

SYSTEM WIDE BUSINESS CASE				Fit for the Future Working together to keep people well	
Reference Number:					
Date:	08/03/2017	Version:	3.2		
Business Case Title:		CCG Wide Falls Prevention Programme			
Organisation(s) submitting business case:		System Wide – Health & Local Authority (Public Health)			
STP Work Stream / Directorate		PCIN – Healthy Ageing			
Author:		Helen Tunster, Jill Eastment, Karen Hurst, Jackie Riglin, Angelique Mavrodaris			
SRO:		Cath Mitchell			
Executive Sponsor:		Dr Liz Robin			
Senior Finance Manager Comments:		<i>This is to be completed by the Senior Finance representative responsible for reviewing bids prior to submission to the Exec Team / relevant committee for approval</i>			
Executive Team / Committee Meeting Comments:		<i>This is to be completed by the Exec Team / relevant committee reviewing the Business Case to capture the outcome of the review.</i>			

Guide to complete (and submit) your business case:

This document provides a template for all Business Cases. Please complete every section using the guidance as highlighted.

Be clear and concise.

Where relevant, try to articulate the case in terms of three core areas; Clinical effectiveness, Patient Experience and Safety.

Where necessary, involve specialists e.g. from finance, and proposed project work-streams to provide business case information including costs, risks, benefits and assumptions.

Include a paragraph in the Conclusion and Recommendations section explaining the decisions the committee are being asked to make.

Once completed, arrange for the business case to be reviewed by a peer and agreed by the Executive Sponsor before submission to the relevant board. Allow enough time for key people to review drafts, to support getting the business case right before it goes through the formal approval process.

Section Guidance is given in italics

[A] EXECUTIVE SUMMARY:

A1 – Purpose:

A fall is defined as an unplanned descent to the floor with or without injury to the patient.¹ Falls are the commonest cause of accidental injury in older people and the commonest cause of accidental death in the population aged 75 and over in the UK. A significant number of falls result in death or severe or moderate injury, at an estimated cost of £15 million per annum for immediate healthcare treatment alone.² This is a significant underestimation of the overall burden from falls once the costs of rehabilitation and social care are taken into account, as up to 90% of older patients who fracture their neck of femur fail to recover their previous level of mobility or independence.³ In addition to these financial costs, there are additional costs that are more difficult to quantify. The intangible human costs of falling includes distress, pain, injury, loss of confidence and loss of independence, as well as the anxiety caused to patients, relatives, carers, and hospital staff.⁴

The project seeks to implement an integrated CCG-wide Falls Prevention programme across Cambridgeshire & Peterborough and is seeking revenue investment of £501k in year one rising to £638k in year two. It is proposed that the project will be part-funded by Public Health (CCC and PCC) pump priming for the first two years, so the NHS funding required will be £261k in year one rising to £398k in year 2 and £511k recurrent after this. Based on experience elsewhere, the annual savings once the programme is fully implemented will be between £1.05M - £2.2M annually for acute healthcare costs resulting from falls related admissions, plus additional cost avoidance for community services post discharge.

The aim of the project is to implement a comprehensive, standardised, and integrated falls prevention pathway across the CCG area of Cambridgeshire and Peterborough. This will include:

- Increased provision and improved quality of evidence-based targeted interventions eg strength and balance classes, future development of fracture liaison services
- Proactive identification of those at risk of falls
- Comprehensive multifactorial assessment offered to those at risk of falling with appropriate intervention plan to address risks identified
- Strengthened system-wide integration and co-ordination.

Multi-faceted interventions such as proposed here can prevent falls in the general community, in those at greater risk of falls, and in acute care settings. Well organised services, based on national standards and evidence-based guidelines can prevent future falls, and reduce death and disability from fractures. Recognition of the substantial burden and cost of falls, and the identification of consistent and modifiable risk factors for these injuries demands a pro-active approach to falls prevention. An action-oriented systems perspective is needed to address the challenges inherent in preventing falls. Many sectors have a role to play, all need to be engaged in this process.

¹ National Database of Nursing Quality Indicators (2011).

² NPSA 2007 Slips, trips and falls in hospitals www.npsa.nhs.uk

³ Murray GR, Cameron ID, Cumming RG. The consequences of falls in acute and subacute hospitals in Australia that result in proximal femoral fracture. *Journal of the American Geriatrics Society*. 2007; 55(4): 577-82

⁴ Patient Safety First Campaign 2010. Reducing Harm from Falls.

A2 – Driver for Change

Risk

The project responds to risk in that:

- the population is ageing and rapidly increasing in numbers;
- falls and fracture risk increases substantially with age;
- costs to the health and social care system are substantial and will increase over time;
- the intangible human costs of falling include distress, pain, injury, loss of confidence and loss of independence with up to 90% of older people who fracture their neck of femur failing to recover their previous level of mobility and independence, as well as the anxiety caused to patients, relatives, carers and staff.¹

Opportunity

Building on strong foundations which include established evidence framework, local pathways developed, local application insights from the St Ives Pilot and the multi-agency working that has been built through the Cambridgeshire and Peterborough Working Group – the business case is in a strong position for effective implementation. The evidence base for falls prevention is strong but it is apparent that implementation needs to be at sufficient scale to reach the appropriate number and type of people across the population. Locally, an evidence based framework has been produced in conjunction with the Falls Working Group – and this is in the process of being tested by the Falls Pilot (Vanguard) in St Ives. This project therefore also represents an opportunity to further develop the implementation of the local framework, to increase the 'scale' of current interventions and 'reach' amongst the population and by monitoring and evaluation to generate data to ensure that interventions and resources are targeted appropriately.

A3 – Alignment with Organisation or System Priorities:

The investment supports the following **system priorities**:

- Cambridgeshire and Peterborough STP – in particular key priorities inherent in both Primary Care and Integrated Neighbourhoods (PCIN) and Urgent and Emergency Care (UEC) workstreams
- Cambridgeshire Better Care Fund (BCF) Plan
- Cambridgeshire Health and Wellbeing Strategy 2012-2017
- Cambridgeshire Older People Strategy
- CUH/CCG Care Homes protocol

The investment aligns to the following **provider objectives**:

- CPFT Operation Plan 2016-17
- CPFT Management and Prevention of Falls Strategy (awaiting ratification)
- CPFT Falls Prevention and Management Policy (awaiting ratification)
- CPFT contract with CCG
- CUH Harm Free Care strategy
- Everyone Health Falls Prevention Health Trainer Service

The investment supports the **CCG Improvement and Assessment Framework**:

- Better Health – Injuries from Falls in 65+

A4 – Brief Outline of Proposal:

To achieve its aim, the current programme of falls prevention activities across Cambridgeshire and Peterborough CCG area will need to be strengthened and expanded by applying the evidence base to the local infrastructure and by utilising existing models. The following projects, programmes and services are proposed:

1. Developing and implementing a falls prevention mass media campaign (£10K)

To develop a social marketing campaign targeting those entering retirement and beyond to improve awareness of key falls prevention messages for maintaining and improving strength and balance as we age.

2. Enhancement and expansion of strength and balance exercise provision (£124K)

Increase the number of frailer older people (75+) who successfully complete the recommended 50 hours of strength and balance training by recruiting four band 4 therapy assistants as part of the four rehabilitation falls units in each locality.

3. Enhancement of the existing specialist Falls Prevention Health Trainer Service across Cambridgeshire and Peterborough (£58K)

Proposal is to fund two additional Falls Prevention Health Trainers, one to cover the inequity in provision observed in Peterborough and one additional Falls Prevention Health Trainer in Cambridgeshire.

4. Strengthening Falls Prevention Delivery and Integration in the Community (£261K)

To strengthen the delivery of falls prevention and integration in the community by establishing the necessary staff roles, expertise and falls pathways. Three new band 7 falls champions are proposed as well as changes to existing staff roles including a band 8a uplift, band 7 backfill and a band 6 uplift.

5. Development and implementation of Fracture Liaison Services (FLS) across all acute Trust areas (£137K)

proposed for year 2. Public Health England (PHE) have identified that the implementation of a fracture liaison service in secondary care has potential to deliver savings to the NHS within five years. PHE have commissioned York Health Economics Consortium to produce a tool and model which will determine ROI (due June 2017). The aim of FLS is to reduce repeat fractures by identifying and treating people at risk – including by referrals to services described in this proposal.

6. Employment of Public Health Falls Prevention Coordinator (£59K) (2 years fixed term)

The reduction of falls and fractures admission rates is dependent on system-wide leadership, coordination and integration. The proposal is to appoint a Band 8 (equivalent) falls coordinator to coordinate, monitor and evaluate the implementation of a comprehensive, standardised preventative programme, including wider inputs from district council leisure services, home improvement agencies, and other partners not directly included in this STP bid.

A5 – Financial Impact and Outcomes:

The workstream is seeking gross revenue investment of £500,617 in year one increasing to £637,770 year two onwards. This investment covers the six elements which contribute to an integrated falls prevention programme across Cambridgeshire & Peterborough CCG area. This is a request for recurrent funding for the four year period 2017/18 – 2020/21 with the first two years including pump priming investment from Cambridgeshire/Peterborough Public Health.

Cambridgeshire and Peterborough Public Health will offer pump priming of £240k annually for the first two years to cover the costs of (1) Mass media campaigns (2) Enhancement of strength and balance exercise provision (3) Enhancement of specialist falls health trainer service and (6) public health falls prevention co-ordinator. Therefore the NHS investment will be £260,617k for year one and £397,770 for year two. From year three, recurrent NHS investment of approx. £511k annually will be required to maintain the services, while public health will continue to fund media campaigns, health trainer services, and public health co-ordination.

Based on modelled estimates of the costs of falls (£85.5M to health and social care in 2017) £32.1M is direct costs to the NHS for acute health care treatment of hip fractures and injurious falls resulting in emergency hospital admissions. We have modelled the financial impact of modest reduction in admissions (5% reduction in injurious falls admissions and 1.5% reduction in hip fractures) and a reduction based on other areas that have implemented similar complex intervention (10% reduction in injurious falls admissions and 3.6% reduction in hip fractures). The results suggest gross savings of £1.05M (acute health care costs only) on a full year of operation in year one on the low estimate and gross savings of £2.12M (acute health care costs only) on the higher estimate of 10%/3.6% reduction in admissions. We have considered the effect of implementation on year one (and the falls liaison service being introduced in year two) so recognise that there will be part year effects for both investment and savings.

