LiveWell SOUTH TEES
HEALTH & WELLBEING BOARD

SOUTH TEES JSNA

Joint Strategic Needs Assessment

JUNE 2024

MISSION

We will promote independence for older people.

GOAL

We want to reduce the level of frailty to improve healthy ageing.

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1. Introduction

1.1 Mission led approach

The South Tees Health & Wellbeing Boards have agreed to a "mission-led" approach, structured across the lifecourse. Each mission is a response to a significant local challenge, one where innovation, working together and aligning resources has a big part to play in driving large-scale change. The Missions each have a set of ambitious goals that further articulate and explain the Mission.

The JSNA will provide the intelligence behind the Mission(s) – it will develop our collective understanding of the Mission(s); the issues behind and the broad contributing factors to the current outcomes experienced. We are working across the Tees Valley authorities to develop a process on that footprint that facilitates deeper engagement from the ICB.

The vision and aspirations under the lifecourse framework already exist following previous development sessions of the LiveWell Board. The lifecourse framework consists of three strategic aims – start well, live well and age well.

Vision	Empower the citizens of South Tees to live longer and healthier lives		
Aims	**Start Well**	**Live Well**	**Age Well**
Aspiration	**Children and Young People have the Best Start in Life** We want children and young people to grow up in a community that promotes safety, aspiration, resilience and healthy lifestyles	**People live healthier and longer lives** We want to improve the quality of life by providing opportunities and support so more people can choose and sustain a healthier lifestyle	**More people lead safe, independent lives** We want more people leading independent lives through integrated and sustainable support

1.2 Age well strategic aim

There are two missions within the age well strategic aim. **The first mission relates to promoting independence for older people and the second mission relates to ensuring everyone has the right to a dignified death**. The second goal within the first mission, and the focus on this needs assessment examines reducing the level of frailty to improve health ageing.

Aims	Mission	Goal
Age Well	**We will promote independence for older people**	**We want to reduce the levels of loneliness and isolation in our communities and ensure our places promote healthy ageing**
		We want to reduce the level of frailty to improve healthy ageing
		We want to ensure our communities are dementia friendly
	We will ensure everyone has the right to a dignified death	**We want to improve the identification of people who are over 65 and approaching end of life and enable choice - relating to personalised and coordinated care**

2. What is our mission and why do we need to achieve it?

2.1 We will promote independence for older people.

To understand the level of independent living within our older people population, we must first define what independent living refers to. Independence has multiple meanings for older people, but certain meanings are common - accepting help, doing things alone, having family, friends, and money as resources and preserving physical and mental capacities[1]. At its most basic level, independence means having full autonomy over one's own life.

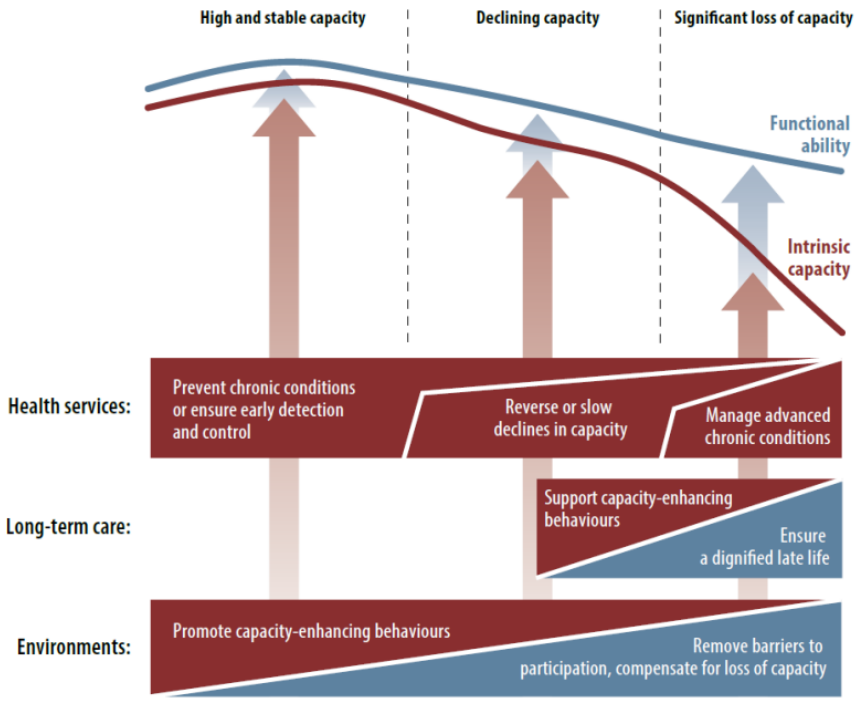
Independent living means disabled people living in the community with the same choices, control, and freedom as any other person, including having choice and control over things like who they live with and where. This requires the removal of barriers to equality of opportunity and for any practical assistance to be based on disabled residents' choices and aspirations.

Disabled people refer to people with different barriers:

- Physical, this affects the way a person can move or get around
- Cognitive, this affects the way a person can communicate, make decisions, and remember things
- Sensory, this affects the way a person touches, smells, sees or hears
- Residents who use services who face barriers for a range of reasons and require support

The term of healthy ageing and independence for older people are intertwined. The World Health Organisation (WHO) define healthy ageing as the process of developing and maintaining the functional ability that enables well-being in older age[2]. This report focuses on 'functional capacity', a combination of their intrinsic or internal resources such as mental and physical abilities and assets, combined with how they interact with their environment. Figure 1 demonstrates the levels of capacity and how these can be raised based on different interventions.

Figure 1- Public health framework for ageing



Source – WHO report on health and ageing

Office for Health Improvement and Disparities (OHID) has built on the WHO framework to create four domains that best align with the levels of functional capacity change. These four domains are;

- **Optimise health and reduce risks early**
- **Improve wellbeing and wider determinants of health**
- **Reverse or live well with a long-term condition**
- **Enhance care and support**

These domains allow for the collation of datasets and indicators to help local areas understand how their population is ageing well and living independently.

2.2 Level of independence in South Tees

The level of older people living independently in South Tees is significantly worse than the England average. Figure 2 below is a selection of indicators from the four domains described above that are key drivers in older people living independently and as a collective help to demonstrate the level of independence. In South Tees, Middlesbrough performs significantly worse compared to England for all indicators and Redcar & Cleveland performs significantly worse for all bar two indicators, suggesting our older population is not living independently.

People living in South Tees are dying at a younger age and are living with poor health from a much younger age compared to the England average. Local rates are some of the lowest in England.

Middlesbrough males on average are living 4 years less than the England average, whilst Redcar & Cleveland males are living 1.9 years less. Middlesbrough females on average are living 3.3 years less than the England average, whilst Redcar & Cleveland females are living 1.6 years less. Middlesbrough males have the 2nd lowest life expectancy in England and females the 4th lowest.

Healthy life expectancy shows the years a person can expect to live in good health (rather than with a disability or poor health). That figure is 4.3 years less for males and 3.3 years less for females in Middlesbrough compared to England and 6.2 years less for males and 5.4 years less for females in Redcar & Cleveland. Redcar & Cleveland has the 8th lowest healthy life expectancy for males in England.

Alongside the local population having significantly lower life expectancy and healthy life expectancy, a large amount of older people are living in poverty, with 23% in Middlesbrough and 17% in Redcar & Cleveland.

Significantly higher proportions of Middlesbrough and Redcar & Cleveland residents are self-reporting poor health as well as long term mental and physical health problems including MSK. There is higher prevalence of Dementia locally and higher number of older people suffering from hip fractures, with Middlesbrough the 3rd highest nationally. We know hip fractures are a debilitating condition – only one in three sufferers return to their former levels of independence and one in three ends up leaving their own home and moving to long-term care.

Both Middlesbrough and Redcar & Cleveland have significantly lower rates of reablement services offered after hospital discharges and significantly higher rates of delayed transfers of care in hospital, permanent admissions to care homes and clients accessing long term social care, all of which drastically alter our older populations level of independence.

Figure 2 - key indicators for older people living independently in South Tees

Indicator	Period	Middlesbrough		Redcar & Cleveland		England
		Rate	Rank	Rate	Rank	Rate
Life expectancy at birth (Male)	2018-20	75.4	2nd Lowest	77.5	29th Lowest	79.4
Life expectancy at birth (Female)	2018-20	79.8	4th Lowest	81.5	26th Lowest	83.1
Healthy life expectancy at birth (Male)	2018-20	58.8	27th Lowest	56.9	8th Lowest	63.1
Healthy life expectancy at birth (Female)	2018-20	60.6	42nd Lowest	58.5	21st Lowest	63.9
Older people living in poverty %	2019	23.3%	22nd Highest	16.8%	64th Highest	14.2%
Health related quality of life for older people - mean score	2016/17	0.70	28th Lowest	0.71	36th Lowest	0.74
Long-term physical or mental health condition % *	2022	60.2%	12th* Highest	60.2%	12th* Highest	53.5%
Reporting long term MSK problem %	2021	21.3%	22nd Highest	24.3%	4th Highest	17.0%
Dementia Prevalence % (65+)	2020	4.6%	16th Highest	4.1%	55th Highest	4.0%
Hip fracturs per 100,000 (65+)	2020/21	687	3rd Highest	542	65th Highest	529
Offered reablement services following hospital discharge % (65+)	2020/21	0.6%	11th Lowest	1.4%	23rd Lowest	3.1%
Delayed Transfers of Care (%)**	Mar 18 - Feb 20	6.0%	-	6.0%	-	4.2%
Permanent admissions to residential & nursing care homes per 100,000 (65+)	2020/21	844	11th Highest	700	25th Highest	498
Clients accessing long term social care support per 100,000 (65+)	2021/22	8,600	10th Highest	6,400	64th Highest	5,055

** Rate and rank is for Tees Valley CCG*

*** Data if for South Tees NHS Trust*

Compared to England

Significantly worse	Similar	Significantly better

Source – OHID Fingertips, NHS Digital and NHS England

We know from these high-level indicators that our local population does not appear to be living independently, and their loss of independence is happening at an earlier age compared to other areas nationally.

3. What is our goal and why do we need to achieve it?

3.1 We want to reduce the level of frailty to improve healthy ageing

Frailty is a distinctive health state related to the ageing process in which multiple body systems gradually lose their in-built reserves. Older people living with frailty are at risk of adverse outcomes such as dramatic changes in their physical and mental wellbeing after an apparently minor event which challenges their health, such as an infection or new medication. [3]

In medicine, frailty defines the group of older people who are at highest risk of adverse outcomes such as falls, disability, admission to hospital, or the need for long-term care. Around 10% of people aged over 65 years have frailty, rising to between 25% and 50% of those aged over 85.

It is important to differentiate between frailty, long term conditions and disability. Many people with multiple long-term conditions (multi-morbidity) will also have frailty, which may be masked. Likewise, some people whose only long-term condition is frailty may not be regularly known to their GP (until they become bed bound, immobile or delirious as a result of an apparently minor illness).

There may be overlap between the management approaches for people with multi-morbidity and those with frailty, but these conditions are not the same. Similarly, there is overlap between frailty and physical disability – many people with frailty also have disability, but many people with a long-term disability do not have frailty. Frailty may be the cause of disability in some patients and the consequence in others.

If a person is identified as frail, they will typically receive a full assessment of their needs, known as a Comprehensive Geriatric Assessment (CGA) This is a review of the person's current symptoms and signs of frailty, taking into consideration any underlying medical conditions. It is carried out by a professional or team of professionals with expertise in frailty. Despite its name, this assessment is also used for younger people with frailty. This is a straightforward and accessible tool that can be used to quickly and simply to assess frailty. It has been validated in adults aged over 65 years and can help to optimise quality of life outcomes for older patients.

Nice guidelines (NG16) include recommendations on promoting a healthy lifestyles to reduce the risk of or delay the onset of disability, dementia and frailty by helping people to:

- stop smoking
- be more active
- reduce their alcohol consumption
- improve their diet and,
- lose weight and maintain a healthy weight if necessary.

3.2 Measuring Frailty

Identifying people living with moderate or severe frailty earlier is the most effective way at managing and possibly revering some aspects of frailty. There are two main measurement tools to identify people who are frail. The Clinical Frailty Scale (CFS), or Rockwood is a global clinical measure of frailty in older people. This is a judgement-based frailty tool that is undertaken by a trained healthcare professional that assess the person's illnesses, function, and cognition to generate a frailty score.

GP Practices are required to use an appropriate tool, such as the electronic frailty index, to identify patients over the age of 65 who are living with moderate and severe frailty. The electronic frailty index is the second main measurement tool and uses data that is available in the GP electronic health record to identify and severity grade frailty. This enables the identification of older people who are fit, and those with mild, moderate and severe frailty.

It uses a 'cumulative deficit' model, which measures frailty on the basis of the accumulation of a range of deficits, which can be clinical signs (e.g. tremor), symptoms (e.g. vision problems), diseases, disabilities and abnormal test values and is made up of 36 deficits comprising around 2,000 read codes. Once people are identified at risk of frailty using the eFI, a diagnosis of frailty need to be supplemented by clinical judgement.

