Evaluating Aging in Place with Dementia:
Towards a value proposition

Dr Louise Lafortune

Cambridge Public Health, University of Cambridge

NAS Workshop 13-15th September 2023 (Virtual)

Aging in place successfully
Framing

- What people call "home" does not exist in a vacuum – it is necessarily embedded in some form of interconnected community, social and policy environments.

  - whether these environments are enabling will determine whether the aging experience is successful…or not.

- Programs that support aging in place – with or without dementia – should focus on optimizing the fit between an individual and the environment they live in.

  - Challenge – The evidence base of what works, for whom, under what circumstances is thin, creating barriers for implementation & the scaling up of interventions.
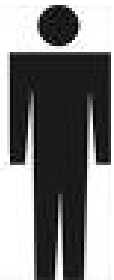
Aging in place successfully
Framing for evaluation research

Promoting a successful later life can work and add value <u>at all stages of health and frailty</u> **if** efforts are well targeted and delivered equitably
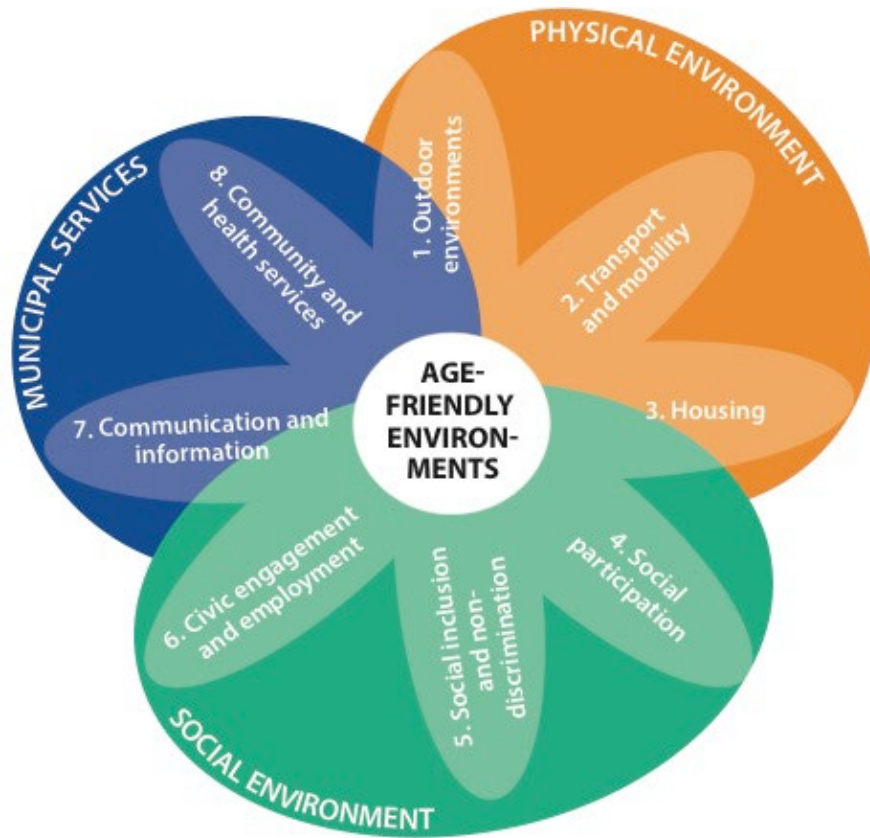
Understanding the factors that influence successful aging

Developing interventions & solutions tailored to needs

Demonstrating what works & adds value

Framework - Age-Friendly Cities & Community (AFC)

