



Friday 21st January 2022

Location offer

Testbeds 2022-2023

Homes for Healthy Ageing
Programme

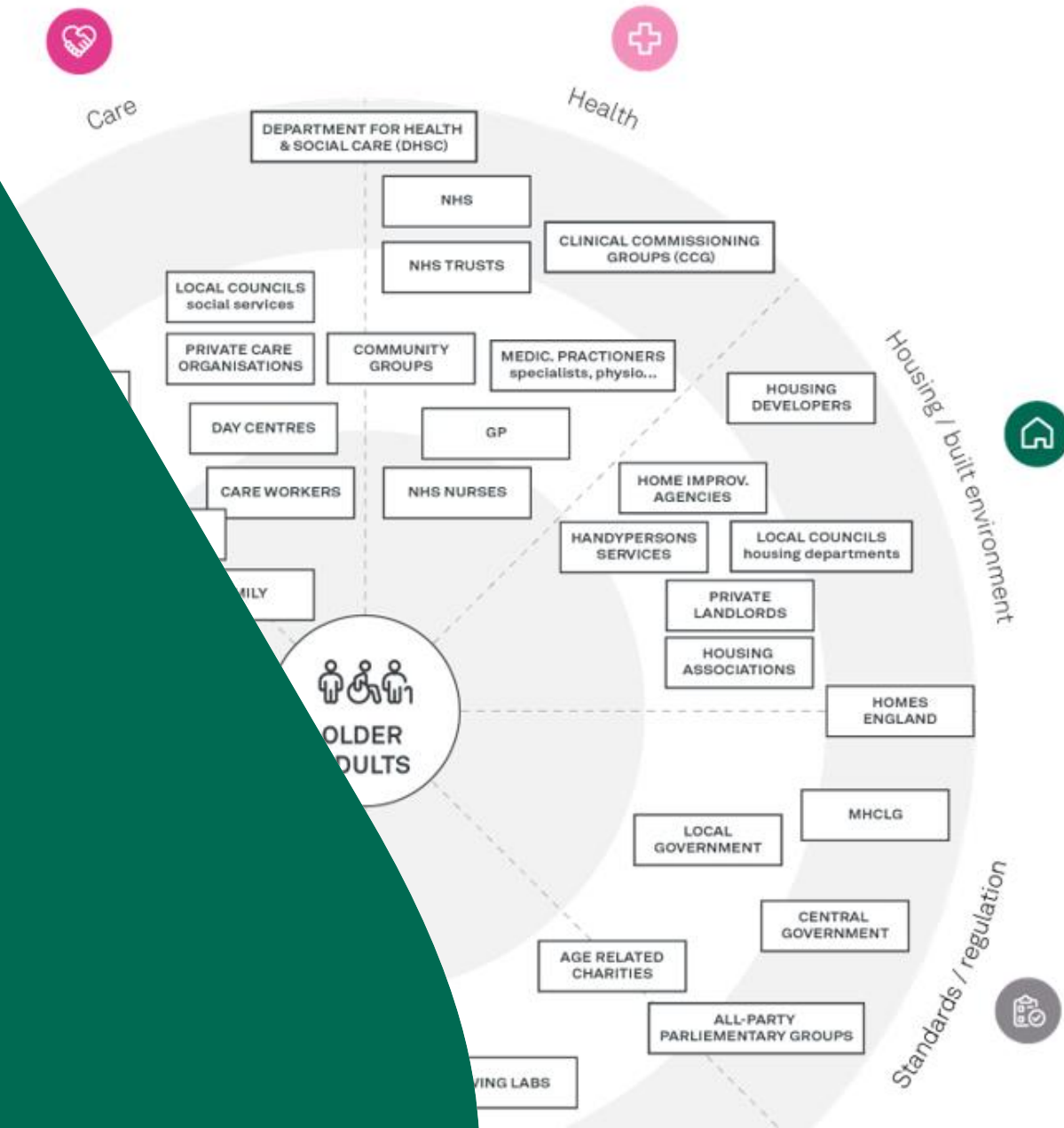
Introduction to the Programme

2022 Testbeds Challenges

Working Together & Programme Timeline

Application Process

Introduction to the Programme



Our Programme

Connected Places Catapult recognises the **importance of the home to support the health and wellbeing of people to live independently for longer** – especially given that in the next decade, 20% of the UK population will be over 65 years old, increasing to 25% by 2050.

Whilst there is a burgeoning healthy ageing market emerging across different sectors in the UK and internationally, **we are yet to see the UK built environment industry integrate healthy ageing interventions** into their design thinking and business models at scale.

To **encourage greater horizontal collaboration between housing and healthy ageing decision makers, innovators, researchers and designers**, Connected Places Catapult launched a 'Homes for Healthy Ageing Programme' in 2021. We have committed to delivering **five testbeds across the UK to trial and demonstrate innovative solutions to some of the country's most pressing healthy ageing challenges** through the nexus of the home.



The Programme



Connected Places Catapult is providing funding and expertise to find and test innovative solutions to local challenges around healthy ageing – creating environments where new products and services can be safely developed and tested by and with local communities.

- £2.5 million programme funded by CPC over 2 years
- **£50,000** of funding for **each of five locations** in the UK
- Additional **£400,000** investment to trial innovative solutions across all locations
- Testing **early and late TRL solutions** to **Healthy Ageing challenges**
- **Two locations** launched in **2021**
- **Three locations** launching in **2022**

What do the testbeds involve?

