

CHARMS: promoting movement and activity in care homes

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Session overview

This session will:

- Provide a brief overview of recent research evidence on the benefits of physical activity for older people with dementia or cognitive impairment based on the results of a literature review
- Use a recent study by the University of Stirling to illustrate and discuss key challenges in conducting research in care homes
- Introduce CHARMS (Care Homes Achieving Realistic Movement Strategies), an evidence-based approach that can be used by care homes to increase opportunities for and promote movement and activity for residents

Literature review - Protocol

- Search terms based on Forbes et al (2008) Cochrane review
- 3 time periods: pre-2010; 2010-2015; 2015-2018
- Range of electronic bibliographic databases, including: CINAHL; Medline; Web of Science; Social Work Abstracts
- All primary research studies considered for inclusion

dement* or
Alzheimer* or
(Lewy* bod*) or
(cognit*
impair*)

AND

exercis*
(physical activit*)
swim*
gym*
walk*
danc*
yoga
((tai chi) or (tai ji))
stretch*
sport*
(physical train*)

Literature review – Search results

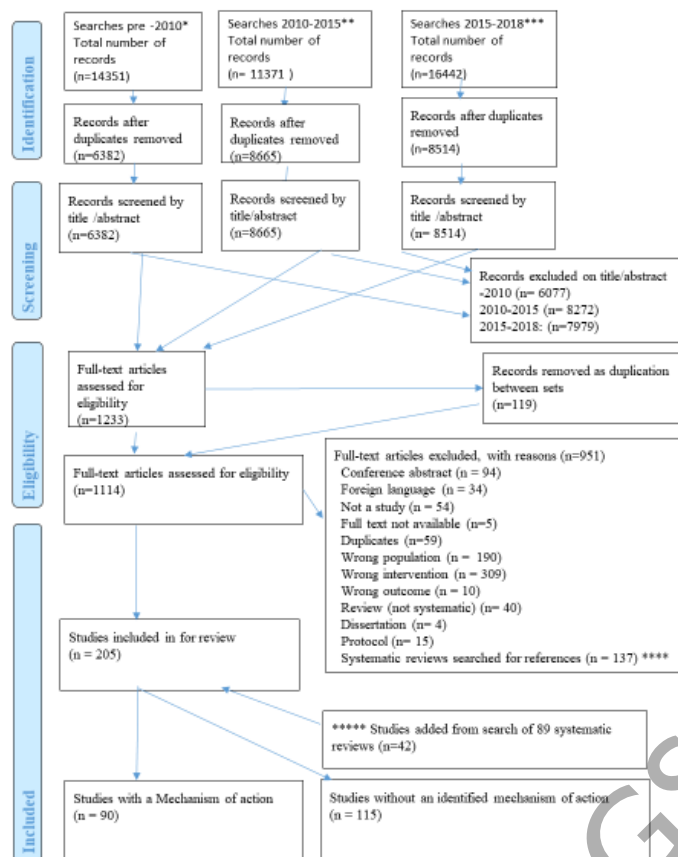


Figure 1: PRISMA Flow Diagram[1].

Initial 'hits'

- Pre-2010: 14,351 items (6382 unique)
- 2010-2015: 11,371 items (8665 unique)
- 2015-2018: 16,442 items (8514 unique)

After screening by title / abstract

- 1114 potentially relevant fulltext articles assessed for eligibility

After fulltext assessment

- 205 studies met inclusion criteria (42 identified from systematic reviews)
- 90 studies included 'Mechanism of action'

Literature review – Selected results

- 87/205 (42%) of included items describe RCTs; 4/205 (2%) describe qualitative studies
- Significant variation in specification of dementia-related participant inclusion criterion across studies, e.g. MCI defined in studies according to: MMSE score; Montreal Cognitive Assessment (MoCA); Addenbrooke's Cognitive Examination Revised criteria; Petersen criteria; subjective memory complaints and Clinical Dementia Rating (CDR) scale score
- Wide range of activities in included studies, many studies use specifically designed programmes of stretching and/or exercises
- Only 52/205 (25%) describe interventions which took place in care homes, nursing homes or residential care