PHYSICAL ENVIRONMENT

MUNICIPAL SERVICES

8. Community and health services

1. Outdoor environments

2. Transport and mobility

7. Communication and information

AGE-FRIENDLY ENVIRON-MENTS

3. Housing

6. Civic engagement and employment

5. Social inclusion and non-discrimination

4. Social participation

SOCIAL ENVIRONMENT

Individual ⟷ Environment
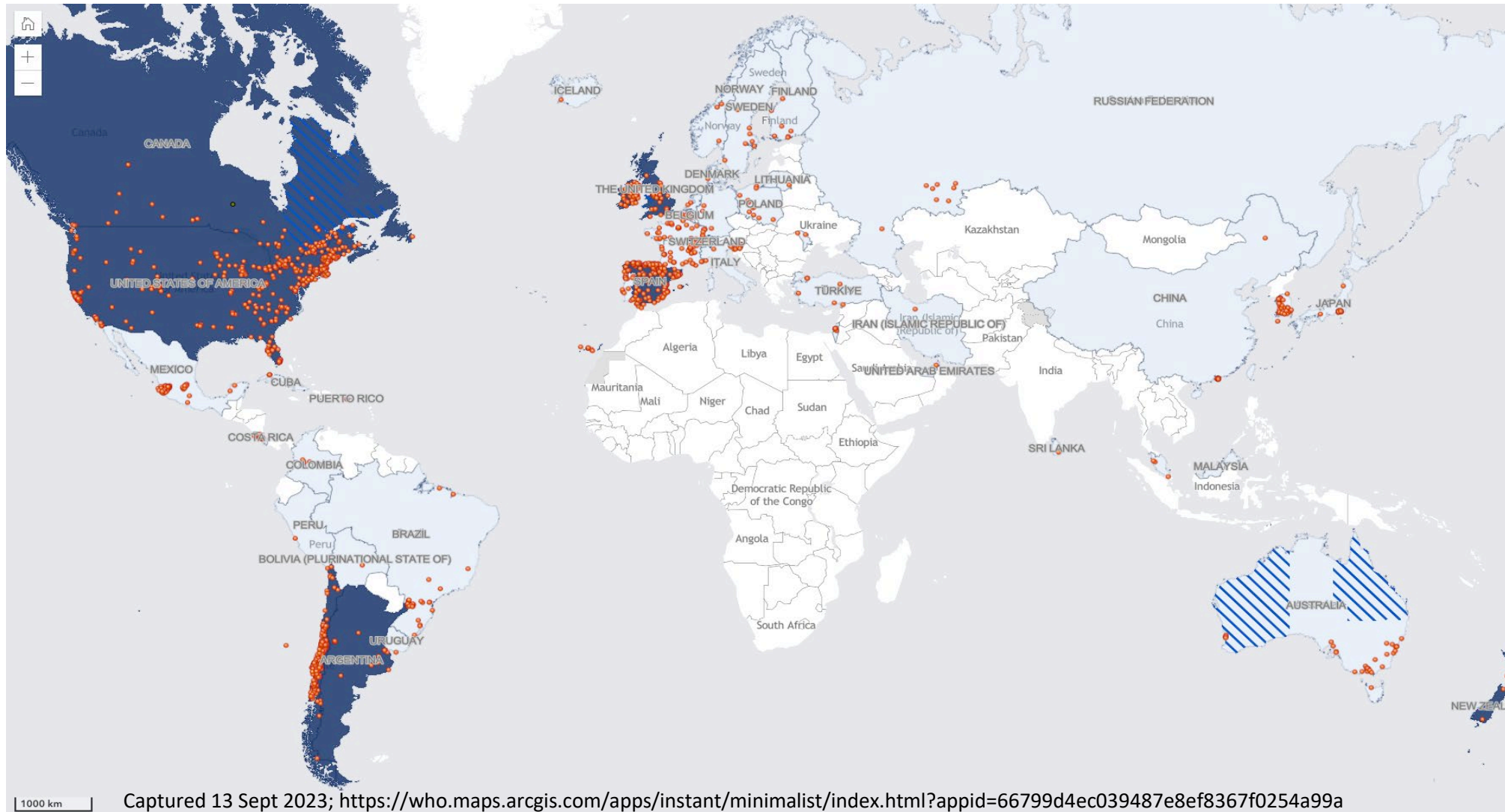
physical, social, economic, technological, polity

…is one in which "policies, services, settings and structures support and enable people to age actively."

WHO 2007 & 2015

"…are created by removing physical and social barriers & implementing policies, systems, services, products and technologies that address the social determinants of healthy ageing, and enable people, even when they loose capacity, to continue to do the things they value".

UN Decade of aging, 2021

WHO Network of Age-Friendly Communities

Captured 13 Sept 2023; https://who.maps.arcgis.com/apps/instant/minimalist/index.html?appid=66799d4ec039487e8ef8367f0254a99a

AFC programme - Building capacity for evaluation

Monitoring & Evaluation needs
UK network of AFC

"...we need to demonstrate what we're doing...we are being asked **'what impact are you making, how is this making a difference**"
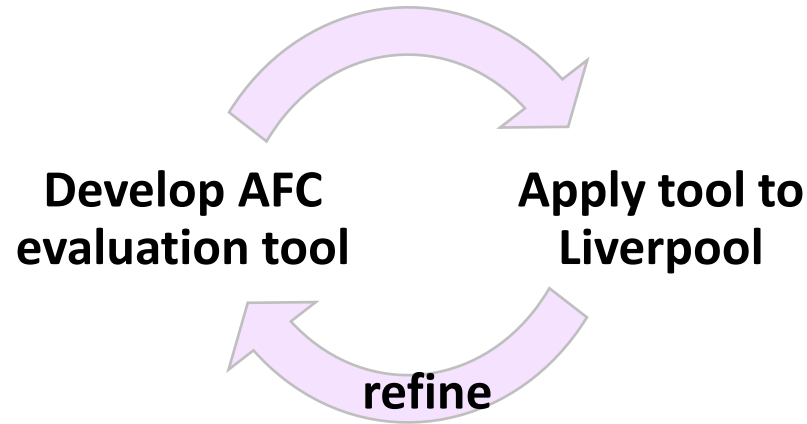
Lack of capacity for evaluation

Age-Friendly Communities Evaluation Tool

	Evidence
1	Political support
2	Leadership & governance
3	Financial & human resources
4	Involvement of older people
5	Priorities based on needs assessment
6	Application of existing frameworks for assessing age-friendliness
7	Provision
8	Interventions rooted in evidence base
9	Co-ordination, collaboration & interlinkages
10	Monitoring & evaluation

AFC - S Buckner et al.
- https://doi.org/10.1007/s12062-017-9206-2
- https://doi.org/10.1108/WWOP-11-2017-0032