The key outcomes to be achieved are a reduction in injurious falls (65+) and reduction in hip fracture admissions.

A6 – Sponsorship:

The project has engaged with the following internal and external stakeholders:

- Formal STP process
- Falls Prevention Working Group
 - Cambridgeshire & Peterborough Foundation Trust (CPFT)
 - Cambridgeshire County Council (CCC)
 - Peterborough City Council (PCC)
 - Cambridgeshire & Peterborough CCG
 - Peterborough VCS
 - Institute of Public Health, University of Cambridge (evaluation)
 - Cambridgeshire Fire and Rescue Service,
 - RightStart
 - All five District Councils in Cambridgeshire
- St Ives Falls Prevention Pilot Operational Group
 - CPFT, CCC, CCG, Institute of Public Health, Everyone Health, RightStart, Local Pharmaceutical Committee

A7 – Quality Outcomes:

Injurious Falls

The key quality outcomes relating to injurious falls and fractures are expressed in terms of inpatient hospital admissions. It should be noted that falls are events rather than conditions or diseases thus coding of falls-related health data can be potentially problematic. Hip fractures are generally seen as a proxy for a serious fall.

Hip fractures

This indicator is based on the NICE quality standard 16 relating to hip fracture in adults.¹ Meeting the overall quality standard should contribute to improving the effectiveness, safety and experience of care for people with hip fracture. This would include preventing people from dying prematurely and protecting them from avoidable harm. The National Hip Fracture Database records specialist falls assessment criteria based on standard 4 in the 2007 British Orthopaedic Association and British Geriatrics Society Care of patients with fragility fracture ('blue book'):² All patients presenting with a fragility fracture following a fall should be offered multidisciplinary assessment and intervention to prevent future falls.³ This indicator reflects both the incidence of falls and bone strength (osteoporosis prevention and treatment). CG146 Osteoporosis fragility fracture: NICE guideline⁴ includes guidance on targeting risk assessment:

- Based on Public Health Outcomes Framework (PHOF) 4.14 – Hip fractures in people aged 65 and over
- Links to NHS OF Domain 1 - Preventing people from dying prematurely
- NICE recommended indicator (HFra24)¹ – Hip fracture: incidence

¹ NICE Quality Standard 16.. Quality Standards for hip fracture. Available at: www.nice.org.uk/qs16

² Royal Orthopaedic Society (2007) 'The care of patients with fragility fractures (The Blue Book)'. Available at: <http://www.nhfd.co.uk/003/hipfractureR.nsf/resourceDisplay>

³ National Collaborating Centre for Nursing and Supportive Care. (2004) 'Clinical practice guideline for the assessment and prevention of falls in older people.' Available at: <http://www.nice.org.uk/nicemedia/pdf/CG021fullguideline.pdf>

⁴ NICE Clinical Guideline 161. (2013). Falls: assessment and prevention of falls in older people. Available at: www.nice.org.uk/nicemedia/live/14181/64088/64088.pdf.

A8 – Recommendation:

The Falls Prevention Workstream seeks approval to invest the following STP NHS funding:

Year 1: £260,617

Year 2: £397,770

Year 3 and recurrent: £511,000

In this proposal for a CCG wide falls prevention programme.

NOTE: In years 1 and 2 this will be pump primed by an additional £240k investment from Cambridgeshire County Council and Peterborough City Council public health funds, over and above the STP NHS funding requested.

The Committee is asked to approve the STP NHS investment in this proposal and to commit to integrated and joint working to implement this proposal.

[B] DRIVER(S) FOR CHANGE:

B1 – Risk & Opportunity:

Risk

The project responds to risk in that:

- the population is ageing and rapidly increasing in numbers;
- falls and fracture risk increases substantially with age;
- costs to the health and social care system are substantial and will increase over time;
- the intangible human costs of falling include distress, pain, injury, loss of confidence and loss of independence with up to 90% of older people who fracture their neck of femur failing to recover their previous level of mobility and independence, as well as the anxiety caused to patients, relatives, carers and staff.¹

Opportunity

The evidence base for falls prevention is strong but it is apparent that implementation needs to be at sufficient scale to reach the appropriate number and type of people across the population. Locally, an evidence based framework has been produced in conjunction with the Falls Working Group – and this is in the process of being tested by the Falls Pilot (Vanguard) in St Ives. This project therefore also represents an opportunity to further develop the implementation of the local framework, to increase the 'scale' of current interventions and 'reach' amongst the population and by monitoring and evaluation to generate data to ensure that interventions and resources are targeted appropriately.

Drivers for change

Population change

The number of older people aged 65 and over is forecast to increase significantly across the CCG population, with an increase of 42% in Peterborough and 48% in Cambridgeshire by 2031. In Cambridgeshire, amongst the oldest old, the number of people aged 90 years and over is forecast to nearly double in the next 15 years. In addition, a more than doubling of numbers in the 75-84 year age band who have an increased risk of injurious falls is anticipated across both Cambridgeshire and Peterborough.

Falls and fractures

Falls are a major cause of disability and the leading cause of mortality due to injury in older people aged over 75 in the UK.² The average age of a person with hip fracture is 84 years for men and 83 for women, with 76% of fractures occurring in women. About 10% of people with a hip fracture die within one month and about one-third within 12 months.³ Most of the deaths are due to associated conditions and not to the fracture itself, reflecting the high prevalence of comorbidity in this older group of people.⁴ There is emerging evidence that people with dementia and neurological disorders have an increased risk of falling.⁵

Falls are the leading cause of injury-related hospitalisation in older people and are a common reason for older people requiring long-term care in their home or a residential facility. Falls often lead to reduced functional ability and thus increased dependency on families, carers and services. They can often be a turning point or trigger for a deterioration in health or wellbeing, reducing independence and mobility and may lead to increased needs for both formal and informal support. Well organised services, based on national standards and evidence-based guidelines can prevent future falls, and reduce death and disability from fractures.⁶

¹ Patient Safety First Campaign 2010. Reducing Harm from Falls.

² See Falls prevention chapter in the JSNA for the Prevention of Ill Health in Older People. Available at: <http://www.cambridgeshirejsna.org.uk/prevention-ill-health-older-people-2013>

³ Available at: http://www.wmpho.org.uk/resources/APHO_OP.pdf.

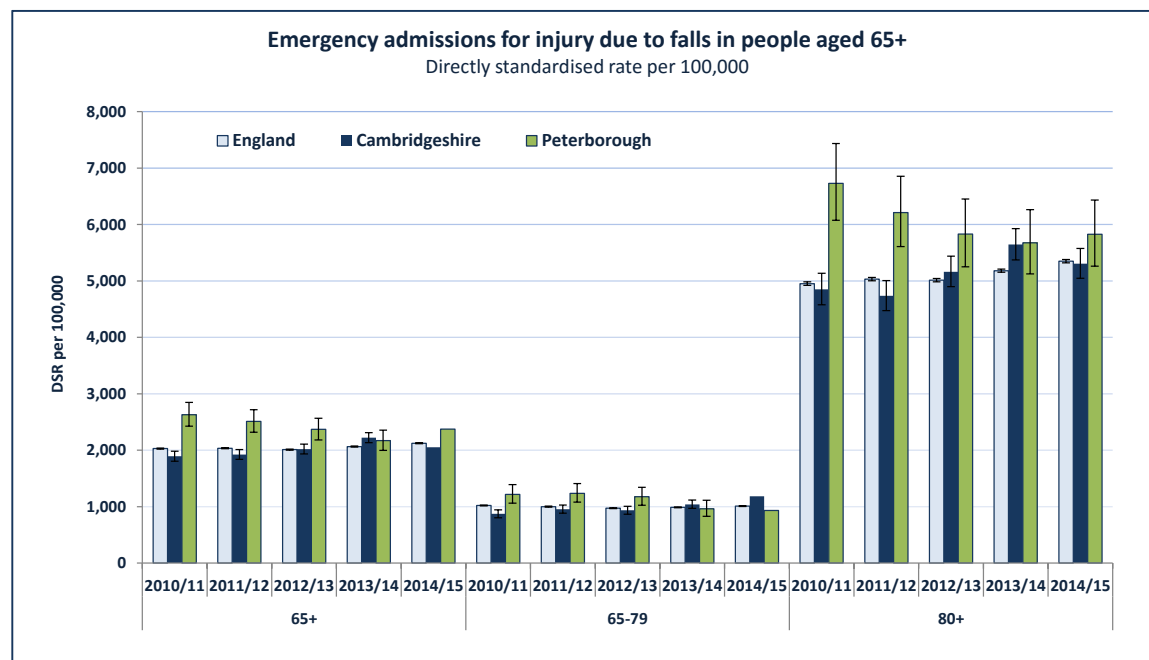
⁴ NICE Clinical Guideline 124 (2011): Hip Fractures – The Management of Hip Fractures in Adults. Available at: <http://www.nice.org.uk/CG124>

⁵ Allan LM, Ballard CG, Rowan EN, Kenny RA (2009) Incidence and Prediction of Falls in Dementia: A Prospective Study in Older People. *PLoS ONE* 4(5): e5521. doi:10.1371/journal.pone.0005521.

