⁵.

For full-time workers, aim to have a dedicated room to work in, preferably not shared, which can help to increase concentration levels and reduce distracting noises or conversations¹⁵.

Other things to consider



Our research has shown a need for a personalised approach to home working regardless of age. We all need to be conscious of our workstation set up at home. 'One size fits all' advice does not address the specific needs of the individual, their home environment, the equipment and support they have available, and any health conditions or mobility restrictions they need to work around. For older adults in particular it seems that work-life and work spaces must be flexible.

Individuals have a range of different health and wellbeing needs and at times need to develop strategies to ensure that their work-life and environment is suitable. Mental and physical health is a priority. Some might experience agitation, visual impairment, reduced mobility, or cognitive impairment. Many individuals that we spoke to found ways to cope with health conditions that subsequently meant there was little to no impact on their home working arrangements. Many individuals had an awareness of the 'ideal' set up solutions to achieve a suitable working space. However, this was balanced with a preference around maintaining their own home space and comfort.

“It’s not being prescriptive. It’s looking at the issue and saying, what can we do to manage this? What can we do that would help you? So, it’s not about spending loads of money. It’s about what we can do that’s cost effective and that works for you.”

Occupational health nurse

We work best when we are comfortable and content, however, if someone chooses to set up their workstation at home, as well as the practical considerations already discussed, they should aim for a space that they enjoy being in.

“If I was upstairs looking out of my little bedroom window, all I’m seeing is rooftops. Down here, I’m looking at trees, the back garden... You know, and stuff like that. I think that working in an uplifting environment has got a lot to do with being content.”

Home worker, age 65, living with osteoporosis



Social connections are an important aspect of our health and wellbeing. A potential downside to home working is the reduced amount of contact with others compared to being in an office. If the home working role does not allow for meeting other people, the person should consider how they will prioritise social time in other parts of their life. Technology can facilitate social connection when home working, for example using video calls for meetings.

“I feel like the outside world – once you work from home... especially as an older person – it’s almost like you’ve cut yourself off from the real world. And you just do your own thing. Which is not necessarily good for your body.”

Home worker, age 69, living with osteoporosis and visual impairment

“I think, for some people, not being with colleagues is an issue. So, a lot of people say that they don’t miss the commute. They don’t miss the hot-desking, the being in busy offices. But what they do miss is the ability to just sit down over a cup of coffee and have a chat. They miss that interaction.”

Occupational health nurse

For full-time workers, consider monitoring your working time to remind yourself of breaks ¹⁶. The breaks could be used to socialise, moving to another room in the house and talking to other people.

Closing Summary

For many of us, working from home will continue to be a key part of our working lives. We hope that the advice and recommendations that have emerged from our research will amplify and promote the need to provide greater support and guidance to a growing, older workforce. This will benefit us all in the future to enable longer, healthier, happier lives.

Home working as we age applied: Harold

Current setup

Harold is a 68-year-old man who lives with his wife in a semi-detached house along with their dog who they try to walk together twice a day, although sometimes he does not have time for this. He is self-employed, working on average 20 to 30 hours per week and tries to keep to three working days per week.

Health conditions

He lives with diabetes and a heart condition.

Workstation

Harold has a designated home office which is a converted bedroom, he uses a laptop computer positioned on a desk and has a comfortable office chair. His wife insists he takes a break to come downstairs for lunch as he can work long days and tends not to take breaks without being prompted.





Suggested interventions

Considering the long hours that Harold works, the furniture should be adequate. He has a comfortable office chair, which is very good. However, more must be done to set up the office correctly for him:

- An adjustable desk – stand/sit desk
- A chair set up adequately allowing arms resting on the desk and feet on the floor.
- Additional adjustable monitor to be positioned at eye level and keyboard to correct the arm/wrist posture.
- Desk must be correctly positioned in relation to the window to avoid glare on the monitor.
- Light, air flow and temperature must be adequate for a comfortable environment.
- Harold would benefit from a system that could monitor working/sitting time and remind him to change his posture and take short frequent breaks throughout the day.
- Also, he needs to increase physical activity levels on working days, a system reminding him could be useful.

