Falls Review: Evidence Overview

1. Introduction

1.1 In September 2010 the Review Panel requested NHS trusts and other stakeholder organisations to provide evidence about falls and falls prevention services commissioned or provided by them. This paper attempts to summarise the responses received against the three themes that were identified by the Panel as of particular interest in its scoping document. This review arose out of concern that falls in the elderly population not only affected confidence and increased the risk of injury to those who fall, but are also responsible for significant demand for health and social care. This was seen to be important, given many warnings in National guidance about the need to proactively reduce the risk of falls and subsequent injuries as the numbers of older people increase in relation to the general population.

1.2 Stakeholders were provided with the scoping document which contained the Terms of Reference for the review as well as an analysis of government and other national guidance. Each stakeholder was also asked to provide data and information in relation to their particular role in providing and managing health or social care services for people over 65 who experience a fall or who are at risk of falling.

1.3 The interest of the Health Overview and Scrutiny Committee which appointed the Review Panel was initially prompted by an assertion by South Central Ambulance Service (SCAS) that falls constituted 30% of their 999 calls. The Panel wished to understand better falls demand and falls prevention services in Hampshire.

1.4 Information was requested from:

- Commissioners
- Acute hospitals
- Community service providers
- Ambulance Service

1.5 Evidence has been considered in terms of the three themes identified by the Review Panel in the scoping document. These are:

- Overall strategy, commissioning and integration
- Local demand and data
- Success measures and cost effectiveness

1.6 Since the Falls Review Panel began its work, two reports of interest have been published that contain local data. Both focus on the consequences of falls. The *National Hip Fracture Database National Report 2010*, was published in August 2010 by the British Orthopaedic

Association and includes an analysis of data received from the Basingstoke and North Hampshire, Queen Alexandra and Southampton General hospitals as part of a web-based national audit of hip fracture care. The second report, *Benchmarking quality of care for fragility fractures in the South Central SHA area*, was published in October 2010 by the South East Public Health Observatory (SEPHO), and like the national report, it is clinically focused. The report for the South Central area is particularly relevant to this review when it states that, "osteoporosis is a long term condition that affects a large number of people in England: one in two women and one in five men over the age of 50 will have an osteoporotic fracture of the hip, wrist or spine". It goes on to say that, "Hip fractures are the most frequent fragility fracture caused by falls and the most common cause of 'injury' related deaths. Good clinical practice, based on national standards and evidence based guidelines, can:

a) Reduce death and disability resulting from hip fractures, and
b) Prevent future falls and fragility fractures"

1.7 Later it asserts that "as hip fracture incidence and related costs increase, a key challenge is how to maximise the impact of interventions that reduce rates of osteoporotic fracture, within available resources". This review seeks to indentify how and where this challenge can be better met within Hampshire.

2 Executive Summary of Hampshire evidence

Themes and Issues

2.1 The Review Panel identified three key themes of interest in its Initial Scoping Document – version 2, these were:

- Overall strategy, commissioning and integration
- Local demand and local data
- Success measures and cost effectiveness

2.2 The evidence from stakeholders, very briefly summarised below, has provided valuable insights into why the first two themes are significant for Hampshire. However progress related to the third theme is dependent upon reaching a stronger position in the first two than evidence suggests is the case currently. Neither success measures nor cost effectiveness could at this time be supported by good and readily accessible data, and without a more fully developed 'good' strategy it is doubtful that any success measures would, with certainty, contribute to integrated effective and efficient falls care and falls prevention services across the County.

Overall strategy, commissioning and integration

Strategy and integration

2.3 In July 2003 the Department of Health published "guidance for commissioners to implement the NSF for Older People Standard 6 falls prevention". In this document it stated what "Good Falls Strategies contain". The Review Panel drew on this guidance in identifying what it believed were three key themes of relevance for Hampshire (see above). Written evidence from stakeholders included a 'Falls and Bone Health Strategy' developed by NHS Hampshire, and a 'Joint Commissioning Statement' provided by Adult Services. The NHS Hampshire document is high level and is not yet developed to the point where it could serve as a basis for commissioning or implementation. Specifically, it would require more detail to enable it to provide, as the Department of Health guidance suggests:

- A baseline of information and a commitment to collecting and using good information to inform service development
- Mechanisms for partnership working across the range of organisations, services and roles that contribute to resolution of falls issues
- Clear roles and responsibilities for different partners
- Mechanisms to involve users and carers
- Evaluation of each element, their contribution to the big picture, and of the whole strategy, and of the relationships between interventions and systems access and capacity
- Shared care pathways, referral pathways and assessment processes
- Timetabled and funded plans for implementation

2.4 The strategy itself concedes that the South Central Strategic Health Authority identified falls and bone health provision as a priority and it was working to develop "an audit of the Metrics…to establish a baseline of data". Good data is needed to underpin a good strategy as a framework for commissioning but it is not always easy or possible to obtain. Other statements in the strategy in terms of it becoming 'good' are aspirational.

2.5 The Adult Services 'Joint Commissioning Statement' is also high level and aspirational, and offers no baseline data about actual demand or costs to the service. Both the NHS Hampshire and Adult Services documents appear to have been produced independently and neither stakeholder makes reference to the other's strategy or strategic intentions.

2.6 Both organisations draw on statistical population based data sources that provide the basis for future demographic projections. Evidence provided to the Panel suggests that commissioners may have little option than to resort to statistical data in the absence of good reliable

local data about falls that should reflect actual demand and service use in Hampshire.

2.7 The exception to this picture based on evidence provided to the Panel is the ongoing falls work in Southeast Hampshire where in practice a *de facto* or implicit falls strategy appears to have been in place over a number of years. Falls care and prevention for older people seems to be better integrated between provider organisations in the area, and possibly significantly, is led by clinicians rather than commissioners.

Commissioning

2.8 Written evidence provided no clarity on what falls or falls prevention services are currently commissioned, nor any detail around commissioning "new integrated falls services (that) will help to:

- improve care and treatment of those who have fallen, with an emphasis on preventing serious injuries which can lead to disability
- provide rehabilitation and long term support needed to help older people regain mobility, confidence and independence." (DH Older People's NSF Standard Six)

2.9 Evidence from NHS Hampshire referred to potentially commissioning 'enhancements' to current falls prevention services, but since it is not clear what is already commissioned, neither is it clear what the enhancements might refer to.