Figure 3 below shows the levels of frailty as part of the eFI, which broadly algins with the Rockwood Clinical Frailty scale.

Figure 3: Levels of frailty

e-Frailty Index	Rockwood clinical frailty scale
Fit	**1. Very fit** – People who are robust, active, energetic and motivated
	2. Well – People who have no active disease symptoms but are less fit than category 1
	3. Managing well – People whose medical problems are well controlled, but are not regularly active
Mild Frailty	**4. Vulnerable** – While not dependent on others for daily help, often symptoms limit activities
	5. Mildly frail – These people often have more evident slowing, and need help in high order IADLs
Moderate Frailty	**6. Moderately frail** – People need help with all outside activities and with keeping house. I
Severe Frailty	**7. Severely frail** – Completely dependent for personal care, from whatever cause (physical or cognitive).
	8. Very severely frail – Completely dependent, approaching the end of life.
	9. Terminally ill – Approaching the end of life. This category applies to people with a life expectancy <6 months

Source: NHS England

3.3 Level of Need in South Tees

There are two main models of frailty, the Phenotypic model and the Cumulative Deficit model. The Phenotype model can identify frailty in patients using the following five markers - unintentional weight loss, reduced muscle strength, reduced gait speed, self-reported exhaustion and low energy expenditure. Generally individuals with three or more of the characteristics are said to have frailty.

The second model of frailty is known as the Cumulative Deficit model and assumes an accumulation of deficits (loss of hearing or low mood, through signs such as tremor, through to various diseases such as dementia) which can occur with ageing and which combine to increase the 'frailty index', which in turn will increase the risk of an adverse outcome.

Using the Cumulative Deficit model, estimates of prevalence of frailty among older adults (65+) range from 4% to 59% of ambulatory adults (Collard et al., 2012). This could mean there are between 929 (4%) to 13,696 (59%) residents with frailty in the total population of 23,214 over 65s in Middlesbrough and between 1,252(4%) to 18,459 (59%) residents with frailty in the total population of 31,288 over 65s in Redcar & Cleveland

There is considerable variability in frailty prevalence also reported even restricting only to the most commonly used assessment method, the physical frailty phenotype. Estimates range from 4% to 17% with a weighted prevalence estimate of 10%, meaning approximated 2,320 in Middlesbrough and 3,130 in Redcar & Cleveland with physical frailty.

Figures 4 & 5 below show public health indicators for Middlesbrough and Redcar & Cleveland that compare against England the rates amongst both older people and wider age bands for factors that are involved with frailty. The rates, particularly in Middlesbrough are much higher compared to England for several of the risk factors for frailty suggesting there are more people at risk of frailty locally compared to England.

Figure 4: Factors involved in frailty

Public Health Indicators	Period	Middlesbrough				Redcar & Cleveland				England
		Number	*Rate*	*Compared*	*Trend*	*Number*	*Rate*	*Compared*	*Trend*	*Rate*
ONS **Population estimate** aged 65+	*2020*	23,214	**16.4%**	**Higher**	-	31,288	**22.8%**	**Higher**	-	**18.5%**
Older people **living alone** (65+)	*2011*	7,290	**35.2%**	**Worse**	-	8,791	**33.5%**	**Worse**	-	**31.5%**
Older **people in poverty**: Income deprivation affecting older people (IDAOPI)	*2019*	6,868	**23.3%**	**Worse**	-	6,306	**16.8%**	**Worse**	-	**14.2%**
Dementia recorded prevalence (65+)	*2020*	1,068	**4.6%**	**Higher**	⇩	1,256	**4.1%**	**Higher**	⇩	**4.0%**
Estimated **Dementia** diagnosis rate (65+)	*2022*	1,041	**72.7%**	**Better**	↓	1,305	**67.9%**	**Better**	⇨	**62.0%**
Dementia emergency admission rate per 100,000 (65+)	*2019/20*	995	**4,344**	**Worse**	⇨	870	**2,845**	**Better**	⇩	**3,517**
Hip fractures rate per 100,000 (65+)	*2020/21*	155	**687**	**Worse**	⇨	170	**542**	**Similar**	⇨	**529**
Emergency admissions due to **falls** rate per 100,000 (65+)	*2020/21*	395	**1,755**	**Better**	⇨	530	**1,716**	**Better**	⇨	**2,023**
Preventable **sight loss** - age related macular degeneration (AMD) - 65+	*2020/21*	31	**134**	**Worse**	⇨	32	**102**	**Similar**	⇨	**82**
Registered **blind or partially sighted** (75+) rate per 100,000	*2019/20*	270	**2,587**	**Better**	⇨	500	**3,524**	**Similar**	⇨	**3,429**
Alcohol related hospital admissions rate per 100,000 (65+)	*2020/21*	191	**813**	**Worse**	⇨	175	**560**	**Better**	⇩	**692**
Estimated prevalence of **common mental disorders** (65+)	*2017*	2,663	**11.8%**	**Worse**	-	3,430	**11.4%**	**Similar**	-	**10.2%**
Social Isolation: adult social care users who have as much social contact as they would like (65+ yrs)	*2019/20*	725	**47.7%**	**Similar**	⇨	725	**47.2%**	**Similar**	⇨	**43.4%**
Social Isolation: adult carers who have as much social contact as they would like (65+ yrs)	*2018/19*	50	**40.3%**	**Similar**	-	100	**34.1%**	**Similar**	-	**34.5%**
Health related **quality of life** for older people (score)	*2016/17*	-	**0.701**	**Worse**	⇨		**0.710**	**Worse**	⇨	**0.735**

Source: OHID Fingertips Tool

Figure 5: Wider factors involved in Frailty (wider age bands)

Public Health Indicators	Period	Middlesbrough				Redcar & Cleveland				England
		Number	*Rate*	*Compared*	*Trend*	*Number*	*Rate*	*Compared*	*Trend*	*Rate*
Reporting a long-term **Musculoskeletal (MSK)** problem	*2021*	-	**21.3%**	**Worse**	⇨	-	**24.3%**	**Worse**	⇨	**17.0%**
Reporting at least two long-term conditions, at least one of which is **MSK** related	*2021*	-	**15.9%**	**Worse**	⇨	-	**17.4%**	**Worse**	⇨	**12.1%**
Depression: GP recorded prevalence	*2020/21*	14,182	**11.1%**	**Lower**	⇧	17,605	**15.9%**	**Higher**	⇧	**12.3%**
Smoking prevalence in adults	*2019*	-	**17.2%**	**Worse**	⇩	-	**15.5%**	**Similar**	⇩	**13.9%**
Adults classified as **overweight or obese**	*2020/21*	-	**70.8%**	**Worse**	⇧	-	**69.7%**	**Worse**	⇧	**63.5%**
Adults classified as **physically active**	*2020/21*	-	**56.9%**	**Worse**	⇩	-	**63.5%**	**Similar**	⇩	**65.9%**
Offered **reablement services** following discharge from hospital (65+)	*2020/21*	20	**0.6%**	**Worse**	⇩	57	**1.4%**	**Worse**	⇨	**3.1%**
Still at home 91 days after discharge from hospital into reablement services (65+)		19	**95.0%**	**Similar**	⇨	50	**87.7%**	**Similar**	⇨	**79.1%**
Permanent admissions to **residential and nursing care homes** per 100,000 (65+)		196	**844**	**Worse**	⇨	219	**700**	**Worse**	⇩	**498**

Source: OHID Fingertips Tool

4. Key data and drivers for change?

4.1 Prevalence of frailty

Electronic frailty index (eFI) measures extracted from GP records as of July 2023 provided by NECS, show the number and proportion of patients aged 65+ who are living with mild, moderate or severe frailty. The data is split by PCNs across the Tees Valley. South Tees PCNs have a greater proportion of moderate frailty with 9.7% compared to 7.5% in Tees Valley and a higher proportion of patients with severe frailty with 4.1% compared to 3.7% in Tees Valley. In total there are 7,943 patients aged 65+ living with moderate or severe frailty in South Tees, with a total of 16.579 with some level of frailty.

Some PCNs in both Middlesbrough and Redcar & Cleveland have significantly higher levels of frailty. Greater Middlesbrough PCN has a rate of 40.9% of patients with some level of frailty, followed closely by Eston PCN with a rate of 39.8%. This compared with Redcar Coastal PCN which has the lowest level of frailty in South Tees at 18.1%.

Figure 6: Prevalence of frailty in Tees Valley PCNs

LA	Primary Care Network	Patients (65+)	Frailty Score				Frailty Score %			
			Mild	Moderate	Severe	Total	Mild	Moderate	Severe	Total
Darlington	Darlington PCN	22,875	488	1,599	1,078	3,165	2.1%	7.0%	4.7%	13.8%
Hartlepool	Hartlepool Health PCN	5,603	422	320	131	873	7.5%	5.7%	2.3%	15.6%
	Hartlepool Network PCN	6,285	111	341	280	732	1.8%	5.4%	4.5%	11.6%
	One Life Hartlepool PCN	6,682	346	483	375	1,204	5.2%	7.2%	5.6%	18.0%
Stockton-on-Tees	Billingham & Norton PCN	10,748	953	723	289	1,965	8.9%	6.7%	2.7%	18.3%
	Bytes PCN	10,372	497	518	243	1,258	4.8%	5.0%	2.3%	12.1%
	North Stockton Network PCN	8,610	872	607	291	1,770	10.1%	7.0%	3.4%	20.6%
	Stockton PCN	9,453	352	233	93	678	3.7%	2.5%	1.0%	7.2%
Middlesbrough	Central Middlesbrough PCN	6,839	565	444	240	1,249	8.3%	6.5%	3.5%	18.3%
	Greater Middlesbrough PCN	11,165	2,331	1,587	653	4,571	20.9%	14.2%	5.8%	40.9%
	Holgate PCN	7,676	1,101	545	267	1,913	14.3%	7.1%	3.5%	24.9%
Redcar & Cleveland	Eston PCN	8,922	1,862	1,156	535	3,553	20.9%	13.0%	6.0%	39.8%
	Redcar Coastal PCN	13,020	1,100	914	345	2,359	8.4%	7.0%	2.6%	18.1%
	The East Cleveland Group PCN	10,521	1,677	942	315	2,934	15.9%	9.0%	3.0%	27.9%
	SOUTH TEES	58,143	8,636	5,588	2,355	16,579	14.9%	9.6%	4.1%	28.5%
	TEES VALLEY	138,771	12,677	10,412	5,135	28,224	9.1%	7.5%	3.7%	20.3%

Source: NECS business intelligence team

Data provided by South Tees NHS Foundation Trust Business Intelligence Team shows the frailty score of patients aged 65+ admitted to hospital in 2022/23. Data shows the number of admissions, so could therefore be repeat individuals. Admissions are for either emergencies, electives or both at some point during the year.

Figure 7 below shows the frailty score for the patients admitted by deprivation (IMD) quintile, with 1 being most deprived and 5 being least deprived. Overall 44.2% of patients in Middlesbrough and Redcar & Cleveland were identified to have some level of frailty, with 8.6% classified as a high level of frailty. Looking at admissions by deprivation quintile, those in the most deprived areas of Middlesbrough and Redcar & Cleveland had higher rates of frailty compared to those in the least deprived with 50.4% compared to 37.6% respectively. High levels of frailty were also more common in the most deprived areas.

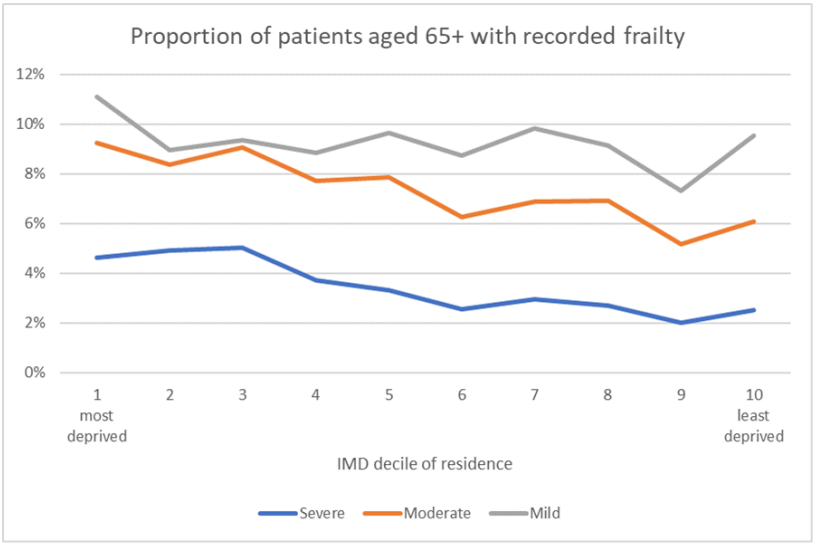
Figure 7: Prevalence of frailty by deprivation quintile

IMD quintile	a-High (7-9)	b-Medium (5-6)	c-Low (1-4)	e-N/a (0)	Total	Frail %	High %
1	1,256	2,492	2,183	5,838	11,769	50.4%	10.7%
2	600	1,030	996	3,019	5,645	46.5%	10.6%
3	321	677	746	2,829	4,573	38.1%	7.0%
4	270	910	1,091	3,659	5,930	38.3%	4.6%
5	256	540	584	2,294	3,674	37.6%	7.0%
Total	**2,703**	**5,649**	**5,600**	**17,639**	**31,591**	**44.2%**	**8.6%**

Source: South Tees NHS Foundation Trust Business Intelligence

Geographical spread of frailty among the population aged 65+ years primarily reflects the distribution of care homes, the age of local populations and deprivation (in that order). Frailty levels are highest in care homes and the highest levels of frailty in the general community are found in sheltered housing and then areas of social housing more generally. Recorded frailty among patients aged 65 and over is experience disproportionally by residents of deprived LSOAs as shown in Figure 8 below. This is particularly the case for severe and moderate frailty.