⁶ Royal College of Physicians.(2011) 'Falling standards, broken promises. Report of the national audit of falls and bone health in older people 2010'. Available at: http://www.rcplondon.ac.uk/sites/default/files/national_report.pdf

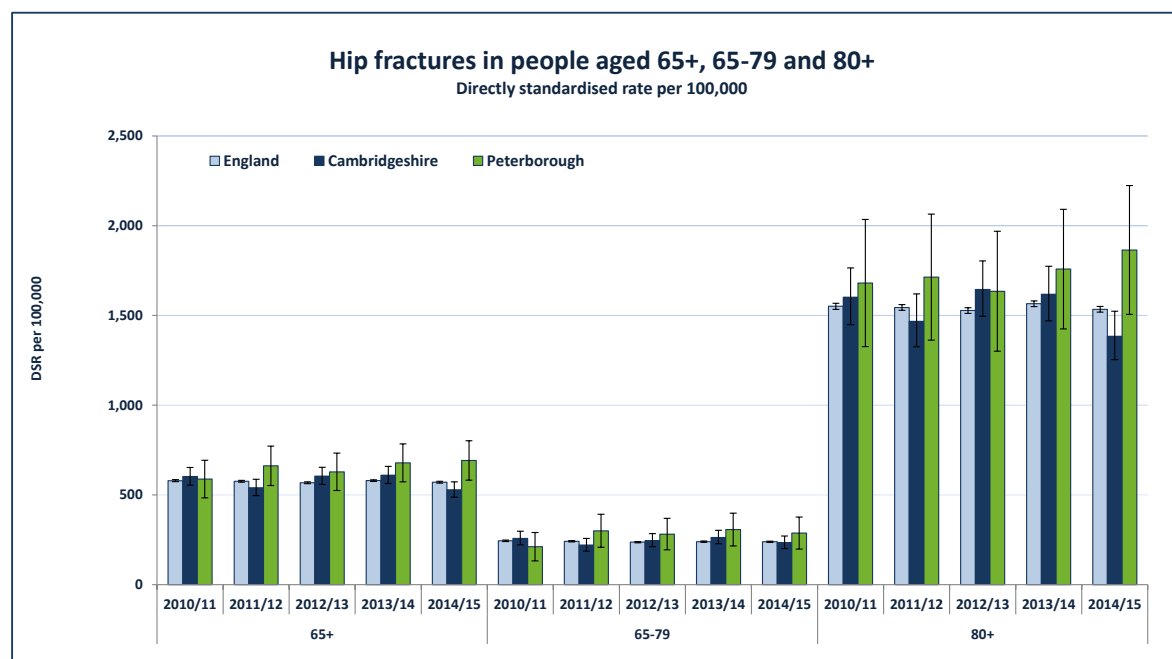
Figures 1 and 2, demonstrate rates of emergency admission for injuries due to falls, and for fracture of the hip between 2010/11 and 2014/15 in Cambridgeshire and Peterborough. Rates for emergency admissions in Cambridgeshire as a whole are similar to the national average whilst rates in Peterborough have been higher than the national average. It is clear that the impact of falls is disproportionately greater in those aged 80 years and above. This pattern accentuates the case for a dual approach to falls prevention. Services will target the over 65s who precede the age of high risk of hip fractures and frailty. Secondly, they will emphasise on effective approaches tailored to those aged over 75 years who are older and frailer, and have increasing risk of injurious falls and associated poor outcomes.

Figure 1: Emergency admissions for injury due to falls in people aged 65+



Source: Public Health England (PHE) Fingertips <http://www.phoutcomes.info/> Primary diagnosis code for Injury (ICD 10 S00-T19) with falls code (W00-W19) anywhere in diagnostic string.

Figure 2: Hip fractures in people aged 65+, 65-79 and 80+



Source: Public Health England (PHE) Fingertips <http://www.phoutcomes.info/> Primary diagnosis ICD 10 S72.0, S72.1, S72.2.

Costs of falls to health and social care system

In 2013, results were published from a Scottish study which aimed to estimate the costs to health and social care services in managing older people who fall in the community.⁷ The study used predominantly national databases and cost of illness methodologies and the authors noted that costs, while specific to Scotland, were generalisable to other parts of the UK. The study demonstrated that 34% of people aged 65 years and over living in the community fall at least once a year, of which 20% contacted a medical service for assistance. Applying the results from the Scottish study to local population figures for Cambridgeshire & Peterborough CCG, we can estimate the costs of falls across health and social care.

It is estimated that in 2017, falls will result in over 6,000 GP attendances, over 7,200 ambulance call outs, and more than 9,500 A&E attendances resulting in over 3,300 inpatient admissions across the CCG (numbers per year). The associated costs are high and estimated to be over £85 million. Costs at discharge are predominantly associated with social care but not from the funder perspective.

Table 1 - Estimated number and cost of fall related events, Cambridgeshire & Peterborough CCG 2017, based on study estimates applied to local population figures.

Clinical event		Number	Cost per event	Total cost (2017)	Total percentage
Population aged 65+		170,117			
Total people falling	34% of population	57,840			
Of whom serious	7% of population	11,908			
GP attendances	51% of serious falls	6,073	£36	£218,635	0.3
Ambulance callouts	61% of serious falls	7,264	£257	£1,866,849	2.2
A&E attendances	80% of serious falls	9,527	£101	£962,183	1.1
Inpatient admissions	35% of A&E attendances	3,334			
Falls (non hip fractures)	69% of admissions	2,301	£7,406	£17,038,720	20.1
Hip fracture	31% of admissions	1,034	£14,528	£15,016,603	17.7
Discharge falls					
Home	64%	1,475	£1,776	£2,619,118	3.1
Residential: short term	21%	492	£8,406	£4,132,703	4.9
Long term	15%	334	£65,942	£22,044,323	25.9
Discharge fractures					
Home	34%	353	£1,776	£627,362	0.7
Residential: short term	47%	482	£8,406	£4,049,368	4.8
Long term	19%	199	£65,942	£13,100,289	15.4
Re-admissions	7% of admissions	400	£7,406	£2,963,256	2.1
Mortality at one year	12% of admissions	233	£3,703	£864,283	1.8
Total cost				£85,503,691	100

Source: CCC PHI. ONS population projections applied to FHS Registration System (Exeter) January 2017 (Costs and estimates modelled using Craig et al.).

⁷ Craig J, Murray A, Mitchell S et al. The high cost to health and social care of managing falls in older adults living in the community in Scotland. Scottish Medical Journal 2013;58(4):198-203. Available at: <http://scm.sagepub.com/content/58/4/198>.

Evidence based interventions

To achieve savings to the health and care system as modelled above, and improvement in health and QOL outcomes for our older population, a multi-faceted falls prevention approach is fundamental. The approach will need to address varying phases of need across the population, ranging from older people who are well and mobile with no risks identified; those complaining of unsteadiness; those who have fallen and injured themselves; and those with significant frailty and multi-morbidities that may have already had interventions related to falls.

There is a large body of research literature, including several systematic reviews of robust clinical trials completed, and meta-analyses to provide pooled estimates of the effect sizes for the interventions. Overall, the trialled interventions demonstrate clinical effectiveness and the outcomes include reduced rate of falls, and reduced risk of serious falls.

To achieve impact, an array of evidence-based interventions is necessary, targeted to specific population groups and needs and delivered in an integrated manner by a range of sectors and partners across the system (Table 2).

Table 2: Effective interventions to reduce the rate of falls and risk of serious falls

Effective Interventions ⁸	Target Group
Strength and Balance (community)	All population >65
Tai chi (community)	Low/medium risk of falling
Home improvements (hazard assessments)	Medium/high risk of falling
Multi-factorial risk screening and intervention	Medium/high risk of falling
Medication review (withdrawal of psychotropic medication)	Taking multiple medications
Expedited cataract surgery	Patients with cataracts
Vision and eye exam	All population >65
Vitamin D and calcium	All population >65
Cardiac pacing	Patients with carotid hypersensitivity

The prevention and management of falls in community dwelling older people is only one element of a system wide falls prevention programme. NICE clinical guideline 161⁹ centres on the delivery of multi-factorial assessment of risk of falling in all older people in contact with healthcare professionals (therefore representing the majority of the population aged 75 years and over), and the implementation of multifactorial interventions addressing for example:

- Strength and balance training
- Home hazard assessment and intervention
- Vision assessment and referral
- Medication review with modification/withdrawal

In addition, those who are discharged from acute care following medical intervention for a serious fall (estimated as 3,250 people locally) are an important population group known to be at very high risk of injurious falls.

Approximately a third of patients admitted for a fall and two thirds of those admitted for a fracture from the community are discharged to a residential care setting. For those returning to living in a community setting, key interventions as identified in the local framework include the assessments of home hazards by an Occupational Therapist.

⁸ Interventions drawn from Day et al., (2009) Modelling the impact, costs and benefits of falls prevention measures to support policy-makers and program planners. MONASH University Accident Reduction Centre; Church J, Goodall S. Norman R. Haas M. An economic evaluation of community and residential aged care falls prevention strategies in NSW. Sydney. NSW Ministry of Health 2011.

⁹ Clinical Guideline 161 on Falls: Older People living in the community, 2013. Available at: <http://www.nice.org.uk/guidance/cg161/resources>

Local evidence based framework

In light of the evidence, a framework has been developed locally to describe evidence-based interventions across the population which are demonstrably effective in preventing falls (and therefore may incur cost savings for the NHS). This framework is summarised below:

Figure 3: Cambridgeshire and Peterborough Falls Prevention Framework

Primary prevention in the community (untargeted interventions) 60+	Identification & Assessment	Targeted interventions At risk/frail 75+	Preventing falls in hospitals & LTCF	Post-discharge (towards independence)
P.1 Exercise <ul style="list-style-type: none"> gait, strength, balance, or functional training Otago Tai Chi 	IA.1 Routinely ask older people whether they have fallen in the past year	TI.1 multidisciplinary assessment	PS.1 Groups at risk of falling in hospital: <ul style="list-style-type: none"> All patients aged 65+ Patients aged 50 to 64 years judged by a clinician to be at higher risk 	PD.1 home hazard assessment and safety intervention/modifications by suitably trained healthcare professional.
P.2 Vitamin D supplementation (+ Calcium)	IA.2 Observe for balance and gait deficits and consider for strength and balance.	TI.2 individualised multifactorial intervention: <ul style="list-style-type: none"> strength and balance training home hazard assessment and intervention vision assessment and referral medication review 	PS.2 multifactorial assessment	PD.2 Multiple programs (eg Otago, Matter of Balance)
P.3 Environmental & home safety interventions	IA.3 healthcare professionals' professional competence in falls assessment and prevention.	TI.3 Strength and balance training	PS.3 Multifactorial interventions (include individual risk assessment and tailored interventions)	
P.4 Multifactorial interventions	IA.4 multifactorial falls risk assessment	TI.4 psychotropic medications reviewed, and discontinued if possible	PS.4 Multifactorial interventions with an exercise component older people in extended care settings	
	IA.5 strength and balance training	TI.5 Cardiac pacing considered for cardioinhibitory carotid sinus hypersensitivity	PS.5 Exercise for more than 6 months (2–3 times a week)	
		TI.6 falls prevention programmes (includes behaviour change & addressing barriers)	PS.6 Vitamin D supplementation	
		TI.7 Education & information.	PS.7 Early anticipation of discharge needs	
			PS.8 Information & support	
			PS.9 share relevant information across services.	