Home working as we age applied: Anne

Current setup

Anne is a 70-year-old woman who lives in a bungalow with her husband. She is retired and does volunteering work for a charity. She tends to work two to four hours per day most days. Her work involves using a laptop, reading reports and emails. Outside of working she enjoys attending an adapted yoga class.

Workstation

Anne sits in a comfortable armchair in her favourite spot in the living room as she likes to feel included in conversations in the home. She works with the laptop on a tray on her lap. She feels stiff after prolonged sitting and finds it uncomfortable to sit on a firm chair, her posture is stooped.

Health conditions

She lives with Parkinson's which makes walking difficult at times. Her posture is stooped.





An over-chair table could help place the laptop at a better height

Alternate working positions between table and armchair

Use yoga stretches regularly through the day

A system to remind the need for changing postures and regular breaks

Suggested interventions

The armchair is comfortable but not supportive. Considering that Anne works almost every day, a more upright position with the laptop on a desk or table would be more appropriate when working.

- An over-chair table could help place the laptop at a better height to encourage a more upright sitting posture if she prefers to continue sitting in the armchair.
- It would be important to alternate working positions between table and armchair if tolerated.
- Anne could use yoga stretches regularly through the day to counteract the extended sitting position.
- A system to remind the need for changing postures and regular breaks would be helpful.

Please note: This intervention is not suitable for full time-work. Full-time workers should consider getting adequate furniture for long hours of work - a comfortable office chair and an adjustable desk – stand/sit desk whenever possible. Setting them up adequately is important too.

Home working as we age applied: Sara

Current setup

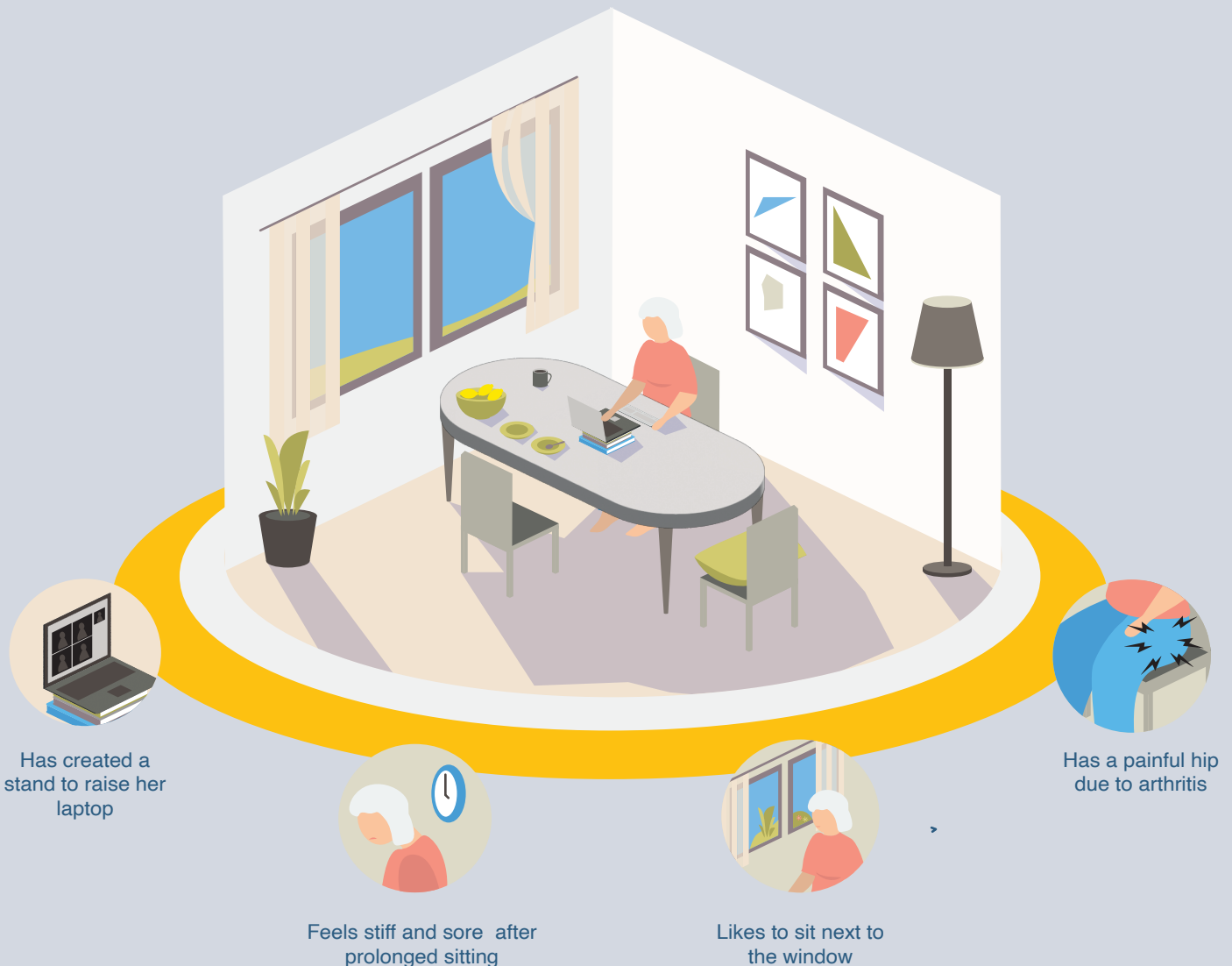
Sara is a 73-year-old woman who lives alone in a small ground floor flat. She is retired and does volunteering work for a charity, which mainly involves working at the computer, video calls and emails twice a week for up to three hours. She talks to lots of people while working but very rarely is this face to face. However, she does have an active social life and regularly spends time with friends and family.