Figure 8: Prevalence of frailty by deprivation decile



Source – NECS business intelligence team

Admissions by ward show our areas across South Tees where levels of frailty are highest. In Middlesbrough there are five wards with 50% or higher rates of frailty in those aged 65+ seen in hospital. These are mostly in the central and east areas of Middlesbrough. The most affluent areas of the town such as Marton East and Marton West have significantly lower levels of frailty, particularly that of high levels of frailty with rates under 5%. In Redcar & Cleveland, similarly to Middlesbrough, the most deprived wards such as Coatham, Grangetown and Dormanstown have high levels of frailty (54%/55%).

Figure 9: Prevalence of frailty by ward

Ward	Total	Frail %	High %
Newport	527	54%	13%
Brambles & Thorntree	786	54%	13%
North Ormesby	296	52%	14%
Berwick Hills & Pallister	781	50%	12%
Coulby Newham	1,077	50%	12%
Linthorpe	675	48%	11%
Stainton & Thornton	523	48%	15%
Ayresome	441	48%	7%
Park	937	47%	13%
Park End & Beckfield	1,022	47%	8%
Longlands & Beechwood	1,095	47%	13%
Central	539	47%	12%
Ladgate	614	45%	10%
Trimdon	635	44%	6%
Nunthorpe	767	40%	11%
Kader	904	38%	6%
Hemlington	669	37%	3%
Acklam	585	34%	3%
Marton West	652	32%	4%
Marton East	677	29%	3%
Middlesbrough	14,202	45%	9%

Ward	Total	Frail %	High %
Coatham	707	55%	15%
Grangetown	421	54%	3%
Dormanstown	523	54%	6%
Teesville	940	50%	8%
Brotton	690	49%	8%
Eston	996	49%	13%
Loftus	732	49%	9%
Wheatlands	311	48%	9%
Zetland	575	47%	11%
Saltburn	1,062	47%	17%
Kirkleatham	1,158	47%	9%
Lockwood	327	47%	5%
Guisborough	1,110	46%	10%
South Bank	407	44%	8%
Skelton West	363	43%	6%
St Germain's	1,026	41%	6%
Ormesby	931	40%	4%
Skelton East	438	38%	4%
Normanby	838	37%	5%
West Dyke	897	37%	5%
Hutton	1,084	35%	5%
Longbeck	568	34%	5%
Belmont	612	33%	3%
Newcomen	673	31%	6%
Redcar and Cleveland	17,389	44%	8%

Source: South Tees NHS Foundation Trust Business Intelligence

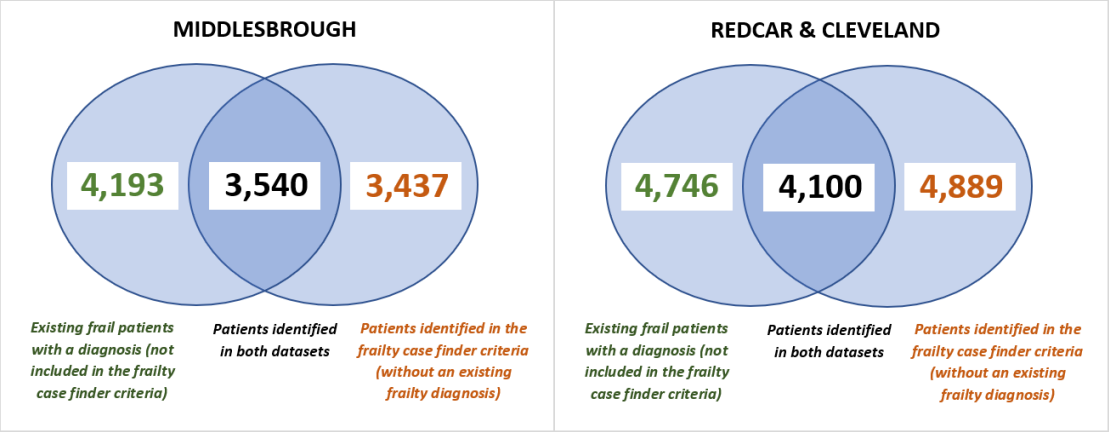
Frailty gap analysis

Data provided by NECS as of July 2023 shows for patients over 65 years old, identifies those who currently have a frailty diagnosis within the RAIDR primary care datasets, of those which patients are included in the frailty case finder criteria set out below and also those patients which have been identified in the frailty case finder criteria which do not currently have a documented frailty diagnosis within the RAIDR primary care datasets.

The case finder criteria is for over 65s who have any of the following: palliative care flag, dementia flag, care home resident, falls flag, housebound flag or aged 90 years old and over. Figure 10 below shows the number patients with an existing frailty diagnosis within the RAIDR primary care datasets, those new patients identified by the frailty case finder criteria and the cross section of patients which are included in both datasets.

In Middlesbrough 3,437 were identified through the case finder and did not have a frailty diagnosis. This equates to 49.3% of the patients identified. In Redcar & Cleveland there were 4,889 who did not have a frailty diagnosis which equated to 54.4% of the patients identified. These patients identified should be assessed for frailty to help find those who are missing vital support or those who have low levels of frailty and can benefit from early intervention.

Figure 10: Frailty Gap Analysis



Source: NECS Information Services

Readmissions with frailty

Analysis of hospital admissions by recorded frailty score, shows a clear relationship between recorded frailty, particularly severe frailty, and emergency admission within 30 days of discharge. However it is also notable that while severe frailty is most closely associated with re-admission, for the Tees Valley, patients aged 65+ without frailty recorded have higher re-admission rates than those with recorded moderate or mild frailty. This suggests that either the added support for frail patients is reducing readmissions of those with moderate and mild frailty to below those of people without frailty (or that specific support), or that there are a number of frail people who haven't had sufficient contact with practice to have the diagnoses and other flags that leads to a high EFI score.

Figure 11: Frailty readmission rates

Area Type	Area Name	Re-admission rate by recorded frailty score			
		Mild	Moderate	Severe	Not assessed
ICB	NENC	9.4%	12.4%	16.5%	12.0%
Sub-ICB Area	Tees Valley	7.6%	10.1%	14.4%	10.8%
Tees Valley Primary Care Network	Central Middlesbrough PCN	8.5%	9.2%	18.4%	10.9%
	Greater Middlesbrough PCN	5.7%	8.4%	11.5%	10.7%
	Holgate PCN	7.9%	8.0%	14.8%	10.0%
	East Cleveland PCN	5.5%	8.8%	15.0%	8.7%
	Eston PCN	5.4%	9.1%	11.5%	10.3%
	Redcar Coastal PCN	7.1%	9.6%	15.8%	9.4%

Source – NECS business intelligence team

Admissions relating to certain causes are significantly more likely to lead to readmission within 30 days. There was a 21.8% rate of readmissions within 30 days within renal procedures and disorders, compared to 2% of admissions relating to eye procedures and disorders. Figure 12 below shows the top 10 readmissions causes. Emergency admissions are more likely to lead to further readmission than elective admissions.

Figure 12: Readmission to hospital based on original admission reason

Reason for original admission (top 10)	Proportion of spells leading to readmission				
	Severe	Moderate	Mild	Not assessed	Total
Renal Procedures and Disorders	18.8%	20.8%	12.8%	23.5%	21.8%
Respiratory System Procedures and Disorders	19.3%	16.8%	13.7%	22.7%	21.1%
Infectious Diseases and Immune System Disorders	20.3%	14.9%	13.4%	20.7%	19.6%
Cardiac Disorders	19.2%	16.8%	12.8%	19.1%	18.2%
Skin Disorders	15.0%	13.8%	19.7%	18.8%	17.9%
Digestive System Disorders	19.9%	12.3%	11.1%	17.7%	16.7%
Metabolic Disorders	21.4%	15.5%	10.5%	12.7%	13.3%
Nervous System Procedures and Disorders	20.5%	9.5%	12.5%	13.3%	13.3%
Poisoning, etc and Other Healthcare Contacts	15.0%	7.4%	5.9%	12.3%	11.3%
Haematological Procedures and Disorders	6.9%	8.2%	9.5%	11.6%	11.0%

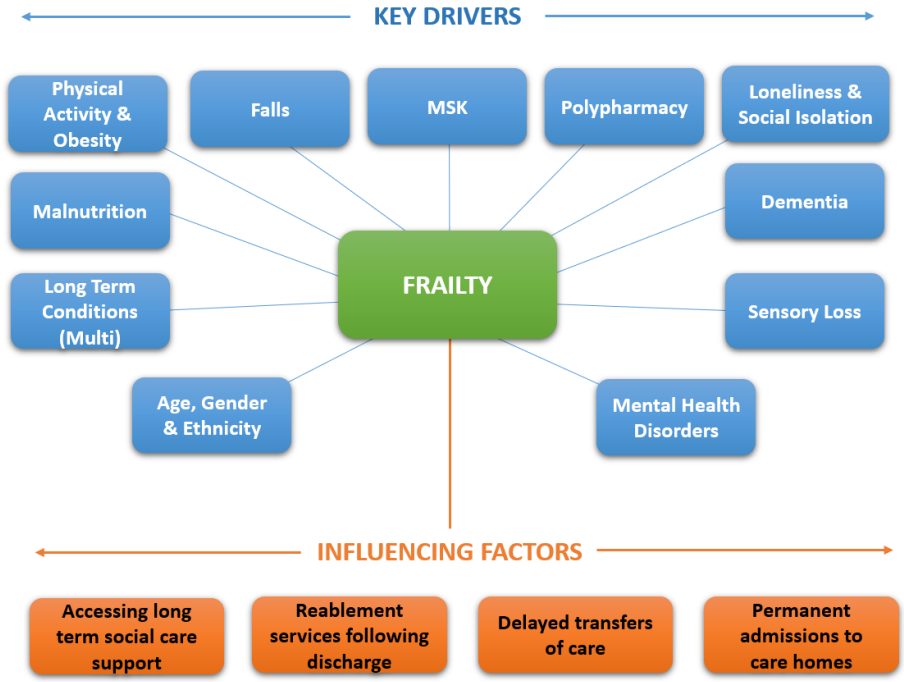
Source – NECS business intelligence team

The admissions at highest risk of a subsequent readmission are with patients who are not marked as frail on practice systems - for UTI, acute kidney injury, pneumonia and sepsis. This suggests that the care after discharge received by patients known to by frail helps reduce readmissions in these areas in particular. Patients with severe frailty are generally at higher risk of admissions than those with moderate or mild frailty. Particularly high risk of re-admission result following discharge for stroke, sepsis, pneumonia and fluid/electrolyte imbalance. Readmissions are most commonly respiratory, cardiac and digestive system disorders. Patients with recorded frailty are slightly more likely to have readmissions for cardiac disorders, falls without injury, mental health conditions and diabetes.

Key drivers of frailty

Frailty is a condition where there are multifaceted underlying factors that drive the frailty process that range from medical factors, complex social issues and lack of social support. Figure 13 below shows some of the key drivers involved in frailty, some are potentially preventable or modifiable risk factors, or conditions for people developing frailty. As with many other conditions, promoting healthy ageing offers a chance to avoid or postpone the onset of frailty.

Figure 13: Key drivers of frailty



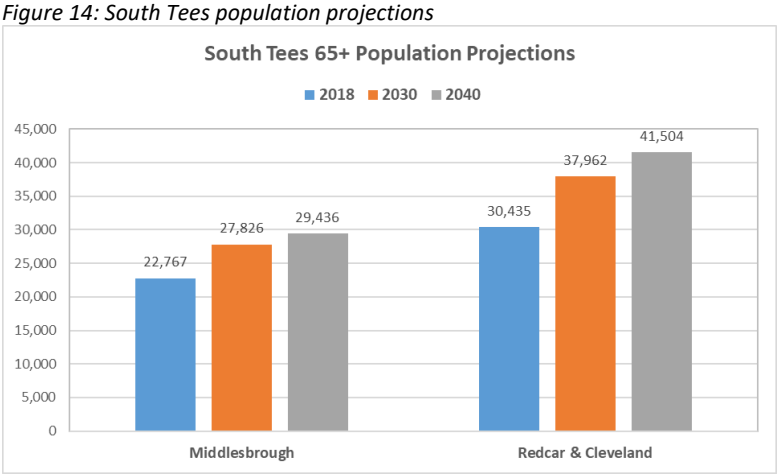
4.2 Age, Gender & Ethnicity

Frailty risk rises significantly with age. Around 10% of people aged over 65 live with frailty. This figure rises to between 25% and a 50% for those aged over 85[4].