The framework also provides a foundation for potential roles and leadership actions across sectors. Further information can also be gleaned from examples of falls services delivered elsewhere in the UK. 'Gold standard' falls preventions packages typically include strong pathways between the relevant agencies. The Greater Glasgow and Clyde model,¹⁰ which has evidence of actual realised savings, includes the following key components:¹¹

- Single point of referral in each locality for triage and onward referral
- Multi-factorial falls assessments (all assessments in the home)
- Data recording of patients using the service
- Programme of exercise classes run in community centres by trained specialist therapists (held immediately after rehabilitation classes)
- Integration: Close partnership-working between the NHS and local council
- Falls service widely promoted in GP practices, libraries, and other public settings

Falls Pilot (Vanguard) St Ives

The local framework has been tested in the St Ives Falls Pilot (Vanguard). Learning from the pilot will be incorporated into strengthening community provision in this proposal. Full evaluation is due in June 2017.

¹⁰ This programme is the only UK model to have evidence of realised savings, finding over a 10 year period the service has achieved a reduction in falls in the home of 32%, a reduction of falls in residential institutions of 27% and a reduction of falls in the street of almost 40%. However there may be some concerns about the analysis, and the ability to extrapolate for local models.

¹¹ Greater Glasgow and Clyde Falls Prevention and Osteoporosis Services. Available at: <http://www.nhsggc.org.uk/CONTENT/default.asp?page=s1361>

B2 – Strategic Context:

PHE Consensus Statement (January 2017)

This guidance was produced by the National Falls Prevention Coordination Group (NFPCG). The NFPCG is made up of organisations involved in the prevention of falls, care for falls-related injuries and the promotion of healthy ageing.

<https://www.gov.uk/government/publications/falls-and-fractures-consensus-statement>



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consensus_statemen

This proposal supports the system STP priorities of ‘at home is best’ and ‘we’re only sustainable together’.

Guidance documents, best practice and research:

NICE Clinical Guidance CG 161 & Quality Standard QS 86 Falls

NICE Clinical Guidance CG 81 & Quality Standard QS 16 Hip Fracture

NICE Clinical Guideline 21. Falls: The Assessment and Prevention of Falls in Older People. London, UK: National Institute for Clinical Excellence, 2004.

NICE Guidance NG5 Medicines Optimisation

NICE Technology Assessments TA 204, TA160 & TA161 osteoporosis medications

Commissioning for Quality and Innovation CQUINs. Fracture prevention & dementia

Best Practice Tariff Hip Fracture

Commissioning Toolkit Falls & Fracture Prevention

Royal College of Physicians National Falls & Fragility Fractures Audit Programme

British Geriatrics Society/American Geriatrics Society Falls Guideline

British Orthopaedics Association/ British Geriatrics Society Blue Book - hip fracture care

Silver Book - Quality Care for Older people with Urgent & Emergency Care Needs

Gillespie LD, Gillespie WJ, Robertson MC et al. Interventions for preventing falls in elderly people. Cochrane Database Syst Rev 2003;Issue 4.

Clemson L, Mackenzie L, Ballinger C, Close JC, Cumming RG. (2008) Environmental interventions to prevent falls in community-dwelling older people: a meta-analysis of randomized trials. [J Aging Health](#). 2008;20(8):954-71. doi: 10.1177/0898264308324672.

Key resources:

National Patient Safety Association Slips, Trips & Falls in Hospital

National Patient Safety Association Rapid Response Report Essential care after in-patient fall

National Patient Safety Association How To Guide - Reducing Harm from Falls

Royal College of Nursing Let's Talk about Restraint

College of Occupational Therapists Practice Guideline Falls

Chartered Society of Physiotherapy/AGILE - Falls guidelines

B3 – Risk Assessment (only applicable if responding to a risk as identified in B1):

N/A

[C] ALIGNMENT WITH ORGANISATION or SYSTEM PRIORITIES:

C1 - The proposed investment aligns to the following elements of the organisational or system priorities:

CCG Framework Element / Provider Strategic Objective / STP Strategic Objectives (delete as applicable)	Evidenced By:
1. Change Priority 1 'At home is best'. Falls prevention is highlighted as a key action to enable the delivery of this priority under the 10 point plan 'People powered health and wellbeing'.	Cambridgeshire and Peterborough STP
2 PCIN – aims to enhancing quality of integrated care closer to home, improving outcomes, strengthening communities and support available to individuals and empowering people to live independently (leading to reduced demands on statutory health and care services)	PCIN Delivery Plan
3 'Prevention' priority - emphasises the need to address falls in older people	Cambridgeshire Better Care Fund (BCF) Plan
4. 'Support older people to be independent, safe and well' priority	Cambridgeshire Health and Wellbeing Strategy 2012-2017
5. 'Older people are more independent, more active and more engaged in their communities for as long as possible; knowing that if they need them, they can rely on services which are flexible, creative, coordinated and focused on keeping them well'.	Cambridgeshire Older People Strategy
6. 'To reduce avoidable harm through improved falls prevention and reduction in harm from falls'.	CPFT Operation Plan 2016-17
7. Admission avoidance priority (falls are a cause of hospital admission and therefore are a focus for CPFT)	CPFT contract with CCG
8. 'To reduce avoidable harm through improved falls prevention and reduction in harm from falls'.	CPFT Management and Prevention of Falls Strategy (awaiting ratification)
9. 'To reduce avoidable harm through improved falls prevention and reduction in harm from falls'.	CPFT Falls Prevention and Management Policy (awaiting ratification)
10. 'To reduce emergency admissions due to falls from care home residents'	CUH/CCG Care Home protocol
11. To reduce the no of avoidable harm falls (inpatient)	CUH Harm Free Care Strategy
12. To improve the identification and assessment of clients at increased risk of falling and implement evidence based interventions to contribute to a reduction in falls and injurious falls.	Everyone Health Falls Prevention Health Trainer Service Specification
13. Better Health – Indicator – Injurious Falls in people aged 65+	CCG Outcomes Framework
14. Hip fractures in people aged 65+; Injurious falls in people aged 65+	Public Health Outcomes Framework (PHOF)

OUTLINE PROPOSAL

D1 - The Preferred Option:

This is a summary of the Full Business Case. Please see attachment for further details.

The aim is to implement a comprehensive, standardised, and integrated falls prevention programme across the Cambridgeshire and Peterborough CCG area. To achieve this, the current programme of falls prevention activities will need to be strengthened and expanded by applying the evidence base to the local infrastructure and by utilising existing models. The preferred option is to invest in five schemes for 2017/18 and six from 2018/19:

1. Develop and implement a Falls primary prevention campaign: £ 10,000

A falls prevention communication campaign is a central tenet of a multi-faceted and comprehensive approach to reducing falls, as depicted in the locally developed falls prevention framework. The proposal is to develop a social marketing campaign targeting those entering retirement and beyond to improve their awareness of key falls prevention messages around maintaining and improving strength and balance as they age. The campaign strapline, graphics and communication routes will be developed and targeted to specific segments of the older people population based on behavioural insights and engagement with the target group to ensure the messages are well received. The campaign design will be underpinned by major principals for developing effective mass media campaigns previously identified from the evidence base (Appendix 1) and by key findings derived from qualitative research exploring appropriate falls prevention messages to communicate to older people. The campaign will be evaluated by calculating the number of people reached by the campaign, number of people aware of the campaign, and number intending to implement the behaviour.

2. Enhancement and expansion of strength and balance exercise provision: £ 123,754

Strength and balance training, based on the Otago programme, has been evidenced to reduce falls. Economic modelling undertaken locally indicates that significantly higher numbers of older people are needed to undertake and complete the recommended 50 hours of strength and balance exercise training to achieve a reduction in the number of falls on an individual level and to contribute to a reduction in injurious falls on a population level. The aim of the proposal is to increase the number of frailer older people (75+ years) who successfully complete the recommended 50 hours of strength and balance training which will reduce their risk of falls. This will be achieved by recruiting four band 4 Therapy Assistants to deliver NHS strength and balance classes and set up home exercise programmes with 6 monthly follow ups. The 4 Therapy Assistants will provide additional capacity as part of the 4 rehabilitation falls units in each locality and their role will embed in the local falls prevention infrastructure, linking with the 16 Neighbourhood Teams as appropriate.

3. Enhance existing Falls Prevention Health Trainer Service: £58,333

The identification and assessment section of the evidence based Cambridgeshire and Peterborough Falls Prevention Framework highlights the need for timely identification of those who have fallen or at risk of falling, multifactorial risk assessment, and implementation of evidence based intervention such as strength and balance exercises. The Falls Prevention Health Trainer service builds capacity in the local falls prevention system and enables a more upstream, preventative focus by identifying those at risk. It is a key component of a community level falls prevention pathway that is being implemented in a local falls prevention pilot, aligning and complementing the existing NHS falls prevention service and Neighbourhood Team provision. The proposal is to fund 2 additional Falls Prevention Health Trainers to cover the inequity of provision observed in Peterborough and to increase capacity and provision in Cambridgeshire. The Falls Prevention Health Trainers will complete falls assessments and implement an appropriate intervention plan, including setting up and progressing a home based strength and balance exercise programme to complement those attending a community class in order to ensure the correct exercise dose for preventing falls. 6 monthly follow up appointments will be implemented to provide valuable motivational support and to enable progression and compliance with the home exercise programme and other evidence based interventions. The aim is to increase the number of older people receiving multifactorial assessments and evidence based intervention plans, particularly those at risk of falling.

