#### BRIEFING NOTE

# Collaborating on Falls Prevention





#### ABOUT THEHILL

TheHill is an innovation catalyst, embedded within Oxford University Hospitals NHS Foundation Trust. We empower innovation in health and care by supporting new approaches which seek to make the NHS more efficient and effective, empower staff and benefit patients.

We are at the centre of a broad and always growing network of NHS staff who are passionate about digital innovation. We have a wealth of expertise in delivering regional and national programmes coupled with extensive support for entrepreneurs and innovators. We turn ideas into reality, creating a flourishing ecosystem where SMEs, entrepreneurs, innovators, clinicians and healthcare professionals thrive. We bring digital technology and new innovations to the NHS, by working with NHS Trusts, universities, digital developers, innovators and investors. Breakthrough innovation, which catalyses commercial and impactful technological solutions in healthcare, is our focus.

# Engaging with NHS colleagues is at the heart of what we do.

We work through collaboration and co-design to make sure that our people are empowered to put in place solutions that work for them, whether these are home grown ideas or the work of partners from outside of Oxford University Hospitals (OUH). We encourage colleagues at OUH to engage with digital innovation and inspire them to come up with their own solutions. We do this by providing opportunities for clinical teams to collaborate on improvement and development projects, by building capacity within the NHS to increase skills and understanding of digital technology, and through our championing of new innovations.

## Connecting the ecosystem and stakeholders

We bring together patients, carers, nurses, doctors, allied healthcare professionals, designers, developers, researchers, business leaders, investors, and anyone with a passion for using new technologies and building the systems, partnerships and capacity to bridge the gap between digital innovation and ultimate patient benefit.

We work in Oxfordshire and across the Thames Valley with NHS Trusts, universities, digital developers, innovators and investors to promote and facilitate impactful technological solutions to problems in health and

#### WHAT IS THE HEALTH RESEARCH CENTRE?

The Health Research Centre (HRC), funded by the National Institute for Health and Care Research (NIHR), aims to tackle health inequalities by supporting applied health research that is place-based, inclusive, and community-driven.

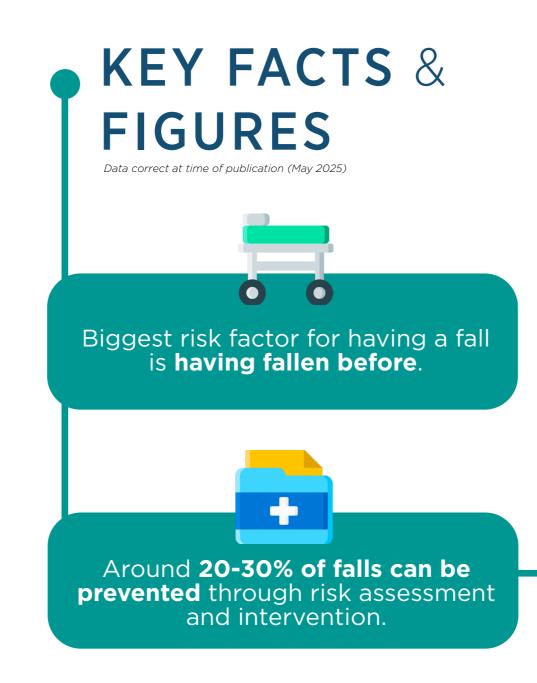
HRC goals include enabling co-designed research that reflects local and regional health needs, building research capacity in underserved and high-need areas, promoting equity in health outcomes through strong partnerships across the NHS, academia, local authorities and the voluntary sector, as well as engaging communities to ensure research is relevant, impactful and accessible.

#### ABOUT THIS WORKSHOP

TheHill's Director, Megan Morys-Carter, is a co-lead of the Digital theme of the HRC, along with Professor John Powell. This workshop was a collaboration between the Digital theme and the Care Homes and Care in the Home theme led by Adam Gordon, Professor of the Care of Older People at the Academic Centre for Healthy Ageing.

## AIMS OF WORKSHOP

- Identify key clinical challenges in falls prevention.
- Identify best practice in falls prevention.
- Support startups in refining their innovations by providing real-world clinical insights.
- Provide opportunities for collaboration between healthcare professionals, industry and academia.



### CHALLENGES & THEMES

- Highlighting the importance of routine blood pressure checks to identify postural drops and the efforts to track compliance, particularly for patients who have experienced falls.
- Challenge of distinguishing between correlation and causation when it comes to postural drops and falls.
- Comorbidities and lifestyle choices (e.g. alcohol)
- Moving too quickly patients might experience dizziness due to being rushed through their movements, especially after being in bed for extended periods.
- Medications can increase fall risk both as a side effect and when used to manage challenging behaviour.
- Environmental factors (poor lighting, obstacles, uneven surfaces)
- Cognitive factors not all patients or service users are able to communicate how they are feeling.
- Staffing levels across care providers.
- Falls often occur at specific times of the day. Difficult to identify why this is amongst a multitude of factors.
- Difficult to unpick and find the patterns in factors which cause falls.

Care home residents are 10x more likely to sustain a significant injury.

Hip fractures alone cost the UK treasury circa **£4bn per year** (£1bn of which is for social care)

# BEST AND SHARED AREAS OF PRACTICE

- One team monitoring B12 levels have been advised to treat anyone with B12 level below 250.
- ▲ To develop person centred support plans and personalised care plans with input from families and friends, understanding residents' routines and behaviours.
- Understand and recognise patient behaviour and to accurately predict individuals at higher risk of falling, enabling earlier interventions and personalised fall prevention strategies.
- For patients and service users to implement lifestyle changes such as limiting or avoiding alcohol consumption.
- For patients and service users to regularly engage in exercise or fitness activities which include strength, balance and flexibility training.
- Undertaking regular medication reviews to minimise side effects and unnecessary medication.

Approximately **30-50%** of falls result **in some physical injury**, with fractures occurring in 1-3% of cases.

## AREAS FOR IMPROVEMENT & SOLUTIONS

- Integrated digital systems to streamline fall incident reporting and enable shared access to patient history.
- ✓ Increase staffing, especially for night shifts and 1:1 support.
- Consideration of proprioception and sensory perception in falls risk assessments.
- Expand access to exercise groups, in particular falls-specific sessions locally.
- Develop a shared hub of evidence based guidance and centralised falls prevention resource.
- Provide regular physiotherapy, onsite in care settings to maintain mobility.
- Minimising the impact of falls is important rather than trying to prevent them entirely, as falls are inevitable.
- Improve risk prediction to focus resources around those most at risk.