As estimated by ONS in 2020, there were 23,214 adults aged 65+ in Middlesbrough, a proportion of 16.4% of the population. This was lower than the England average of 18.5%. In Redcar & Cleveland there were 31,288, a much higher proportion of 22.8% of the population.

ONS population projects by local authority show that Middlesbrough's over 65 population is expected to increase by 22.2% (5,059) from 22,767 to 27,826 between 2018 and 2030 and by 29.3% (6,669) to 29,436 in 2040. In Redcar & Cleveland over 65s population is expected to increase by 24.7% (7,527) from 30,435 to 37,962 between 2018 and 2030 and by 36.4% (11,609) to 41,504 in 2040.

Figure 14: South Tees population projections



Source - POPPI

Frailty is more common in women, compared with Men. For example a UK study from 2010 using the phenotype approach to defining frailty found a prevalence of 8.5% in women and 4.1% in men aged 65 –74. Both Middlesbrough and Redcar & Cleveland had a higher proportion of female over 65s compared to men with 55%. Population projections by gender show that female over 65s are expected to have a bigger growth, particularly in Middlesbrough with a 27% increase for males between 2018 and 2040 compared to 31% for females. The difference is smaller in Redcar & Cleveland but still higher in females- 37% compared to 35%

Prevalence of frailty was higher in ethnic minorities than in White British. After adjusting for sociodemographic and lifestyle factors, odds of being frail remained significantly higher in ethnic minorities. However, frailty was associated with lower or similar mortality compared to White British participants[5].

4.3 Polypharmacy

What is polypharmacy?

Polypharmacy refers to the concurrent use of multiple medication items by one individual. In the past polypharmacy has been considered negative and something to be avoided, however it is now accepted that in many circumstances polypharmacy can be a positive treatment. The terms 'appropriate polypharmacy' and 'problematic/inappropriate polypharmacy' are now used to recognise that polypharmacy has the potential to be beneficial for some patients, but also harmful if poorly managed. [6]

Appropriate polypharmacy is defined as prescribing for an individual for complex conditions or for multiple conditions in circumstances where medicines use has been optimised and where the medicines are prescribed according to best evidence.
Problematic/inappropriate polypharmacy is defined as the prescribing of multiple medications inappropriately, or where the intended benefit of the medication is not realised.

The term problematic polypharmacy broadly covers four main scenarios[7]:

- The prescribing of medicines that are no longer clinically indicated or appropriate or optimised for that person
- Where the benefit of a particular medicine or medicines does not outweigh the harm
- Where the combination of multiple medicines has the potential to or is actually causing harm to the person
- Where the practicalities of using the medicines prescribed to a person have become unmanageable or are causing harm or distress.

Polypharmacy in older people

In England, more than one in 10 people aged over 65 take at least eight different prescribed medications each week. This increases to nearly one in four people aged over 85. It is estimated that up to 50% of all medicines for long term conditions are not taken as intended and around one in five prescriptions for older people living at home may be inappropriate. [8]

Older people are at a greater risk of problematic polypharmacy for several reasons. They are more likely to have multiple long-term conditions and physiology changes with age which results in different

reactions to medicines compared to younger adults. Other factors include the impact of frailty, dementia, malnutrition and being a care home resident[9].

Hospital admissions are often a trigger for worsening health and wellbeing in older people. The more medicines older people take, the more at risk they are for example of falling which in turn is a major risk for a hospital admission[10]. Multiple medications create a cumulation of side effects that contribute to this risk. Once older people are admitted to hospital due to a fall, their chance of falling again increases to 14% for each extra medication they take over the first four[11].

Research found that nearly 6% of unplanned hospital admissions are caused by adverse drug reactions[12] and up to 10% of all admissions in older people are medicines related[13]. Between 2008 and 2015 the number of emergency hospital admissions caused by adverse drug reactions increased by 53%[14]. For older people themselves, this can reduce their ability to remain independent and puts an extra strain on informal carers.

Older people have reported feeling particularly vulnerable when leaving hospital and returning home. On top of recovering from illness or injury, poor communication at discharge and a lack of follow-up in the community can result in confusion and poor adherence with their medicines. An estimated 1 in 3 older people suffer a medication-related harm within 30 days of hospital discharge[15].

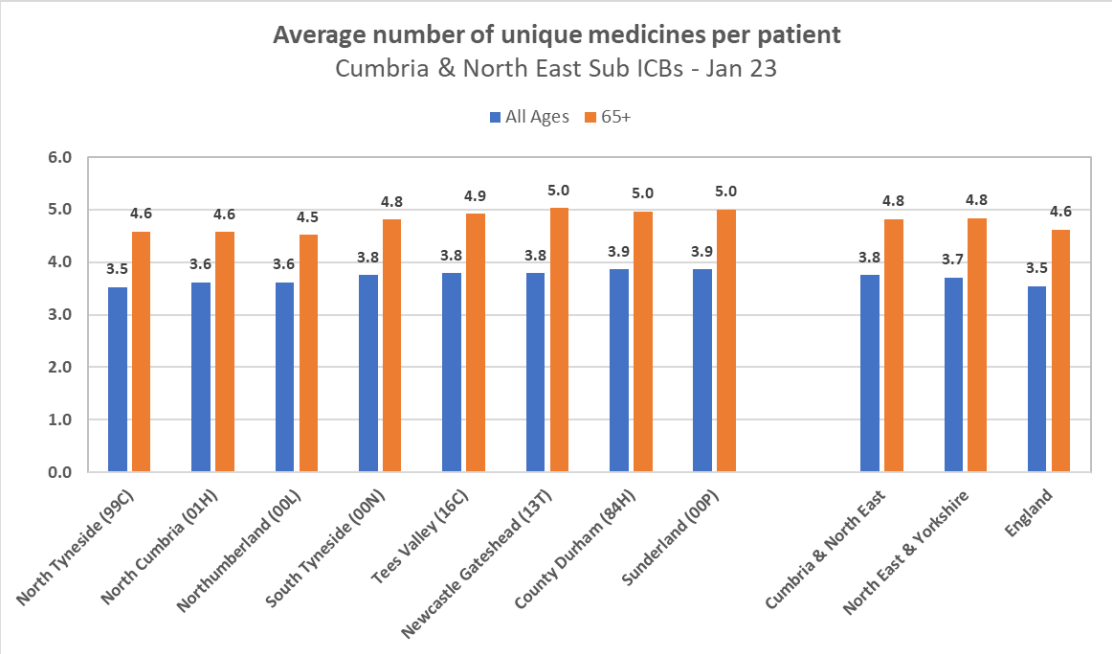
The Department of Health and Social Care undertook a national overprescribing review in September 2021[16]. The review estimates that greater than 10% of prescribing falls into the category of 'overprescribing'. As well as a focus for older people living with frailty which is the priority within this section, some specific areas noted to be a focus for overprescribing include:

- Overuse of SABA inhalers
- Opioid prescribing for chronic pain
- Over-medication in people with a learning disability or Autism

Polypharmacy prevalence

Data from NHS Business Services Authority highlights the level of polypharmacy in the North East region. Figure 15 shows that five of the sub ICBs in the region including Tees Valley have a higher average number of unique medicines per patient for over 65s compared to England.

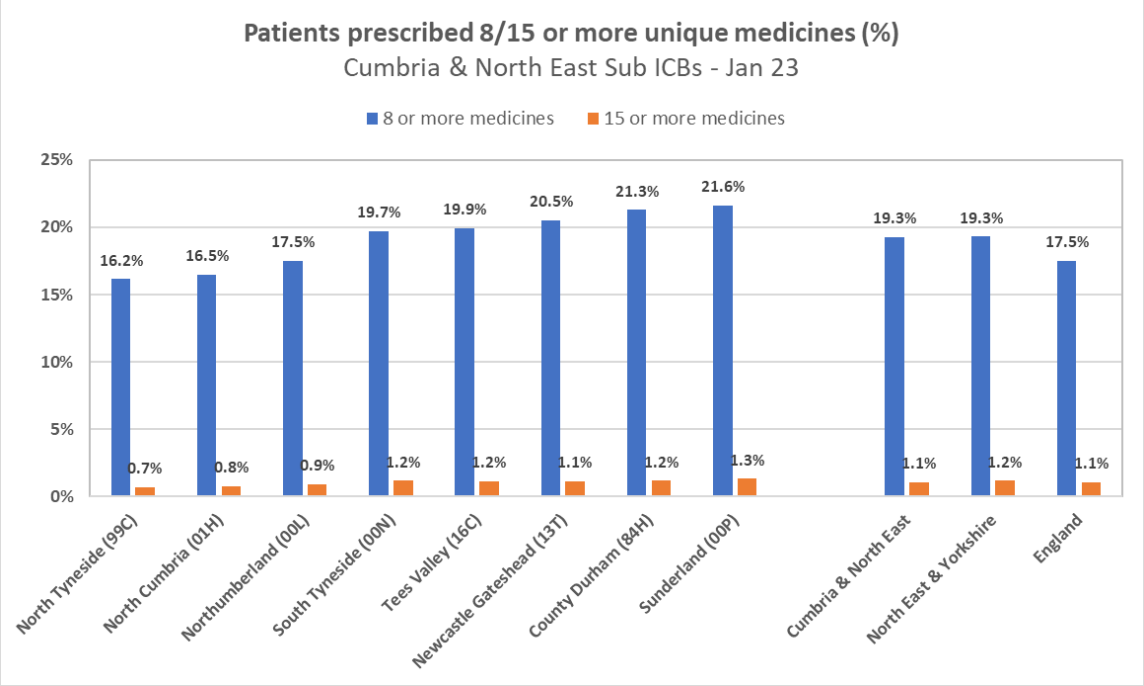
Figure 15 - Average number of unique medicines per patient



Source – ePACT2 Polypharmacy prescribing comparators

The national overprescribing review highlighted that proportions of patients receiving multiple medications increases with age and for those aged 60+ there are increasing proportions receiving more than eight medicines concurrently. Figure __ below shows that within the Cumbria and North East ICS, five sub ICBs including Tees Valley have a higher proportion of patients receiving eight or more medicines and the same five areas also have a higher proportion of patients receiving 15 or more medicines.

Figure 16 - % of patients prescribed 8 or 15 or more unique medicines



Source – ePACT2 Polypharmacy prescribing comparators

Figure 17 provides a selection of polypharmacy comparator indicators. Tees Valley has a higher percentage of patients who received five or more medicines for three or more consecutive months from analgesic medicines compared to other sub ICBs in area, but lower than the national average. The definition of analgesic medicines used includes non-opioid analgesics and compound analgesic preparations, opioid analgesics, neuropathic pain and antimigraine drugs. Opioid analgesics specifically are associated with greater potential for addiction and overdose.

Unintended hypotensive side effects caused by multiple medications may increase the risk of falls. In particular, in the 65 years and over age group, where 35% and 12% of people are estimated to have mild or moderate frailty respectively[17]. Tees Valley has a higher proportion compared to local, regional and national rates for patients prescribed 3 medicines that can have unintended hypotensive effect.

Anticholinergic burden (ACB) is the cumulative effect on an individual of taking one or more medications with anticholinergic activity. They work by blocking the action of acetylcholine, a type of neurotransmitter. Neurotransmitters are chemical messengers in the brain. Blocking this neurotransmitter inhibits involuntary muscle movements and various bodily functions. Tees Valley has a higher proportion of patients with a ACB score of 6 or more compared to England and higher proportion of patients prescribed 3 medicines with moderate to high ACB. An ACB score of 3 or more may increase the risks of cognitive impairment, functional impairment, falls and mortality in older adults[18].

Figure 17- Polypharmacy comparators

Polypharmacy Comparator	Tees Valley	Cumbria & North East	North East & Yorkshire	England
Percentage of patients concurrently prescribed 5 or more analgesic medicines (Aged 65+)	0.19%	0.13%	0.20%	0.25%
Percentage of patients prescribed 3 medicines that can have an unintended hypotensive effect - (Aged 65+)	6.33%	5.94%	6.02%	5.67%
Percentage of patients with an anticholinergic burden score of 6 or more - (Aged 65+)	0.98%	0.92%	0.95%	0.78%
Percentage of patients prescribed 3 medicines with moderate to high anticholinergic burden - (Aged 65+)	0.43%	0.37%	0.40%	0.38%

Source – ePACT2 Polypharmacy prescribing comparators

4.4 Sensory Loss

Visual impairment and hearing loss estimates for 2023 provided by Projecting Older People Population Information System (POPPI) show a significant number of older people aged 65+ are living with sensory loss in South Tees. Approximately 6,863 people are living with either moderate/severe visual impairment or registrable eye conditions and a total of 39,226 are living with either some hearing loss or severe hearing loss.