4. Strengthen the delivery of falls prevention and integration in the community: £ 260,900

Multi-faceted interventions can prevent falls in the general community in those at greater risk of falls. Well organised services, based on national standards and evidence-based guidelines can prevent future falls, and reduce death and disability from fractures.

The proposal is to strengthen the delivery of falls prevention and integration in the community by establishing and embedding the necessary staff roles, expertise and pathway. Three new band 7 falls champions roles are proposed, as well as changes to existing staff roles. These changes include: a band 8a uplift for the band 7 Falls Clinical Lead (their new role will include Falls Champion (see below) as well as falls leadership across CPFT and wider system); concomitant backfilling of their band 7 clinical role; and a band 6 uplift to consolidate the Exercise trainer post and ensure accredited training is delivered, monitored and evaluated.

It is proposed that three new band 7 falls champions (2 nurses and 1 therapist) are employed and that a complementary skill mix comprising a therapist and a nurse work collaboratively in each of the north and south localities (East Cambridgeshire/Fenland/Peterborough and Huntingdonshire/Greater Cambridgeshire). The third therapist role will be covered by the band 8a uplift mentioned above. The falls champions will be based around a rehab and falls hub in each locality which would become a centre of excellence for falls prevention and management training. The falls champions will be responsible for offering training, complex clinical intervention and support to falls link workers identified in each Neighbourhood Team and in Specialist Services to ensure all staff have falls prevention knowledge and follow the agreed falls prevention pathway. Furthermore, the nurse falls champion will have a specific role concentrating on MDT working and training around admission avoidance. The nurses will lead on proactive and timely management of patients with exacerbations of long term conditions who have an increased risk of falls and subsequent hospital admissions.

5. Development and implementation of Fracture Liaison Service (FLS)

Public Health England have identified at least six areas where interventions have the potential to deliver savings to the NHS within 5 years and the implementation of a fracture liaison service in secondary care is one. The aim of an FLS is to reduce repeat fractures from falls by identifying people at risk of future fractures and falls and offering bone strengthening medicines and referrals to services that can reduce this risk (for example, strength and balance programmes). There is strong evidence to demonstrate that investment in fracture liaison services results in improved quality of care for patients as well as financial savings for commissioners of health and social care^{1,1}.

The proposal is to plan, develop, and implement a Fracture Liaison Service (FLS) across acute trusts over a five year period. The first year will be dedicated to the planning and development of the service with implementation in years 2-5. The FLS will be a key part of the Falls Prevention Pathway. Currently the costing is for 3 Band 7 nurses.

6. Public Health Falls Co-ordinator: £58,800

A reduction in falls and fracture admission rates is dependent on system-wide leadership, co-ordination and integration. Evidence indicates that the success of multicomponent falls prevention interventions depends on strong co-ordination at a system-level. The proposal is to appoint a band 8 (equivalent) Falls Co-ordinator to co-ordinate, monitor and evaluate a comprehensive, standardised and falls prevention programme ensuring join-up across falls activities such as fracture liaison services, falls health services and community provision in line with the Falls Prevention Pathway. The co-ordinator would work with partners to develop a Primary Prevention Campaign and facilitate data collection. This will include wider inputs from district council leisure services, home improvement agencies, and other partners not directly included in this STP bid.

Note that Interdependencies/ Communication with other services will be important for referrals to the service and onward referrals from the Falls Service will be addressed through a Communication and Engagement Plan.

This Business Case is a standalone case for Falls Prevention and is not dependent on other PCIN and UEC business cases.

D2 - 'Do Nothing' Option:

The cost implications of falls and fractures for the health and care system are evident and a 'do nothing' approach incurs increasing costs to all components and partners of the health and care system over time in addition to the devastating impacts on quality of life and independence of our growing older populations.

The table below provides an additional breakdown of NHS costs associated with falls and fractures and indicates the financial impact assuming no change in prevention up until 2020. This is a conservative estimate as numbers have been applied on the risk across the 65+ age group and not specifically adjusted for the increased risk inherent in the oldest old (greatest falls burden). Note that these tables do not include the costs incurred post hospital discharge (60% of total described above). There is some distribution of these costs between health and social care though the majority will be to social care.

Table 3: Estimated number and NHS costs of fall related events, Cambridgeshire & Peterborough CCG 2016 - 2020, based on study estimates applied to local population figures.

Breakdown of costs to NHS - Cambridgeshire & Peterborough CCG - no change in prevention

	2016	2020	2016	2017	2018	2019	2020
Population 65+	166,039	181,667					
Estimated falls in the community	56,453	61,767					
of which serious	11,623	12,717					
GP attendances	5,928	6,486	£.2M	£.2M	£.2M	£.2M	£.2M
Ambulance callouts	7,090	7,757	£1.8M	£1.9M	£1.9M	£2.M	£2.M
A&E attendances	9,298	10,173	£.9M	£1.M	£1.M	£1.M	£1.M
Costs GP/Amb/A&E			£3.M	£3.M	£3.1M	£3.19M	£3.25M
Inpatient admissions	3,254	3,561					
Of which non hip fx	2,246	2,457	£16.6M	£17.M	£17.4M	£17.8M	£18.2M
Of which hip fractures	1,009	1,104	£14.7M	£15.M	£15.4M	£15.7M	£16.04M
Costs of admission			£31.3M	£32.1M	£32.8M	£33.5M	£34.2M
Readmissions	228	249	£.8M	£.9M	£.9M	£.9M	£.9M
Total			£35.1M	£36.M	£36.8M	£37.6M	£38.4M

Source: (Costs and estimates modelled using Craig et al)

D3 - Alternative Option(s) Considered:

In terms of strengthening the delivery of falls prevention and integration in the community, three options were considered:

1. The training of therapy staff and district nurses in the 16 Neighbourhood Teams could be continued by the current band 7 Falls Clinical Lead once the St Ives Falls Prevention pilot (and the Falls Nurse role), comes to an end at the end of June 2017. This was discounted because:
 - a. The workload is unfeasible for one staff member preventing the timely implementation of evidence based practice, potentially leading to an increase in falls and injurious falls
 - b. The falls prevention pilot has identified that therapy staff have specific clinical training needs that need to be met to enable them to more effectively identify and manage patients at risk of falls. These training needs are not met during their foundation training and a nurse would be required to deliver these elements of training and to provide ongoing support.
 - c. The pilot has identified that district nurses are key players in identifying patients at risk of falling in the context of the patient's wider health needs and, in order to continue to embed falls within the role of the nurse, ongoing support and development is required from a falls specialist nurse
2. A falls nurse or therapist is employed in each of the Neighbourhood Teams. This was discounted because:
 - a. Cost prohibitive
 - b. Query over value for money
 - c. Cheaper alternative was to uplift the current band 7 to band 8a and for their role to cover the therapist falls champion role as well as wider leadership roles and responsibilities.
3. The preferred option described in D1 – one nurse and one therapist working collaboratively in a locality (total of two nurses and two therapists across the two localities).

[E] FINANCIAL IMPACT:

E1 – Investment Required for Proposed Option:

The work stream is seeking gross revenue investment of £500,617 in year one increasing to £637,770 year two onwards. This investment covers the six elements which contribute to an integrated falls prevention programme across Cambridgeshire & Peterborough CCG area.

Cambridgeshire and Peterborough Public Health will offer pump priming of £240k annually for the first two years to cover the costs of (1) Mass media campaigns (2) Enhancement of strength and balance exercise provision (3) Enhancement of specialist falls health trainer service and (6) public health falls prevention co-ordinator. Therefore the NHS investment will be £260,617k for year one and £397,770 for year two. From year three, recurrent NHS investment of approx. £511k annually will be required to maintain the service, with the remainder of the programme covered by public health funds.

Implementation of an integrated CCG-wide Falls Prevention programme in Cambridgeshire & Peterborough 2017/18			Y1	Y2	Y3	Y4	Y5
Primary prevention campaign	Primary Prevention campaign (Cambs & Peterborough)	See business case	£10,000	£10,000			
Physical activity Strength & Balance	Band 4 x 4 wte @ £28,126 per person per annum (based on top of band 4 Agenda for Change Payband 2016, plus 24% on costs and expected 1% uplift for 2017)	To provide strength and balance home exercise programmes and classes for frailer older people (75+ years)	£112,504	£112,504	£112,504	£112,504	£112,504
Falls prevention Health Trainer	x2 wte @ £26,667 per trainer per annum	To conduct multifactorial assessments, implement intervention plan (including strength and balance home exercise programmes) and provide motivational support for up to 6 months for older people independent of activities of daily living, in Peterborough and in Cambridgeshire	£53,333	£53,333			
	Non pay costs		£5,000	£5,000			
	Total costs		£58,333	£58,333			
Strengthening falls prevention delivery and integration in the community	Band 8a uplift	Co-ordinate Falls prevention and management in CPFT and maintain wider links with other stakeholders.	£15,000				
		To enable service to have locality champions that will training and support identified link workers in all 1 community teams to ensure Falls prevention/management becomes everyone's responsibility. Develop consistent pathways	£137,700				
	Band 6 x 1 wte	To backfill clinical work that JR is currently doing	£38,350				
	Band 6 uplift for Exercise Trainer	Need to support development of this role as the postholder offers accredited training courses to internal and external staff to ensure consistency of Strength and Balance exercise training.	£6,500				
	Total		£197,550				
	Non pay costs		£27,700				
	Overheads @ 18%		£35,600				
	Total costs		£260,900	£260,900	£260,900	£260,900	£260,900
Fracture Liaison Service		Uncosted - assume Band 7 staffing across Acute Trusts	0	£137,700	£137,700	£137,700	£137,700
Public Health Falls Coordinator	X1 wte Band 8a equivalent		£53,880	£53,333			
	Non pay costs		£5,000	£5,000			
	Total costs		£58,880	£58,333			
	Grand Total	Falls Prevention Programme across Cambridgeshire and Peterborough	£500,617	£637,770	£511,104	£511,104	£511,104

This Business Case is a standalone case for Falls Prevention and is not dependent on other PCIN and UEC business cases.

