

Supplementary Material 2. Final coding framework for CHAnGE interview data

Program Theory

1. Capabilities & limitations

PA/falls definitions & views
Observations of others
Own abilities and preferences
Own initiatives and strategies
Environment
Responses specific to CHAnGE

2. Opportunities & constraints

Work & retirement
Local environment
Local facilities

- Retirement village
- Age- & capability-specific classes

Home & family
Weather
Financial situation, costs
Social, companionship

3. Autonomy

Choice, CHAnGE flexibility
Own initiatives
Autonomy as a motivator

4. Relatedness

Support - family

- Others' concerns

Support - friends

- Learning from others

Support - CHAnGE coach
Lack of or desire for connection
Pleasure in social aspects

- As motivation for activity

Independence Vs social

5. Motivation

Countering physical decline

- Lifestyle maintenance
- Countering mental decline
- Independence, not a burden

Fun & rewards
Goals, challenges & feedback

- Competition
- Accountability
- Making a new lifestyle
- Encouragement & support

Ease-difficulty

- Multi-tasking

Avoiding & addressing injuries

Value perceptions

6. Competing priorities

Intervention & trial components

7. Acceptability & trial architecture

Recruitment

Overarching positives

Negatives, what doesn't work

- Impost, confusion, tech troubles

Results feedback

8. Participation

Enticement and hopes

Support research/altruism

'Volunteered'

Social aspects inc. support friend

Improve health & fitness

- Provide structure

Prevent falls

Confirmation

Timing & transition

Barriers & enablers

Barriers

Health, injury

Time demands

'Wrong' arm

Dislike of specific exercise

Weather

Enablers

Coaching enjoyment

'Right' trial arm

Fitbit feedback re goals

Group, social aspects

Flexibility

Environment

Non-participation

9. Coaching

TRUST concepts

Ability, competence, credibility

Benevolence, encouragement, friendliness

Integrity, professionalism, reliability

Goals & motivation

Accountability

Feedback
Reflection
Internalising the coach
Coach AND Fitbit
Resourcing & guidance

10. Fitbit

Accuracy & credibility
Technology & wear-ability
Feedback re progress & goals

- Pushing harder
- Keeping track
- No denial or self-deception
- Being monitored

Comparison, competition, relatedness
Not using

11. Being part of a CHAnGE group

What's working (or not)
As a motivator
Capability (& motivation) alignment
Conversations & shared activities

- Competition & comparison

Desire for connection & PA companionship
Change & loss in the group

12. Impact & maintenance

Impacts
Increased PA or expanded repertoire

- Embedded, habit, routine
- Fitbit commitment
- Changed mindset, awareness, motivation, confidence
 - Reconceptualising exercise

Improved fitness, health, weight

- Stronger, more flexible, injury recovery
- Mental health

Better balance, more falls savvy
No or minimal impact
Maintenance
Enablers
Barriers
Intentions/plans

13. Intervention improvements

Social interaction, group cohesion
Connecting individuals
Periodic gp meetings with coach
Periodic gp meetings - self organised
Support local initiatives
Falls assessment visit

Measurement feedback
Coaching
 1-to-1 sessions, personal trainer
 More visits
 Extended contact (after trial)
 Skype rather than phone
Fitbits
Non-CHANGE initiatives
Diet & nutrition
Recruitment & info meetings
Clearer explanations & rationales
Available to friends & neighbours
Longer duration
Information collation
Start younger

Other

14. Pre-trial & enduring characteristics & circumstances

Current work
Personal traits & identity
Pre-trial PA
Social & environment
Pre-trial health

15. Falls & balance (all)

16. Miscellaneous

Future hopes & plans (not PA or FP)