Sustainability Strategy

ACRC
Advanced Care Research Centre

INTRODUCTION

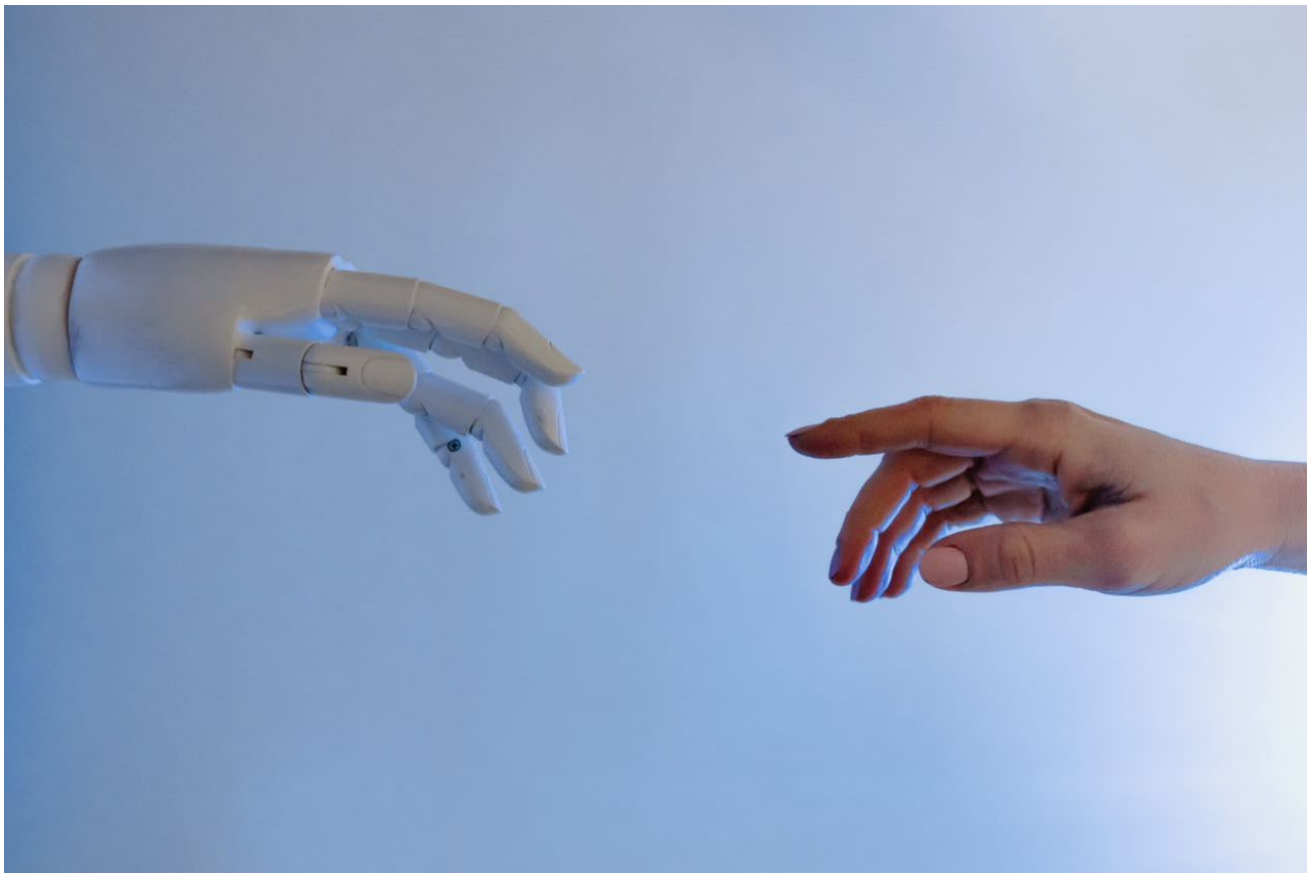
Across the world, there is a major demographic transition in progress characterised by a rapidly ageing population. An increased life expectancy is to be celebrated, but it poses major societal challenges for individuals, families and both the public and private sectors. In the context of ensuring appropriate care in later life, the problem is not living longer, but living longer in poor health, and often with multiple health conditions. This status is strongly associated with reduced physical and mental function and reduced quality of life, which drives the need for support from family or health and social care services in later life. Social care is typically “low tech” featuring limited integration with healthcare, and both health and social care fail to make best use of their data and human resources. Neither health nor social care are well oriented to support family, friends and neighbours who are critical caregivers. Both tend to treat people in later life as relatively passive ‘recipients’ of care rather than active participants in a shared endeavour that actively involves (and relies on) the person, their family and their community. Care systems were already often sub-optimal as a result of austerity and ageing, and in the aftermath of the pandemic require greater investment and an evidence-based re-design in the face of rapidly growing demand. Therefore, understanding how needs and priorities change in later life and being able to predict future health and functioning are both essential to target interventions at people who are most likely to benefit.

