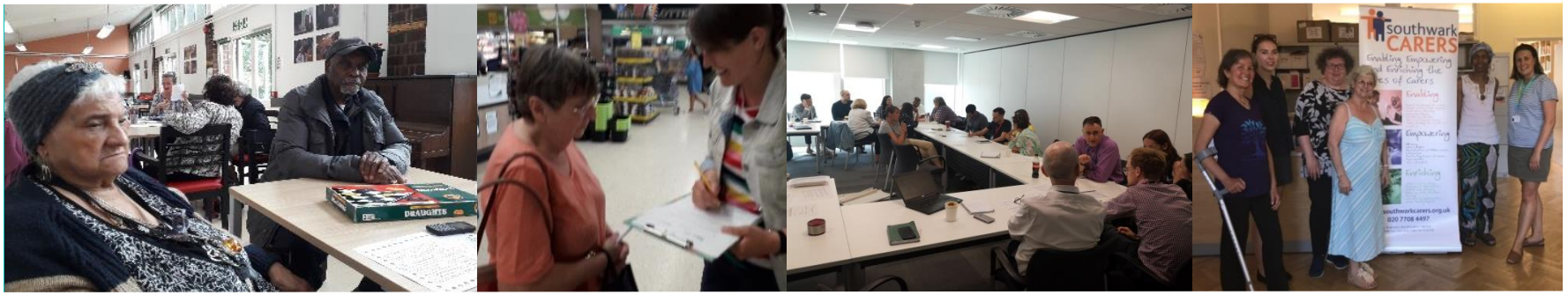
Social Care Digital Innovation Programme

Discovery Phase Review



Health Innovation Network South London
NHS Southwark Clinical Commissioning Group
Guy's and St Thomas' NHS Foundation Trust
Lewisham & Southwark ageUK
Local Government Association
NHS Digital
Southwark Council southwark.gov.uk

Exploring the problem

The context

Falls have a devastating impact on a person's life. They cause distress, injury, loss of confidence, loss of independence and can lead to isolation, depression and mortality. They also put significant pressure on our health and social care system.

Falls are a big issue in Southwark with rates of falls-related injuries consistently amongst the highest in London.

Southwark's over-65 population is predicted to rise by 40% over the next 10 years[1]. This will put increasing pressure on our health and social care system unless we improve approaches to prevention and management of common conditions. As a preventable health issue which affects about a third of over-65s annually and which accounts for half of all accident related hospital admissions[2], falls management and prevention is an area where we could see improved outcomes for our residents and significant system-wide savings.

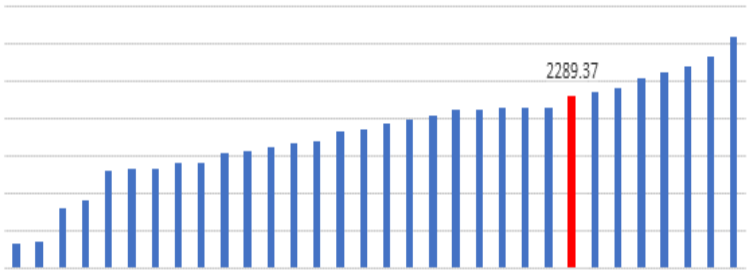


Figure 1: Southwark rate of injurious falls in older people > 65 as a direct comparison to other London boroughs (Q3 2017/18, IAF 104a).

Framing (and re-framing) our discovery

We started our discovery with a very broad view; our intention - to gain a greater understanding of the falls system as a whole; the current experience of users (both residents and staff); and the opportunities for improvement and development across the health and social care landscape (including our voluntary and community sector). Through the course of our discovery themes began to emerge, narrowing our focus and bringing definition to our problem area. This process is outlined in detail in this review.

Original problem statement:
"How can we improve prevention and management of falls in Southwark to reduce the impact on local residents and the wider health and social care system?"