Figure 18 - Sensory loss estimates 2023

Sensory Loss	Middlesbrough	Redcar & Cleveland	Total
Moderate/severe visual impairment or registrable eye conditions (aged 65+)	2,869	3,994	**6,863**
Some hearing loss (aged 65+)	14,660	20,123	**34,783**
Severe hearing loss (aged 65+)	1,849	2,594	**4,443**
Total sensory loss	**19,378**	**26,711**	**46,089**

Source – POPPI

Living with sight loss, hearing loss or Deafness creates challenges in every aspect of day-to-day life; practical, emotional, and social challenges with communication barriers, making access to support services very difficult or almost impossible, therefore creating increased health risks and vulnerabilities, especially for older people who are living with other health conditions.

The RNIB estimated age profile for people living with sight loss in Redcar and Cleveland is 1,060 aged 65 to 74 years, 1,660 aged 75 to 84 years and 1,680 aged 85 years and over and in Middlesbrough 830 are aged 65 to 74 years, 1,160 are aged 75 to 84 years and 1,180 are aged 85 years and over.

Age related macular degeneration (AMD) is the leading cause of blindness and severe sight loss in the UK and data shows that Middlesbrough is worse than the National average for the number of people living with preventable age-related macular degeneration and Redcar and Cleveland is similar to the National average.

Research findings have shown that frailty is not a static syndrome and many of its signs and symptoms can be reversed, at least partly, with appropriate interventions, such as physical activity, diet and review of medications. [19] These promising results have led to renewed efforts to uncover other potentially modifiable risk factors associated with frailty, and hearing loss is one of them. Hearing loss has a high prevalence among older adults. Age related hearing loss (ARHL) is the most common cause of hearing loss, affecting 40% of the population aged 65 years and over.

ONS data estimates that 1,682 people aged 71 and over were living with severe hearing loss in Middlesbrough and 2,248 aged 71 and over in Redcar and Cleveland.

Longitudinal studies suggest that both vision and hearing impairment increases the odds of frailty progression. The Women's Health and Aging Studies showed that older adults with visual impairment are more likely to progress toward frailty, with a 3.5-fold greater odds of incident frailty over 3 years, than those who are unimpaired. An English Longitudinal Study of Ageing found that self-reported hearing loss was associated with 1.4-fold greater odds of incident prefrailty or frailty over 4 years [20]

A UK study reported that only one-third of hearing-impaired adults older than 70 years who could have benefit from hearing aids actually owned them, and among those with hearing aids, 10 % never used them [21] Panza et al. suggested that age-related hearing loss and frailty, as well as cognition, share pathophysiological pathways, and that the use of hearing devices could potentially alleviate frailty.

Older adults with dual sensory impairment (co-occurring hearing and visual impairment) are more likely to be frail than those with no impairment, suggesting that interventions to improve sensory

function may potentially help reduce the risk of frailty in older adults. However, Interventions should be part of a multi-pronged frailty intervention including enhancing nutrition and physical activity that have been proposed for older adults. Dual Sensory often leads to increased difficulty in mobility (in terms of walking, getting outside, getting into or out of bed/chair); in meal preparation; and medication management as well as restrictions in social participation. Therefore, future work needs to establish the cumulative risk of frailty in individuals with dual sensory impairment.

Services are often not immediately accessible to those with sensory and acquiring communication support such as BSL Interpreters and making reasonable adjustments results in delays in accessing support which increases anxieties and impacts on mental and physical health risks. Clinicians and policymakers should consider adding sensory screening measures to frailty detection programs. In addition, it is important to keep in mind that sensory impairment may also impact how older adults interact with the healthcare system, for example, poorer communication may be an issue that could further impede patient-provider communication and treatment of frail older adults.

In Middlesbrough a sensory drop-in clinic has been set up to provide access to social care, health and wellbeing services, and peer support. The drop in supports access to information about holistic support options for people living with sensory around independent living and prevention services to reduce health and care needs which is critical for a person being able to make informed decisions and choices about their care and support.

The drop-in addresses inequalities and empowers the local sensory community to access a range of health, wellbeing and social care support, and to participate in activities which would be difficult to access in community settings. BSL Interpreters attend all sessions to provide consistency with communication support and build positive and trusted relationships for local deaf residents.

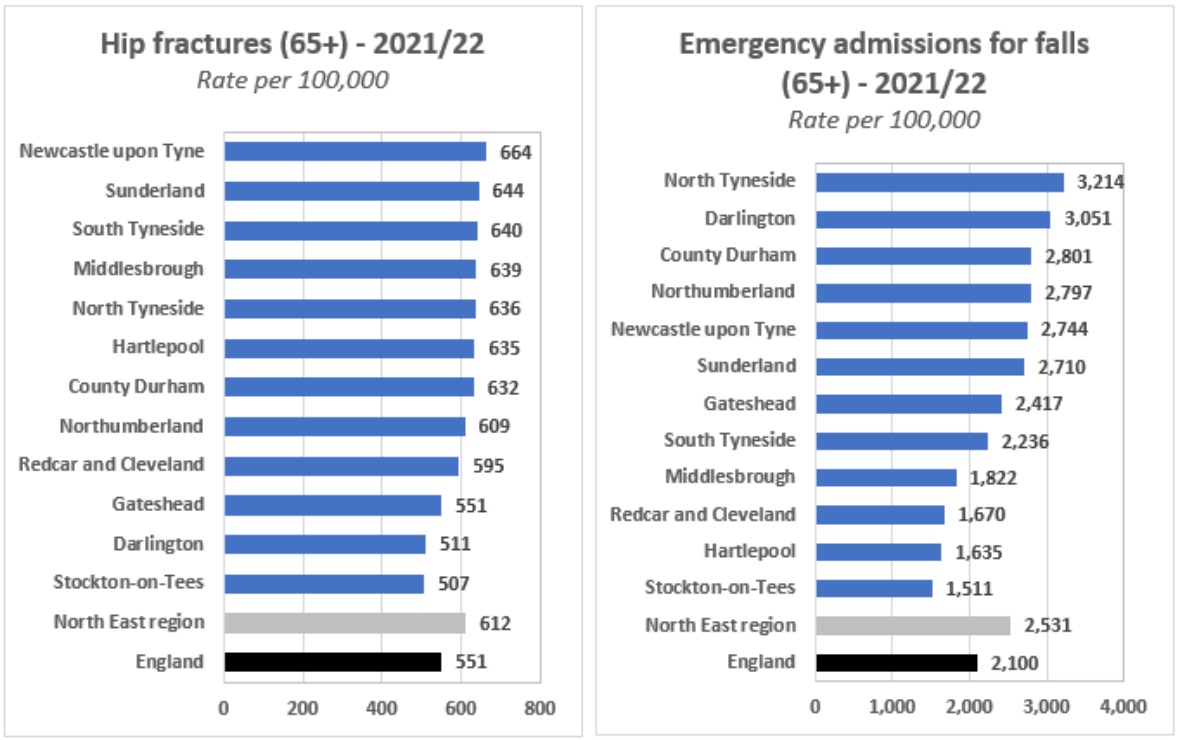
Future research investigations would determine if interventions to optimize vision and hearing in older adults may have the potential to delay or prevent the dysregulation process central to frailty and improve resilience in the face of stressors that might otherwise lead to physical decline and frailty.[22]

4.5 Falls and hip fractures

Middlesbrough has the 12th highest rate in England in 2021/22 for the number of hip fractures in those aged 65+ with 155 recorded or a rate of 639 per 100,000 population. This is significantly higher than the England rate of 551 per 100,000. Redcar and Cleveland had a higher number of falls at 180 but as a rate this was lower at 595 per 100,000.

The number of emergency admissions due to falls from people living in Middlesbrough aged over 65 was 430 or a rate of 1,822 which was lower compared to the England rate of 2,100. Redcar and Cleveland was also lower with 515 recorded emergency admissions for falls or a rate of 1,670.

Figure 19 - Hip fractures and admissions for falls rates



Source – Fingertips

A hip fracture is a serious injury, with complications that can be life-threatening to the individual, and the risk increases with age because bones can weaken with age. A hip fracture is a common outcome when an older adult has a fall, and it occurs due to the progressive decrease in bone mass that often affects women and men as they age.

Another risk for hip fracture is osteoporosis, a skeletal disease marked by a loss of bone density, which leaves bones porous, thin and brittle. Hip fractures are the most serious consequence of falling in older people with osteoporosis and 87% to 96% of hip fracture patients are 65 years of age or older.[23]

Excess mortality after hip fracture is said to be linked to complications following the fracture, such as pulmonary embolism infections and heart failure. Factors associated with the risk of falling and sustaining osteoporotic fractures may also be responsible for excess mortality.[24]

Women are at increased risk of developing osteoporosis because of the hormonal changes that occur during menopause. (Although it's more common in women, men can develop osteoporosis, as well.) These skeletal changes are reflected in hospital records, which show that more than 300,000 adults over the age of 65 are admitted each year due to a hip fracture, nearly all the result of falling, usually sideways. If the fracture is not repaired, the one-year mortality is about 70%. This means that, with optimum treatment, roughly four out of five people will survive for at least the first year following a hip fracture.

The relationship between frailty and osteoporosis relies on the fact that, the frailer an individual is, the greater the likelihood that the individual will have a prevalent osteoporotic fracture and the higher the risk of a fracture in the future[25]

A hip fracture in older adults can contribute to poor health outcomes including increased risk of death however other factors also play a role such as the age, sex and any other health problems the person is living with before the fracture, such as cardiovascular disease, pulmonary or neurological issues;

diabetes, cognition decline or frailty and data has shown that the likelihood of falling is 1.8 times higher for the frail than for the healthy elders.

Recovery of a hip fracture for adults who are older, or frail can take months and often leads to further loss of muscle mass which can increase the risk of a subsequent fall. Due to the length of recovery, a hip fracture also leads to a decrease in independence.

Studies suggest that there is a strong causal relationship between the events of frailty, falls, fractures, and the occurrence of postoperative adverse outcomes. Focusing on the frailty status of older adults will be important to promote healthy aging. Frailty, falls, fractures, and the increased risk of complications and mortality combined to constitute a series of causal associations that will have a serious threat to the health of older adults. In future medical practice, frailty has the potential to be an effective tool for risk stratification of older patients and therefore guide disease prevention and treatment. [26]

Current interventions for frailty include exercise, nutritional supplementation, enhanced treatment of existing conditions, and medical injury reduction. Focusing on the frailty status of older adults is important to promote healthy ageing and reduce mortality rates linked to falling and hip fractures.

4.6 Musculoskeletal Conditions and Frailty

Musculoskeletal (MSK) conditions are problems of the bones, joints, muscles and spine, and are a common cause of severe long-term pain and physical disability. There are 3 groups of MSK conditions:

- inflammatory conditions, for example rheumatoid arthritis
- conditions of MSK pain, for example osteoarthritis, back pain
- osteoporosis and fragility fractures, for example fracture after fall from standing height

Musculoskeletal functioning is a key component on quantification of frailty, at the same time, frailty is associated with the most common age-related disease conditions such as rheumatoid arthritis and osteoarthritis.

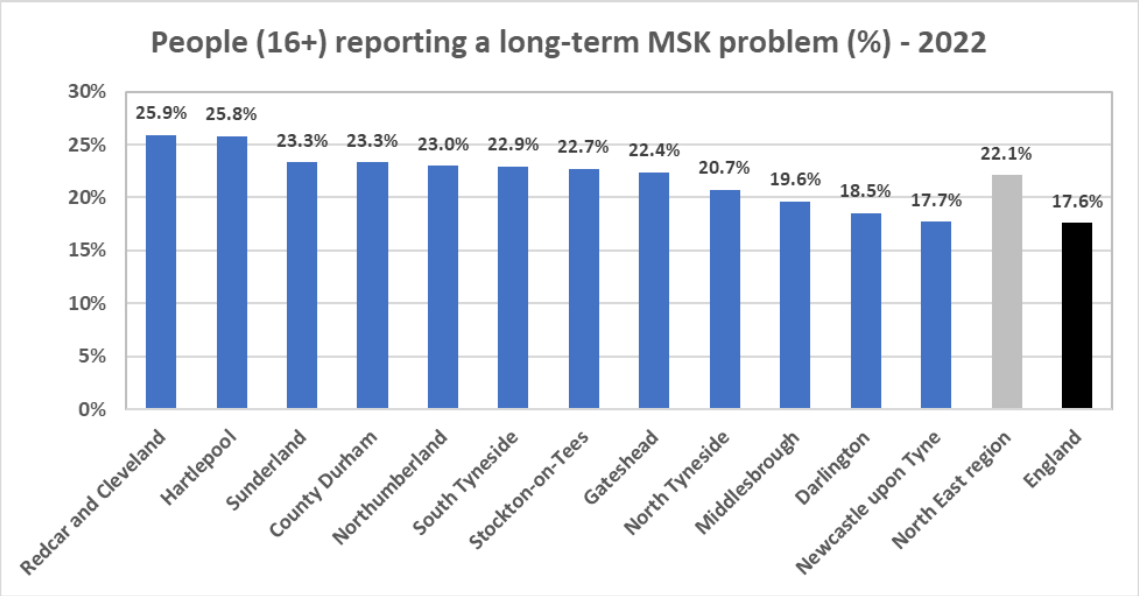
MSK as well as falls, fractures and frailty are priority areas within the NHS and collectively they have a major detrimental impact on patients, families and carers, and are a major cost to the NHS. With a growing and ageing population, health and social care services need to be proactive in their response to this challenge. Over 20 million people in the UK, almost one third of the population are living with an MSK condition such as arthritis or back pain. Symptoms can include pain, stiffness, limited movement, and disability which can affect quality of life and independence.