2.10 Their evidence also considers the potential for commissioning 'fracture liaison services', but NHS Hampshire proposes that a service should be piloted in order to be convinced that it is cost effective. This is despite recommendations from the Royal College of Physicians (National Clinical Audit of Falls and Bone Health in Older People, 2007), and the Department of Health: Falls and fractures – effective interventions in health and social care (July 2009). It is not certain a pilot would be able to demonstrate cost effectiveness in the short to medium term.

Local data and local demand

2.11 Evidence provided to the Panel revealed significant difficulties in obtaining data and information about falls demand experienced by services, and the consequent difficulties in being able to demonstrate the effectiveness of interventions and of their potential impact on the lives of older people and on the costs of falls and their consequences for the system.

2.12 Without reliable, good quality data it is difficult to establish patterns of demand on the system. The Panel is aware that falls in older people create demand at different points in the system, these might be summarised as those experienced by the:

- Ambulance service
- Acute hospitals
- Community based services

(see diagrams on pages 24 and 25)

2.13 The South Central Ambulance Service experiences demand for every call it receives and every fall it attends. It may either transport patients to an Emergency Department, or provide any necessary medical care and then refer the patient to a community based Falls Prevention Service without having conveyed them to hospital. Evidence received by the Panel enabled it to associate actual numbers with the demand experienced by the Ambulance Service, including how many older patients were taken to Emergency Departments and how many patients were not transported. It was not clear how many non conveyed patients were referred to community Falls Prevention Teams. Evidence does indicate that falls in older people account for approximately 9% of 999 demand in Hampshire. This contrasts with a SCAS document that stated falls represented 30% of their 999 demand, but is consistent with other SCAS evidence that puts falls demand at below 17% for all ages.

2.14 At acute hospitals the Emergency Department experiences falls demand from patients transported to the hospital by the ambulance service, and from those who attend having travelled there independently. It may admit patients who, for example need to be kept in for observation or require treatment for injuries received. It may also discharge some patients, referring them to their GP or a community Falls Prevention Service. Evidence received by the Panel enabled it to learn how many patients the Ambulance service had conveyed to each Emergency Department. All hospitals apart from one either failed to provide information about falls attendances or underestimated them. The reason for this is that the data collected in Emergency Department may only capture the patient's clinical diagnosis, thus failing to record the cause, such as an inadvertent fall. In this respect the 'core data set' is not fit for purpose, albeit Queen Alexandra Hospital records all falls attendances because the clinical lead recognised it was important to understand the impact of falls demand on the trust's services. The data provided, indicated that at least as many older patients conveyed by the Ambulance Service due to falls arrived independently at the Emergency Department. This pattern of demand is consistent with Department of Health assumptions in 'Falls and Fractures: effective interventions in health and social care' (2009).

2.15 Community based Falls Prevention Services experience demand, often as a result of referrals from the ambulance service or acute hospital

emergency departments. Other referrals may come from clinicians or care professionals who identify older people at risk of falling through contact in normal clinical or social care contexts. Evidence provided to the Panel suggests that the demand experienced can be very high, leading to service deterioration. On the other hand, demand from some expected sources may be less than it should be. However it was difficult for community based teams to provide good, reliable data to support anecdotal reports of high demand. Furthermore it would appear to be difficult to provide clear evidence to support the value of falls prevention and interventions unless good data is made much easier to obtain.

Success measures and cost effectiveness

2.16 The Department of Health 'Developing a local joint strategic needs assessment' (July 2009) estimates that "Falls prevention can reduce the number of falls by between 15 and 30%" based on local data. Local evidence provided to the Panel suggests that much better local data are essential to support effective planning, commissioning and focused falls prevention services by health and social care if better care is to be provided and costs are to be contained in all parts of the county.

2.17 Anecdotal evidence of success such as included with evidence must in the future be supported by disaggregation of current generic and unfocussed approaches to providing health and social care services in favour of focused, lean management to achieve improved outcomes for patients and whole system efficiencies. Reduction in falls demand has to flow through all demand points, until falls prevention services themselves benefit from lower and better managed demand, and data can be readily provided to test the cost effectiveness of innovations and their impact across the system. The following sections provide a more detailed overview of material covered in this executive summary.

3 Overall strategy, commissioning and integration

3.1 The Department of Health in its guidance for strategy development, commissioning and for establishing the underpinnings for commissioning, consistently assumes that strategy needs to take an integrated perspective between health, social and independent agencies and that commissioning should be based on a joint strategic needs assessment (JSNA). The *Falls and fractures: developing a local joint strategic needs assessment* states that "An effective JSNA process is underpinned by:

- Partnership working - contributions from Local Strategic Partnerships members, including providers from all sectors
- Community engagement
- Evidence of effectiveness

3.2 Evidence from stakeholders has been considered against national guidance and expectations such as those cited above, and the 2003 Department of Health *guidance for commissioners to implement the NSF for Older People Standard 6 falls prevention*.

3.3 The Department of Health guidance suggests that a 'good' strategy should contain:

- A baseline of information and a commitment to collecting and using good information to inform service development
- Mechanisms for partnership working across the range of organisations, services and roles that contribute to resolution of falls issues
- Clear roles and responsibilities for different partners
- Mechanisms to involve users and carers
- Evaluation of each element, their contribution to the big picture, and of the whole strategy, and of the relationships between interventions and systems access and capacity
- Shared care pathways, referral pathways and assessment processes
- Timetabled and funded plans for implementation

3.4 ***NHS Hampshire:*** refers to the establishment of a 'Hampshire Falls Commissioning and Advisory Group'. This group is described as being comprised of key stakeholders, and developed the *Falls and Bone Health Strategy* for Hampshire which was completed in late 2009. The strategy considers the demographic profile of Hampshire, district by district, and is informed by the Care Services Improvement Programme, and a number of other health data sources, the Office of National Statistics (ONS) and Hampshire County Council small area population forecasts. On the basis of the statistical evidence the strategy concludes that numbers of older people are rising and that falls admissions have continued to increase in recent years. The strategy appears to assume there is potential for falls prevention services to reduce admission rates for people aged 65+ by 30%. This would be at the top end of Department of Health estimates for the impact of falls prevention (*Falls and Fractures: developing a local joint strategic needs assessment*, 2009)

3.5 NHS Hampshire anticipates " that the Hampshire Falls and Bone Health Care Strategy will provide the following outcomes:

- An evidence based pathway of care that ensures a positive patient experience and the effective management of people who have fallen or who are at risk from falling. The strategy is to deliver equity of access to and consistency of provision of services across the County.
- Evidenced based falls and bone health assessments and subsequent interventions.