The vision of the ACRC is to improve the quality and sustainability of care provision and to reduce inequalities in care provision in order to enhance the quality of life, dignity and the desired level of independence of people living with multiple conditions in later life. We do this by researching different approaches to person-centred care, how data are used, what assistive technologies help people and their carers, and different models of care for people in later life, within the context of broader social and structural factors which influence health and care. This focus on both structures and individuals is deliberate, as both are needed to transform care in later life. This research is underpinned by cross-disciplinary integration and cross-sectoral collaboration embedded in real-world care delivery across the UK. The centre’s outputs are planned to be multi-pronged, focussing mainly on high-impact research outputs, but also on the development of data-driven insight and technologies to benefit policy, patients and the public.

This is currently being driven by a collaboration between the Universities of Edinburgh and Newcastle, supported by a £20M, seven year investment from Legal & General plc (L&G).

The original ACRC strategy, as agreed between The University of Edinburgh and L&G, outlined the intention for ACRC to "form a larger body of research, innovation and implementation [which would] incorporate further partners, and [leverage] additional support". Now that we are approaching the end of the second full year of the Centre, it is time to take stock and decide how we expand the scale, the scope and the span of the Advanced Care Research Centre over the next twenty years, particularly in light of the current health and social care landscape. This includes proposed changes to adult social care in England and Scotland (which includes changes to funding and workforce planning), and proposed improvements to the digital underpinnings of health and care service provision in Scotland). ACRC should also capitalise on the many opportunities offered by the current science and innovation landscape, for example the focus on artificial intelligence in health and social care both in Scotland and across the UK. This is backed up by the investment in the UK Government Industrial Strategy Grand Challenges, two of which (AI and Data, and Healthy Ageing) are directly applicable to the work of ACRC, and underline the need to work closely with business.

ACRC's vision for sustainability is of a centre with a guaranteed funding beyond the initial seven-year funding horizon and expanded beyond the current six work packages. The sustainability strategy presents our approach to research and strategic partnerships to ensure expanded and extended funding to achieve this vision.



DEVELOPING THE SUSTAINABILITY STRATEGY

The ACRC sustainability strategy was developed over six months and was informed via a number of activities:

- A review of the initial proposition to our original funders, and a landscape review of the current strategic and policy related drivers.
- Three "deep-dive" sessions with the ACRC Advisory Board during 2021 and 2022 (see appendix one for details of the ACRC Advisory Board).
- Two "deep-dive" sessions with the ACRC Management Group during 2022.
- Two workshops and seven individual consultations with a range of policy makers, academics, voluntary, community and social enterprise (VCSE) sector organisations, think tanks, care provider organisations and people with lived experience of later life and of care (i.e. public contributors) to discuss the work of the ACRC, to gather perspectives on the current areas of focus and the potential for wider partnerships. These were carried out and reported on by an independent facilitator. See appendix three for details of the organisations which contributed to these workshops.
- Further lay feedback on the first full iteration of the strategy during a workshop with six people from our public contributor network.
- A description of the consultation process can be found in appendix four.

THE STRATEGY

How will the ACRC influence the state of the art in relation to "transforming care in later life"?

We will retain and capitalise on our **generalist focus on multiple conditions** and avoid leading on single-condition work. There are already significant centres of expertise focussed on individual conditions associated with later life, including dementia (particularly at the University of Edinburgh). However, we will collaborate with others on single-condition work where an expertise in later life is required.

We will retain our focus on the **last few years of life,** whenever they occur. However, we will **also** include research on **upstream interventions** (i.e. earlier in the lifespan) where these may improve people's experiences of later life, i.e. to increase their healthspan (the duration of healthy life).

We will, with our expertise in patient and public involvement and engagement (PPIE) and co-creation, develop a more **person-focussed approach** to the data-driven and care systems work, in order to better integrate the different work packages of the ACRC.

Related to this, we will focus more on **evaluation and implementation of health and care technologies** that are either currently used or needed by people in later life. This focus acknowledges that people vary widely in their experience of, and willingness to use technology but that willingness can be influenced by adapting current technologies to improve their relevance and ease of use. This will include evaluation of user and practitioner requirements, as well as "blue skies" innovation. Technologies in this context includes data and analytics, as well as assistive, sensing and software technologies, and implementation includes service-level as well as user-level approaches to change.