MSK disorders are debilitating conditions that significantly impair the state of health, especially in older people, since they are associated with pain, mobility disorders, increased risk of falls and fractures, and impaired ability or disability to perform activities of daily living. As more people are living longer with complex MSK conditions, more years are being spent in ill health and it is estimated that by 2030, over 15.3 million people in the UK will be over 65 years of age, resulting in a rising demand for MSK services. (NHS England)

Whilst many different clinical pathways and services are provided to manage these problems as there are clear links between them. MSK functioning is a key component on quantification of frailty, at the same time, frailty is associated with the most common age-related disease conditions such as rheumatoid arthritis and osteoarthritis.[27]

The rate of people reporting MSK conditions in South Tees is significantly higher compared to England. In Middlesbrough, 19.6% report an MSK problem and 25.9% of people in Redcar and Cleveland report a problem. Redcar & Cleveland's rate is the 2nd highest in England and Middlesbrough is the 49th highest out of 150 local authorities.

Figure 20 - MSK Prevalence



Source – Fingertips

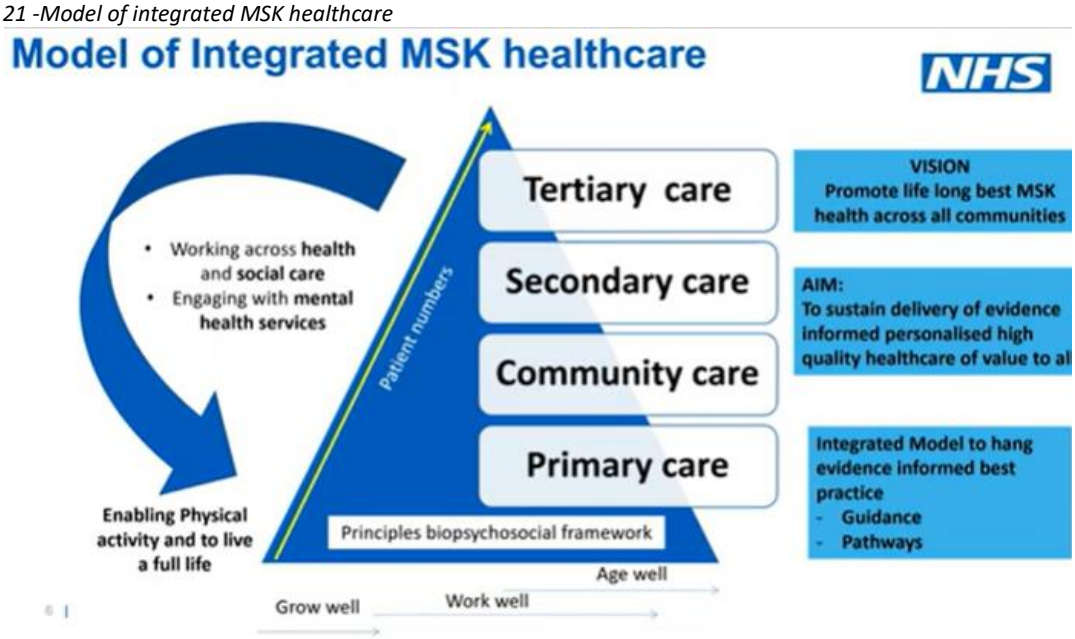
The rate of people living with 2 reported long term conditions with at least one being MSK is 15.1% in Middlesbrough and 19.8% in Redcar and Cleveland, significantly higher than the rate of 12.8% nationally.

Poor management of MSK health has a huge impact not only on the individual but on employers, the NHS and the wider economy. NHS England recorded that 30 million working days are lost due to MSK conditions every year in the UK and they account for up to 30% of GP consultations in England.
Many published studies on frailty in multiple rheumatic disorders have provided insight into the overlap between frailty and musculoskeletal health, including proposed pathogenic mechanisms and recommended interventions to prevent or ameliorate frailty. The overall prevalence and knowledge of factors that influence frailty in musculoskeletal disorders, however, are reported with considerable inconsistency across studies and have not been effectively synthesized through prior narrative reviews.[28]

In 2021 NHS England launched a National programme of work to improve MSK health for all #Best MSK Health Programme (Part of the pathway for better health programme) The aim of the campaign was to promote best long life MSK health in all communities and help people to be more active as well as grow, work and age well.

The national progamme is based on integration, collaboration, and co-production and aimed to work with people who have direct lived experience, patient groups and organisations representing MSK clinicians so that the people who are delivering care and those who are receiving care, are central to how services look in the future.

Figure 21 -Model of integrated MSK healthcare



Source #MSK Programme

The programme is focused on a wraparound preventative approach in MSK and trying to get people to be more active, have a good diet and have good Mental Health, stop smoking and moderate alcohol. It is focused on triage for long term conditions management and getting the right people in the right place at the right time, which is good for secondary tertiary prevention and is taking a preventative approach to an overarching MSK strategy. (Arthritis and Musculoskeletal Alliance) #BestMSKHealth.

The Arthritis and Musculoskeletal Alliance say that the prevalence and impact of MSK conditions are not experienced equally across the population and are linked to deprivation, age and are more prevalent in women, and disproportionately affect some minority ethnic groups.

Although the majority of MSK conditions can be managed very well in primary and community care, we need get patients with MSK conditions into secondary care at the right time for the right interventions including rehabilitation, so we can get people back to physical activity and living life to the full and we need to work closely with social services and mental health services to achieve this aim.

4.7 Frailty and Long Term Physical and Mental Health Conditions

Long-term conditions or chronic diseases are conditions for which there is currently no cure and are managed with drugs and other treatment. Long-term conditions are move prevalent in older people and in more deprived groups and are considered to be a major determinant of frailty. Living with multiple long-term conditions (multi-morbidity) and levels of frailty are commonly associated.

Figure 22 below shows the number and rate of the population aged 65+ who are estimated to have multi-morbidity in 2011 in the form of living with 2 or more chronic conditions and those living with 3 or more chronic conditions. Rates are higher compared to England for both those living with either 2 or 3 or more conditions, and this is higher for females, with 71% of females in both Middlesbrough and Redcar & Cleveland living with 2 more chronic conditions.

Figure 22 - Rates of multi-morbidity in over 65s

Area	Sex	Population	Prevalence of 2 or more chronic conditions		Prevalence of 3 or more chronic conditions	
			Number	*%*	*Number*	*%*
Middlesbrough	Male	9,162	6,225	67.9%	4,475	48.8%
	Female	11,673	8,326	71.3%	6,123	52.5%
Redcar & Cleveland	Male	11,901	8,120	68.2%	5,817	48.9%
	Female	14,524	10,371	71.4%	7,602	52.3%
England	Male	3,881,419	2,570,001	66.2%	1,807,622	46.6%
	Female	4,848,248	3,345,891	69.0%	2,412,752	49.8%

Source – OHID

Most of the definitions of frailty consider the physical health aspect of it rather than considering frailty as a combination of both physical and mental health vulnerabilities. One helpful definition that combines both aspects states that "Frailty is a distinctive state of health related to the ageing process, usually characterised by a complex mix of physical, mental health and social care needs. It is a condition where the body's in-built reserves are eroded, meaning people are vulnerable to sudden changes in their health triggered by seemingly small events.[29]

Psychiatric illnesses are common among older adults and are associated with increased mortality and physical co-morbidities. It has been suggested that patients with frailty have a higher prevalence of depressive symptoms (Lakey et al., 2012). Frailty has also been proposed as a risk factor for cognitive decline, mild cognitive impairment (MCI) and dementia (Avila-Funes et al., 2012)

The concept of physical and cognitive frailty have been extensively studied in older adults. However, neither concept incorporates the domain of psychological frailty. Like physical and cognitive frailty, psychological frailty results from aging-related decreases in physiological and psychological reserves, contributing to elevated vulnerability to stressors and increased morbidity risks. (WHO, 2006).

Figure 23 below shows the estimated number of people aged 65+ who have a comorbidity of physical and mental health together. Both Middlesbrough and Redcar & Cleveland have higher rates or those with both physical and mental health conditions, and similarly to the multi-morbidity estimates is higher in females compared to males.

Figure 23 - Rates of comorbidity (physical and mental health) – aged 65+

Area	Sex	Population	Physical & Mental health comorbidity	
			Number	*%*
Middlesbrough	Male	9,162	1,797	19.6%
	Female	11,673	2,827	24.2%
Redcar & Cleveland	Male	11,901	2,294	19.3%
	Female	14,524	3,525	24.3%
England	Male	3,881,419	651,215	16.8%
	Female	4,848,248	1,088,439	22.5%

Source – OHID

While evidence suggests that older adults with a functional mental illness such as depression or anxiety are at an increased risk of becoming frail and often experience the highest levels of frailty, no frailty assessment tools have been developed or validated in this regard.

To assess and manage frailty requires an interdisciplinary approach that encompasses functional, psychological and medical input and includes long-term planning within our complex and changing healthcare systems. Patients with frailty can be expected to be involved with multiple specialties and will require flexibility and pragmatism in management[30]

Case Example Annie
'Annie', an 82-year-old female, presented to the frailty clinic having suffered numerous falls and multiple admissions to hospital; she was assessed by an occupational therapist and a social worker. After reviewing her at home the social worker felt concerned about her mood and her living conditions; there was evidence of self-neglect with out-of-date food and her older husband (and main carer) had visual impairment, poor self-care and was drinking alcohol excessively. Annie was seen by the old age psychiatrist, who found that she had depression, with some evidence of mild cognitive impairment secondary to her depression. She was started on an antidepressant and referred to the local community choir. Her husband was referred to the sensory team and given support with reducing his alcohol intake. The occupational therapist assessed the home situation and put appliances in place to enable the couple to continue to function at home. Additionally, they were linked into the local befriending service. She did not attend hospital as frequently and a potential deterioration in her husband's health was avoided.

Source - the Royal College of Psychiatrists

When considering frailty, it is essential to see it as a combination of both physical and mental health vulnerabilities. The above case example shows how care for frail older people involves blending a chronic care approach with a rehabilitation approach to optimise function. The interventions should however be prioritised to avoid the risks of over treatment and adverse side effects.

While there is increasing evidence that frailty can be prevented, treated and potentially delayed, in order to achieve this, screening for frailty is recommended for individuals with mental disorders who are at risk of premature mortality. As well as the need for a reliable and valid tool to assess frailty in this population.

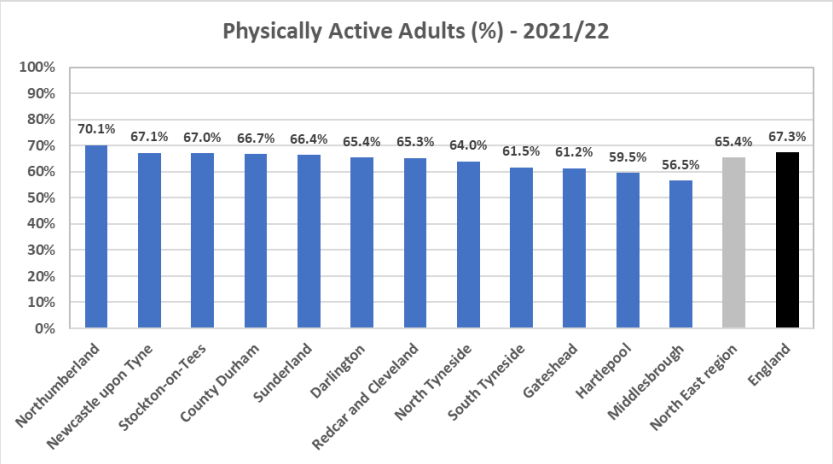
Mental health support for frail older people needs to address late-life anxieties as well as depression, physical health issues and align with older people's need for independence and facilitate coping skills.