Challenges in conducting research in care homes



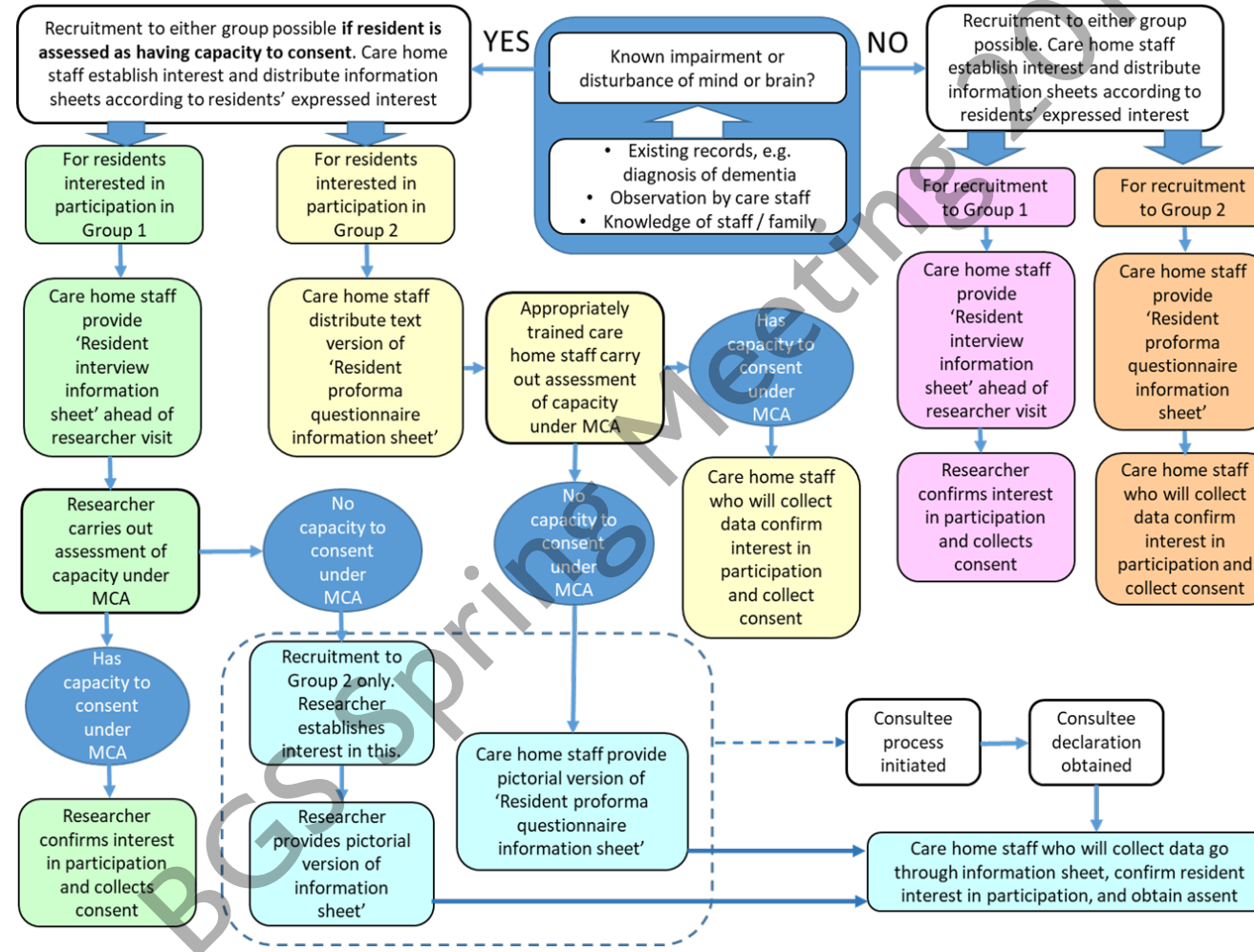
‘Developing an intervention for personalised physical activity designed for people with cognitive problems including dementia living in care homes’