Focused Problem Statement:
*"How can we improve access to **information** and **services** to help **reduce the risk of falls** in **older people** (65+) living in their **own homes**"*

Source:
[1]GLA Population Predictions
[2]Briefing for NHS England 2014

User engagement and involvement

Identifying our stakeholders

At our internal 'kick-off' meeting we mapped out the user groups from across the system and drew up an engagement plan to ensure that the discovery encompassed exploration of the needs, behaviours and experiences of the diverse range of stakeholders. The users are represented to the right with a summary of the research activities below. This allowed us to capture a range of insights into problems and opportunities relating to falls prevention and management in Southwark.

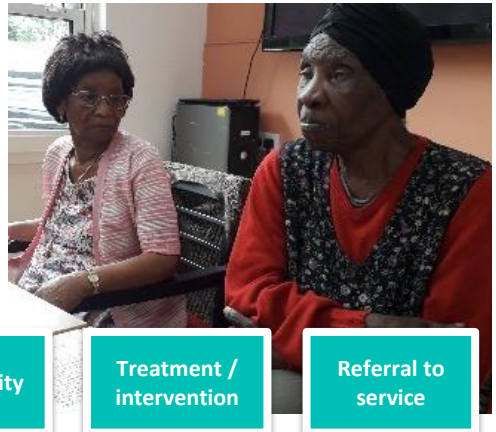
Summary of research methods and activities

Activity	Detail
Focus groups	3 focus groups (involving a total of 19 residents) facilitated by Southwark Carers and Age UK Lewisham and Southwark explored residents' beliefs, thoughts and experiences of falls, falls prevention, exercise and tech.
Residents Survey	A survey conducted at a local supermarket captured the experiences, beliefs and opinions of mobile older residents deemed to be at low risk of falling (5 residents surveyed).
Service mapping workshop	A workshop involving 18 colleagues from across NHS, local authority & voluntary sector created a visual representation of the current landscape of services involved in prevention & management of falls in Southwark.
Professional stakeholder survey	An electronic survey sent to relevant health and social care professionals explored the problems with existing provision, use of technology and areas for improvement/ development (12 responses).
Interviews with H&SC professionals	Building on the stakeholder survey, 9 teams/ individuals provided deeper insight into current provision and opportunities for innovation and improvement through 1-to-1 interviews.
Low & high-risk personas	The core project team developed 'personas' to better understand the user-journeys of low and high risk residents (outlined on next slide).
In-depth interview with 'low-risk' resident	An in-depth interview with a local resident provided more information for the low-risk persona – to challenge the project team's assumptions and sense check their interpretation of a 'typical' journey.

Research methods

Personas

Two key personas depict the journeys of high and low risk residents through the current falls system in Southwark. These personas were based on the knowledge and assumptions of the core project team and further developed and verified through user-research. They provide insights into the current experiences of residents and highlight areas for development.



High Risk → **Being found** → **Treatment / intervention** → **Referral to service** → **Preventing further falls/ longer term...**

- Fallen previously
- Lives alone
- No family or friends
- Cognitive impairment
- Poly-pharmacy
- Social care package
- Cluttered/poorly maintained home
- English not first language
- Low socio-economic status

Mr S

Found on floor by carer → Carer calls LAS → LAS arrive → Transfer to A&E → Admitted to hospital → Discharged from hospital

Discharged from hospital → Rehab and reablement / GSTT community services / Social services / Telecare

Rehab and reablement → Care package review by MDT (6 wks post fall) → Annual review by social care

GSTT community services → Follow up from secondary care - Clinic - Home visit

Social services → Age UK / SAIL

Low Risk → **Community** → **Treatment / intervention** → **Referral to service**

- Lives with husband
- Regular contact with family/ friends
- Active
- Some elements of poly-pharmacy
- Some unreported slips, trips, near misses
- Fears falling

Collects prescriptions from pharmacy → May enquire/ purchase walking stick

May go to GP for over 65's check → Asked about physical activity levels → Strength and balance class

May call Age UK for advice/ signposting → Asked about physical activity levels → SAIL (Age UK) assessment → Strength and balance class / Referral/ self-referral to home adaptations/ OT/ Telecare

Visits/ meetings with housing officer → Referral/ self-referral to home adaptations/ OT/ Telecare

they don't teach about why people fall or about hazards. Maybe they should do

there isn't really anything you can do

Mrs P

Key Findings

Focus groups, surveys and interviews

Residents

Most participants described feeling worried or afraid of falling; those that had experienced a fall also referenced feelings of embarrassment.