Age Friendly Community Evaluation Tool

Develop AFC evaluation tool
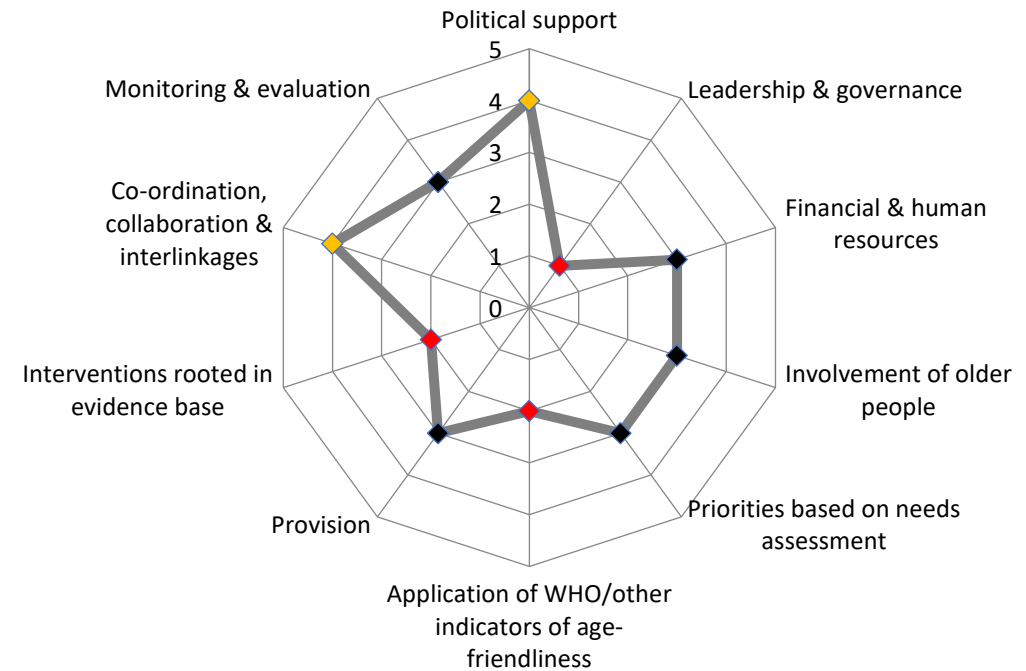
Apply tool to Liverpool

refine

Pilot testing – is the tool flexible enough?

- Falls intervention (identified priority as part of tool development)
- Dementia friendly community (Sheffield)
- New community (Healthy New Town, Northstowe)

Age Friendly Community Evaluation Tool

	Evidence input areas
1	Political support
2	Leadership & governance
3	Financial & human resources
4	Involvement of older people
5	Priorities based on needs assessment
6	Application of existing frameworks for assessing age-friendliness
7	Provision
8	Interventions rooted in evidence base
9	Co-ordination, collaboration & interlinkages
10	Monitoring & evaluation

Building capacity for evaluation

Monitoring & Evaluation needs
UK network of AFC

Age-Friendly Communities Evaluation Tool

Dementia Friendly Communities
National Evaluation

"...we need to demonstrate what we're doing...we are being asked **'what impact are you making, how is this making a difference**"

Lack of capacity for evaluation

	Evidence
1	Political support
2	Leadership & governance
3	Financial & human resources
4	Involvement of older people
5	Priorities based on needs assessment
6	Application of existing frameworks for assessing age-friendliness
7	Provision
8	Interventions rooted in evidence base
9	Co-ordination, collaboration & interlinkages
10	Monitoring & evaluation

Revised framework

Thematic domains	Cross-cutting
Activities & environments	Involvement of PAD*
Basis of DFC	Equalities
Leadership & governance	Evolution
Resources	
Monitoring & evaluation	

*people affected by dementia

AFC - S Buckner et al.
- https://doi.org/10.1007/s12062-017-9206-2
- https://doi.org/10.1108/WWOP-11-2017-0032

DEMCOM
- https://doi.org/10.1002/gps.5123
- http://dx.doi.org/10.1177/1471301220965552
- https://doi.org/10.1002/gps.4987
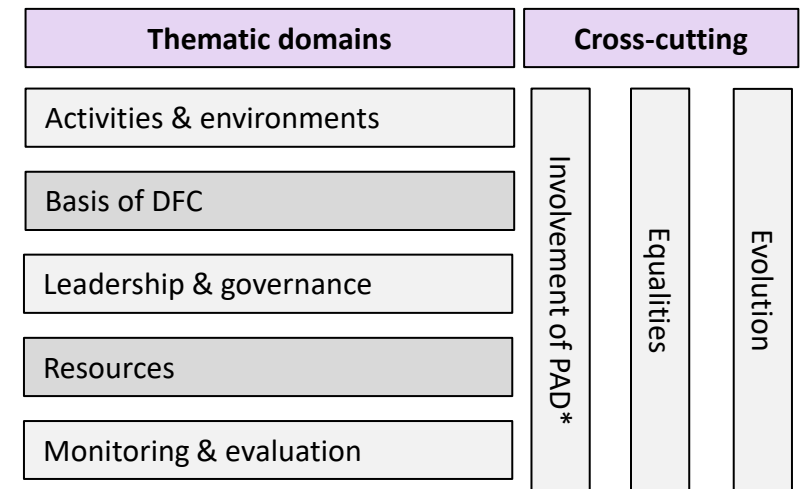
Dementia Friendly Communities (DFC)