E2 – Savings Delivered in the Proposed Option:

Method

Potential gross savings have been calculated by estimating the financial impact of reducing hospital admissions for injurious falls and hip fractures under two scenarios – a conservative estimate of 5% reduction in injurious falls and 1.5% reduction in hip fracture, and a more average reduction based on areas that have implemented similar complex interventions (10% reduction in injurious falls admissions and 3.6% reduction in hip fractures). Note that gross savings shown are for CCG acute health care costs only. Other health service costs pre hospital admission (GP attendances, ambulance callouts, A&E attendances) are not included and represent an additional cost of £3.05M in 2017. Note that these are modelled costs based on Craig et al (2013).

Estimate of savings to be delivered

Based on modelled estimates of the costs of falls (£85.5M to health and social care in 2017) of which £32.1M is direct costs to the NHS for acute health care treatment of hip fractures and injurious falls resulting in emergency hospital admissions. We have modelled the financial impact of modest reduction in admissions (5% reduction in injurious falls admissions and 1.5% reduction in hip fractures) and a reduction based on other areas that have implemented similar complex interventions (10% reduction in injurious falls admissions and 3.6% reduction in hip fractures).

The results suggest gross savings of £1.05M (acute health care costs only) on a full year of operation in year one on the low estimate and gross savings of £2.21M – (acute health care costs only) on the higher estimate of 10% /3.6% reduction in admissions.

We have considered the effect of implementation on year one (and the falls liaison service being introduced in year two) so recognise that there will be part year effects for both investment and savings.

We estimate that in 2017, the total costs of falls and fractures to the health and social care system in Cambridgeshire & Peterborough CCG will be £85.5M. Of this total, £32.1M is direct costs to the NHS for acute health care treatment of hip fractures (Table 3) and other injurious falls which result in hospital admission¹. Costs post discharge amount to £46.6M and will be incurred predominantly by social care but also by community health care

- Achieving a modest 5% reduction in injurious falls admissions plus a modest 1.5% reduction in hip fractures results in acute healthcare gross savings of £1.05M.
- Achieving a 10% reduction in injurious falls admissions and a 3.5% reduction in hip fractures² results in acute healthcare gross savings of £2.18M.

Net savings on total investment (ie no split of funding determined between PH/STP/CCG etc)

Acute healthcare costs only		Y1	Y2	Y3	Y4	Y5
Savings from 5% reduction in falls admissions	5%	£0.83M	£0.85M	£0.87M	£0.89M	£0.91M
Savings from 1.5% reduction in hip fracture admissions	1.5%	£0.22M	£0.23M	£0.23M	£0.24M	£0.24M
Total (gross)		£1.05M	£1.08M	£1.10M	£1.13M	£1.15M
<u>Net savings (acute healthcare NHS only)</u>		£0.55M	£0.44M	£0.46M	£0.49M	£0.51M
Savings from 10% reduction in falls admissions	10%	£1.66M	£1.70M	£1.74M	£1.78M	£1.82M
Savings from 3.5% reduction in hip fracture admissions	3.5%	£0.51M	£0.53M	£0.54M	£0.55M	£0.56M
Total (gross)		£2.18M	£2.23M	£2.28M	£2.33M	£2.38M
<u>Net savings (acute healthcare NHS only)</u>		£1.68M	£1.59M	£1.64M	£1.69M	£1.74M

<i>Cost avoidance post discharge is in addition to cost avoidance to acute healthcare. Neither summary includes health costs pre admission.</i>	Gross savings post discharge (community health and social care)					
	Total - low	£1.67M	£1.71M	£1.74M	£1.78M	£1.82M
	Total - high	£3.42M	£3.5M	£3.58M	£3.66M	£3.74M

Please note: this table is based on 2012-based CCG population forecasts (CCC PHI) which will be updated.

High and low estimates of % reductions in admissions have been made. The Glasgow model that we use to assume the 3.5% (high) reduction in hip fractures is the model that most resembles our proposed complex intervention. The cautionary (low level) estimate is presented to account for the application of the intervention in local setting and context. This is what is currently being tested in the pilot and will continue to be monitored as the intervention is rolled-out to ensure local responsiveness.

If the 'low' ROI figure for the first year is halved to allow for the implementation process and the later introduction of the fracture liaison service in year two, the gross saving is still over £0.5M.

What has not been included in the summary analysis is the considerable cost of falls and fractures post hospital discharge. For 2017 this is estimated to be £45.5M. Proportions are borne by both community health care and social care (nursing and residential care post discharge for a hip fracture); depending on the local model of care. Gross savings shown in the table above therefore indicate considerable additional savings to both the health and social care system if the falls prevention programme aligns with other initiatives and projects – this is considered critical to the success of the programme.

E3 – Source of Funding:

It is proposed that funding is split between Cambridgeshire & Peterborough CCG/STP and Cambridgeshire/Peterborough Public Health as follows:

Year	NHS funding	CCC and PCC public health funding
Year 1	£261k	£240k
Year 2	£398k	£240k
Year 3 and recurrent	£511k	Mass media campaigns, health trainers and public health falls prevention coordination mainstreamed within local authority public health services.

E4 – Financial Model: See separate Excel spreadsheet – please complete for all options outlined in section D**E5 – Contractual Considerations:**

The existing Health Trainer contract is currently undergoing a contract variation.

The remainder of the proposals consist of new posts (with two exceptions where existing posts include uplift). With the exception of the PH Falls Coordinator who will be employed within CCC (Public Health), all other posts will be employed by CPFT. SDU to further advise.

E6 – Capital Risk (Capital Cases only):

N/A

[F] PATIENT EXPERIENCE:

In terms of the preferred option:

F1 – Impact on Patient Care:

- Through strength and balance exercise provision, people identified as at risk of falls, are less likely to fall, and will maintain confidence and independence through training
- More people will be aware of falls prevention through the social marketing campaign
- Through the extension of the Falls Specialist health trainer role, more health professionals will be able to identify patients at risk of falls and conduct falls assessments, putting appropriate interventions in place.
- Patient satisfaction through strengthening the Falls Prevention Delivery and Integration in the Community
- Patients maintaining stability in balance through support, education and knowledge
- Patients being maintained in the community leading to fewer referrals and admissions to acute hospitals
- Patients who experience fragility fractures being identified and treated early once FLS operational leading to less severe fractures in the future

[G] OPERATIONAL IMPACT:

In terms of the preferred option:

G1 – Capacity: post change, during implementation; Other areas:

Primary prevention campaign	Currently little capacity is available within the falls prevention programme for this activity. The employment of the Falls Coordinator supported by existing public health staff will create the capacity to develop and implement the campaign.
Strength & Balance	The four new therapy assistants will increase capacity to support frailer older people to increase their strength and balance. The new staff will improve the number of people taking up the exercise programmes by reducing the waiting time for intervention enabling the patient to be seen sooner after the referral and when they are still motivated and more likely to make the behavioural change.
Falls Prevention Health Trainer	Two new posts: <ol style="list-style-type: none">1. One in Peterborough into the new service. Capacity unavailable in Peterborough currently. No impact during implementation as the lifestyle service is being commissioned and set up.2. One in Cambridgeshire. The new post will increase capacity. Service will be able to continue during implementation.
Falls prevention delivery and integration	Three new posts will create capacity which is currently unavailable. Band 8a uplift will create capacity by enabling this post to cover one of the four falls champions in the 2 localities. The substantive band 7 post will need to be backfilled during the implementation and this is costed for in the business case. There will be an operational impact on this role whilst the backfilling takes place. Band 6 uplift of exercise specialist. Capacity available to some extent. The upgrade will create additional capacity in terms of responsibility and leadership.
FLS	This needs to be scoped and planned and implemented across the system. This is proposed for year 2.
PH Falls Prevention Coordinator	Currently the falls prevention programme is supported by the Senior Public Health Manager – Older People (Cambridgeshire County Council). However, the increasing demands of this programme have limited their capacity, prohibiting the ability to plan and implement new programmes of work such as UTIs/incontinence, malnutrition etc. The new 2 year fixed term post will release capacity of the manager to work on these other priority areas defined by STP and BCF and increase the capacity to implement the falls prevention programme. It is proposed that the PH Falls Prevention Coordinator will plan for the implementation of FLS across the acute trusts.

G2 – Support Services, Physical and Equipment Capacity, IT and IG Compliant:

Primary prevention campaign	n/a
Strength & Balance	The capacity is not currently available. Yes there are plans which could accommodate the additional therapy assistants within falls rehabilitation units.
Falls prevention Health Trainer	The capacity is not currently available. Yes additional staff could be accommodated within Cambridgeshire. Peterborough will be a new service (with falls health trainers recruited alongside general health trainers)
Falls prevention delivery and integration	Capacity not currently available.
FLS	n/a
PH Falls Coordinator	Capacity not currently available within public health team. Yes an additional staff member can be accommodated within existing structures.

G3 – Impact Assessment:

Cambridgeshire County Council (CCC)

An impact assessment was carried out in 2015 for Cambridgeshire County Council Public Health Directorate for the previous PH Business Plan regarding falls prevention. This will be updated to inform the current proposal across all project elements. This is likely to be when PH Falls Prevention Coordinator is in post.

[H] WORKFORCE/HR:

We have considered the ability to recruit to the small number of posts and there is no foreseen barrier to filling the posts. The more difficult posts for the Fracture Liaison service will have a lead in of 12 months as they are required in Year 2.

H1 – Staffing Numbers:

The Organisation's headcount will increase as shown in table as a consequence of this proposal.

	Organisation	WTE
Primary prevention campaign	n/a	n/a
Strength & Balance	CPFT	4 wte
Falls prevention Health Trainer	Everyone Health Solutions for Health	1 wte 1 wte incorporated within new contract implementation
Falls prevention delivery and integration	CPFT	4 wte (3 new posts, 2 uplifts and 1 backfill)
FLS	Acute Trusts	1 wte per Trust
PH Falls Coordinator	CCC	1 wte

H2 – Staff Consultation:

The Falls Pilot (Vanguard) has provided insight into the key staff groups who will be involved with developing and implementing key elements of this proposal. This has given useful feedback and engagement with different staff groups.