4.8 Physical activity

A study analysing the relationship between frailty syndrome, the combination of physical activity levels and sedentary behaviour in older adults, found that frailty is more prevalent among individuals who present with insufficient levels of physical activity and, at the same time, spend excessive time in sedentary behaviour and concluded that Strategies to encourage physical activity that are aiming to prevent frailty in older adults, should focus on reducing the time spent in sedentary behaviour.[31]

The level of physical activity in the populations of Middlesbrough and Redcar & Cleveland are lower compared to England rates. In Middlesbrough the rate is 56.5% compared to 67.3% in England. This is the 6th lowest level for local authorities in England. Redcar & Cleveland rate is higher at 65.3%. Although this rate is for all age adults, levels in older adults will likely be lower also.

Figure 24 - Physically active adults (%)



Source – Fingertips, OHID

Insufficient physical activity is related to increased vulnerability to adverse health outcomes and, consequently, to higher probability for frailty in older adults. Regular physical activity can help to promote improvements in both physical and psychological health and can contribute to the reversal of detrimental effects of chronic diseases as well as the maintenance of functional autonomy in older adults. However, physical activity levels have been decreasing over time due to the increasing use of technology, further impacting on sedentary behaviour. This is a major concern in older adults, as they more often present with insufficient activity levels when compared to other age groups.

Many older population groups were unable to participate in regular exercise during the COVID-19 Pandemic due to lockdown, shielding and social distancing regulations. Leaving our most vulnerable older people, more prone to physical deconditioning due to a drop in physical activity levels, which increased the risk of falls, sedentary behaviours, and increased isolation.

Where routine was a preventative factor for isolation and physical and mental decline, this was disrupted due to COVID-19 with many older people missing set routines, they may have had with family, friends and carers, such as attending classes at a local leisure centre, or attending community groups and activities that they used to go to, including dementia friendly tea dances, carpet bowls,

chair based exercise, and falls prevention programmes. Those who would normally attend regular community activity or leisure centres were significantly affected by the pandemic.

An AI sentiment analysis looked at what easing lockdown measures meant for South Tees and how people had been talking about physical activity, social distancing and mental and physical health online. From this study it was predicted that the physical and psychological impact of Covid-19 and lockdown to last way beyond the easing of lockdown restrictions. (Sport England You've Got This Programme)

Everyone Active has a contract with Middlesbrough and Redcar and Cleveland councils to operate leisure services in both areas and operate 5 leisure centres in Redcar and Cleveland and 4 in Middlesbrough. Recent figures show attendances in both Middlesbrough and Redcar and Cleveland have gone up substantially year-on-year by 11% and 12% respectively. Everyone Actives aim is to improve the long-term physical health and mental health and wellbeing of residents and getting people more active including older residents.

Everyone Active Leisure Centres in Middlesbrough are averaging a combined total of between 4,000-5,000 attendances per month for over 65s which is a total of 55,000 attendances in the last 12 months. The Neptune and Rainbow Leisure Centres being the most popular for over 65s in Middlesbrough. Everyone Active has had between 7,000 and 13,000 attendances in over 65s per month at Redcar and Cleveland Leisure Centres, a combined total of 131,000, with Redcar and Saltburn Leisure Centres being the most popular.

Frail, inactive people have much to gain from increasing physical activity levels and building strength and balance, including those with osteoporosis. Even small improvements in strength and balance can reduce a frail individual's risk of falling and improve their confidence.

The Living Longer Better Programme is supported by the Active Partnerships of Sport England. It is population based and its aim is not only to prevent the problems that have been blamed historically on the ageing process, notably frailty and dementia, but also to provide a therapeutic programme enabling increased activity – physical, cognitive and emotional – for people who already have one or more long term conditions, including dementia and frailty.[32]

An objective of the Living Longer Better programme is to Increase physical ability, resilience and healthspan, as well as preventing falls and frailty and the aim is to:

- Help people feel and function better
- Prevent or delay the onset of dementia, disability and frailty
- Focus on the three Rs: regain what they lost during lockdown, recover the strength stamina and suppleness they have lost in the last decade, and recondition the body that disease and inappropriate activity has deconditioned.

Sport England suggested that recommendations for physical activity are tailored to the functional and cognitive capacity of each individual and that this approach is further supported by environmental aids and adaptation, such as seated exercise plans.

Dr Travis a GP and assistant professor of public health and primary care at Trinity College Dublin, focused his PhD on reversing frailty and building resilience in older people. His research included a randomised control trial of 168 participants (aged 65+ with clinical frailty score <5) enrolled from six general practices. Some participants were involved in Primary Care Interventions and significant improvements were seen in the intervention group compared to the usual care group, including reversal of frailty, better grip strength, increased bone mass, and improved activity levels. The study

found that twenty minutes of daily exercise can help reverse frailty and build resilience in over 65-year-olds using a combination of simple strength exercises and dietary changes.[33]

Frailty should not be a barrier to exercise, but rather one of the most important reasons to prescribe it. Like any other medical treatment, to prescribe exercise as a drug will require a full understanding of its benefits, dose-response characteristics, modality-specific adaptations, potential risks, and interactions with other treatments. Additionally, exercise prescription should be a mandatory component of training for all healthcare professionals in geriatric medicine and gerontology[34]

4.9 Frailty and Diabetes

Elderly and frail individuals with diabetes are at marked increased risk of adverse effects of treatments for diabetes, including admissions to hospital and hypoglycaemia[1]. The importance of frailty is increasingly recognised in clinical guidelines of diabetes management in older people as they are less likely to benefit from the long-term protective effects of good glycaemia control.

Severe hypoglycaemia is the second commonest cause of hospital admission for drug related adverse events associated with an increased risk of CVD events or death, particularly in people with pre-existing CVD.[35]

A lancet review suggested that the prevalence of diabetes is increasing worldwide particularly in older people due to increased life expectancy[36] The Study did not find an association between hypoglycaemia or time below range of blood glucose concentrations and frailty, but speculated that this might be due to patients in the study being relatively young (median age 74 years and having a mild degree of frailty (based on their frailty index score), leaving a need for further exploration in those with severe frailty and older age.

A population-based cohort study of people with new-onset type 2 diabetes (mean age 66 years) showed that hypoglycaemic episodes increase the risk of frailty by 44% and another study showed that glycated haemoglobin was inversely correlated with the clinical frailty scale 8, therefore, dysglycaemia in both directions (either low or high blood glucose) is likely to be a risk factor for frailty. A further study found a relationship between blood glucose and frailty, with HbA1c[2] of 7·6% associated with the lowest risk concluded that a glycaemic target of this range needs to be confirmed in future studies. With new-onset type 2 diabetes (mean age 66 years) the study showed that hypoglycaemic episodes increase the risk of frailty by 44%. [37]

There are growing concerns that intensive treatment with insulin and sulfonylureas in older people with low HbA1c increases the risk of hypoglycaemia, frailty and dementia are also risk factors for hypoglycaemia, further increasing the risk of morbidity, and mortality. Older people are also less likely to benefit from the long-term protective effects of good glycaemic control and are at risk of inappropriate polypharmacy due to co-morbidities.

South West London ICB produced some guidelines to help identify diabetic adults affected by frailty and to help minimise the risk of adverse health events and outcomes. They looked at a number of

[1] Hypoglycaemia, or a "hypo", is an abnormally low level of glucose in your blood (less than four millimoles per litre). When your glucose (sugar) level is too low, your body doesn't have enough energy to carry out its activities.

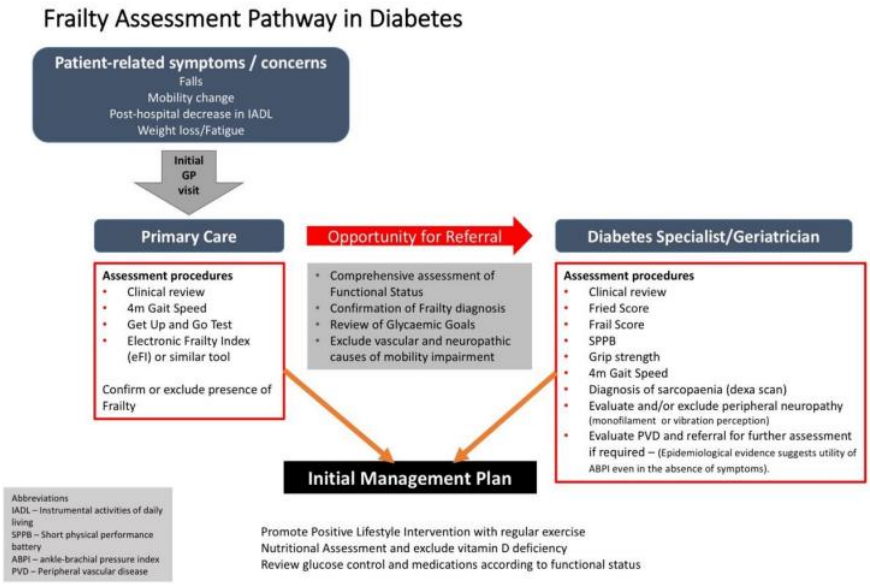
[2] HbA1c is your average blood glucose (sugar) levels for the last two to three months. If you have diabetes, an ideal HbA1c level is 48mmol/mol (6.5%) or below. If you're at risk of developing type 2 diabetes, your target HbA1c level should be below 42mmol/mol (6%).

approaches to detect the presence of frailty in community-dwelling older adults who also have a diagnosis of diabetes. [38]

The following is to consider frailty in any acute presentations suggestive of a frailty syndrome

- Falls (e.g. 'collapse', 'legs gave way', 'found lying on floor)'
- Immobility (e.g. sudden change in mobility, 'gone off legs' 'stuck on toilet')
- Delirium (e.g. acute confusion, worsening of pre-existing confusion/short term memory loss)
- Incontinence (e.g. new onset or worsening of urinary or faecal incontinence)
- Susceptibility to side effects of medications (e.g. confusion with codeine, hypotension with antidepressants).
- Gait speed - taking more than five seconds to cover four metres
- Timed up-and-go test - time taken to get up from a chair, walk three meters, turn around and sit down. 8 o Frail if >8 secs under age of 70, >9 seconds if 70-80, >10 seconds if 80-90 years

A general frailty assessment pathway for people diabetes is presented in Figure _ (below).



The British Geriatric Society recommends that the prisma 7 screening tool is considered in over 65s with a diagnosis of Type 2 diabetes to detect frailty levels. Example included below.

1] Are you more than 85 years?
2] Male?
3] In general do you have any health problems that require you to limit your activities?
4] Do you need someone to help you on a regular basis?
5] In general do you have any health problems that require you to stay at home?
6] In case of need; can you count on someone close to you?
7] Do you regularly use a stick, walker or wheelchair to get about

SCORING: If the respondent had 3 or more "yes" answers, this indicates an increased risk of frailty and the need for further clinical review

Where there is physical or cognitive impairment, or functional loss, referral to geriatricians or other skilled clinicians for a comprehensive assessment should be considered.

4.10 Cognitive Frailty and Dementia

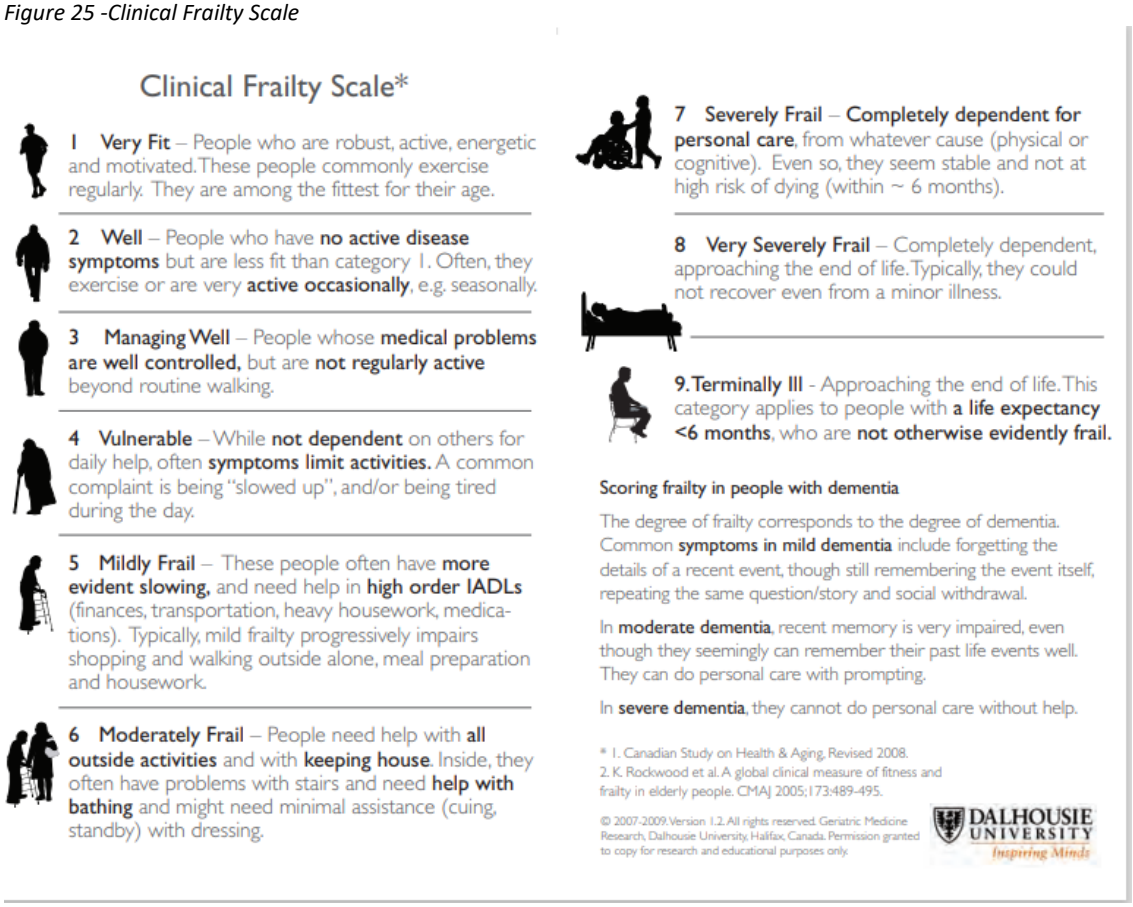
See also goal – ***(We want to ensure our communities are dementia friendly)***

Physical frailty emphasises on age related physiological changes in the human body. These physiological dysfunctions can also contribute to progressive declines in cognitive functioning, also known as cognitive frailty.