We will extend our work on identifying, mapping and understanding new models of care into **testing** and **evaluating new models of care**. We have an existing commitment to submit a series of major grant proposals to rigorously test the new models of care which are currently being examined and designed as part of our New Models of Care work-package.

In order to contribute existing acute and longer-term challenges in this field, we will seek new opportunities in the related areas of **health inequalities and diversity** as a cross-cutting initiative across all of our activities, and **workforce challenges** particularly in relation to delivering new models of care.

In addition to these new opportunities, we will retain enough agility to respond flexibly to other new relevant topics as they emerge or as they are prioritised by research commissioners and funders.

Who do we strategically partner with in the UK and overseas to achieve this?

We will continue our very productive collaboration with leaders in ageing research from Newcastle University, and with our data science colleagues at University College London. As with the choice of research *topics*, we need to retain the flexibility to ally with research *partners* to respond to new funding calls as they emerge. However, in the course of the strategy development we have identified a small number of academic partners in the UK (including the devolved nations), Europe, North America and Asia who we will work closely with during 2022/2023 to determine which of these we have the resource to formally partner with. Our ambitions for partnership will focus initially on reciprocal placements for PhD students, methods for co-creation and interdisciplinary working, and data analysis for replication and comparison, since these provide opportunities to build relationships and mutual understanding before applying for shared funding.

We will explicitly extend our collaborative model beyond academic research partners so that we can demonstrate impact beyond standard academic outputs. To do this, we will create actionable relationships with non-academic partners to focus on two activities:

- Implementation partners (such as housing providers, health and care providers, community organisations including voluntary organisations and academic centres of implementation research) to translate new ways of working or the adoption of new technologies.
- Influencing partners (such as carers' organisations, think tanks, campaigning organisations and charities) to support the ACRC in influencing policy and practice.

What level of funding do we require to reach this ambition, and by when?

Our ambition is to achieve a 100% match of the initial investment by L&G by 2029. In order to do this, we will need, at a minimum, to maintain the current levels of additional funding at approximately £3M per year from year 2025 onwards. In practice, that requires centre/unit funding (typically £10M+) or multiple programme grant (typically £1-5M per programme) funding (or ideally both).

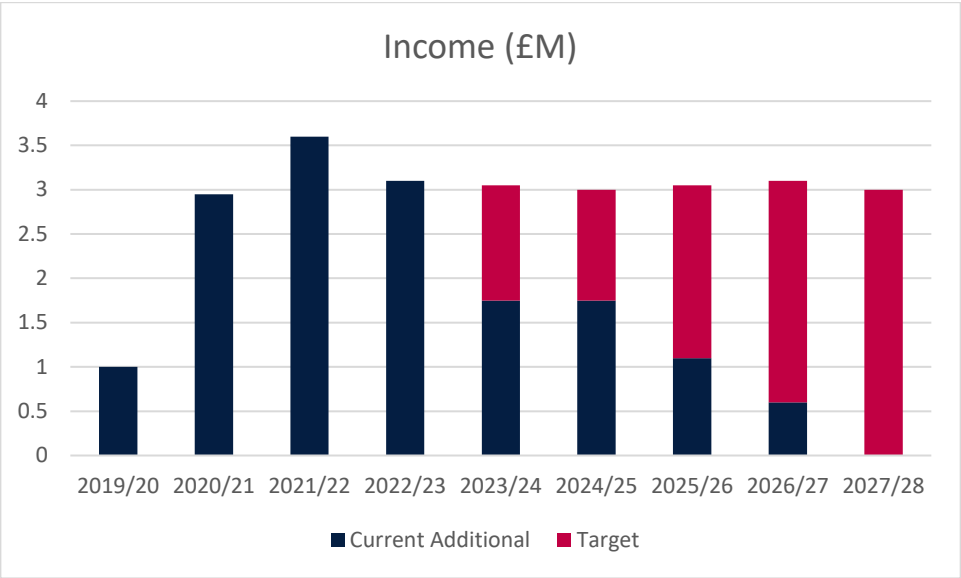


Figure 1 Funding target

Who funds it?

In addition to the ambitions for the target level of funding, we will aim for a balanced portfolio with enough income to resource a sustainable level of activity, to provide attractive career pathways for researchers, to provide a central nucleus to co-ordinate the centre, and with enough overhead contribution to "Full Economic Costing" so as not to be a drain on university resources. The ACRC will therefore target a mix of funder types and award level, in order to make the best of existing talent and to create an achievable pathway to success for future leaders.