Policy context

- Two Prime Minister's Challenges on Dementia (2012 & 2015)

- Target by 2020: *'Over half of people living in areas that have been recognised as DFCs'* (PMC 2015)

Practice

- DFCs come in different shapes and sizes

- Common goal: ensuring that people affected by dementia can continue to be active & valued citizens

- DFCs are not necessarily geographical communities – also communities of interest (e.g. shopping centres; churches; national banks)

Recognition process

- Alzheimer's Society provides guidance & official recognition for communities 'working towards becoming dementia friendly'

National Evaluation of DFC in England
DEMCOM

Research questions

- What are the characteristics and areas of focus of DFCs in England?

- How do different types of DFCs enable people affected by dementia (PAD) to live well?

- What is needed to sustain DFCs?

- What value do they generate?

- How can we assess DFCs?

Phase 2 - Pilot testing DFC evaluation framework

Initial framework

Areas for evidence collection ('domains')
Political support
Leadership & governance
Financial & human resources
Involvement of people affected by dementia
Priorities based on needs assessment
Application of existing frameworks for assessing dementia-friendliness
Provision
Interventions rooted in evidence base
Co-ordination & collaboration
Monitoring & evaluation

Piloting in 2 DFCs

National stakeholder workshop

Revised framework

Thematic domains	Cross-cutting		
Activities & environments	Involvement of PAD*	Equalities	Evolution
Basis of DFC			
Leadership & governance			
Resources			
Monitoring & evaluation			

*people affected by dementia

PPI - Mathie et al, 2020 (https://doi.org/10.3390/ ijerph192315874)

	Outcomes resulting from the DFC's efforts.

Figure 6. (a) The evaluation framework for DFCs – final iteration. b. Areas of focus of the evaluation framework domains.   Buckner et al., 2022

DFC Evaluation framework

Thematic domains
- Basis of DFC
- Leadership & governance
- Resources
- Activities & environments
- Monitoring & evaluation

Cross-cutting
- Involvement of PAD*
- Equalities
- Evolution

Outcomes

What does it mean for people affected by dementia???

*people affected by dementia

Buckner et al. 2022
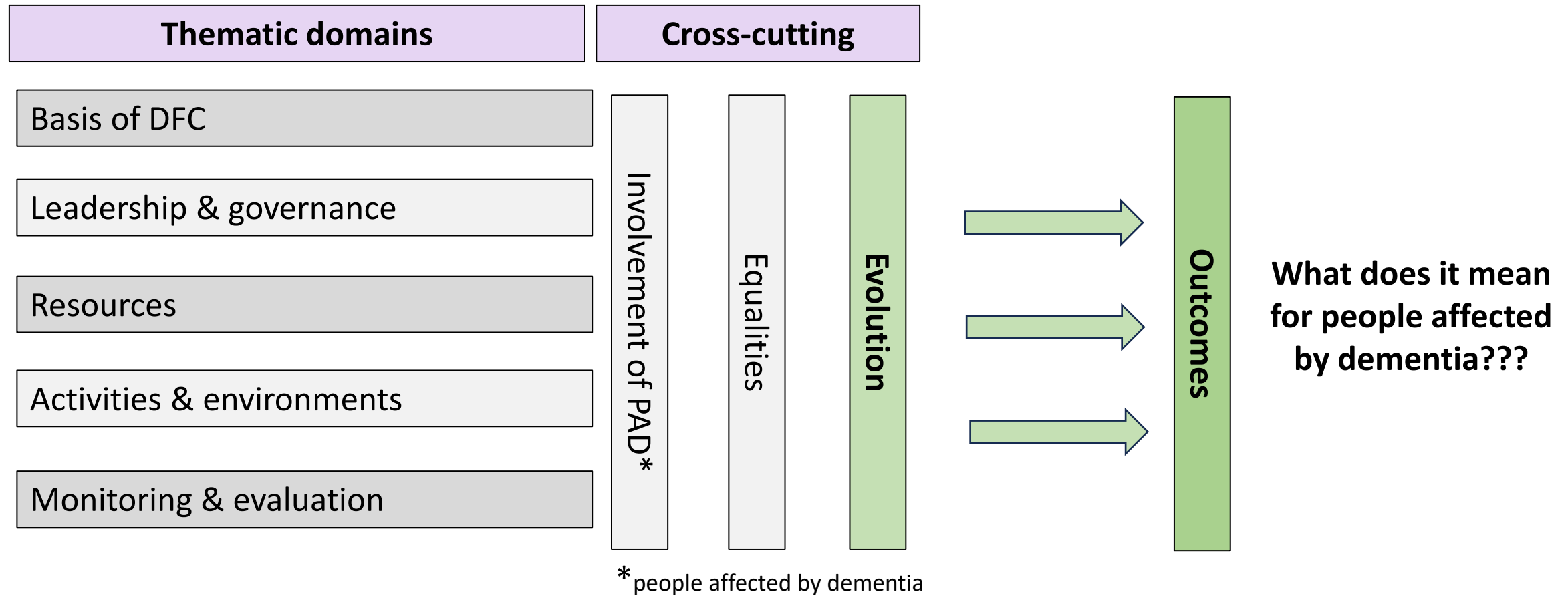
Suite of DFC Evaluation resources