We have committed to **create testbeds** in **five locations in the UK**. In 2021, we announced our first two testbed partners: Sunderland City Council and a Northern Ireland Consortium. We are now seeking our next three. These testbeds will:

- help to build the communities and create the conditions needed to test new and innovative solutions to challenges around healthy ageing
- facilitate the testing of both early stage concepts and more developed solutions.
- draw on local knowledge and experience, and align or integrate with existing projects so we can help those already working in the space and maximise impact.

For each of the testbeds, we are looking to work with a partner or local consortium – this could include (but is not limited to) local authorities, NHS trusts, housing associations, academic institutions, care organisations, and non-profits.



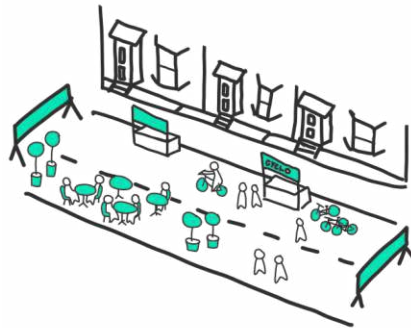
What is a testbed?

A testbed is an approach that removes barriers to testing by giving innovators access to user groups and local environments so they can develop, test and showcase new or existing products and services without the usual risks. Testbeds play a vital role in helping assess the viability, impact and potential for scale of new innovations.

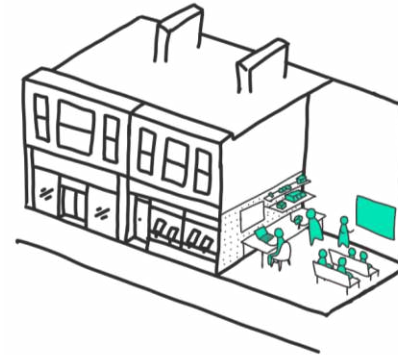
By taking part, location partners would have the opportunity to shape the labs to suit the challenge and the available infrastructure; some examples of what the testbeds could look like are:



Recruiting 10 participants
to use and test new
solutions in their homes



Utilising an area of public
realm to trial solutions to
improve activity and active
travel



Establishing a community
hub in an empty shop front
to co-create solutions and
test new services



Equipping carers with new
technologies or services to
test how well they support
their work

Our approach

Testbed approach

To progress innovations that support healthy ageing and independent living on the UK market, Connected Places Catapult has decided to use a testbed approach for this programme. This approach should enable us to:

- Convene R&D, commercial, private sector, public sector and end-users through a **collaborative mechanism** to find common ground and shape the market for 'Healthy Homes'.
- Offer SMEs / innovators **access to user groups and local environments to co-develop, test and showcase** products and services that address needs and are attractive to customers.
- Enable **cases to be made** (both commercially and socially), for further investment and large-scale deployment, and to ensure learnings live on.

Mindset

Testbeds are great opportunities to **trial innovative and ambitious ideas** in real-life settings, gather insights and feedback from user groups and refine or adjust those solutions. Testbeds offer a safe space for learning and iteration to move towards developing a more meaningful user-centered solution.



Ambitious

Test bold ideas and take risks to make the most of the experiment and learn a lot.



Open-minded

Be curious and ready to gather unexpected feedback and insights



Flexible

Testing means iterating! Be ready to adapt and pivot quickly!

Who are we looking for?

We're looking for organisations and partners who:

- are **keen to try new solutions**,
- have an interest in **learning about the impact** of those solutions, and
- are **willing to help to build an environment** for testing - which could include recruiting users, offering space for running workshops and delivering services, and helping to provide links with other organisations.

You wouldn't need to do all of these things, as the Catapult can help you to build a consortium if you're interested in taking part. A consortium might include:



A **housing provider** with a desire to be at the leading edge of trialling innovative solutions to the challenges their tenants face



A **local authority** with an interest in investigating how best to help enable healthy ageing for citizens



An **academic** working in the area on a challenge related to healthy ageing, who wants to amplify their research to include real-world testing and learn about the impact of different solutions

The opportunity: funding

There are lots of innovations in the healthy ageing space –knowing which will be the right fit and managing the risk of adopting new solutions are the real challenges. We are investing to support local testbeds to find and test innovative solutions to healthy ageing challenges.

Testbed implementation

Each testbed consortium will be provided funding of £50,000 to commission a dedicated task force, who will be responsible for ensuring the effective rollout of their local testbed. This is intended to support the cost of local delivery of a testbed and external expert support.

Open Calls

To ensure testbeds have access to the most relevant solutions to their particular healthy ageing challenges, the Catapult programme includes a £400,000 Open Call fund. This will be invested in suppliers with the most promising solutions, to support their implementation into your local testbed.

Business case

Working with stakeholders in central government, public health, investment and beyond, we will bring together the impacts and outcomes of the testbeds into a business case for future funding and support – creating opportunities beyond the lifetime of the programme.

The opportunity: insights

Our researchers, service designers and technology experts will work closely with you to understand the healthy ageing challenges you would like to focus on – and then provide the tools, insights and knowhow to deliver real change.

Testbed framework & toolkit

Consortia chosen for the programme will be provided the full toolkit needed for a local testbed, and for testing in the real world. Our established testbed framework will guide participants from definition and through launch into delivery. Key practical and ethical considerations of running a local testbed in people's homes will be covered.