- April 2015 – March 2019
- Funded by the Healthcare Management Trust
- Multi-stage project with emergent design

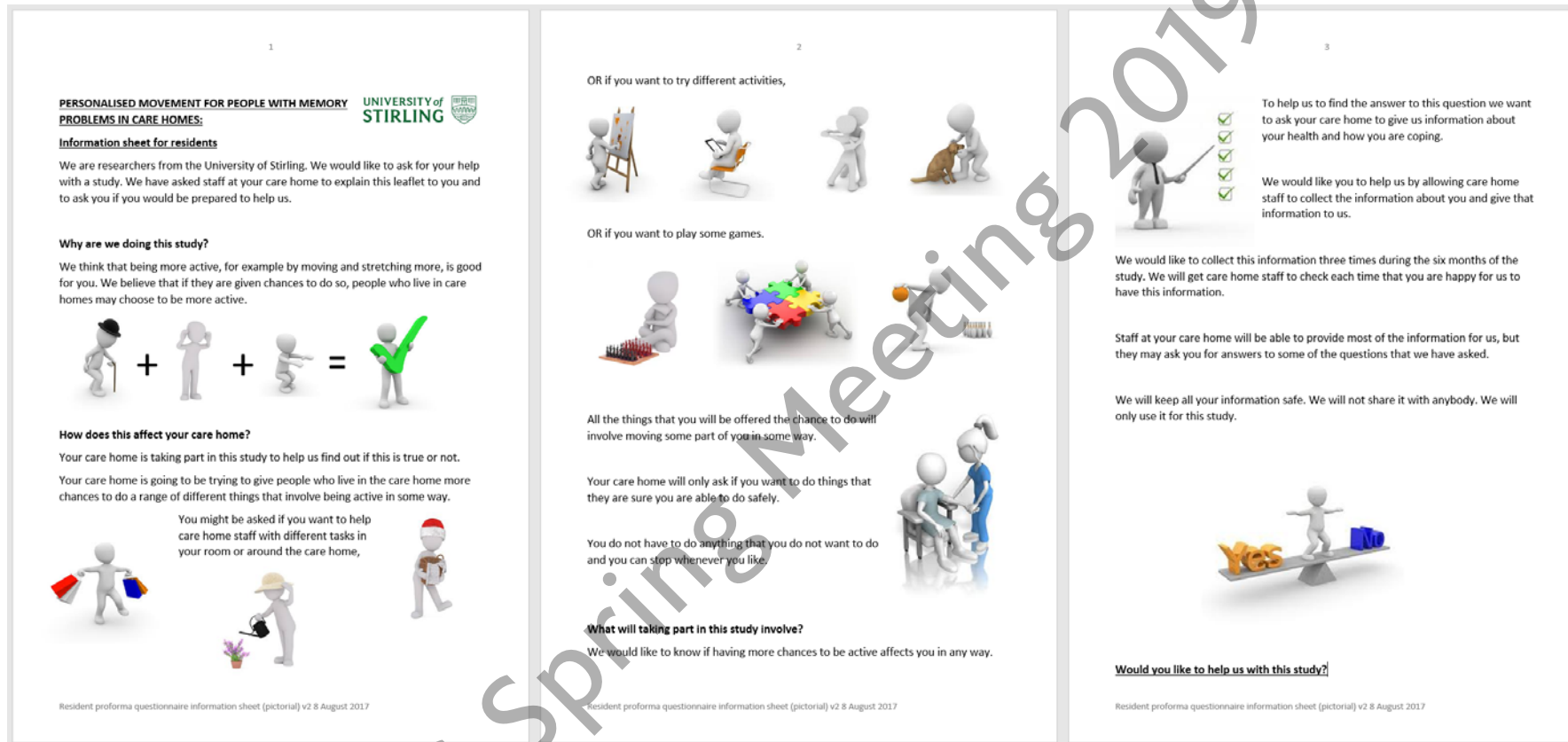
Aimed:

- To identify current practices in supporting physical activity for people with dementia living in care homes
- To develop and test a research-based method of integrating physical activity and movement into care home practice that is grounded in care home realities

Protocol for recruitment of care home residents




Resident information sheet (pictorial)



- Minimal text (can be read to resident)
- Non-technical language
- Pictures to illustrate key points
- Can be used to supplement text version

Stage 4 ethical approvals process

Timeline

- 
- Nov 2016 Application considered by University of Stirling General University Ethics Panel. Is NHS REC required?
 - Feb 2017 Scottish NHS REC opinion = NHS REC approval is required
 - May 2017 Bookings made for earliest available dates for application to be considered by English and Scottish NHS RECs
 - Jun/Jul 2017 Attended meetings of NHS RECs
 - Jul/Aug/Sept 2017 Requests for further information from NHS RECs
 - Aug/Sept 2017 Favourable opinions from NHS RECs

The CHARMS (Care Homes Achieving Realistic Movement Strategies) approach



'CHARMS' and '6SQUiD'



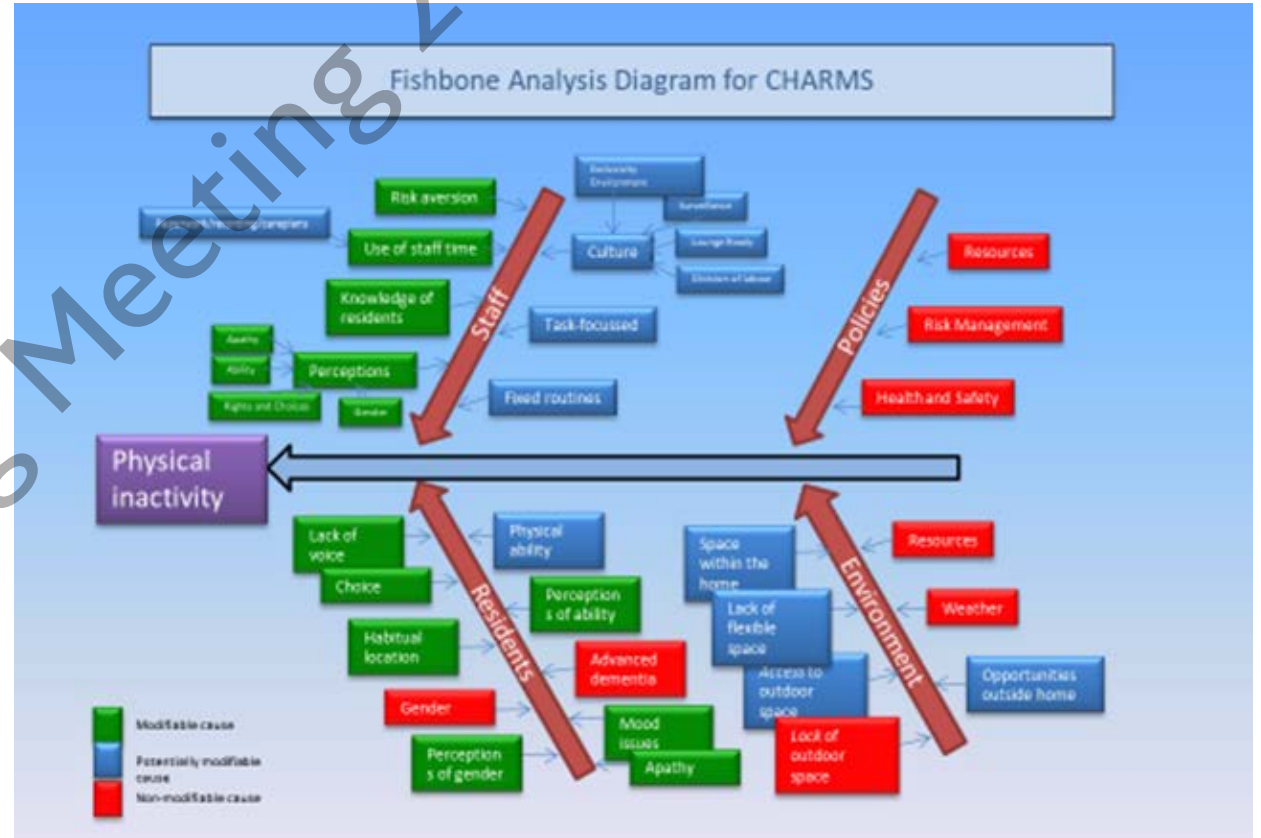
Six Steps for Quality Intervention Development (Wight et al 2016)