- Reduction in number of secondary osteoporotic fractures.
- Reduced Emergency Department admissions due to fractures and falls."

3.6 The NHS Hampshire document is a work in progress in that it expresses the intention to undertake "a review and redesign of Falls and Bone Health Service" which indicates that key background work to understand current services and working arrangements across the county still needs to be put in place. In addition, it is currently at too high a level to provide the basis for a programme of implementation.

3.7 It is not clear whether the NHS Hampshire falls prevention service specification includes the 'enhancement' of fall prevention services referred to in NHS Hampshire evidence, or whether it presents a new vision of what, in principle, should be provided.

3.8 In its response to the Panel, NHS Hampshire indicates that business cases are to be developed for the "*enhancement* of falls prevention services and the introduction of Fracture Liaison Services" with potential implementation from May 2011. However it also indicates it plans to set up a pilot in order to be assured that Fracture Liaison Services will be cost effective and justify the investment in setting them up.

3.9 The Hampshire Falls and Bone Health Pathway must also be considered a work in progress in that a) it omits reference to ambulance service involvement, and b) includes reference to fracture liaison services which are currently not commissioned and do not appear to exist in Hampshire, however the SEPHO report for South Central notes that Basingstoke and North Hampshire NHS FT "reported having a Fracture Liaison Nurse (FLN) or similar"; this could infer that the hospital does provide fracture liaison services. No evidence was provided by the Trust to support this however. The pathway diagram calls itself 'high level' and provides little clarification around how falls services provided by different organisations are or should be integrated.

3.10 The NHS Hampshire response to the Panel makes it clear that it is reluctant to invest in fracture liaison services until additional work is undertaken to provide evidence of their cost effectiveness. Service providers Solent Healthcare, Hampshire Community Health Care and Portsmouth Hospitals Trust (PHT) have identified in their evidence the need for a 'fracture liaison service' to be commissioned. The 2010 SEPHO report also identifies this need and echoes earlier national guidance in its key recommendations:

"6) PCTs and local government should ensure a partnership approach to address local gaps in provision of an integrated falls and fracture prevention care.

7) PCTs must ensure commissioning and provision of a fracture liaison service for the local population."

3.11 ***Adult Services:*** recognises that a partnership approach is necessary for tackling falls and 'maximising the impact of falls prevention'. In their evidence they say that, "A joint approach has been taken with NHS Hampshire through the development of 'Joint Commissioning Intentions'. They then state that the principles listed in the commissioning intentions "underpin Hampshire County Council and NHS Hampshire approach". NHS Hampshire evidence however makes no mention of the Joint Commissioning Statement, but neither do Adult Services make reference to the Falls and Bone Health Strategy developed by the Hampshire Falls Commissioning and Advisory Group.

3.11 Statistical data are provided by Adult Services, drawing on some of the same data sources as NHS Hampshire. These provide a basis for future demographic projections and both organisations agree that the statistics point to growing demand for falls and bone health services as the proportion of older people in the population continues to grow.

3.12 ***Local Integration of Services:*** Falls Prevention Services have historically been provided by Solent Healthcare and Hampshire Community Health Care (HCHC) in the southeast of Hampshire. A service has also been provided by HCHC in the Southwest of Hampshire, but it is not clear how these services have been commissioned and funded. A recent appointment by HCHC of a falls co-ordinator for the North of the county should help address the gap in falls prevention in that part of Hampshire which is identified as a key issue in the NHS Hampshire response.

3.13 The HCHC falls coordinator in the South East area participates in the following groups:

- The Portsmouth and SE Hampshire falls prevention team, working closely alongside Solent Healthcare
- The HCHC specialist falls team
- The South Central falls coordinators network

3.14 The HCHC falls coordinators also work closely with the Adult Services Older Person's Wellbeing team on strengthening and balance interventions, and with community matrons or specialist nurses for care homes. They provide literature on falls prevention and support local councils and charities as resources permit.

3.15 The Adult Services 'Joint Commissioning Statement' provided in evidence and which is said to underpin the Hampshire County Council and NHS Hampshire approach to commissioning care, is high level and aspirational. The outcome sought is a "reduction in falls and associated injuries and fractures". "The measurements *that will be* used to evidence improvements will be:

- Reduced A&E attendance due to falls
- Reduced number of falls related admissions into acute care

- An effective universal pathway which is adopted and embedded
- The wide spread use of an effective falls risk assessment tool
- Better standards for effective prevention and rehabilitation services using benchmarking
- Reduction in acute, community, rehabilitation and social care costs"

3.16 However, no mention was made in the Adult Services evidence of specific demand issues, commissioning costs or issues related to any of the proactive work undertaken by the department. It was not possible to determine the impact on other services or costs incurred by Adult Services as a result of falls or in support of falls prevention. Two factors need to be borne in mind, however, a fall is unlikely to be a presenting need for social care in its own right. It would be more usual for the consequences of a fall to trigger the need for social care, such as the loss of independence, and therefore a 'fall' as such may not have been recorded by the system. Related to that fact is that Adult Services are often reliant on a mixture of NHS falls data where available, and extrapolation of data from statistical sources such as Strategic Needs Assessments. As the proportion of 65+ people increases in the population it is not therefore possible for the Panel to gauge the potential impact of falls on the capacity of social services to provide care, nor on the potential costs involved.

3.17 Solent participates in the following strategy and co-ordination groups:

- The Falls Strategy Group – includes representation from Portsmouth City Council and local voluntary and private providers (since 2001)
- The District Falls Prevention Strategy Group – covers patients in the geographical area of Portsmouth and South East Hampshire ("aims to overcome and direct strategic falls prevention issues that cross organisational boundaries")
- The Pan Solent Healthcare Falls Strategy Group – "to ensure that appropriate pathways are agreed and governance structures exist to support their delivery and monitoring…"

3.18 In 2008 ***Portsmouth became one of 18 national Health Reform Demonstration Systems*** in a collaborative project with PHT and Portsmouth City Councl (PCC) to "improve the care of older people who have fallen by increasing the effective use of resources and infrastructure across the whole health and social care system operating in Portsmouth". This project is ongoing and is very relevant to the interests of this review. It is built on sustained falls work in the area and has potential to provide valuable input to the development of falls prevention work in the county.

3.19 Since 2003 an agreed Falls Pathway has been in place between Portsmouth Hospitals and Solent Healthcare (formerly as Portsmouth City tPCT) to refer on high risk patients to Specialist Falls Prevention

Clinics. Low to moderate risk falls patients are referred back to their GP for primary care-led assessment.