User research and impact assessment

Our programme draws upon extensive research of innovative solutions tested in reality and in living labs, including the achieved impacts and lessons learnt. These insights will be used to guide your own testbed implementation.

Successful consortia will also be able to shape and benefit from localised user research, delivered with the support of the Catapult's Human Connected Design team and leading academic partners, to better understand your own challenges in enabling healthy ageing.

Programme outcomes will also demonstrate the art of the possible, and inform future procurement and service delivery.

The opportunity: network

The HfHA programme is bringing together an unrivalled network of stakeholders in the UK healthy ageing space. Applicants to the programme will be given exclusive access to the key change makers, to guide your strategy for healthy ageing and the successful implementation of your local testbed.

Stakeholder access

Consortia selected for the programme will be able to participate in a series of co-creation workshops hosted by the Catapult bringing together different stakeholders to develop and refine new and early-stage solutions to key healthy ageing challenges identified in our research.

Sharing best practice

Applicants will be granted access to exclusive reports and insights as part of the HfHA programme network. Regular events will bring together leaders in the healthy ageing field - to learn about findings and best practice from across all of the testbeds and in the wider ecosystem.

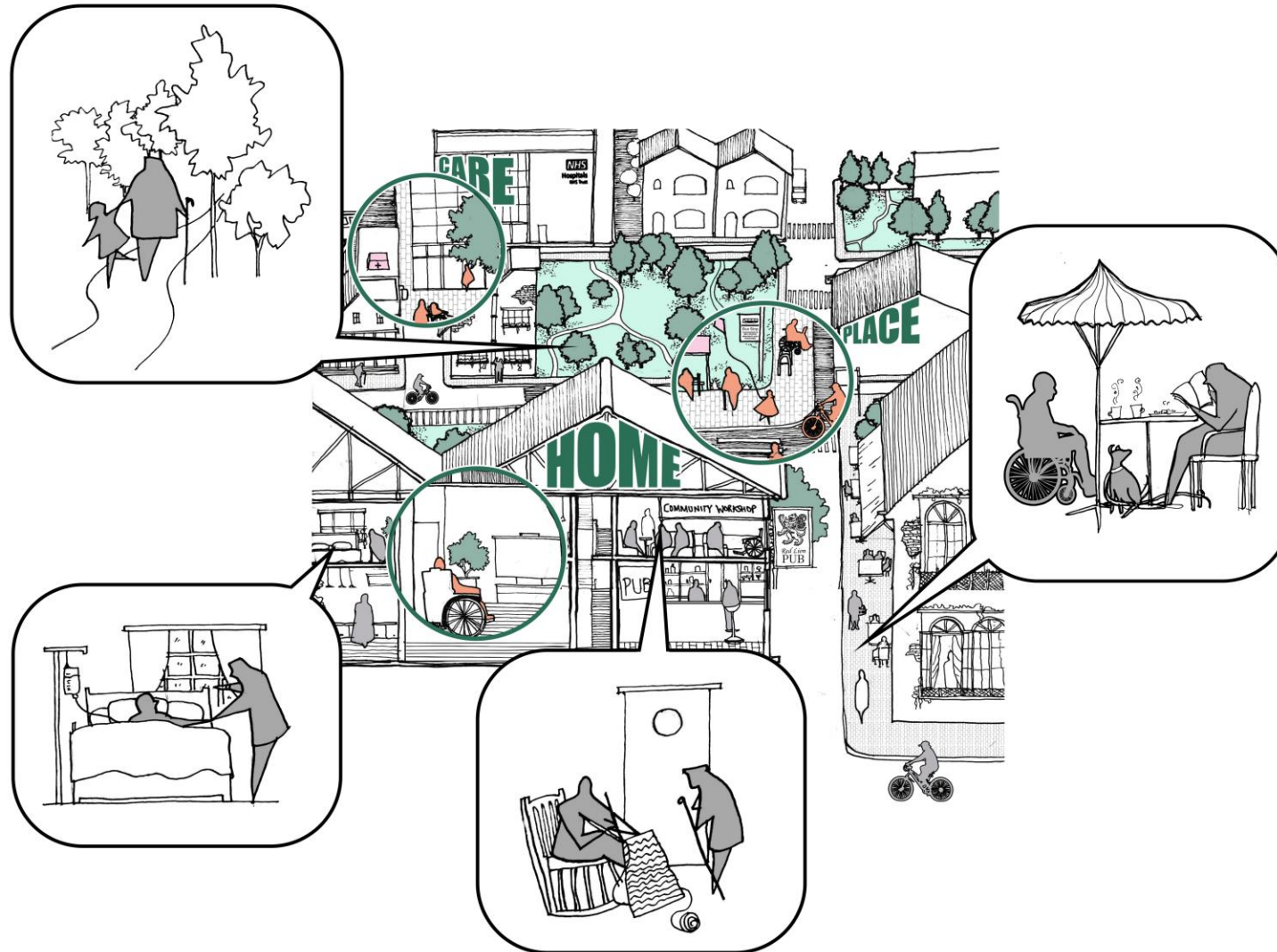
Connecting with leaders

As pioneers of local healthy ageing innovation, participants will get the opportunity to connect with leading influencers of the healthy ageing agenda in the UK and internationally.