Buckner et al. 2022
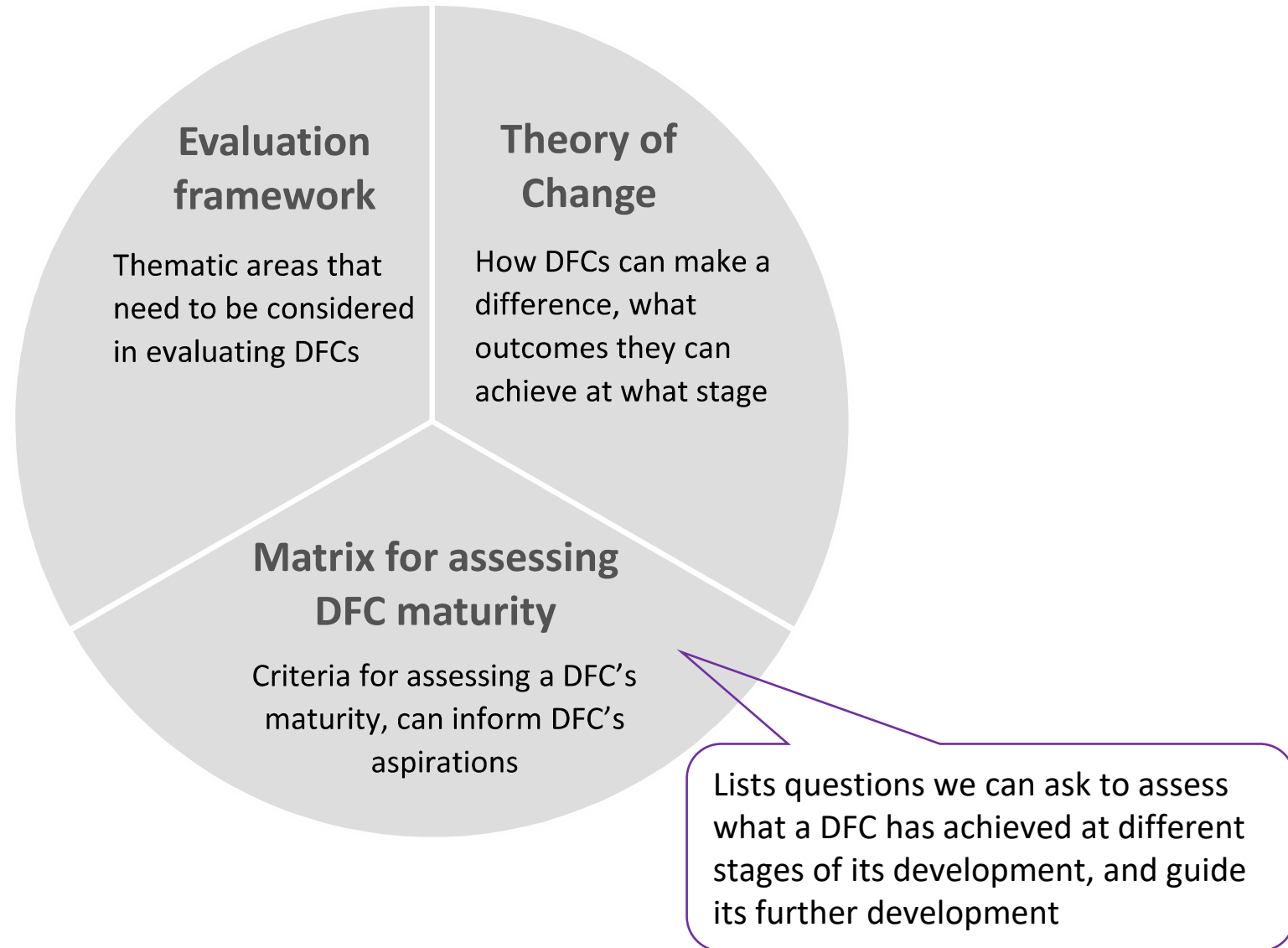
Theory of change for DFC

Research
Evidence base on DFCs

Dementia is normalised

Buckner et al. 2022

An economic perspective on DFCs

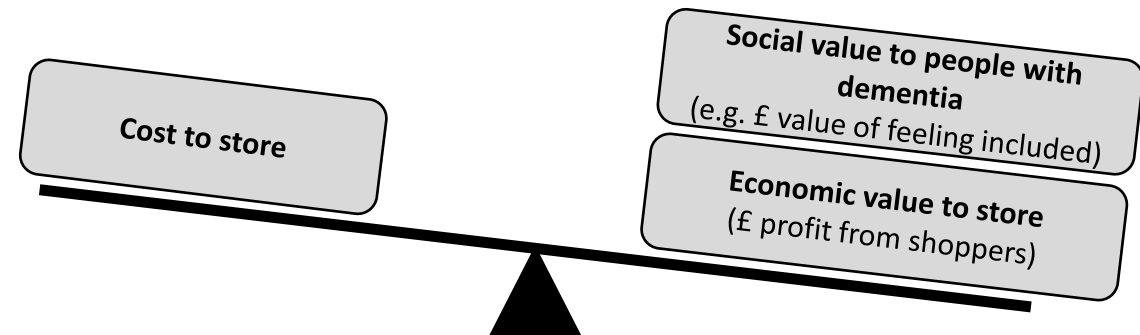We sought to gain a better understanding of