Summary

3.20 Possibly because the strategic framework is still at an early stage of development, evidence has revealed little of the commissioning challenges that currently exist. It is also apparent that in the absence of a clear and more fully worked out joint strategy, commissioners appear to have only high level aspirations to guide them. The expectation of the Department of Health is that a falls strategy offers a framework for commissioners, and defines what a 'good strategy' should include. It is not clear when the Hampshire falls and bone health strategy might be expected to meet the Department of Health's criteria for a good strategy.

3.21 NHS Hampshire in its "Next Steps" section of evidence includes a proposal to develop a business case for the enhancement of falls prevention services, but the Panel is not clear what this might include. The reference to a 'gap analysis' that might lead to more falls exercise classes would appear to be too limited, however the potential introduction of Fracture Liaison Services is possibly part of what the PCT is referring to.

3.22 It is not clear how Adult Services will be impacted by falls in the 65+ population. Examples of proactive work by the department to improve the health and wellbeing of older people were helpful, in particular the Better Balance for Life programme and Telecare initiatives that support the falls agenda. However it is possible that these initiatives represent limited understanding of work undertaken by Adult Services that may be relevant to falls and falls prevention.

3.23 Evidence provided to the Panel did not clearly demonstrate that commissioning for falls and falls prevention was driven by a joint strategic approach or framework, despite the Joint Commissioning Statement on Falls Prevention provided by Adult Services and the Falls and Bone Health Strategy developed by NHS Hampshire. It also seemed clear that commissioners of falls and falls prevention services must struggle to understand demand issues and related consequent costs to provide high quality health and social care in the absence of good data. Reference to actual local demand issues by either NHS Hampshire or Adult Services was conspicuous by its absence. The "baseline of information and a commitment to collecting and using good information to inform service development", a recommended component of a good strategy, must be rich in local data. The following section attempts to understand this critical issue better.

4 Local demand and data

4.1 The Falls Review was initiated in part on the basis of information from South Central Ambulance Service (SCAS) that 30% of the 999 demand was due to falls. The ability of the service to respond to calls within the standard time frames set by Government depends on the availability of resources to respond to the demands made on it. If 30% of calls are for falls, then while the resources are being used for that purpose they cannot be used for other calls, some of which may be life threatening. Evidence from SCAS and other stakeholders is considered in this section in order to better understand demand for services associated with falls and falls prevention, how they are managed and where the system is challenged.

4.2 Each service considered below has its own demand challenges, but each is also impacted by, and impacts on, other services in the wider system. For example, demand for the ambulance service consists of responding to calls for people who have fallen. Demand then moves to Emergency Departments for those patients conveyed to acute hospitals, and to community falls prevention services for patients who are not conveyed, but who are then referred on by the ambulance service to a falls prevention service.

4.3 Falls demand on acute hospitals is not limited to falls patients conveyed by the ambulance service to Emergency Departments; other patients find their way independently to the hospital following a fall. Not all falls patients are admitted, but if they are, demand is transferred to bone healthcare services or other specialist areas. Non-admitted patients may either be referred to their GPs, falls clinics for assessment or to community based falls prevention services. Evidence indicates that one hospital has signed up to a pathway that includes undertaking an initial assessment of non-admitted patients whilst they are on site.

4.4 Ultimately, falls prevention services, including fracture liaison services are the downline recipients of much of the demand that has been channelled through the system. Therefore, this section on local data and local demand tracks, as far as possible, the falls journey as described by stakeholders in their evidence through the three main areas of demand:

- On the ambulance service
- On acute hospitals
- On community-based falls services

Simplified falls demand flow diagrams are included at the end of the overview.

Demand on the ambulance service

4.5 Data received from SCAS indicates the following:

Falls demand for a 999 ambulance response for people aged 65+ and for all ages for 2009/10 in the county of Hampshire

Falls demand for people aged 65+			
Category A[1]	**Category B**	**Category C**	**Total**
555	5,039	6,906	12,500
(Falls demand for all ages)			
1,228	11,502	10,384	23,114

4.6 Category A calls (emergencies) comprised only 4% of falls related calls for the 65+ age group who had fallen, category B calls (urgents) comprised 40% of the calls, and category C calls (non-urgents) 55% of calls for this age group who had fallen.

4.7 The category A calls for the 65+ age group comprised 45% of all 'emergency' calls for falls. Category B calls for over 65s amounted to 44% of all 'urgent' calls for falls, and category C calls for over 65s 'non-urgents' comprised 66% of demand of all category C calls for falls.

4.8 Falls in over 65s (12,500) amounted to just over half the 999 demand for all falls (approximately 24,000). Seen in the context of all 999 calls made to SCAS in 2009/10 falls in older people represented about 9% of the total 999 demand (Categories A, B and C). This contrasts with the 30% figure that the SCAS report referred to, but it seems clear that

[1] Note that the ambulance service control centres classify the 999 calls they receive on the basis of telephone triage into three types:

Category A (emergency)

- Category A calls are those assessed as immediate life-threatening conditions where the speed of response may be critical in saving life or improving the outcome for the patient, e.g. heart attack, serious bleeding, etc.

Category B(urgent)

- Category B calls that are assessed as conditions which need to be attended quickly, but which will not deteriorate or suffer by a slightly slower response. These calls take precedence over any call time except those in Category A.

Category C (non-urgent)

Category C calls are considered on the basis of information provided as non life-threatening conditions. These are generally assistance calls in which someone needs help - perhaps to get up following a fall where no injury has been sustained - or where a minor or non-clinical issue is the prime cause for the call.

according to the evidence provided, falls in the over 65s accounted for less than one third of the 30% mentioned (ie. approximately 9%).

SCAS falls conveyances and non-conveyances for people aged 65+ for 2009/10

Falls destinations	Number of conveyances	Percentage of total ambulance falls demand for 65+
Queen Alexandra Hospital	2450	20%
Southampton University Hospitals	1829	15%
Royal Hampshire County Hospital	775	5%
Basingstoke and North Hampshire Hospital	682	5%
Other (eg. MIUs)	489	4%
Sub Total	**6,225**	49%
Non conveyances		
Number of falls attended but not conveyed to hospital	6,275	50%
Total falls attendances for 65+ (conveyances + non-conveyances)	**12,500**	

4.9 The above figures provided by SCAS show that:

- More calls were resolved at the scene than were transported to an acute hospital.
- More calls were classified as non-urgent than the emergency and urgent categories combined.