A consultation process involving staff side will not be required for this proposal.

H3 – Training:

Primary prevention campaign	n/a
Strength & Balance	Tbc
Falls prevention Health Trainers	Yes – Falls awareness training (internal); Falls prevention training (internal), Ongoing supervision by new band 7 therapists.
Falls prevention delivery and integration	Yes for the band 7 nurses and therapists – it will depend on the skill set of the staff recruited but as a minimum will include: Falls prevention training (internal), Falls pathways and internal IT systems training (Internal), Ongoing supervision by band 8a. Specialist nurses will need the following training: Holistic clinical assessment skills; mentorship; SystmOne training; Phlebotomy; Otago training.
FLS	Yes probably (Year 2) but also bone health, primary care staff,
PH Falls Coordinator	n/a – depending on appointee, some training may be required

H4 – Recruitment Considerations:

Primary prevention campaign	n/a
Strength & Balance	The Clinical Falls Lead has indicated that she is unaware of any difficulties and issues recruiting therapy assistants.
Falls Prevention Health Trainer	Recruitment of falls health trainers has been relatively straightforward and the role appears to be attractive to people interested in the health trainer role (physical activity backgrounds). No special considerations.
Falls prevention delivery and integration	It is not known whether there will be difficulties recruiting from an external pool. Internally, it is anticipated that there may not be the staff with the knowledge and skills currently employed by CPFT, however, successfully appointed individuals will be trained up to deliver the role.
FLS	Specialist nurses – there is likely to be interest within each acute trust and people with relevant experience and expertise. It may be wise to accelerate recruitment if national guidance is likely to make this a priority for each region/CCG.
PH Falls Prevention Coordinator	This is a new post which should attract a wide field of candidates from varying backgrounds. Recruitment should be straightforward.

H5 – Tenure:

New Posts will be fixed term.

H6 – Job Plans:

Primary prevention campaign	n/a
Strength & Balance	CPFT therapy assistant job descriptions exist.
Falls prevention Health Trainer	n/a Three successful appointments have been made. Employer is an external provider.
Falls prevention delivery and integration	One new band 7 therapist role based in CPFT. Job description exists and could be adapted for new role. One backfill of band 7 therapist role. Job description exists. Two new band 7 falls nurse roles based in CPFT. Job description exists for district nurses which could be adapted for falls nurse.
FLS	Comprehensive support is available from National Osteoporosis Society (NOS). This includes template job descriptions.
PH Falls Coordinator	Postholder will be employed by CCC (Public Health) and job description/person specification will be evaluated (Hay) by CCC HR and quality assured to ensure parity across the organisation.

[I] IMPLEMENTATION:

I1 – Timescales:

Following business case approval the project will take between 24-60 months to implement (depending on the project), with the earliest project anticipated 'go live' from August 2017.

1. Falls primary prevention campaign

Activity	No. Weeks	Dates Start - Finish
Scoping/Design	28	1/4/17 – 13/10/17
Planning Consent	0	n/a
Contracting/Advertising	0	n/a
Delivery Lead-Time	0	n/a
Works/Installation/Commissioning	6 (included in design phase)	n/a
Practical Completion/"Go Live"	3	13/10/17 – 3/11/17
Post-Project Evaluation	6	3/11/17 - 15/12/17
TOTAL	37	1/4/17 – 15/12/17

2. Enhancement and expansion of strength and balance training provision

Activity	No. Weeks	Dates Start – Finish
Scoping/Design	4	1/4/17 – 28/4/17
Planning Consent	0	n/a
Contracting/Advertising	12	28/4/17 – 7/7/17
Delivery Lead-Time	5	7/7/17 – 11/8/17
Works/Installation/Commissioning	0	n/a
Practical Completion/"Go Live"	239	11/8/17 – 31/3/22
Post-Project Evaluation	4	31/3/22 – 28/4/22
TOTAL	264	1/4/17 – 28/4/22

3a. Enhancement of Falls Prevention Health Trainer Service - Peterborough

Activity	No. Weeks	Dates Start - Finish
Scoping/Design	6	1/4/17 – 12/5/17
Planning Consent	0	n/a
Contracting/Advertising	12	12/5/17 – 4/8/17
Delivery Lead-Time	8	4/8/17 – 29/9/17
Works/Installation/Commissioning	0	n/a
Practical Completion/"Go Live"	234	29/9/17 – 31/3/22
Post-Project Evaluation	4	31/3/22 – 28/4/22
TOTAL	264	1/4/17 – 28/4/22

3b. Enhancement of Falls Prevention Health Trainer Service - Cambridgeshire

Activity	No. Weeks	Dates Start - Finish
Scoping/Design	0	n/a
Planning Consent	0	n/a
Contracting/Advertising	16	1/4/17 – 21/7/17
Delivery Lead-Time	8	21/7/17 – 15/9/17
Works/Installation/Commissioning	0	n/a
Practical Completion/"Go Live"	236	15/9/17 – 31/3/22
Post-Project Evaluation	4	31/3/22 – 28/4/22
TOTAL	264	1/4/17 – 28/4/22

4. Strengthening falls prevention delivery and integration in the community

Activity	No. Weeks	Dates Start - Finish
Scoping/Design	4	1/4/17 – 28/4/17
Planning Consent	0	n/a
Contracting/Advertising	12	28/4/17 – 21/7/17
Delivery Lead-Time	16	21/7/17 – 10/11/17
Works/Installation/Commissioning	0	n/a
Practical Completion/"Go Live"	228	10/11/17 – 31/3/22
Post-Project Evaluation	4	31/3/22 – 28/4/22
TOTAL	264	1/4/17 – 28/4/22

5. Development and implementation of Fracture Liaison Service

Activity	No. Weeks	Dates Start - Finish
Scoping/Design	42	1/4/17 – 19/1/18
Planning Consent	0	n/a
Contracting/Advertising	12	19/1/18 – 13/4/18
Delivery Lead-Time	0	n/a
Works/Installation/Commissioning	0	n/a
Practical Completion/"Go Live"	206	13/4/18-31/3/22
Post-Project Evaluation	4	31/3/22 – 28/4/22
TOTAL	264	1/4/17 – 28/4/22

6. Public Health Falls Prevention Co-ordinator

Activity	No. Weeks	Dates Start - Finish
Scoping/Design	4	1/4/17 – 28/4/17
Planning Consent	0	n/a
Contracting/Advertising	12	28/4/17 – 21/7/17
Delivery Lead-Time	6	21/7/17 – 8/9/17
Works/Installation/Commissioning	0	n/a
Practical Completion/"Go Live"	82	8/9/17- 31/3/19
Post-Project Evaluation	4	31/3/19 – 26/4/19
TOTAL	108	1/4/17 – 26/4/19

I2 – Implementation Governance Arrangements:

SRO Catherine Mitchell
Clinical Lead Dr Angelique Mavrodaris

Project Manager Public Health Falls Coordinator – with support to be identified within each organisation involved

The project will be overseen by the Cambridgeshire and Peterborough Falls Working Group which currently reports through and is accountable to STP channels (via PCIN and CAG) as well as local Area Executive Partnership Boards and the Ageing Well Strategy Board (HWB).

I3 – Support Services Resources:

The project will benefit from support from Finance and HR functions within each organisation (ie CPFT, CCC) in drawing up the detailed implementation plans. In addition, project support will be welcomed to ensure smooth running pre recruitment. No funding requests have been included in E4 for these elements. SDU to advise.

I4 – Post-Project Evaluation (PPE):

Evaluation and monitoring is a key part of the implementation of this project and the St Ives pilot (Falls Vanguard) has been developing and implementing some of the key components which will lead to the success of this element. An example would be the development of key SystmOne modules to record and report on multifactorial falls assessments. This project has been carried out by pilot staff working with CPFT and CCG informatics leads. The result will be that any county-wide expansion will reap the benefits and monitoring should begin from start of project. In addition, a Falls Dashboard is in development as part of the current evaluation funded separately by PPHES with University of Cambridge staff. This will have identified and refined key data sources eg ambulance callouts and consequences. All training carried out by current specialist nurse has been evaluated in order to inform future expansion. A key element has been the learning logs (lessons learnt) and this approach will be continued to ensure learning is embedded during expansion with University of Cambridge staff.

Timescale for PPE: (Please tick one box below)

3 months ☐ **6 months** ☐ **9 months** ☒

I5 – Deliverables: KPIs/Outcomes and systems for measuring performance of the scheme:

Measure	Definition	Source/ method of collection	Reporting	Comment
Hospital admissions				
Hospital admissions for Injury due to Falls (65-79, 80+)	Age-sex standardised rate of emergency hospital admissions for injuries due to falls in persons aged 65+ per 100,000 population	PHOF, local SUS	PHOF Annual, local monitoring more frequent as required (quarterly)	
Hip fractures in people aged 65 and over (65=79, 80+)	Age-sex standardised rate of emergency admissions for fractured neck of femur in those aged 65+ per 100,000 population	PHOF, local SUS	PHOF Annual, local monitoring more frequent as required (quarterly)	
Hip fracture including fragility fractures (experimental)	As above with inclusion of codes for fragility fractures (ref OP Outcomes Framework)	Local SUS	As required (quarterly)	
Measure of repeat hospital admissions following an admission for an injurious fall	See Older People Outcomes Framework for definition	Local SUS	As required (quarterly)	Development: Linked data could indicate interventions
Ambulance service				
Number of ambulance callouts for fall by locality				
Number and % of conveyances				Development: Linked data could indicate admissions

A&E attendances

Number and rate of A&E attendance by acute Trust where a fall is identified as being cause of admission		*Placeholder		Explore whether coding in A&E sufficient to identify falls
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Neighbourhood Teams