1. Define the problem
2. Identify causal factors that are modifiable and amenable to change
3. Develop a theory of change
4. Develop a theory of action
5. Test and refine the intervention
6. Collect evidence of effectiveness

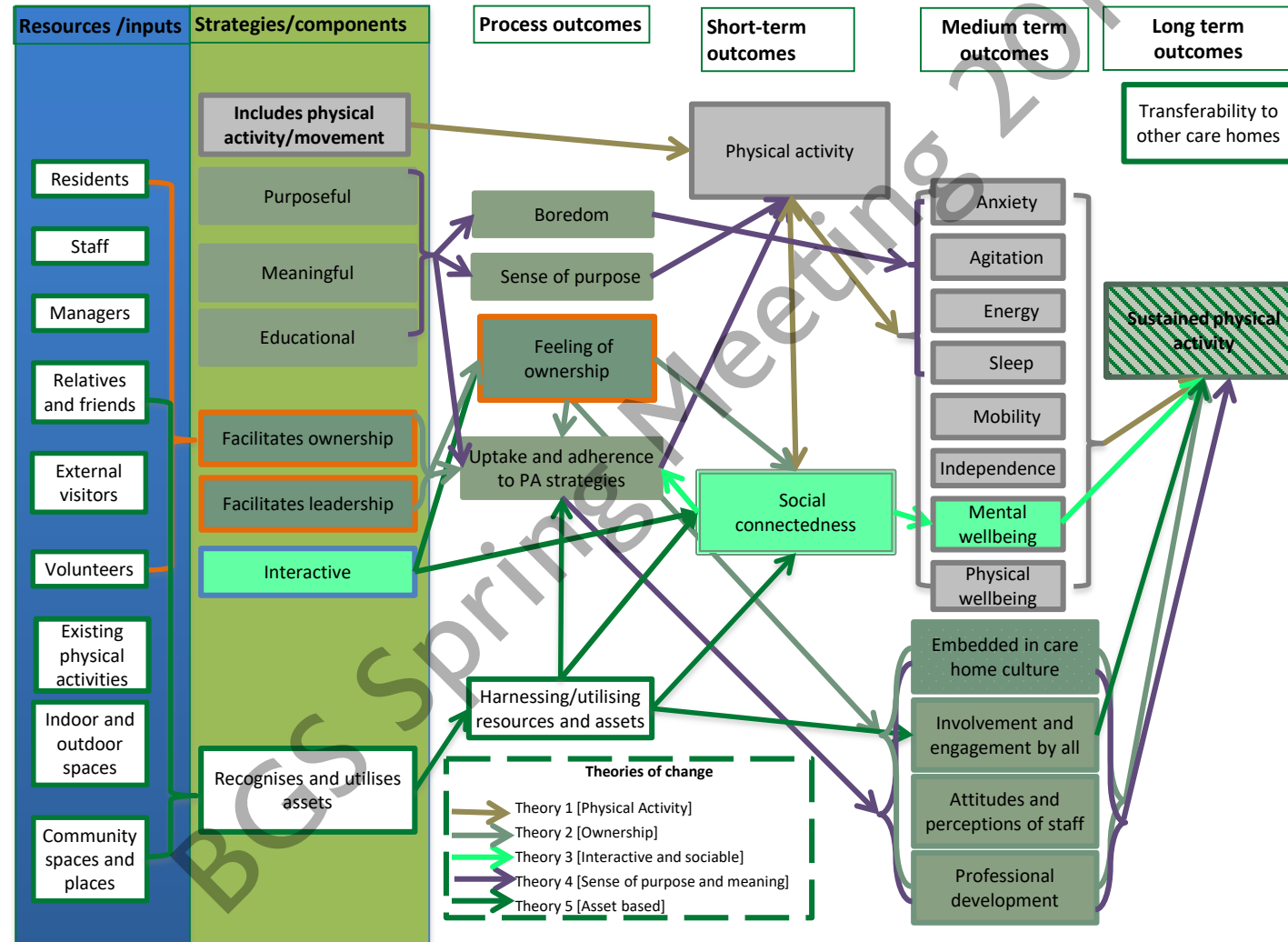


Defining the problem; identifying causal factors amenable to change

- Literature review (2010-2015)
- Survey of UK care homes on activity-related practices and beliefs
- Fieldwork with 5 care homes
 - Interviews with managers
 - Interviews with family members
 - Interviews with care staff and activity coordinators
 - Interviews with residents including people with dementia



Simplified logic model/theory of change for CHARMS



CHARMS: activities and strategies

Strategies	Examples of activities	Underpinning theories
Educational	Recognising opportunities for physical activity/movement Training the trainer Educational sessions/website/short videos	Theory of change 1. Physical activity Theory of change 4. Purpose and meaning
Leadership	Movement champion Mentoring/Open door policy Movement strategy	Theory of change 2. Ownership Theory of change 4. Purpose and meaning
Ownership & staff engagement	Forum/links Staff pledges Developing a PA strategy Play to staff strengths Staff and relatives involved in delivery	Theory of change 2. Ownership Theory of change 1. Physical activity Theory of change 5. Recognising and harnessing assets Theory of change 4. Purpose and meaning
Purposeful/Benefits for staff	Reflective tool Feedback at meetings Structured provision Step count challenge or related	Theory of change 4. Purpose and meaning Theory of change 2. Ownership Theory of change 1. Physical activity
Meaningful	Rewards (care home level)	Theory of change 4. Purpose and meaning
Taking account of culture	Staged approach Strategy with tasks and goals Writing it as a role in job descriptions	Theory of change 4. Purpose and meaning Theory of change 5. Recognising and harnessing assets
Interactive/personalised	Consultation with residents/relatives) Writing it into the care plan Involving others (relatives, volunteers etc)	Theory of change 3. Interactive and sociable Theory of change 5. Recognising and harnessing assets

Developing the CHARMS (Care Homes Achieving Realistic Movement Strategies) approach

- Workbook produced to help care homes develop a strategy that is relevant to them and their context
- Based on the logic model and theories of change
- Easy to use and serves as an aid to provoke discussion and generation of ideas and help development of action plans



The workbook: a resource for planning change

Workbook sections

- Assets
- What is happening already?
- Training and education
- Champions
- Engagement
- Purpose and meaning
- Changing culture
- Personalised activity

Write down all the assets that there are or could be in the care home that can help people move. Assets can be people, places or opportunities.