4.10 The cost implications of each decision, eg. to convey a patient to an Emergency Department or to refer should be understood to complement the above data. Therefore if the average cost of attending an incident is £257, then 12,500 attendances would equate to £3,212,500. If the minimum Emergency Department attendance tariff (approximately £87 for 6,225 patients conveyed to EDs) were added, the cost would rise by at least another £541,575. Not included here are admissions costs, nor the cost of referrals for non-conveyed fallers to local falls prevention services for assessment and possible interventions because costs associated with community based falls prevention have not be provided in evidence by commissioners or service providers.

Numbers of calls to SCAS for falls incidents at Care Homes in Hampshire

4.11 A significant part of falls demand for older people is from care homes. Data provided by the Specialist Commissioners for ambulance services showed the number of falls incidents per care home to which SCAS was called out during 2009/10. Over that period SCAS received a total of 1829 calls to attend care homes for residents who had fallen which was about 29% of falls calls for the 65+ age group. This equated to £470,053 for attendance costs.

Calls to SCAS due to falls from nursing / care homes during 2009/10 for 65+	
Number of care homes	**Made the below number of calls**
2	40-49
3	30-39
8	20-29
43	10-19
13	9
10	8
15	7
17	6
33	5
28	4
33	3
32	2
64	1

4.12 An attempt was made to correlate the numbers of calls to SCAS by the size of care home and by registration category. For example it was thought that larger care homes might be responsible for most calls, or that a care category such as dementia which can be a predictor of falls would correlate with a higher volume of demand for patients who fall. However, no obvious patterns emerged, concluding that possibly falls training for staff may lead to better falls management within care homes..

4.13 It is not clear from evidence provided to the Panel whether falls training provided by Adult Services or community health care organisations is prioritised for care homes that make the most use of ambulance services for falls or whether others factors are used to prioritise training.

4.14 The ambulance service demand does not represent the full extent of falls incidents. National experience estimates that a proportion of falls are never reported and are therefore not recorded anywhere, therefore

it is impossible to provide a precise figure for all falls in the over 65 year old population. Also the Department of Health predicts on the basis of evidence that almost equal numbers of patients will attend an Accident and Emergency department as call the ambulance service because of a fall. Local evidence confirms that similar numbers of people find their own way to an Emergency Department to obtain help or reassurance after a fall via other means than the ambulance service, such as by public transport, private car or by foot.

Demand on acute hospitals

4.15 Data provided by the acute trusts themselves reveal more about the ways in which falls are, or are not recorded, than about the actual demand that falls represent for Emergency Departments. As indicated in the Solent Healthcare evidence, falls are often regarded as a 'symptom' rather than a 'diagnosis', thus when patients attend Emergency Departments the coding system may reflect the cause, for example, a polypharmacy issue, or result of the fall, such as a broken wrist, rather than the fall itself for which no code may be available.

4.16 This situation appears to be exemplified by the evidence where one hospital was only able to identify from the standard recording codes 77 patients who may have attended Emergency Department because of a fall during 2009/10 despite SCAS reporting that 682 patients were conveyed there for that reason.

4.17 At the other end of the spectrum, another hospital that had recognised the difficulty of knowing which patients had attended the Emergency Department due to a fall, decided to enhance their reporting system to ensure that all attendances at the Emergency Department because of a fall were recorded. Over the year 2009/10 the hospital recorded 5,408 attendances for falls by patients aged 65+, while SCAS records conveying 2,450 patients (aged 65+) because of a fall. This example suggests that SCAS conveyances to the hospital comprised about 45% of the total falls attendances for patients of 65+. The actual attendances (those conveyed by SCAS plus those who arrived independently) represented about 5.8% of all people in that age group who attended the Emergency Department. That similar numbers of older patients arrive independently because of a fall confirms Department of Health assumptions.

4.18 Unless additional information is sought from patients when presenting at Emergency Departments and recorded by the system, demand on acute hospitals due to falls will be very difficult or impossible to obtain.

Acute hospital data on falls attendances during 2009/10

Acute Hospital	'Falls' attendances recorded in the Emergency Department	Admissions	Non-admissions
Queen Alexandra Hospital	5408	3454 (64%)	1954 (36%)
Southampton University Hospitals	969	No information provided	No information provided
Royal Hampshire County Hospital	No information provided	No information provided	No information provided
Basingstoke and North Hampshire Hospital	77	39	38

4.19 The high figure for falls attendances recorded by the Emergency Department at Queen Alexandra Hospital results from an "internal process (that) has been developed with expert clinicians working with the Business Intelligence unit to implement a method of proxy coding" to "improve our understanding of the actual demand on the service". This is a clear recognition of the limitations of the standard coding system with respect to providing useful data about falls and their potential impact on demand for falls related services.

4.20 The evidence from the Trust noted that prior to the enhancement of reporting on falls, under-reporting on falls was in the order of 31-32%. In all, during 2009/10 according to the enhanced recording system, the hospital had 5014 older patients coded with falls admissions equating to 64,000 bed days or averaging nearly two weeks each as in-patients. The minimum cost of 5014 patients presenting at the Emergency Department would be £436,218 regardless of whether they were admitted or sent home. The tariff for attendance at an Emergency Department ranges from £87 to £117.

4.21 If the QA falls admissions were to incur a relatively modest tariff of £1,300 then the 3,454 admissions would result in an approximate cost of £4.5 million. Admissions for hip fractures, fortunately a small proportion of the total, can cost six times the lower tariff.

Demand on Community-based falls services

- HCHC

4.22 Demand from SUHT**:** despite attempts by HCHC falls prevention staff to raise awareness of falls / falls prevention with Emergency Department staff and to encourage them to refer at risk patients to community teams for falls assessments, "the number of referrals is extremely low compared with the number of patients attending those settings".

4.23 Demand from PHT: older people attending QA Emergency Department after a fall are:

- assessed using a dedicated falls proforma
- are referred to one of three locality falls clinics. Patients are followed up according to need

4.24 Data from falls clinics are collated and show a 53% increase in referrals over the past two years. The consequence of this 'success', ie. the increase in referrals, is an increase in waiting lists for appointments. In addition, "The provision of specialist falls clinics (for older people) is patchy … and has never been commissioned."

4.25 Demand from SCAS: For the past year HCHC falls coordinators have worked closely with SCAS to develop a new system for the care of older patients who fall. SCAS crews are able to refer the non-conveyed patients directly to the patient's local falls prevention service for further assessment. However, the consequent "…large number of referrals have caused huge resource issues…" HCHC indicates that possibly some filtering mechanism may be required if falls prevention services are to focus primarily on the over 65s and those at greatest risk.

