



Intergenerational Support To Encourage Physical Activity

What is the social innovation?

iStep is a web based intergenerational social innovation which aims to bring people from different generations together to encourage culture change towards normalising exercise in everyday life. In developing **iStep** we have demonstrated the innovation process from the earliest stages though to a working prototype. We have used approaches derived from both health research and design paradigms to build upon a scientific understanding of the value and potential of intergenerational exchange as a resource for support across the life course.

Who will benefit from this innovation?

iStep is a co-production between health researchers and design researchers which is intended to engage participants across age and socioeconomic groups. Its critical, and defining characteristic is that it sets up groups or pairs of individuals (dyads) to interact and increase activity levels through a shared exercise experience.

iStep works by bringing people from different generations together and using simple pedometer technologies to encourage them to complete and record shared challenges, which may be co-operative, competitive or mixed depending on the preferences of the participants. Participants can receive visual feedback on their progress (against a map rendering) as well as encouragement from their partner by social media messaging within the platform.

iStep is aimed at adults and children and supports new and existing social groups and dyads. Users of **iStep** can:

- Join or set up new groups and intergenerational dyads
- take part in shared exercise challenges where general physical activities are measured against personally meaningful goals (e.g. a nearby long distance walk)
- · record progress towards agreed goals
- communicate with their group or partner about their progress to encourage physical activity

The innovation will be of interest to existing social groups, schools, health care providers.

How has the social innovation been tested?

iStep is an early stage social innovation. The initial ideas behind **iStep** were generated through literature review and with the active engagement of older people in co-design workshops. The design concepts were tested by developing storyboards which were then reviewed by older people. The views of older women from relatively deprived socio-economic groups about exercise in general and **iStep** in particular have informed the development of the innovation. The iStep prototype has been through multiple iterative pilot phases in schools (targeting both pupils and staff). In addition a modified co-operative evaluation of usability has also been performed with older women. The collective data has helped inform the development of a strategy for implementation sustainability and scaling.

How were older people involved?

Older people were involved in helping us develop the concept, providing critical feedback about the emerging innovation in stakeholder forums and as research participants, helping to inform the development of the prototype, and helping to test the prototype.

What were the findings?

The literature review revealed that an intergenerational social innovation targeting overweight and obesity to benefit both older and younger participants was likely to be novel and if it was personalized could be highly engaging for participants. In particular the potential for the flow of benefits from younger to older people had not previously been investigated.

Interviews with older women suggested that to be successful, an intervention would need to be personalized, encourage sociability, incorporate everyday activities (such as walking) and work towards realistic goals with a focus on protecting/caring for their body.

Discussions in co-design workshops indicated that:

- to be broadly acceptable, an innovation would need to allow for many different forms of physical activity,
- many older adults experienced psychological barriers to exercising with others, and
- that connecting digitally with another person to undertake a shared challenge might help to overcome some of these barriers.

The design process resulted in the ${\bf iStep}$ concept which was developed and piloted using inter-generational dyads in the

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school setting and a modified co-operative evaluation gaining the views of older women (60+ years). These showed:

- the technology is straightforward to use and motivational;
- the goals of participation were appreciated and needed to be achievable;
- the nature of the dyadic partnership is an important preference;
- the collaborative nature of the activity was appreciated.

What is required to implement the social innovation?

Considerations for scaling and implementation include:

- Linking up with existing platforms and initiatives (e.g. Meetups, Facebook, MoveMore, Fitbit, Global Corporate Challenge). Issues to consider here include ethical issues related to privacy on these commercial platforms versus funding issues related to public sector provision
- Developing domain specific stylesheets for the **iStep** engine to attract different target audiences (e.g. schools, religious groups, older people's social groups etc.)
- Developing tools to allow facilitators to configure new challenges
- Building mobile friendly versions (including both smartphone apps and SMS service interfaces)
- Exploring integration with different exercise measurement technologies to broaden the types of exercise that can be recognised (e.g. swimming / cycling)
- · Provision for users with poor IT skills or access.
- · Provision for users with walking limitations
- Mechanisms for finding appropriate partnerships
- Access to target audience via existing social groups and health initiatives
- Further inclusion of appropriate behavior change techniques to promote uptake and sustainability
- Financial investment to enable more user engagement to test and develop **iStep** further.

Where can I learn more?

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