Homes for Healthy Ageing: 2022 Testbed Challenges



2022 Testbed Challenges



From the research that has been conducted through the Homes for Healthy Ageing Programme we have highlighted three key challenges that the upcoming 2022 testbeds should focus on:

Functionality of the **Home** to support Independent Living

Home= *The interior environment and domestic spaces where people live, whether owner occupied or rented. This can include shared spaces for gathering or activities.*

Places to Support Active Ageing and Easy Access to Amenities

Place(s)= *Situating the home in the wider context of the neighbourhood, including the urban realm, access to local amenities and transport connectivity.*

Innovation to Support **Care** Provision in the home

Care = *Care can be small acts, such as picking up a neighbour's shopping, to working around the clock to meet someone's everyday needs.*

Home

The functionality of the **home** to support independent living in old age

90% of older people are living in mainstream homes (1), many of whom need support in order to continue to live at home independently. Be this to help with everyday activities, encouraging socialising and hobbies or to help with maintenance.

This challenge goes beyond meeting the decent homes standards or viewing the home as purely functional; instead, it looks for innovations, services and products designed for older peoples homes that enable them to live independently for longer.

Associated facts and figures

- 1.3 million older peoples homes are categorized as non-decent. (2)
- Costing the NHS £624 million each year in hospitalisations and other health care treatments. (3)



Questions to consider:

- *How might we enable these positive interactions and activities to happen across different housing typologies and occupancies?*
- *How might we create meaningful social connections that have been enabled by their home environment for older adults?*
- *How might we make home adaptations which are appealing and accessible in the eyes of older adults?*
- *How might we make services and products accessible for older people?*

Place

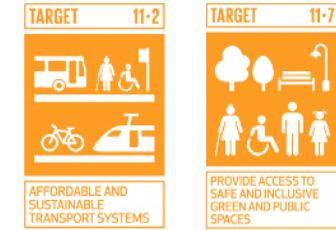
Places to support active ageing and easy access to amenities

The outdoor environment is key to supporting older people to remain active and engaged in the community. Activities such as walking to local amenities or green spaces enable older people to continue to build exercise into their daily routines, promoting healthy ageing, mobility and participation in society.

However, the design of urban realm traditionally does not focus on elderly user needs, resulting in poor physical and mental health outcomes.

Associated facts and figures

- 47% of 75-84 year olds are inactive, with inactivity being defined as less than 30 minutes of exercise per week. (4)
- Lower strength results from decline in everyday activities leading to falls and inability to carry out everyday tasks. This creates a huge cost to the NHS who currently spends 4.4 billion per year on fragility fractures alone. (5)



Questions to consider:

- *How might we create shared spaces and urban environments that are accessible and welcoming to older people?*
- *How might we make our transport systems more accessible and appealing to older adults?*
- *How might we encourage older adults to take up active travel?*
- *How might we better connect older people to their local amenities so they can remain independent and connected to the community?*

Care

Innovation to support **care** provision in the home

Home care plays a vital role in allowing older people to live at home for longer by helping to prevent visits to the hospital or the need to go into a care home.

Despite its importance, the social care system in Britain has been described as 'not fit for purpose and failing the people who rely on it, with high levels of unmet needs' (6).

There is need to understand how both formal and informal care overlap and the role each plays in caring for our ageing population.

Associated facts and figures

- 1 in 10 over 65's face costs of £100,000 or more for their care needs (7)
- 43% of all care jobs are paid less than living wage (8)
- Informal carers contribute the equivalent of 4 million care workers. (9)