4.26 Data for the three months from July 2010, indicates that referrals to HCHC from SCAS, were averaging about 66 per month. Previously referrals from SCAS averaged about 10 per month. SCAS itself has reported that referrals following attending falls across all of South Central amounted to about 20 per day (ie. approximately 600 per month). Further data are required to understand where SCAS is referring the patients to, and how many patients follow through with the referrals made for them.

4.27 HCHC says that initial signs indicate this initiative is helping prevent admissions, a claim independently echoed by SCAS which states that there are now less 999 incidents due to falls. HCHC have put further monitoring in place to provide better information about the number of referrals and prevented admissions. However no figures are yet available to indicate whether falls prevention is having a sustained impact on prevention of admissions; in addition it may be difficult to

establish a clear cause and effect link between specific falls interventions and reductions in admissions due to injuries sustained from falls.

- Solent Healthcare

4.28 Solent Healthcare (East): has worked to a Falls Pathway established since 2003, initially agreed between PHT and what was Portsmouth City tPCT. The Secondary Care Falls Pathway generates demand from the Emergency Department which refers on high risk patients to the Specialist Falls Prevention Clinic. However, care pathways are only as good as how well they are put into practice, and evidence suggests that they work best when new or temporary staff are fully briefed not only on their own roles, but also on how their work affects or is affected by other parts of the system for successful outcomes for the patient. Solent evidence identifies, for example, instances where it appears that inappropriate referrals are made to intermediate care and rehabilitation teams. In integrated, complex care pathways like the Secondary Care Falls Pathway such experience reinforces the need for care pathways, systems and practice to recognise the challenges posed by boundaries and the tendency for silo working to introduce avoidable inefficiencies and affect outcomes.

Local Portsmouth 65+ patient falls attendance at QA Emergency Department for 2009/10

Total Falls Attendances	**Admissions**	**Non-admissions**
1730	1121 (65%)	609 (35%)
Hip Fractures for Solent Healthcare (East) Population		**Hip fractures as a percentage of falls admissions**
175		10%

4.29 Solent also comments that:

- About 20% of hip fracture patients are from care homes
- Hip fractures are considered an index marker of overall falls rates and that about 1% of all falls result in a hip fracture in any given area.
- “focused work may result in cost effective falls reduction”.

4.30 Solent Healthcare had previously sought to engage with and financially incentivise GPs through a ‘Locally Enhanced Service’ (LES) agreement to provide an agreed level of assessment for those not admitted to the acute hospital, but who had a low to moderate risk of falling. Take up of this ‘LES’ was poor and subsequently discontinued.

4.31 Manually collected data indicates that 49% of intermediate care Occupational Therapy, and 38% of intermediate care Physiotherapy

referrals were for patients who had fallen. Such data, however was time consuming to obtain. Current management information systems do not provide the tools for good data collection and analysis.

4.32 Additional evidence included the following local data and cost estimates:

- there are 28,600 older people in Portsmouth
- about 3,771 falls incidents (all ages) in Portsmouth are attended each year by SCAS
- falls attendance (at £200 per attendance?) are estimated to cost £754,000
- 2,000 falls admissions to the secondary pathway are estimated to cost £2,600,000

4.33 The figures provided indicate that the Portsmouth all ages falls demand on SCAS amounted to about 16% of 999 calls in the city in 2009/10. Recent reference costs for an ambulance attendance is said by SCAS to be £257, this would make the cost for attendances approximately £963,000 based on 2009/10 figures. Not included are costs for attendance at the Emergency Department which could range from £87 – £117 per attendance. In addition, the £1,300 cost per admission does not differentiate between the range of possible costs for fracture procedures, some of which are much higher than the cost included here.

- Adult Services

4.34 No information is provided to indicate levels of demand on services or where the demand comes from. Consequently there is no clear information about the impact of falls related demand on resources or about what is commissioned against what assessed needs.

4.35 Adult Services evidence does, however highlight that "increasing numbers of older people falling will have an impact on the demand for social care provision". It also states, "..it is not currently possible to define exactly how many people utilise social care service just because they fall…". The Adult Services evidence refers to independent research (Preventing Falls:…, Help the Aged, 2004?) that says that 40% of people who enter care homes do so due to falls. It then goes on to point out that residents of care homes are more than 3 times as likely to fall than those living in the community.

4.36 Adult Services append statistical data to demonstrate variations in the rates of admissions due to accidental falls and for fractured neck of femur. While the standardised rates point to variations between districts, in terms of understanding actual demand faced by health and social care, the recording and reporting of good quality data is essential. In order for Adult Services to understand actual needs and

demand, it would seem essential that good quality local data will be needed to complement current reliance on statistical sources.

Summary

4.37 Understanding demand on public services that arises when people experience a fall is a major issue in the consideration of falls and falls prevention services. There needs to be consistent and robust information provided to help service providers and commissioners understand how this demand can most effectively be managed. Demand has to be managed at three key points within the system:

- *Demand on the ambulance service*
- *Demand on acute hospitals*
- *Demand on community-based falls prevention services*

Demand on the ambulance service

4.38 Demand begins where the system and the patient first come into contact because someone has fallen. Ambulance services experience a significant proportion of the initial demand and evidence shows that for 2009/10 SCAS attended approximately 12,500 falls related calls for people aged 65+. However just over half this number were not conveyed to Emergency Departments, but were initially resolved by the service and referred to an alternative pathway. The rest, just under half, were conveyed by SCAS to Emergency Departments or similar facilities.

Demand at Emergency Departments

4.39 Evidence suggests that for every older patient transported to an Emergency Department by SCAS because of a fall, at least one other may arrive independently of the ambulance service, if the QA experience can be generalised across the county.

4.40 Emergency Departments generate demand for community-based falls prevention services, but based on QA experience more than 60% patients may go on to being admitted. Those not admitted may either be referred to the their GP, assessed whilst in the Emergency Department and referred for community-based follow-up, or referred to a falls clinic.

Demand for falls prevention interventions

4.41 Demand for falls prevention may come from referrals from Adult Services, GPs, mental health services, care homes and secondary care as well as by SCAS. A recent policy adopted by SCAS in Hampshire has resulted in non-conveyed patients now being referred to falls prevention teams and these constitute a significant element of the demand experienced by HCHC teams.

4.42 The referral process is being reviewed to consider how the most appropriate cohort of patients is seen by falls prevention teams; the

demand is currently challenging resources and leading to long waits. It is also noted in evidence, however, that expected demand from one busy Emergency Department is low in relation to the number of patients believed to be attending in that setting.