- the resources that drive DFCs
- the social value generated by DFCs

1) Resource input in case study DFCs

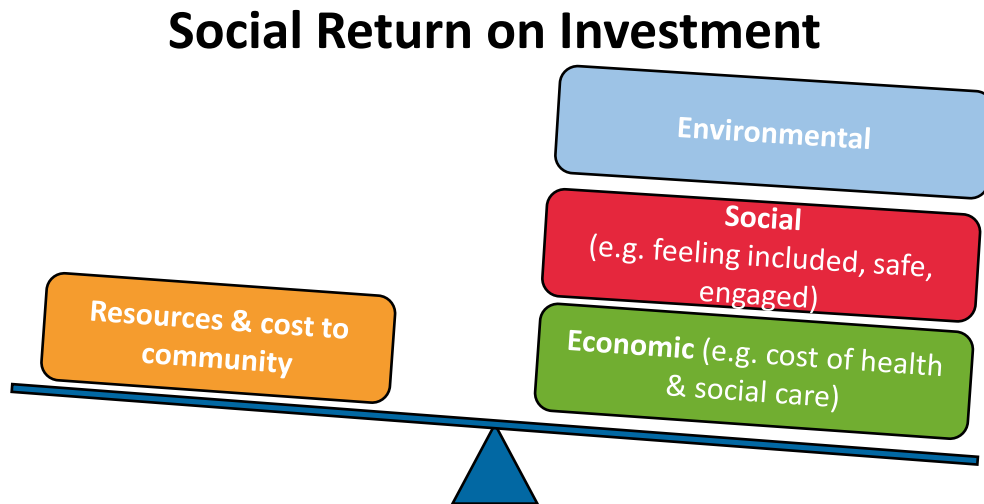|	Site A	Site B	Site C	Site D	Site E	Site F
Source/Flow/Sufficiency - Sustainability						
✓ Charities	++	(+++)	(+)	+++	+	++
✓ Public/Statutory funding	+++	+++		++	+++	
✓ Private sector	+					+++
✓ User charges & contributions	+	+				
✓ Fundraising	++	+++	---		++	
✓ Donations	+		+	++++		
✓ Grants			+	++	+	
Salaried staff	++	+++	-	+	++	
Volunteers	++	+	++++	+	+++	+
✓ Trained staff	+	++	+++		+++	
✓ Members of community	++	+	++++		+	++
✓ PWD	+	+++	(+)			(-)
✓ Support from partner organisations			++	+++	++	+++
Built infrastructure / technical support / Sundry						
✓ Information	+		++			++
✓ Room/venues/offices	+	+	+++	+++		
✓ printing & equipment	+		++			
✓ design support						
✓ transport services	+		++			

2) Scenarios to calculate the value generated by DFCs

Example: A local grocery store trains staff as Dementia Friends, to help retain/attract customers living with dementia

Cost to store

Social value to people with dementia (e.g. £ value of feeling included)

Economic value to store (£ profit from shoppers)