Multifactorial assessments	Definition	Source/ method of collection	Reporting	Comment
No. of referrals for multifactorial falls assessments received by Neighbourhood Team (broken down by	No. of referrals in to health for falls management and prevention	*Placeholder		Explore possibility
No. of multifactorial assessments completed by Neighbourhood Team (broken down by staff group)	No. of assessments completed	*Placeholder	Monthly	Beginning Feb 2017

Multifactorial intervention signposting and referral (by source)	Definition	Source/ method of collection	Reporting	Comment
No. of referrals for:				
Strength and balance training and motivational support from Falls Prevention Health Trainers		*Placeholder		Explore possibility
Medication Review		*Placeholder		Explore possibility
Home Safety Assessment		*Placeholder		Explore possibility
Vision assessment		*Placeholder		Explore possibility
Cardiac assessment		*Placeholder		Explore possibility
Urinary incontinence		*Placeholder		Explore possibility
Osteoporosis		*Placeholder		Explore possibility
Assistive Technology?		*Placeholder		Explore possibility

GP Practices

Multifactorial intervention signposting and referral (by source)	Definition	Source/ method of collection	Reporting	Comment
No. of referrals for:				
Strength and balance training and motivational support from Falls Prevention Health Trainers		*Placeholder		Explore possibility to monitor via read codes
Medication Review		*Placeholder		Data development agenda
Home Safety Assessment		*Placeholder		Data development agenda
Vision assessment		*Placeholder		Data development agenda
Cardiac assessment		*Placeholder		Data development agenda
Urinary incontinence		*Placeholder		Data development agenda
Osteoporosis		*Placeholder		Data development agenda
Assistive Technology		*Placeholder		Data development agenda

Health Trainers

Measure	Data collection in place?	Source/Method of collection	If no, when?	Reporting
No. of referrals from NT to Falls Prevention Health Trainers for falls multifactorial assessment	n	Placeholder	Explore possibility	n/a
No. of referrals received by Falls Prevention Health Trainers	y	Everyone Health KPI	n/a	monthly
No. of multifactorial assessments completed by Falls Prevention Health Trainers	y	Everyone Health KPI		monthly
No. of personal health plans written with falls prevention goals	y	Everyone Health KPI		monthly
No. and % of clients achieving the falls prevention goals	n	Placeholder	Explore possibility	n/a
No. and % of clients who attend strength and balance classes	n	Placeholder	Explore possibility	n/a
No. and % of people completing 6 weeks of strength and balance training	n	Placeholder	Explore possibility	n/a
No. of people referred to RightStart to continue strength and balance training	n	Placeholder	Explore possibility	n/a
No. of people engaged in RightStart strength and balance training	n	Placeholder	Explore possibility	n/a
No. and % of clients who demonstrate an increase in strength after participation in the Falls Prevention Health	n	Placeholder	Explore possibility	n/a

Measure	Definition	Method of collection	Reporting
Neighbourhood team training process measures			
No. and % of Neighbourhood staff receiving falls prevention training (by staff group)	No. neighbourhood team staff trained as % of Total no. of neighbourhood staff in NT	After each training session	Monthly
	As above: Occupational Therapists	After each training session	Monthly
	As above: Physiotherapists in NT	After each training session	Monthly
	As above: District Nurses in NT	After each training session	Monthly
	As above: CPNs in NT	After each training session	Monthly
No. and % of participants rating the training as good or excellent	No. of participants rating as good or excellent as % of Total no. of evaluation forms completed	Post training evaluation form after each training session	Quarterly
No. and % of participants reporting that the training improved their knowledge, skills and confidence to screen and identify those who have fallen or at risk of falling (by staff group)	No. of participants reporting improvement as % of total evaluation forms	Post training evaluation form after each training session	Formative/at end of pilot
No. and % of participants reporting that the training improved their knowledge, skills and confidence to conduct multifactorial falls risk assessments (by staff group)	No. reporting improvement as % of total evaluation forms	Post training evaluation form after each training session	Formative/at end of pilot
No. and % of participants reporting that the training improved their knowledge, skills and confidence to refer/signpost patients to sources of help as detailed in the	No. of participants reporting increased K,S & C to signpost on as % of total evaluation forms	Post training evaluation form after each training session	Formative/at end of pilot

[J] RISKS & OPPORTUNITIES:

J1 – Implementation Risks & Opportunities:

Opportunities:

- To deliver an integrated falls service to achieve better outcomes for patients and a saving to the system
- To ensure that we are in a good position in 2018/19 to implement a Fracture Liaison Service which will again improve patients that have experienced a fall to have a better service provision and prevent repeated fractures which will also lead to a saving to the system
- To use falls and fractures as one of the key conditions to test joined up data and information across the system.

Risks:

- Falls prevention efforts are unlikely to be successful unless they are sustained at a systems level. The opportunities identified to deliver cost-effective interventions and outcomes among our older populations at risk of falling are not simply stand-alone strategies. Rather, they comprise component parts that ideally, interact synergistically to create an effective falls prevention system that will make a real difference in an area that causes pain and distress to many people every day.
- Communication channels does not reach targeted audience
- Patient engagement
- Recruitment and retention of staff
- Information systems do not currently lend themselves to analyses that contribute to better understanding of the whole patient journey across the system and the trigger events at which point an intervention could be made. There are many elements in this proposal which would benefit from such an approach.
- One of the difficulties with this proposal and separate components in the intervention is the ongoing need to establish and review at what scale the intervention needs to be operating in order to achieve the desired outcomes (and savings). The Falls Pilot has begun to generate information and this needs to continue in order to contribute towards estimating the scale required (eg training; multifactorial assessments; other)
- The Falls Pilot (Vanguard) has highlighted a risk if therapy teams do not take on the new systems and processes. Learning from the pilot will be applied in wider implementation.

[K] STAKEHOLDER ENGAGEMENT:

K1 –Stakeholders Engaged During Business Case Development:

Name	Title	Representing	Internal / External
Karen Hurst	AHP Lead for Integrated Care Services Directorate	CPFT	
Jackie Riglin	Falls Prevention Clinical Lead	CPFT	
Val Thomas	Consultant in Public Health	Public Health, Commissioner of Everyone Health	

All of the above stakeholders have received and reviewed the latest version of this business case and have consented to its submission.

The project has engaged with the following internal and external stakeholders

- Formal STP process

- Falls Prevention Working Group
 - Cambridgeshire & Peterborough Foundation Trust (CPFT)
 - Cambridgeshire County Council (CCC)
 - Peterborough City Council (PCC)
 - Cambridgeshire & Peterborough CCG
 - Peterborough VCS
 - Institute of Public Health, University of Cambridge (evaluation)
 - Cambridgeshire Fire and Rescue Service,
 - RightStart
 - All five District Councils in Cambridgeshire
- St Ives Falls Prevention Pilot Operational Group
 - CPFT, CCC, CCG, Institute of Public Health, Everyone Health, RightStart, Local Pharmaceutical Committee

In addition feedback on the proposals has been sought and received from the following stakeholders:

- Area Executive Partnerships
- Healthwatch
- District council providers
- Falls Working Group (see below) and St Ives Pilot Implementation Group (see below)

[L] RECOMMENDATION:

The Falls Prevention Workstream seeks approval to invest the following STP NHS funding:

Year 1: £260,617

Year 2: £397,770

Year 3 and recurrent: £511,000

In this proposal for a CCG wide falls prevention programme.

In years 1 and 2 this will be pump primed by an additional £240k investment from Cambridgeshire County Council and Peterborough City Council public health funds

The Committee is asked to approve the investment in this proposal and to commit to integrated and joint working to implement this proposal.

[M] DUE REGARD SCREENING:

Please note this will be reviewed as part of the update to the 2015 assessment (CCC). It is currently covered by the 2015 assessment and will be revised into STP format following SDU advice,

Impact (please indicate Yes or No for each question)	Race/Ethnicity	Sex	Religion or Belief	Gender Reassignment	Sexual Orientation	Age	Marriage & Civil Partnership	Pregnancy & Maternity	Disability
Do different groups have different needs, experiences, issues and priorities in relation to the proposed change?	N	N	N	N	N	Y	N	N	N
Is there potential for or evidence that the proposed change will not promote equality of opportunity for all and promote good relations between different groups?	N	N	N	N	N	N	N	N	N
Is there potential for or evidence that the proposed change will affect different population groups differently (including possibly discriminating against certain groups)?	N	N	N	N	N	N	N	N	N
Is there public concern (including media, academic, voluntary or sector specific interest) in potential discrimination against a particular group or groups?	N	N	N	N	N	N	N	N	N

Note that if any box contains a 'Yes' then a full DUE REGARD assessment is required to be undertaken. (see note above)

[N] REVISION HISTORY:

Version	Date	Amendments	Authored/Approved By
1	3/3/17		Jodie Hills
2.1	6/3/17	Yes	Helen Tunster/Jill Eastment
2.2	7/3/17	Yes	Helen Tunster/Jill Eastment (Joanne Fallon reviewed)
2.3	8/3/17	Yes	HT/JE/Angelique Mavrodaris
2.4	8/3/17	Yes	As above and incorporating Liz Robin comments
2.6	9/3/17	Yes	Edits and comments from LR and Angelique Mavrodaris incorporated. SRO comments.
3.0	9/3/17	Yes	SRO and Executive Sponsor signed off and sending to SDU
3.1	9/3/17	Yes	Final comment incorporated (LR)
3.2	9/3/18	Yes	Table 1 corrected (JE) and resubmitted

This template should be used for all investment bids (both Capital and Revenue), in accordance with relevant Organisation's SFIs.

[O] SIGN-OFF TEMPLATE

BUSINESS CASE SIGN-OFF

Business Case Title:

Author:

Date:

Function	Name	Title	Approved	Rejected	Approved "subject to"	Comments (please explain reasons for approval, rejection and "subject to")	Signature	Date
Business Case Lead		Manager						
Clinical Lead		Clinical Lead						
Executive/ SRO Lead		Director						
Finance		Finance Lead						
HR/ Medical Staffing		HR/ Medical Staffing Lead						
Contracting		Contracting Lead						
Estates		Estates Lead						
IT		Head of IT						
Impact Assessment		Impact Assessment Lead						