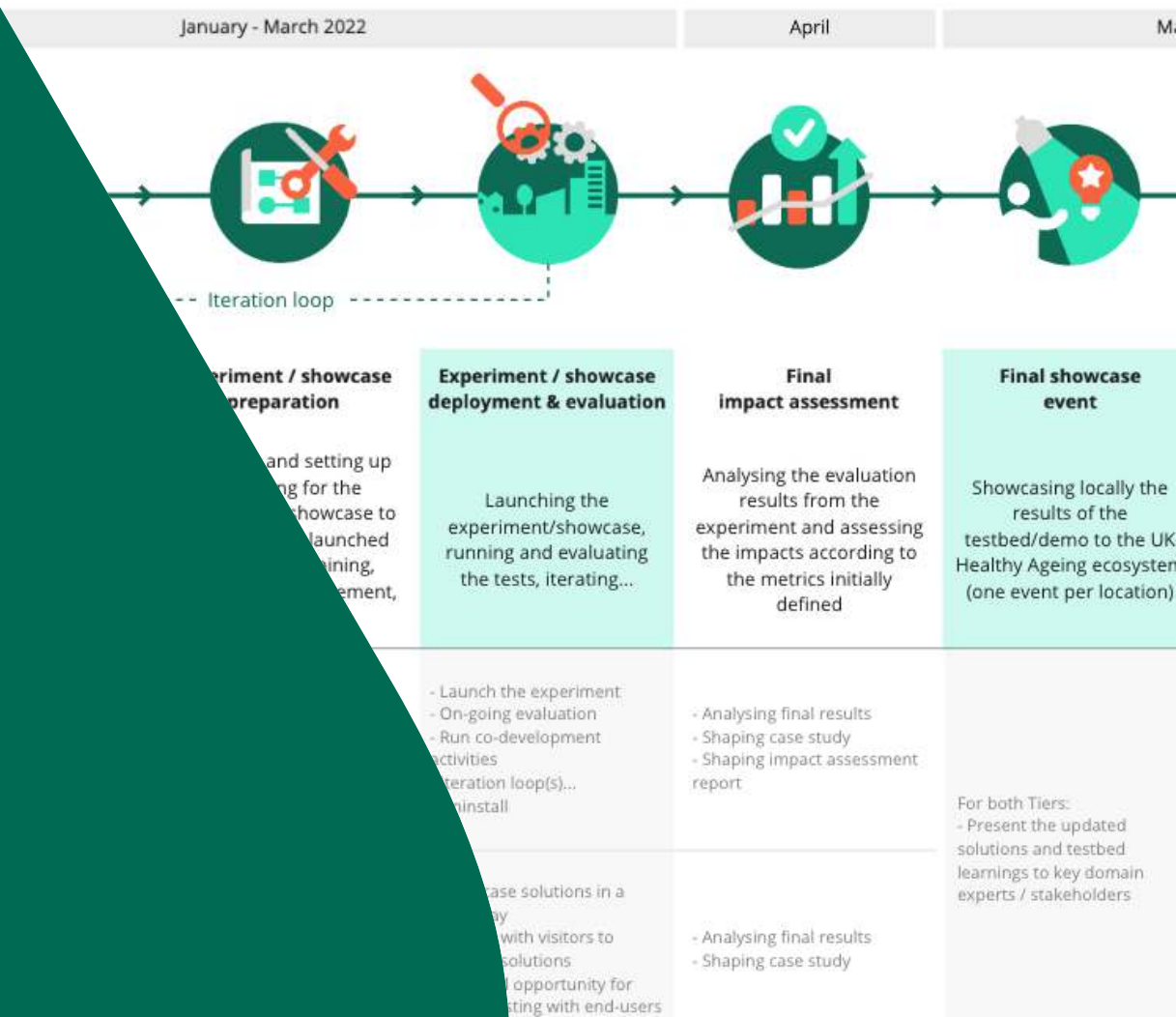


Questions to consider:

- *How might we create an asset-based and integrated approach to our social care system?*
- *How might we enable care workers to have more meaningful and positive time with their patients?*
- *How might we better support the mental well being of carers? And reversing the perception of being a burden on the state.*
- *How can the way we care for older adults improve their healthy life expectancy whilst respecting the wellbeing of carers?*

Working Together & Testbed Timeline

Programme Timeline



Stakeholders and roles

Connected Places Catapult

Leading on the testbed programme by designing and implementing methodologies, activities and support to the location partners and SMEs

Location Partners

Collaborating with Connected Places Catapult to define and address their local challenges. As well as providing support to the SMEs to set up the testbed and deploy their solutions.

SMEs

Trialling or showcasing solutions that respond to the local challenges. Solution providers will work with participants to co-design their solutions through an iterative approach.

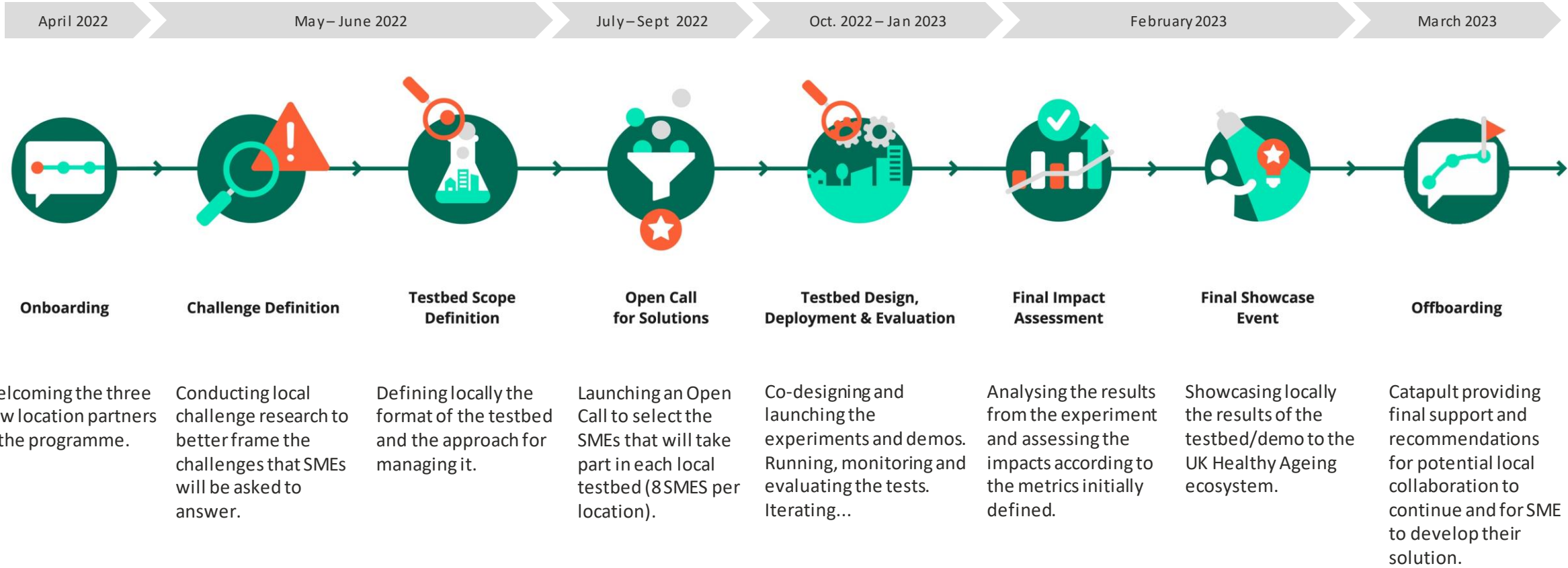
Participants / testers

Participants will engage in the programme by committing to testing solutions in real world settings or at showcase events. They will provide feedback to SMEs and location partners.