"I feel stupid, I think I could have avoided it if I took more care"

Participants were concerned they would fall again and as a result reported losing confidence.

"at the back of your mind…you think you are going to fall again"

Participants felt falling was an inevitable consequence of getting older, attributing this to declines in physical function, weaker muscles and reduced mobility.

"because we get weaker, I suppose"

Participants were unaware of measures that could help them to reduce their risk of falls and as a result were restricting activities rather than pro-actively managing risk. In some cases, they had altered their daily routine or become reliant on others to do activities such as getting the bus.

"there isn't really anything you can do."

"I can't go on the bus on my own – I prefer to have somebody with me. It makes me feel more comfortable"

Professional stakeholders

Professional stakeholders frequently suggested that technology could be used more pro-actively to prevent falls. Some of the perceived barriers included up-front and ongoing costs and user uptake.

Interviewees felt there was a gap in the knowledgebase of some frontline staff and referenced the importance of ensuring both care and non-care staff had an increased understanding and awareness of falls risk and reporting.

"there are opportunities to develop resources to improve [staff] knowledge, skills and practice starting with awareness, recognition, simple actions they can take and how and when to refer"

High staff turnover was also referenced and the negative effect it had on capacity issues as well as gaps in knowledge and experience.

Staff frequently described challenges in working across the system in a joined-up and coordinated way.

"Many times there is not enough coordination between hospital, social care and community support"

They felt the issues were exacerbated by factors such as: not being in the same physical location as other teams; limited time; and no shared IT systems. They felt that this affected referrals into other services and created barriers to providing consistent, coordinated care. It was felt that dedicated roles/posts for falls within organisations/ services would improve care planning and approaches to prevention.

Challenges were conveyed about the reporting of falls, with subsequent gaps evident in the data. Staff felt that data was a useful tool in understanding the challenges and opportunities but it wasn't captured consistently.

Key Findings

Summary of common themes

Insights	Pain Point	Opportunities
"[Challenges with] systems working, effective service pathways, timely access and co-ordination across services." CCG and Social Care Commissioner	The system is fragmented and hard to navigate. There are multiple IT systems across health and social care making it difficult to coordinate across service boundaries.	• Improve the ability of **systems** and people to connect/ interface to improve **data capture & information sharing** • Simplify **pathways** and **referral processes** • Create **navigation tools** • Learn from areas that have implemented **integrated falls services/ pathways**
"……various agencies doing good work, but not always communicating with one another." SMART Alarm Team	There is evidence of good practice but this is happening in silos, making it difficult to share information and provide coordinated care.	
"There is not a consistent evidence-based multi agency approach to falls prevention. Prevention needs to be everyone's business and the focus needs to be at a much earlier stage." Programme Manager, Guy's & St Thomas' NHS Trust	Different teams/ organisations are taking different approaches to prevention (and not all evidence-based). Intervention/ prevention isn't happening early enough.	• Make falls prevention everyone's business, within the system and general population i.e. **awareness campaign** • Establish a **system-wide approach** to falls prevention based on best available evidence
"Many patients fall, are assessed by LAS and not taken to hospital. This is a missed population that no one is addressing." *CCG Contracts Manager*	Missed opportunities to prevent future falls across the system.	
"There isn't really anything you can do." Older resident, Age UK focus group	Lack of awareness of falls risks and preventative measures amongst residents/ aging population.	
"[exercise] would never have appealed to me when I was younger, let alone now." Older resident, Age UK focus group	Exercise is not a common feature of the older adult lifestyle. Many are not meeting recommended guidelines for reducing falls risk.	• Explore solutions that address barriers to engaging with appropriate exercise activities and utilise **patient activation** measures
"They say that they have short and insufficient training, which impacts on us." Carer, Southwark Carers	Training needs of frontline staff particularly in regards to preventative measures and approaches.	• **Improved training offer** for staff (care and non-care) across the system