Testing and refining the CHARMS approach

Meet with Care Home Managers
and Key Staff

Identify strategies
related to workbook
topics

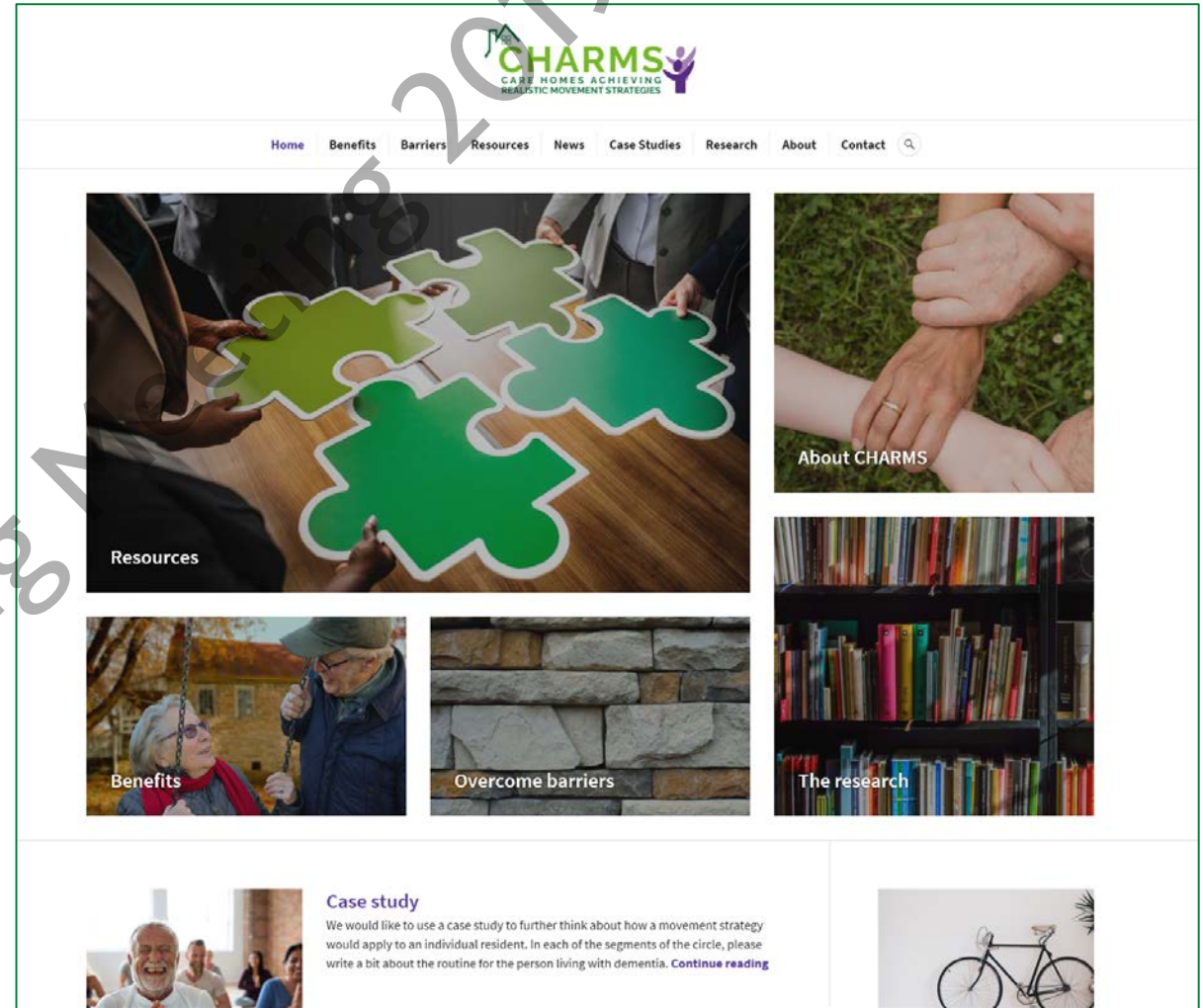
Identify key outcomes and
how care homes will know
if outcomes have been
achieved

Agree a formal action plan; evaluate
progress against plan

From
Workbook
to Action
Plan

CHARMS: Testing and refining the intervention

- Evaluation of the CHARMS approach with three care homes
- Changes suggested to workbook, action planning templates, and data collection instruments
- Development of CHARMS website and resources
- Collecting evidence of effectiveness? Planning for larger-scale testing in line with 6SQUiD approach



Thank you for listening!

For more information
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<https://dementia.stir.ac.uk/blogs/dementia-centred/2019-02-25/charms-evidence-based-intervention-helping-care-homes-promote>