Our core funding source will be UK public research funders (e.g. UKRI, NIHR) as funding calls for these are relatively predictable, have a range of opportunities suited to the funding mix we require, and cover the interdisciplinary nature of ACRC's scope.

We will continue to seek additional funding to sustain the ACRC academy, through UKRI and charitable sources, as well as including PhD studentships as part of research bids.

We will scan potential opportunities offered by the Horizon Europe programme although UK eligibility remains in doubt (as of September 2022).

We will continue to seek funding from charitable sources (including alumni and charitable donations), following existing successes in this domain. However, the scope for charity funding is more limited than for other research domains, because many charities are condition specific, which is usually a poor fit for ACRC.

We will continue to seek commercial funding, and given the significant investment in networking and relationship management required, we will invest in a member of business accelerator staff to work closely with Edinburgh Innovations to start during 2024.

Some of our professorial leads are in a position to lead these potential grants, but others are nearing retirement so cannot commit to long-term leadership, and others are at full capacity over the next 3-5 years. We will agree a list of potential leads from this senior group, and complement these with mid-career academics who are at the point of starting to lead or co-lead large project and programme grants.

We will support existing post-doctoral research assistants (PDRAs) to apply for research fellowships and for more senior mid-career and early tenured researchers to apply for project grants. We aim to co-invest in at least three Chancellor's Fellows across the University's three colleges who will also be expected to operate at this level starting in 2023.

Finally, we will continue to identify and nurture a small number of “rising stars” at early or mid-career stages to support in personal fellowship applications, both internally within the current Academy PhD students, the PDRA cohort, and by attracting new collaborators from elsewhere in the University and internationally.

How do we develop a sustainable organisation on which to build?

The sustainability of the ACRC is underpinned by alignment with the University of Edinburgh’s Strategy 2030, which focuses on the creation of a number of initiatives, including data science and ageing, driven by collaborative communities and industry programmes. At a detailed level, this includes the University’s approach to transforming *healthspan*, using a multiprofessional and interdisciplinary approach, and transforming the health and care workforce to deliver the right health and care at the right time. Sustainability will also be bolstered by our inclusion within the University of Edinburgh’s flagship Usher Institute Building (opening Spring 2024), and our existing relationship with the Data Driven Innovation hubs. A key aim is to maintain effective interdisciplinary working which is open to additional collaborations. At the moment, the ACRC’s activities are split across seven different organisational units (schools). This has the risk of compromising the Centre’s longer-term sense of identity and ability to attract new talent as staff will inevitably feel a sense of belonging to their host school where their disciplinary base is. We will therefore work to seek formal Cross-College Centre status within the University, which will allow all staff to be fully affiliated to the centre, or seek to join other relevant Cross-College institutes (Usher Institute if it evolves in that direction, or similar).

Sustaining the level of activity described in this strategy requires not just a solid organisational foundation, or a balanced and steady stream of grant funding, but crucially depends on the availability of talented staff. There are currently a number of attrition points between 2023 and 2025 as current funding ends. Therefore, planning started in early 2022 to develop new grant applications in order to create a pipeline of activity to maintain both the income and expertise available to the ACRC.

APPENDICES

Appendix 1 ACRC Advisory Board Membership

Prof Sir Lewis Ritchie OBE FRSE (Chair)	James Mackenzie Professor of General Practice, the University of Aberdeen
Prof David Grayson CBE	Chair of the international, pan-disability charity Leonard Cheshire
Prof Kamlesh Khunti CBE	Professor of Primary Care Diabetes and Vascular Medicine at the University of Leicester, UK
Prof Jill Manthorpe CBE	Professor of Social Work at King's College London and Director of the NIHR Policy Research Programme in Health and Social Care Workforce.
Prof Irene McAra-McWilliam OBE	Deputy Director Research & Innovation at The Glasgow School of Art
Phil(omena) O'Malley	Public contributor
Ian C Ritchie CBE	Non-executive Chairman of Tern plc
Debbie Smith	Public contributor

Appendix 2 ACRC Management Group Membership

Prof Bruce Guthrie	Professor of General Practice at the Usher Institute, The University of Edinburgh and ACRC Director.
Dr Bea Alex	Chancellor's Fellow and Turing Fellow, The University of Edinburgh
Prof Katie Brittain	Professor of Applied Health Research and Ageing, Newcastle University.
Prof Jacques Fleuriot	Personal Chair of Artificial Intelligence, The University of Edinburgh
Prof Barbara Hanratty	Professor of Primary Care and Public Health, Newcastle University.
Prof Eileen Kaner	Professor of Public Health and Primary Care Research, Newcastle University
Dr Alan Marshall	Senior Lecturer in Quantitative Methods, The University of Edinburgh
Prof Stewart Mercer	Professor of Primary Care and Multimorbidity, The University of Edinburgh
Prof Louise Robinson	Regius Professor of Ageing and Professor of Primary Care and Ageing, Newcastle University
Prof Heather Wilkinson	Professor of Dementia Practice and Participation, The University of Edinburgh
Dr Honghan Wu	Lecturer in Health Informatics at University College London.
Prof Ian Underwood	Professor of Electronic Displays, The University of Edinburgh