Translating discovery into solutions

Approach and methodology

Based on insights from the discovery, Southwark's research partner, the Health Innovation Network (Academic Health Science Network for South London), began to explore the digital marketplace and identify concepts and tools that could allow us to exploit some of the opportunity areas identified. They focused on the 3 following areas to reflect the dominant themes:

The methodology involved:

- Reviewing digital falls prevention strategies in other councils, particularly those involved in the Social Care Digital Innovation Programme (e.g. Stockport, Essex, Wirral)
- Reviewing initiatives supported by other Academic Health Science Networks (e.g. East Midlands and Kent, Surrey & Sussex) around falls prevention and care for older people
- Exploring digital technologies designed to address specific risks associated with falling e.g. polypharmacy, cognitive impairment

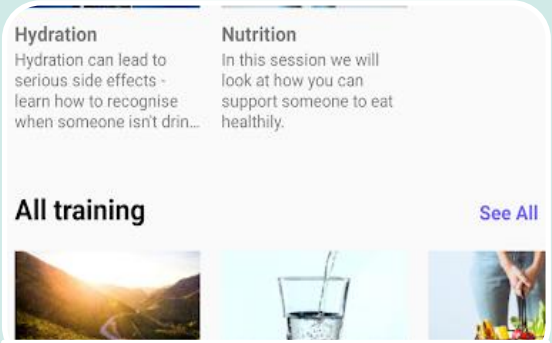
This led to the identification of a number of concepts and tools. The project team created a shortlist by considering potential benefits, costs and deliverability. The team then arranged teleconferences with the developers to find out more about the existing products, any early findings/ outcomes and appetite for further innovation & development. A meeting was also arranged with colleagues from Essex County Council to share discovery insights as they too had conducted a 'falls' discovery as part of the Social Care Digital Innovation Programme. We wanted to gain a better understanding of their proposed solution and establish whether it addressed a common problem area reflected in our discovery.

This left the project team with a shortlist of 3 solutions (including a potential partnership with Essex) as outlined on the next slide.

Potential solutions

Overview of shortlisted solutions

1. Digital Training Content



Overview of idea:

Develop falls prevention training content (digital micro-learning modules) to upskill frontline staff (care and non-care), unpaid carers and residents. Distribute via partner training platforms, websites and new Agylia Care app (launching in September 2019).

Intended users:

Health, local authority and vol sector staff; Carers; Residents (self-care)

Opportunity area/s:

- Digital Training/ Awareness/ Navigation

2. Risk assessment and action planning tool (Safe Steps)

Overview of idea:

Work with 'Safe Steps' to develop a community version of their care home falls app. Community-based staff would complete a 12 point falls risk assessment for residents generating personalised action plans of evidence-based interventions.

Intended users:

Health, local authority and vol sector staff

Opportunity area/s:

- Technologies addressing individual risk factors
- Digital Training/ Awareness/ Navigation
- Maximising utilisation of data

3. SMART socks and accompanying app

Overview of idea:

Work with Essex County Council to develop SMART socks and accompanying app to improve adherence and patient activation related to strength and balance exercise programmes.

Intended users:

Residents; staff/ carers with permission to view dashboard

Opportunity area/s:

- Technologies addressing individual risk factors
- Maximising utilisation of data