- DFCs are assumed to have a high Social Return on Investment
- Case study findings from DEMCOM suggest this is the case
- **Gap to fill: more data needed for a thorough assessment of
  i) resources dedicated to DFC activity
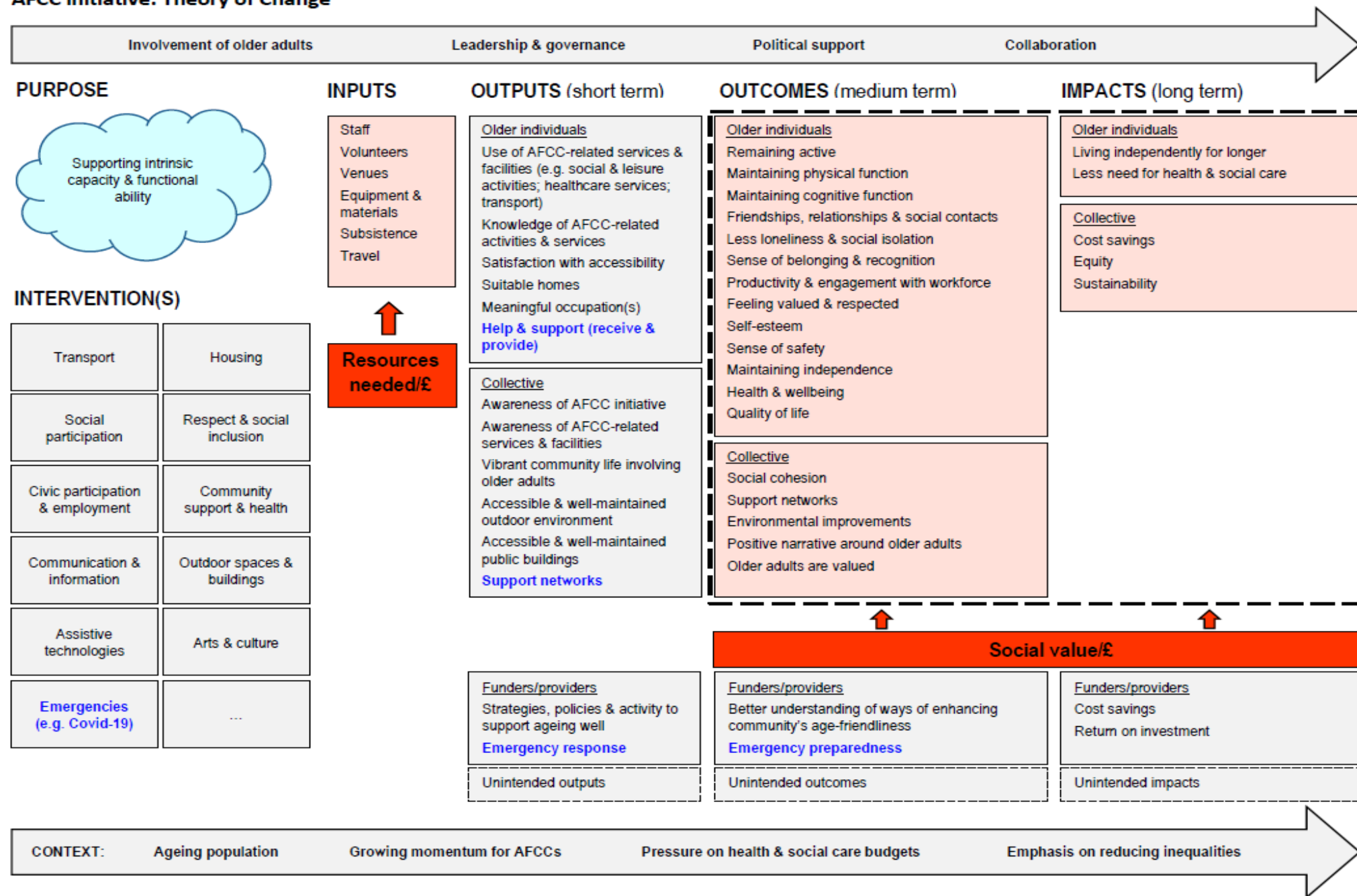 ii) outcomes/impact of DFC on PAD and their communities**

Towards a value proposition for AFC

- Efforts to assess impact of Age-Friendly Community initiatives to date...
  - ❖ Largely focused on the process / individual components
  - ❖ Much less is known about **short and long-term benefits & resources implications**

Social Return on Investment

Environmental

Social
(e.g. feeling included, safe, engaged)

Economic (e.g. cost of health & social care)

Resources & cost to community

How much social value do we generate for each $ invested in Age friendly or dementia friendly communities?

AFCC initiative: Theory of Change

Involvement of older adults → Leadership & governance → Political support → Collaboration

PURPOSE

Supporting intrinsic capacity & functional ability

INTERVENTION(S)

Transport	Housing
Social participation	Respect & social inclusion
Civic participation & employment	Community support & health
Communication & information	Outdoor spaces & buildings
Assistive technologies	Arts & culture
Emergencies (e.g. Covid-19)	...

INPUTS

Staff
Volunteers
Venues
Equipment & materials
Subsistence
Travel

Resources needed/£

OUTPUTS (short term)

Older individuals
Use of AFCC-related services & facilities (e.g. social & leisure activities; healthcare services; transport)
Knowledge of AFCC-related activities & services
Satisfaction with accessibility
Suitable homes
Meaningful occupation(s)
Help & support (receive & provide)

Collective
Awareness of AFCC initiative
Awareness of AFCC-related services & facilities
Vibrant community life involving older adults
Accessible & well-maintained outdoor environment
Accessible & well-maintained public buildings
Support networks

OUTCOMES (medium term)

Older individuals
Remaining active
Maintaining physical function
Maintaining cognitive function
Friendships, relationships & social contacts
Less loneliness & social isolation
Sense of belonging & recognition
Productivity & engagement with workforce
Feeling valued & respected
Self-esteem
Sense of safety
Maintaining independence
Health & wellbeing
Quality of life

Collective
Social cohesion
Support networks
Environmental improvements
Positive narrative around older adults
Older adults are valued

IMPACTS (long term)

Older individuals
Living independently for longer
Less need for health & social care

Collective
Cost savings
Equity
Sustainability

Social value/£

Funders/providers
Strategies, policies & activity to support ageing well
Emergency response

Unintended outputs

Funders/providers
Better understanding of ways of enhancing community's age-friendliness
Emergency preparedness

Unintended outcomes

Funders/providers
Cost savings
Return on investment

Unintended impacts

CONTEXT: Ageing population   Growing momentum for AFCCs   Pressure on health & social care budgets   Emphasis on reducing inequalities

Social Return on Investment of AFC

Aim

To evidence the health-related outcomes of AFC interventions & their social value for older adults, and the resources needed to sustain these complex interventions at different geographical scales.