4.43 The Solent evidence reported their attempts to incentive GPs to assess patients who have been identified as at risk of falling. GPs however have been reluctant to provide this service even though the evidence indicates this is important for focused falls prevention interventions. It would seem to be essential that primary care services are fully engaged in falls prevention.

4.44 Falls prevention includes a range of interventions, ranging from poly-pharmacy reviews, strength and balance exercise programmes, to assessments of living conditions to minimise risks and increase potential for independent living. Whilst patients can sometimes self refer, the system itself will generate much of the demand for these services, some of which are provided by health, others by social services, and yet others by the voluntary sector.

4.45 In principle, a high demand for falls prevention services should in the longer term lead to reduction of demand for ambulance and acute care, and ultimately for falls prevention services themselves. Nevertheless the expected increase in numbers of older people over the next two decades make it imperative for falls prevention services to be well integrated, and play a significant role in managing down demand and costs in the system.

4.46 The design of care pathways needs to consider where scope may exist for efficiencies in a system that has considerable power to move demand around it, even when it appears to reduce demand and cost in one part of it. A system-wide approach will be essential to prevent sub-optimal solutions re-distributing demand and cost without benefiting the whole system.

4.47 HCHC comments that the provision of a Fracture Liaison Service based in acute hospitals is an essential component in reducing the longer term demand for unscheduled care for fractures resulting from falls in the over 65s. This has been identified as a service gap in Hampshire since the 2007 Royal College of Physicians falls and bone health audit. Despite attempts of HCHC and Solent Falls Co-ordinators to persuade NHS Hampshire Commissioners to move this forward, they have achieved “no success”. It is not clear why existing national guidance fails to convince Commissioners such that a local business case is considered necessary before Fracture Liaison Services can be commissioned. In addition, the recent SEPHO report on fragility fracture care in South Central has included within its recommendations that “PCTs must ensure commissioning and provision of a fracture liaison service”. Their argument is that “quality and cost of care are not in conflict”; better care is less costly to the wider system.

4.48 Another aspect of demand that is addressed by the Adult Services evidence is the department's focus on older people's wellbeing and associated work. This aims in general to promote physical and mental healthy independence for older people and is supported by the provision of good information, strengthening natural ties with society and practical help. In addition Adult Services has been playing a targeted role in conjunction with HCHC colleagues in falls training for care home staff, and running the 'Better Balance for Life' exercise programme for at risk frail older people. The demand here seems to result from older people self selecting to take advantage of programmes offered in literature and/or organisations/networks to which they belong. Evidence did not make clear the extent of demand, capacity to meet it or whether the health contribution is commissioned. Nor did Adult Services evidence indicate how or to what extent social care is impacted by the loss of independence experienced by older people following a fall or fall related injury.

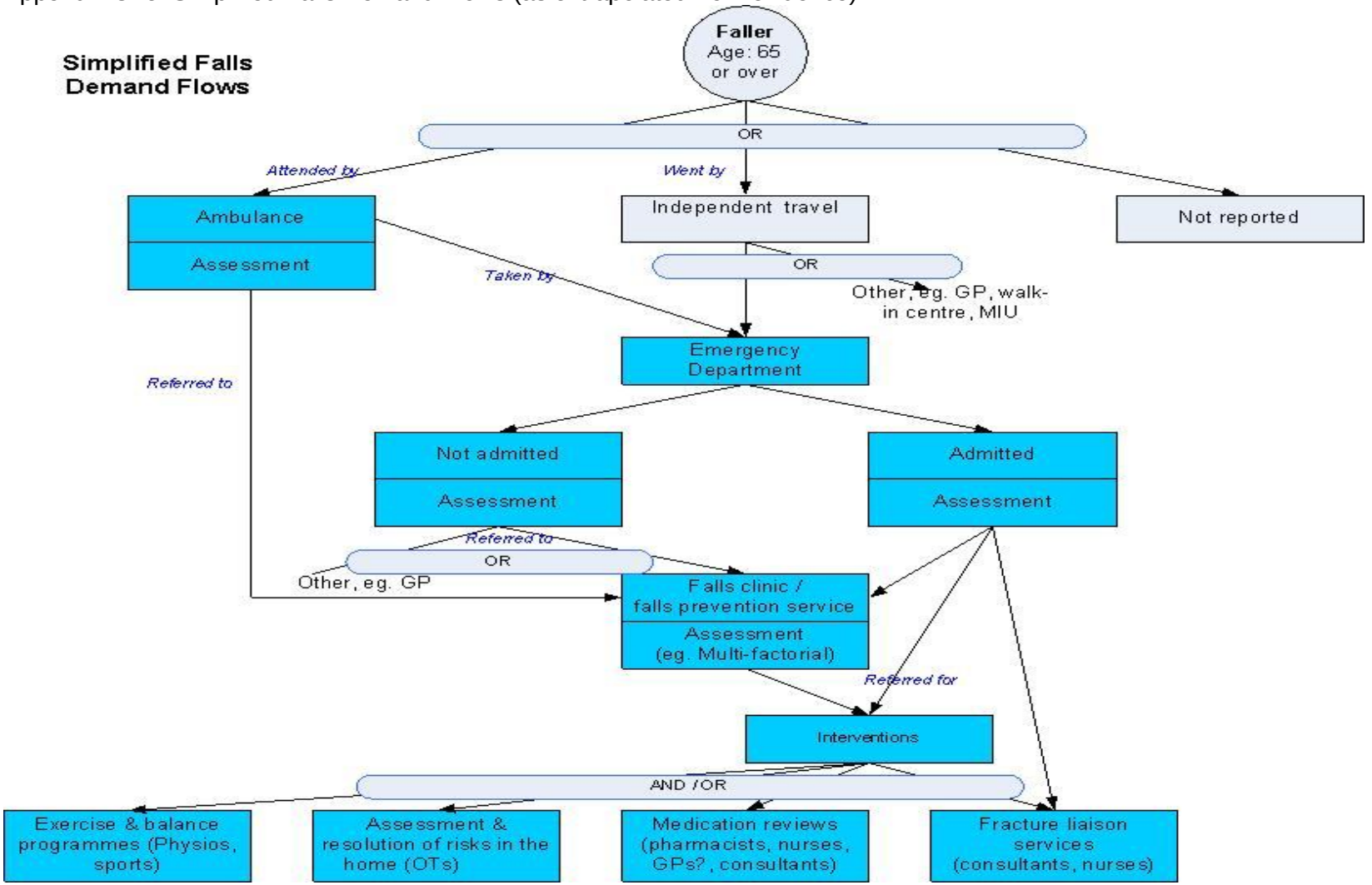
5 Success measures and cost effectiveness

5.1 The Panel, aware of the financial pressures on health and social care organisations, recognised that the review should consider where evidence pointed to improvements in care due to integrated working and for which evidence existed for cost effectiveness and potential savings for the wider system particularly over the longer term, since benefits gained from falls interventions and prevention may not be realised immediately.