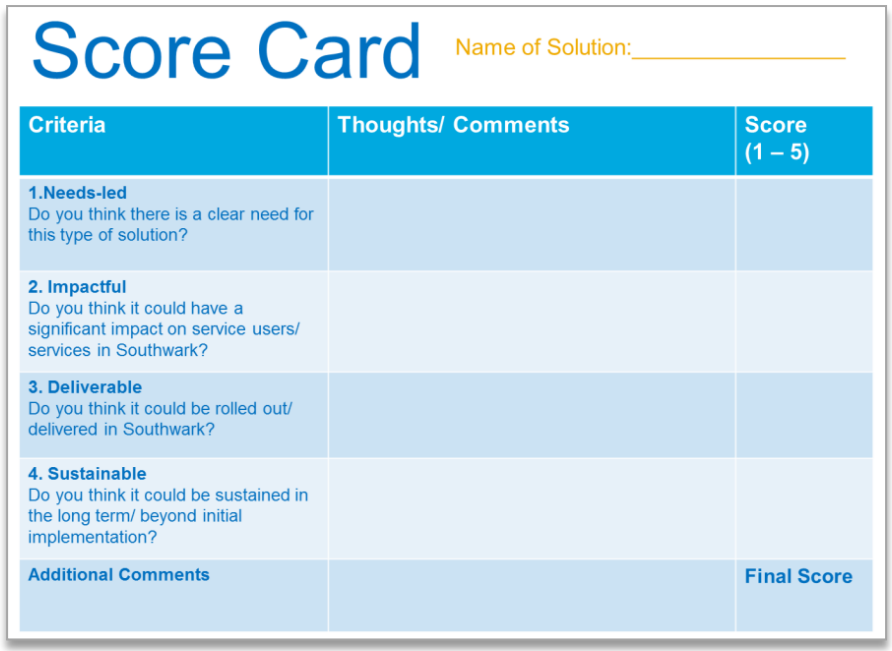
Co-production and selection

Stakeholder Workshop

A workshop was held for key stakeholders to explore and further develop the proposed ideas. The invitation was sent to all of the stakeholder groups identified during the initial mapping exercise as well as any additional groups identified during the course of the discovery. Attendees included colleagues from Housing, SMART Alarm Team, Telecare, Social Care, Commissioning, Public Health, Community Falls Team (GSTT NHS Trust), Age UK and Southwark Carers. Some residents were invited but unfortunately did not attend. We have outlined our intentions for further engagement and co-design on the next slides.

The format and content of the workshop was as follows:

Item	Detail
Findings from Discovery	The core project team presented the key insights, opportunities and themes that had emerged during the discovery
Potential Solutions	The core project team presented the 3 proposed solutions, outlining the existing products (where applicable) and the suggested development areas
Feedback and development of potential solutions	Stakeholders split into 3 groups and considered each solution in turn. They discussed and recorded: • Pros - The good points/ potential benefits • Cons – Concerns or potential challenges • Who – The potential users/ services that could benefit • What – Ideas related to functionality/ features
Evaluation of potential solutions	Stakeholder groups rated each solution in turn using the score card to the right.



Score Card

Name of Solution:_____

Criteria	Thoughts/ Comments	Score (1 – 5)
1.Needs-led Do you think there is a clear need for this type of solution?		
2. Impactful Do you think it could have a significant impact on service users/ services in Southwark?		
3. Deliverable Do you think it could be rolled out/ delivered in Southwark?		
4. Sustainable Do you think it could be sustained in the long term/ beyond initial implementation?		
Additional Comments		**Final Score**

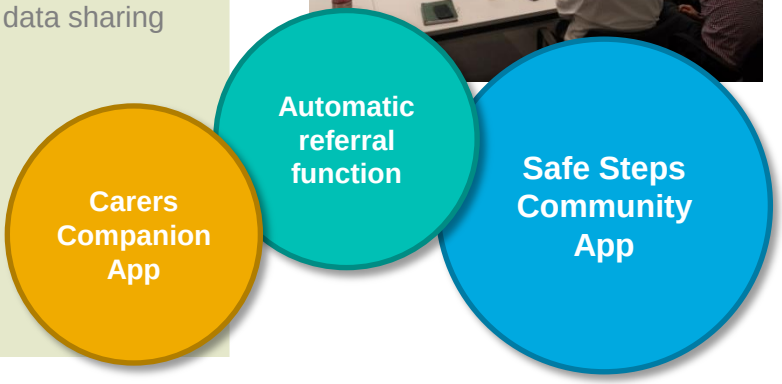
Following the workshop the core project team reviewed the feedback and score cards. An overall score was generated by taking an average of the scores assigned by the 3 stakeholder groups. **Proposal 1 'Digital Training'** & **2 'Risk Assessment/ Action Plan Tool'** achieved almost identical scores (only 1 point difference). The core project team discussed the 2 proposals and took the decision to pursue **Proposal 2** as it had the potential to address all 3 of the opportunity areas highlighted by the report i.e. data, training/ awareness and individual risk factors. The project team also felt that the development of 'Digital Training' could feed into an existing work stream that had a broader remit (not just falls). Feedback on Essex's proposal (SMART socks) was shared with their project team.