External partners

External partners may be procured by Connected Places Catapult at different times during the project. They will support or lead on various activities, collaborating with one or more of the above stakeholders.

Testbed timeline



Challenge Definition

Objectives

The challenge research work provides a basis for the Open Call; giving SMEs direction on which challenges the location partner wants to address through the testbed.

Co-developing these challenge briefs ensures that the location partner is gaining value from the testbed by targeting the Open Call at SMEs with solutions that tackle the most important challenges, and by ensuring that the challenges are framed in a way which makes the opportunity for SMEs clear.

Roles & Responsibilities

Connected Places Catapult

- Lead challenge definition work & write up of challenge briefs
- Set approach for challenge definition in collaboration with the location partner
- Create templates for challenge briefs
- Carry out interviews and research workshops with key stakeholders to contribute to challenge development

Location Partner/s

- Identify and invite stakeholders (key experts, potential users...) for interviews & workshops to better understand the local challenges that are being addressed through the testbed.
- Participate to workshops and meetings with CPC to define the approach for challenge definition, to analyse insights and prioritise challenges to address.
- Participate in / run local experts' interviews in collaboration with CPC
- Review challenge brief drafts created by CPC
- Sign off final challenge briefs created by CPC

Testbed Scope definition

Objectives

The testbed scope definition stage intends to refine the shape of the testbed in relation to the different challenges that your testbed intend to address. This will enable to agree on what the testbed constitutes (i.e testing environment and infrastructures, potential cohorts of testers/participants, timeframe and local taskforce support offer...).

This will allow to complete the Open call documentation to share with SMEs and to then prepare the testbeds setup.

Roles & Responsibilities

Connected Places Catapult

- Lead testbed shaping process & run workshops
- Advise on testbed offer, testers and taskforce cohorts and engagement plan

Location Partner/s

- Feed into development of testbed concept through attending workshops
- Define and setup with the support of CPC a local taskforce/helpdesk for managing the testbed locally
- Start to secure access to testing locations & participants (testbed setup to come after Open Call)- this could include:
 - Recruiting participants (e.g. older adults or carers), signing agreements with participants that they are happy to be testers, and securing their consent for data collection
 - Signing agreements with building owners to test in their spaces

Open Call & SME Selection

Objectives

The Open Call is the mechanism for selecting SMEs to work with; this is principally run by the Catapult, who will prepare for and manage the Open Call process. However, the location partner will participate in reviews of the documentation (i.e. challenge briefs and offer to SMEs), as well as participating in the judging & selection of the SMEs.

Roles & Responsibilities

Connected Places Catapult

- Prepare and gather materials for Open Call brief (including challenge briefs and lab scope)
- Launch and run Open Call
- Communicate and disseminate Open Call
- Manage judging & selection
- Contract SMEs

Location Partner/s

- Review and sign off on Open Call materials
- Support CPC in communicating and disseminating Open Call
- Participate in judging & selection of SMEs

Testbed Setup, Deployment & Evaluation

Objectives

After the SMEs have been selected, this also includes planning the experiments, recruiting specific users, and facilitating the individual tests. On a day-to-day basis this will be overseen by the location partner, with support provided by the Catapult to understand experiment progress, advise on the approach and support the evaluation of the experiments.

Roles & Responsibilities

Connected Places Catapult

- Lead planning of experiments & facilitate introductions to SMEs
- Provide deployment guidance
- Maintain high-level oversight of tests
- Support the evaluation of the testing interventions

Location Partner/s

- Co-develop experiment plans through sessions with SMEs led by CPC
- Deploy solutions with SMEs – this could include:
 - Visiting participants' homes with a representative from one of the SMEs, introducing the participant and the SME and installing their solution.
 - Holding a group session with carers testing a solution, facilitating a demonstration of the solution from the SME, and explaining their required participation.
- Act as communication point between SMEs and participants to manage and resolve day-to-day issues.
- Deploy monitoring infrastructure (such as sensors) and distribute surveys to participants.
- Report back to Catapult on test progress at weekly or biweekly catchups.

Impact Assessment

Objectives

The impact assessment work at a location level is to measure the impact of the testbed, based on the location partner's aims from participating in the programme. The Catapult will provide the process and tools to carry out the impact assessment, but the location partner will be providing the perspective of their aims for taking part, helping to set the impact metrics, and providing relevant data so that the impact can be measured.