Health conditions

Sara has a painful hip due to arthritis and some other health problems that can impact on her energy levels.

Workstation

Sara chooses to work at the dining table, sitting on a standard dining chair, using very portable equipment that can be packed away. She thinks it is important to feel comfortable but also to be able to tidy 'work' items away and be able to use the space for other purposes. To make herself more comfortable while working she has created a stand for her tablet which raises it closer to eye level and has added a separate keyboard which she finds easier to work on. Sara likes to sit close to a window for better light levels but also to enjoy the view of the garden. She finds she tends to lose track of time when working and can sometimes feel very stiff and sore after sitting too long.





Suggested interventions

It isn't feasible to suggest a bespoke desk and chair due to limited space, so we need to think about making her working position at the dining table as optimal as possible. Also, considering that the work is conducted only twice a week and up to three hours, the interventions do not need to be 'radical'.

- Sara uses a separate keyboard and raises the laptop to eye level, which is good. Now she needs to look at chair height – maybe by adding cushions but keeping her feet on the floor.
- She sits close to the window, which enhances luminosity. However, heating is another aspect to consider - she needs to make sure that the work environment is comfortably warm.
- It is important to remind Sara to break up the time spent sitting, encourage her to think about breaking up her tasks, standing and walking regularly at the end of each block.
- Continue to have social contact outside of work and make use of video and telephone calls to avoid feeling isolated when working.

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Dr Katherine Baker is a physiotherapist, specialising in neuro-rehabilitation, long term condition management and physical activity, with a particular interest in Parkinson's Disease. After working in clinical practice, she joined Northumbria University and has since worked in roles across research, physiotherapy education and is now a member of the Department of Sport, Exercise & Rehabilitation Leadership team as Head of Subject for Physiotherapy. She uses mixed methods research to explore the impact of living with a long term condition and ageing on wellbeing and ways of promoting physical activity, improving mobility and function.



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Dr Emilene Zitkus is a Senior Lecturer in Inclusive Design at Loughborough University with expertise in human-computer interaction, digital inclusion, user-centred and user experience design. She has been teaching at the undergraduate and postgraduate levels. After her PhD (EPSRC funded) at the University of Cambridge, where she iteratively co-created inclusive design tools with practitioners, she has been using her user-centred, inclusive design and co-creation skills in research related to accessible interfaces and service design focused on healthy ageing. Emilene is a member of the editorial board of Design for Health journal; visiting Lecturer at UNESP; a Fellow of the Higher Education Academy.

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