Developing the proposal

Risk Stratification and Action Planning Tool (Safe Steps)

The table below summarises the feedback from the 3 stakeholder groups on the Safe Steps proposal:

Pros/ Potential benefits	Cons/ Areas for consideration
• Consistency across assessments • Personalised action plans • Captures low and high risk individuals • Improved data capture and sharing via dashboard • Cost effective (based on available evidence) • Assigned 'ownership' of action plans • Evidence-based (and in-line with NICE guidance) • Learning and development • Teams already have the hardware (tablets/ phones) • Simple and Intuitive	• Uptake/ usage • Time (to complete risk assessments and action items in plan) • Identifying suitable users • Information governance/ data sharing • Training requirements



The workshop exercise also asked stakeholders to consider the 'Who' (potential users) and 'What' (features/ functionality).

Discussion on the day highlighted a strong interest in informal carers having access to the app (with permission). The original Safe Steps app is designed for professional users in a care home setting and as such requires some clinical inputs to generate a risk score e.g. blood pressure rating. For a community version of the app, stakeholders expressed strong support for carer access to support risk management and follow-up. Professional stakeholders also expressed strong support for an automatic referral function. These ideas helped to frame subsequent conversations with the developers, leading to the identification of specific development areas i.e. a **Carers Companion App** and **Automatic Referral Function**.

A number of key stakeholders and service leads participated in the follow up calls with 'Safe Steps' to shape these ideas and to identify potential 'test' cohorts/ service areas for implementation. The co-design process will continue throughout implementation to ensure that residents and users remain at the centre of the solution.

Learning from the Discovery Phase

Key lessons to take forward

Key lessons

The process was a real rollercoaster for our project team – at times we felt completely overwhelmed by the size of the problem we had chosen to explore, and yet not quite ready to narrow the lens in case we missed a key insight. The key lessons we will take forwards into other projects are:

- Recognise the size of the problem you are exploring and prioritise your research missions to ensure that you are delving deeper into the really important 'unknowns'
- You don't have to rigidly follow a project plan – use it more as a guide, allowing flexibility to respond to new insights as you uncover them
- Ensure sufficient time to collaboratively explore and co-design potential solutions (not just consult on the problems). We managed to do some of this towards the end of our discovery but due to the size of the problem we did not engage all of the key stakeholder groups. Co-design of this solution, including prototyping with stakeholder groups will continue throughout the implementation phase.
- Ensure that frontline workers are involved from the start as they often have the greatest insight into the 'as-is' position (from a staff perspective). We recognise that this was an area of weakness in our discovery and we will spend the first part of the implementation phase consulting them on our proposed solution.

Skills development/ capacity building

The discovery process and accompanying workshops explored a range of tools, techniques and principles that were new to our core project team. We have come away from the discovery phase with:

- An understanding and appreciation of user-centred design
- A range of tools to support future service development and evaluation e.g. service blueprinting, personas, prototyping, logic models etc.

We would like to thank the LGA, NHS Digital, Snook, RSM and TLAP for this opportunity and the support and guidance provided throughout. The skills and lessons learnt are already being transferred to other projects.

We would also like to thank all of our project partners, especially our local Academic Health Science Network, the Health Innovation Network, for their role in helping us to deliver a thoughtful and comprehensive discovery.