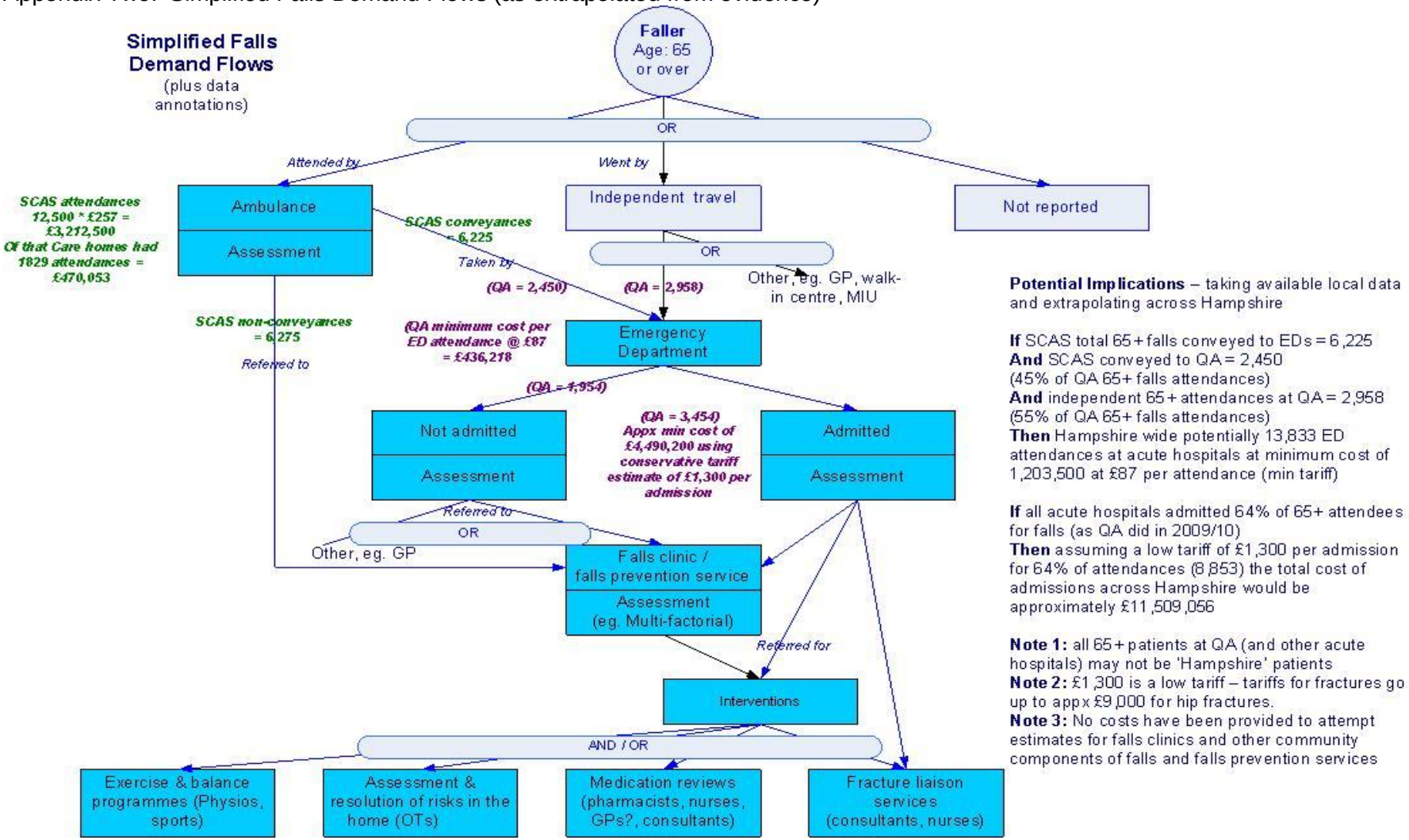
5.2 Evidence provided to the Panel, however indicated that insufficient progress had been achieved in terms of the development of a 'good' integrated strategy, also that local data, bye and large, was inadequate to demonstrate cost effectiveness, especially with respect to being able to show how "quality…care that is prompt and effective – minimising delay, maximising recovery, and promoting early return home – is not only better care, but is also less costly" (SEPHO report, 2010)

5.3 Examples of progress and good practice were evident in evidence, but the impression was that it often tended to be clinically led, and happened despite the system, rather than with the support of commissioning or a good strategic framework and well defined outcomes that benefit the whole system, and hence the patient. In view of the dependence of success measures and cost effectiveness on the two previous sections of the review, the Panel considers that the priorities for Hampshire must be for improvements in strategy development and commissioning, and in establishing a "baseline of information and a commitment to collecting and using goo information to inform service development" (How can we help older people not fall again? Implementing the Older People's NSF Falls Standard: Support for commissioning good services, DH, 2003)

Appendix One: Simplified Falls Demand Flows (as extrapolated from evidence)



Appendix Two: Simplified Falls Demand Flows (as extrapolated from evidence)



Potential Implications – taking available local data and extrapolating across Hampshire

If SCAS total 65+ falls conveyed to EDs = 6,225
And SCAS conveyed to QA = 2,450
(45% of QA 65+ falls attendances)
And independent 65+ attendances at QA = 2,958
(55% of QA 65+ falls attendances)
Then Hampshire wide potentially 13,833 ED attendances at acute hospitals at minimum cost of 1,203,500 at £87 per attendance (min tariff)

If all acute hospitals admitted 64% of 65+ attendees for falls (as QA did in 2009/10)
Then assuming a low tariff of £1,300 per admission for 64% of attendances (8,853) the total cost of admissions across Hampshire would be approximately £11,509,056

Note 1: all 65+ patients at QA (and other acute hospitals) may not be 'Hampshire' patients
Note 2: £1,300 is a low tariff – tariffs for fractures go up to appx £9,000 for hip fractures.
Note 3: No costs have been provided to attempt estimates for falls clinics and other community components of falls and falls prevention services