Roles & Responsibilities

Connected Places Catapult

- Lead overall impact assessment process
- Provide template for impact monitoring plan
- Understand requirements of data collection to carry out impact assessment
- Co-write impact report and review drafts/sign off final impact report

Location Partner/s

- Set impact metrics through impact assessment process (likely through interviews and workshops) – providing an understanding of their aims of participating in the programme, and what success looks like.
- Provide data/facilitate collection of data on impact. This could be through surveys and interviews
- Co-write impact report and review drafts/sign off final impact report

Application Process

selection process

25th Jan -
18th February

Proposal
development

20th February -
11th March

Proposal
assessment

14th - 31st March

Partner
selection

April onwards

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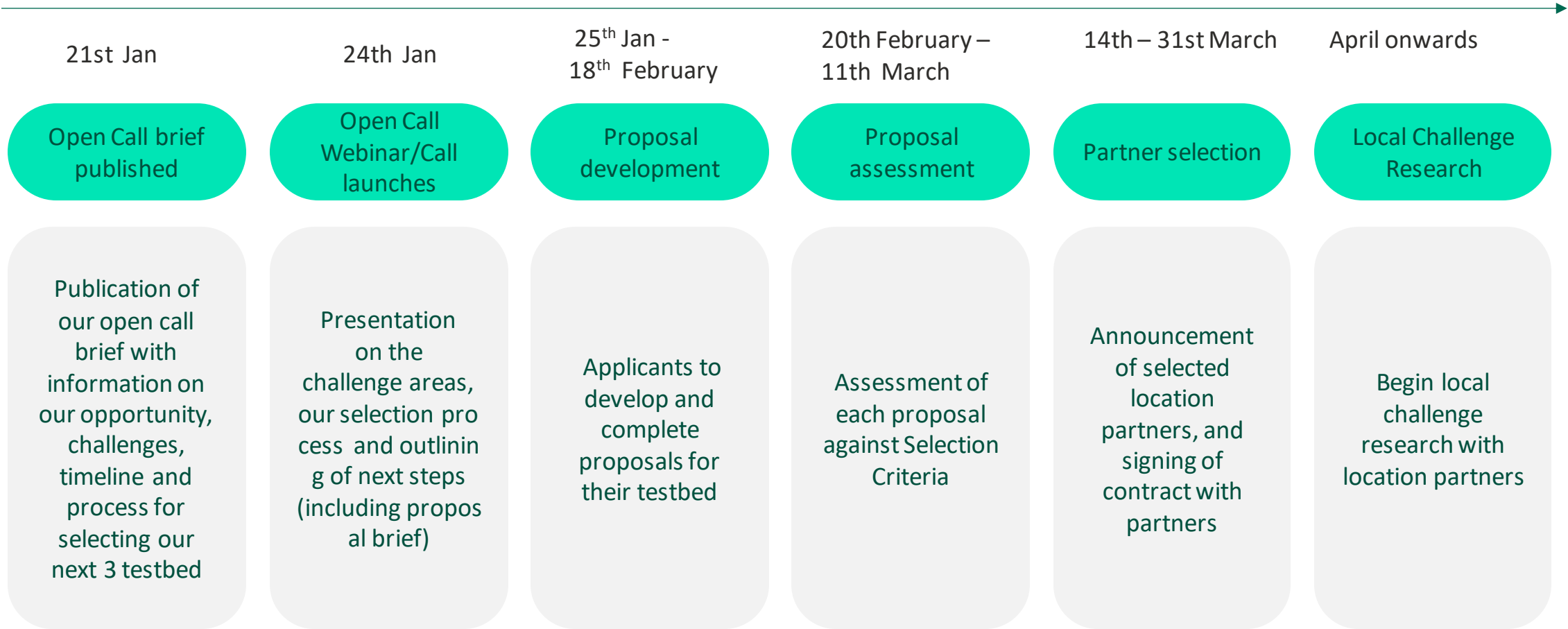
Assessment of
each proposal
against
Selection
Criteria

Announcement
of selected
location
partners, and
signing of
contract with
partners

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Location selection process

Second round testbed selection



Proposal Brief

These are some of the questions we'd like to frame your proposal; you don't need to use these exact headings, but your proposal should include information that answers as many of these questions as possible.

Challenges

- What specific, local challenges would you be trying to address through taking part in the programme?
- What work has your organisation previously contributed to or been involved in (or is currently ongoing) related to these challenges?
- What do you see as the scale of the challenges locally and the potential impacts of addressing them?
- What do you see as the potential role of services and solutions provided by SMEs in addressing these challenges?
- What have been some of the barriers to addressing this challenge previously?

Resources & Access

- What resources would you be able to commit to the programme?
- What would your testbed look like? How would you be helping SMEs— for example, would you be able to recruit 10 carers to trial solutions? Or access to a space to run workshops?
- What is your experience of working with SMEs to address your challenges? How many SMEs would you be willing to work with?

Partnerships, Community & Collaboration

- Which of your existing partners would you see as having a role in this project, and what would you see their roles being?

Sustainability

- How would you see this programme as contributing to addressing the challenge in the long term?
- How could the programme align with your organisation's long-term vision?

Selection Criteria

Challenges

This area of assessment is around the challenges; looking at how well the challenge area aligns with the wider Homes for Healthy Ageing challenge areas, how much impact addressing this challenge might have, and assessing how suitable the challenges are for testing SME-led interventions. In addition, to what extent this challenge is/has been already addressed, and how much impact this specific programme would have.

Resources & access

This involves consideration of what resources and infrastructure a location partner is able to provide; both from the point of view of how supportive the programme can be in helping to boost those resources, as well as the opportunity presented by the available infrastructure – and how the partner plans to use that infrastructure.

Partnerships, community & collaboration

As the success of any testbed will heavily rely on effective collaboration and partnership, in selecting partners we will consider which other organisations that partner plans to collaborate with in order to help to deliver the testbed, maximise impact and share learnings with. In addition we will look at how each potential partner would engage with the communities impacted by the challenge.