Research questions

- What are the preferred health-related outcomes of AFCC interventions and their social value?

- What are the resource requirements for effective and sustainable AFCC interventions?

- Are some approaches to age-friendliness more likely to generate more social value than others?

- What should a practice-friendly resource for assessing the SROI of AFCC interventions look like?

Social return on investment
Aging-well interventions

Systematic review of the evidence

- None look at overall AFC or DFC initiatives (as expected…)

- 23 studies - 7 peer reviewed papers & 16 technical reports/grey literature

- Overall moderate to good quality evidence
  - Scope for researchers to improve it by deploying robust data collection

- Studies mostly conducted in the UK; with a few from the US

- Overall message: **Ageing well interventions – including those targeting people with dementia – generate a positive social return on investment**

Lafortune et al. 2023 – In preparation
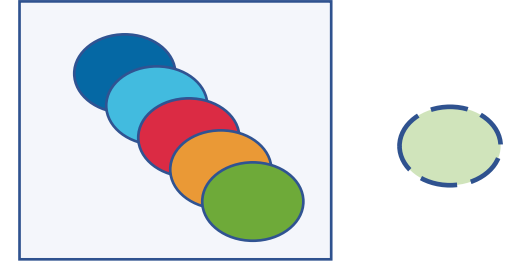
SROI - Project objectives

6 complementary work packages (Oct 2020 - Nov 2023)

- Synthesise existing evidence of the social value of AFCs

- Develop a list of prioritised AFC outcomes

- Attribute monetary values to outcomes using preference-based valuation with older adults

- Characterise & quantify the resources involved in developing and sustaining AFCs

- Assess the SROI of case study age-friendly interventions

- **Develop a social value resource for age-friendly interventions that can be used in practice**

Considerations for future work

- Encourage interdisciplinary research programs – to create the knowledge space needed to understand:

  - mechanism of action of complex interventions

  - their impact on phenotypes of aging in context

  - lift barriers to the implementation of research findings

- Evaluations should embrace the complexity of aging in place with dementia
  - Engage older adults and practice stakeholders from design to implementation of evaluation (funding it helps!)
  - Develop theory of change to guide impact assessment
  - Tailor research question and methods to the maturity of the intervention

Considerations for future work

- Economic and social value implications need to be better understood to foster implementation and help sustain aging in place initiatives, programs and interventions
  - Resources implications
  - Outcomes prioritized by older adults – core measures?
  - Economic evaluations
  - Focus not only on "new" initiatives but also on what is already happening
    - Understand what works to scale up
    - Stop what doesn't work!

- Embrace an equity lens to avoid intervention generated inequalities
  - Who is likely to benefit?
  - HIAT For equity: https://forequity.uk/hiat/

Funding & Acknowledgements

Funding & Acknowledgements

References

- Buckner S, Mattocks C, Rimmer M, Lafortune L. An evaluation tool for age-friendly and dementia friendly communities. *Working with older people*. 2018. 22;1:48-58. DOI: https://doi.org/10.1108/WWOP-11-2017-0032.

- Buckner S, Mattocks C, Rimmer M, Lafortune L. An evaluation tool for age-friendly and dementia friendly communities. *Working with older people*. 2018. 22;1:48-58. DOI: https://doi.org/10.1108/WWOP-11-2017-0032.

- Buckner S, Lafortune L, Darlington N, Dickinson A, Killett A, Mathie E, Mayrhofer A, Woodward M, Goodman, Claire. A suite of evaluation resources for Dementia Friendly Communities: development and guidance for use. Dementia. the international journal of social research and practice. 2022;21(8):2381-240. DOI:https://doi-org.ezp.lib.cam.ac.uk/10.1177/14713012221106634

- Buckner S, Darlington N, Woodward M, Buswell M, Mathie E Arthur A, Lafortune L, Killett A, Mayrhofer A, Thurman J, Goodman C. D. Dementia Friendly Communities in England: a scoping study. *International Journal of Geriatric Psychiatry*. 16 April, 2019. DOI: https://doi.org/10.1002/gps.5123

- UN Decade of Ageing; accessed 8 September 2023: https://www.who.int/initiatives/decade-of-healthy-ageing

- WHO 2007 & 2015, accessed 8 September 2023; https://extranet.who.int/agefriendlyworld/age-friendly-cities-framework/

- Woodward M, Arthur A, Darlington N, Buckner S, Killet A, Thurman J, Buswell M, Lafortune L, Mathie E, Mayrhofer A, Goodman C. The place of dementia friendly communities in England and its relationship with epidemiological need. *International Journal of Geriatrics*. 2019;34:67-71. DOI: https://doi.org/10.1002/gps.4987

- Mathie E, Arthur A, Killet A, Darlington N, Buckner S, Lafortune L, Mayrhofer A, Dickinson E, Woodward M, Goodman C. Dementia Friendly communities: The Involvement of People living with Dementia. Dementia: the international journal of social research and practice. 2022; 0(0):1-20. DOI: https://doi.org/10.1177/14713012211073200.