Appendix 3 Stakeholder organisations contributing to the Strategy workshops

ACRC public contributors
Age Scotland
Age UK
Carers Scotland
Carers UK
Care Workers Charity
Convention of Scottish Local Authorities (COSLA)
Experts by Experience
Future Care Capital
Health Data Research UK- North
International Longevity Centre UK (ILC-UK)
IMPACT Centre
London School of Economics – Care Policy and Evaluation Centre
National Care Forum
Scottish Government Technology Enabled Care
Social Care Future
Social Care Institute for Excellence
University of Edinburgh – Edinburgh Innovations
University of Glasgow - Institute of Cardiovascular & Medical Sciences
University of Newcastle – Centre for Ageing and Inequalities
University of Newcastle – UK National Innovation Centre for Ageing
University of Sheffield - Healthy Lifespan Institute

Appendix 4 The stakeholder consultation process

The ACRC programme team and the external facilitator (Kate Jopling) reviewed existing documents, setting out the ACRC's initial strategy and current programme. This process informed the development of a shortlist of key stakeholders to approach for the two initial workshops and individual consultations. A short information pack setting out the ACRC's vision and priorities was developed which was used as a stimulus for discussions.

Two workshops and seven individual consultations with a range of policy makers; academics; voluntary, community and social enterprise (VCSE) sector organisations; think tanks; care provider organisations; and people with lived experience were held in Spring 2022. These were used to discuss the work of the ACRC and gather perspectives on the current areas of focus and the potential for wider partnerships. Group discussions were held as open forums in which participants were encouraged to share perspectives, offer critical views and to ask questions freely. Participants in both individual and group discussions were assured that comments would not be individually attributed.

We were not able to secure time for discussions with all of the stakeholders identified as having relevant perspectives during the timeline of this project. However, as this strategy development is designed to be a living document, further consultations will be held with other stakeholders as it continues.

Workshop participants and individual consultees were asked for their thoughts in response to an overview of the ACRC's work including its current vision statement, its current work packages and information about two key principles that have informed its internal assessment of how to prioritise its work – namely a focus on the "last 1000 days" of people's life, and a decision not to take forward work on single conditions.

A key parameter for the discussions was that the ACRC's core vision and fundamental tenets were unlikely to be change, so that stakeholders were encouraged to consider suggestions which remained within:

- the vision of "*transforming care in later life using personalised care enabled by data science, AI and assistive technologies and robotics embedded in systems of health and social care which are highly responsive to the wishes, priorities and needs of individual people in later life"*
- the key value of a *"programmatic approach … [that] allows the whole to be greater than the sum of the parts, by ensuring supported cross-disciplinary integration and cross-sectoral collaboration embedded in real-world care delivery from the outset"*

All stakeholder consultations were led by Kate Jopling who was assisted by ACRC staff members Lucy McCloughan and Layla Robinson who were available to answer any specific questions. A report of the stakeholder consultations was written up and presented to the ACRC management group by Kate Jopling.

Several iterations of the strategy were produced during July and August 2022, with the ACRC Management Group. This was then shared with six members of the ACRC public contributors group at the end of August 2022. A ninety minute, on-line workshop was facilitated by the ACRC Patient and Public Involvement and Engagement Co-ordinator, Jenny Robertson. This workshop focussed on the key areas of research (i.e. how ACRC will influence the "state of the art") and key types of partnership working we should be pursuing. Participants were encouraged to comment on which areas were meaningful to them, and which, if any areas should be changed. This workshop mainly validated the key areas of focus for the ACRC, but did also lead to a change of wording in relation to the use of *existing* technology, the *range of experiences* with technology and the desire to accommodate *new* technologies as well as a clearer description of community partnerships.

The ACRC Advisory Board fed back on the process of the strategy, on emerging findings from the stakeholder sessions prior to the stakeholder report being submitted, and on the penultimate version of the strategy after the public contributor workshop. This led to final alterations being made to our aspirations for future work to ensure that they were aligned with both our overarching aim, and the expertise available to the Centre.

Lucy McCloughan
Bruce Guthrie

September 2022

With acknowledgements to Kate Jopling for support with stakeholder engagement and strategy development.