Sustainability

As the testbeds should have lasting benefit, we will also be looking at what the potential long-term future is of each potential partner's testbed, and how closely it aligns with their strategic vision to ensure that the project has long-term impact (even if that doesn't necessarily involve the testbed continuing in exactly the same form after the funding period has ended).

Proposal Brief

As the next step in the selection process, we're asking all location partners (or consortia) to **submit a proposal** for how they would use the funding to create a testbed. The intention of this is to help us to understand more about the local challenges, resources, partnerships and potential sustainability of each location's testbed, in order to help us to select which locations to partner with.

Your proposal should be:

- In **document format** – Word, Google or PDF is fine.
- A **maximum of 10 A4 pages of content** – you can include appendices if you wish, but we're looking for quality over quantity.
- Submitted to homesforhealthyageing@cp.catapult.org.uk by **5:30pm** on the **18th of February 2022**.
- The Catapult can offer support to proposals by answering any related questions. All questions must be sent to the email address above.

CATAPULT

Thank

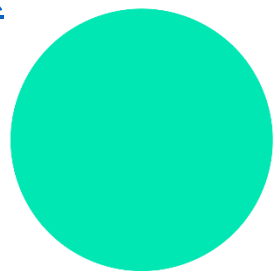
Connected Places

you

Any question?

Please contact us at

homesforhealthyageing@cp.catapult.org.uk



Monday, January 24, 2022

CATAPULT

Appendix

Connected Places

Glossary – Challenge Research

(1) Local Government Association, March 2020

[5.74 Accessible housing_v05_1 - BM amends.pdf \(local.gov.uk\)](#)

(2) (3) BRE, 2021,

Client Report for Connected Places Catapult; Homes for Healthy Ageing Building Fabric Challenges

(4) (5) NIHR Dissemination Centre, 2019

[Moving-Matters-FINAL-WEB28229-1.pdf \(nihr.ac.uk\)](#)

(6) (7) Kings Fund, 2021

[Adult social care funding and eligibility | The King's Fund \(kingsfund.org.uk\)](#)

(8) The Care Workers Charity, 2019

[Wellbeing Report - The Care Workers Charity](#)

(9) Kings Fund, 2021

[Social care 360 \(kingsfund.org.uk\)](#)

Location Partner Activities and Commitments

Challenge Research Activities	Description
Challenge Scoping Workshop 1	10-15 stakeholders and experts, including your team involved in a 2 hours workshop where we will explore your proposed challenge.
Stakeholder Mapping	1-2 members from each location partner to carry out this exercise and deliver back to the team by the deadline.
Expert and User recruitment	Location partners to recruit interviewees this will include 15-20 experts and users.
Expert/Stakeholder interviews	1 or 2 members of each location team to carry out and lead 5 or more interviews with those involved in or affected by the challenge in your local ecosystem.
User Interviews	Led by an external contractor, location partner welcome to sit in on interviews.
Desk Research	Led by CPC, location partner welcome to send any key research they would like to be read and summarised.
Synthesis session	2-3 x 1 hour meetings to share findings from interviews and discuss final reports.
Challenge Definition Workshop	The same 10-15 stakeholders and experts as workshop 1, including your team involved in a 2 hours workshop, where we finalise and agree on challenges to take forward.
Final Challenge definition	Collaboration between, CPC and location partner activities will include; 3 to 6 final challenges mapped onto a challenge map, 3 to 6 final 'how might we' questions, 1 final presentation of findings

**Please take this list as an outline only and not a definite plan, we always try to be agile to meet the needs of our location partners and the programme. As such sometimes meetings or plans change accordingly.*

Location Partner Activities and Commitments

Testbed Scope Definition Activities	Description
Testbed Scoping Workshop 1	8 to 15 stakeholders and experts including your team involved in a 2 hours workshop to start defining the scope of your testbed, including size and profiles of cohort of testers/participants and testing environment.
Testbed Scope Definition	Location Partners conducting the work and discussions required at a local level to specify their testbed scope.
Testbed Scoping Workshop 2	The same 8 to 15 stakeholders and experts as workshop 1, including your team involved in a 1,5 hour workshop to review your Testbed Scope and define the expertise and resource needed in your local taskforce to set up and manage the testbed.

Open Call Activities	Description
Final brief write up	A collaboration between CPC and location partner.
Open call dissemination strategy meeting	1.5 hours to discuss how we release the open call, including who our contacts are, what channels we will be using and which SMEs or organisations we might want to target.
Coms and Marketing for open call	Location Partners disseminating the Open Call for solutions in their network as agreed in the Strategy Meeting. CPC supporting by drafting messages if necessary.

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Location Partner Activities and Commitments

SME interviews and selection activities	Description
Judging	All applicants need to be reviewed and marked digitally before the interview stage.
Normalisation Meeting 1	1,5 hour meeting to review scores and discuss applicants, making sure scoring is fair.
Interviews	Roughly 10-15 interviews per location lasting either 30 minutes or an hour. These will be spread over the course of a few days.
Normalisation Meeting 2	1,5 hour meeting to review interviews and discuss applicants, making sure scoring is fair.
Ongoing Activities	Description
Weekly Meetings	Weekly meetings with the location partner and the CPC main point of contact, to update each other on progress and raise any questions or concerns.
Programme Steering Committee	Chaired by CPC, the steering committee is a community of practice among location partners, to share learnings and best practice on how to deliver innovation locally to address the Healthy Ageing challenges.

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