Over time, many people with dementia experience physical frailty. This is particularly experienced by older people, although it can also occur in people with young onset dementia (where symptoms develop under the age of 65). Understanding, recognising, and managing frailty means the person with dementia can access the right care and support and have a better quality of life. It is important that healthcare professionals look out for signs of frailty and conduct a proper assessment so that it can be managed well. The signs of frailty can be missed if overshadowed by another long-term condition like dementia. Knowing that a person has frailty and ensuring that health professionals are aware, can help to aid decision making so they get the right treatment and support, particularly in emergency situations like an unplanned hospital admission.

A **Clinical Frailty Scale (CFS)** was introduced to summarise the overall level of fitness or frailty of older adults after they had been assessed by an experienced clinician (Rockwood *et al.*, 2005) and was extended in 2008 include a comment about scoring frailty in people with dementia.

Figure 25 -Clinical Frailty Scale



In scoring the CFS in People with Cognitive Impairment, the degree of dementia is correlated to the level of frailty:-

- Mild dementia would go with mild frailty. In both cases, the person is independent in their personal or basic ADLs, but dependent on one or more instrumental ADLs (such as finance, transportation, heavy housework, medications).
- Recent memory is very impaired in people with moderate dementia, even though they seemingly can remember their past life events well. As with moderate frailty, they can do their personal care with prompting or set-up.
- In severe dementia, as in severe frailty, people have progressive difficulty in performing personal ADLs and require increasing amounts of hands-on assistance.

Particular attention should be paid to those who score 5 or more on the CFS as this is the marker for requiring a comprehensive geriatric assessment (CGA) and often referral to geriatric or frailty specialists.

The CGA is the gold standard for the management of frailty in older people and is a process of care that involves holistic, multidimensional, interdisciplinary assessment of an individual by a number of specialists of many disciplines [39] (including doctors, nurses, pharmacies and therapists) all working together with an older person to identify their everyday and medical needs and create a plan to ensure that these needs are met. The CGA can also determine if frailty can be reversed. It looks at signs, symptoms, and needs in a number of different categories including:

- functional capacity: the ability to perform everyday activities
- falls risk
- cognition, including the person's level of confusion, stage of dementia, and psychological symptoms
- mood
- polypharmacy: medications and their effects
- social support: who supports the person and whether the current level of support is sufficient
- financial concerns
- goals of care including the person and their family's wishes around care and what is achievable
- advance care preferences: planning for the progression of the person's condition and end-of-life care

The person with dementia and their family should always be fully consulted and involved following a CGA a care and support plan (CSP) should be formulated, focusing on maintaining and optimising the health and functionality of the person living with frailty, recognising if the person becomes unwell, including when to seek help and who from and making an ongoing care plan. (Dementia UK)

4.11 Loneliness and Isolation and Frailty

See also goal- (***We want to reduce the levels of loneliness and isolation in our communities and ensure our places promote healthy ageing***)

Studies have found that a high level of loneliness was positively related to the worsening of frailty status over time and negatively related to the recovery of prefrail or frail older adults. Lonely people are more likely to be inactive, which increases the risk of frailty in older adults. The inflammatory system is a channel through which biological processes mediate this relationship. Specifically,

loneliness affects the inflammatory system which provides a physiological basis for the geriatric syndrome of frailty. [40]

Poor physical health can also lead to fatigue and mobility difficulties, which are harmful to the establishment and maintenance of satisfactory social networks and contribute to loneliness.

Although previous studies have shown that loneliness is a major risk factor for health outcomes, and may accelerate physical ageing, impair cognitive ability, affect physical function status and increase the risk of diminished longevity in older people, both frailty and loneliness warrant more attention in health and social care systems.

Social prescribing and utilisation of community services working together supports and prevents loneliness, social isolation and frailty. Primary Care Networks (PCNs) have been set up to support people with more complex needs, providing anticipatory, proactive care and having the ability to offer a range of interventions. They give people improved access to services and support them physically, mentally and socially. PCNs signpost and refer people to relevant services, offer face-to-face assessments and use shared decision making to determine the individual's needs. (BJN April 2022)

Social prescribing involves signposting people to a variety of local area-based services that can support them to become integrated into their community. It is made up of many different community and voluntary organisations that provide a wide range of services to match the individual's interests, such as gardening projects, information on becoming a volunteer, befriending services, and education services.

Studies illustrate that interventions targeting one health domain in older adults can be effective in supporting change in another. Future strategies for the health and social care system should consider the spill over effect of health inventions. A focus on social prescribing and utilisation of community services all working together, can support and prevent loneliness, social isolation and frailty.

4.12 Malnutrition

Malnutrition is a condition where a person is deficient in nutrients, such as protein, vitamins and minerals, or not getting enough calories. This has many effects on health and body function, including increased frailty, delayed wound healing, and higher mortality.

Data shows that people aged 65 years and over are more likely to be malnourished compared with any other age group. And this number is on the rise. In the UK, adults over 60 admitted to hospital with malnutrition increased from 1,405 in 2008 to almost 5,000 in 2018. [41]

There is an estimated three million, or one in 20, adults affected by malnutrition in the UK and is currently costing the NHS £20 billion per year. Malnutrition affects every system in the body and results in increased vulnerability to illness and complications, which can lead to prolonged hospital stays, more visits to the doctor and, in some cases, death (NHS england)

Nutrition is a crucial factor closely related to frailty syndrome. Malnutrition can significantly aggravate the development of frailty because long-term malnutrition, insufficient protein and energy intake can lead to weight loss (one of the five criteria of frailty phenotype), fatigue, weakness, slow walking speed and low level of physical activity.

Frailty and malnutrition are actually reversable and if identified early can prevent the onset of disability. Common signs of malnutrition in older people may include their clothing, jewellery and

dentures becoming loose, having a reduced appetite, lack of interest in food and drink, tiredness, altered mood, and weakness. Lack of appetite or lost interest in food are only some tell-tale signs.

The Managing Undernutrition South Tees (MUST) team provide essential nutrition training and support to elderly care homes in Middlesbrough and Redcar and Cleveland. The service puts all residents within elderly care homes at the centre of nutritional care and ensures all staff have the knowledge and skills to be able to support and implement individual nutritional needs, reducing the need for onward referral to primary and secondary care.

The MUST service began as a pilot project in 5 Middlesbrough care homes in 2012, aimed at improving outcomes in poorly performing homes. Care homes were targeted if they had the following concerns:

- High referrals to Dietitian for Nutrition Support
- High admission rates to acute NHS Services
- High prescriptions of Oral Nutrition Supplements
- Poor CQC ratings
- Safeguarding Alerts

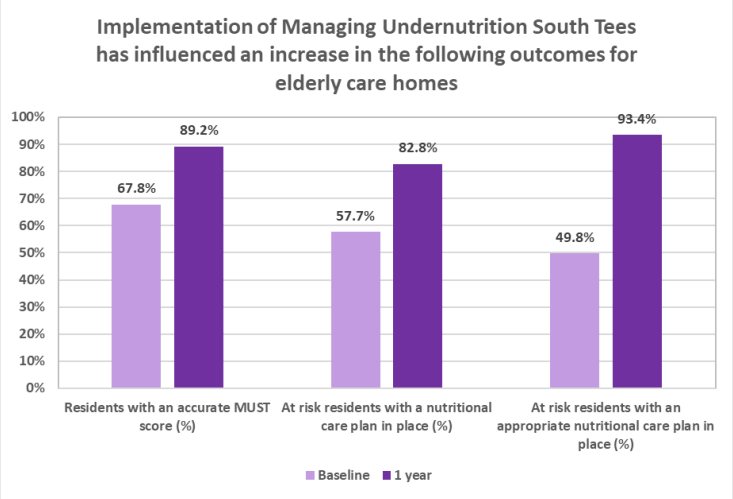
Since 2012, MUST has continued to show excellent patient outcomes and standards of nutritional care. It is now implemented across 60 Middlesbrough and Redcar and Cleveland Elderly Care homes and is a preventative Public Health approach which significantly improves quality of life and care. In April 2022 funding was secured to develop and implement our service across a further 35 Learning Disability and Mental Health care homes in the area, which was rolled out later in 2022.

The MUST deliver a variety of training packages to care homes around nutrition and hydration to ensure care homes are meeting the following standards:

- CQC essential standards of quality and safety in nutrition
- Early identification & treatment of malnutrition
- Appropriate prescribing of nutritional supplements
- Practically achieve nutrition and dietary recommendations
- Maintaining adequate hydration

The below graph demonstrates an increase in outcomes after implementing the MUST Service, specifically for residents at risk of malnutrition.

Figure 26 - MUST Service outcomes



Source – MUST Service

Identifying those at risk of malnutrition early is essential to avoid a significant risk of aggravating the development of frailty and reducing the risk of adverse health outcomes.

4.13 Accessing long term social care support

It is important that all people living with frailty have access to proactive, joined-up care to maximise health and wellbeing and prevent problems arising in the first place. Equally important is access to rapid, specialist services in the event of a health or social care crisis. [42] Teams who work in a more integrated way to deliver frailty care across health, community and social care services, optimise opportunities to provide effective person-centred care. This helps to slow deterioration in people and avoids potential for admission to hospital.

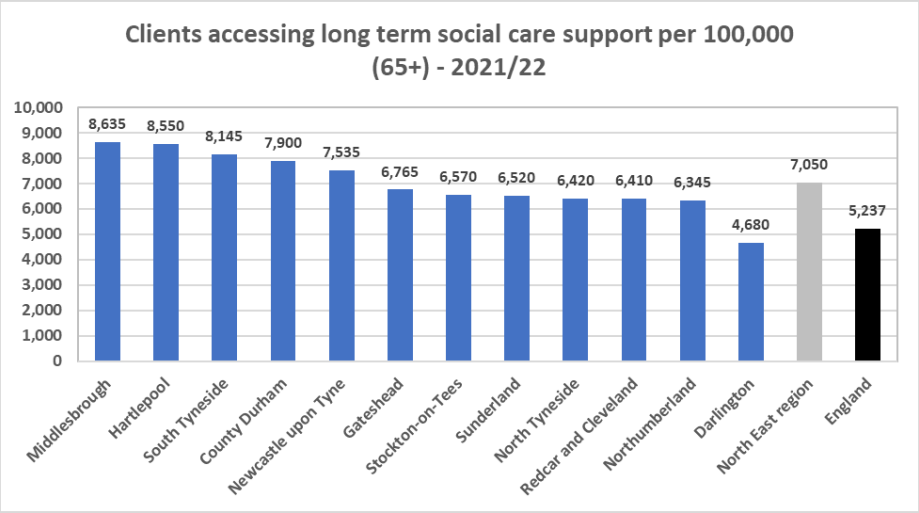
Older people are not only the main users of NHS services, but they are also a potentially vulnerable group with more complex health and social care needs. They deserve the same standard of treatment as we would expect for patients of all ages, and this is very clearly set out in both the NHS Constitution and the Equality Act[43]

Social care services across the UK face longstanding pressures. With consistent underfunding, access to publicly funded care for older adults is now limited to those with the lowest means and highest needs. Access to social care is both means and needs tested. Individuals with care needs are entitled to an assessment by their local authority irrespective of their financial situation. Anyone with means in excess of £23,250 (including income, assets and savings) are required to self-fund their social care. Individuals with assets between £14,250 and £23,250 may be able to access some funding, and anyone with assets below £14,250 are able to access full funding, depending on level of need. National eligibility criteria for need were set out under the Care Act (2014).

Social work is a key principle to ensure wide and inclusive participation of users in decision making and services. Future research needs to gain insight into questions such as the kind of social care services older people would like to have, how they would like to relate to social workers, or how they would like to engage in effective participation.

The data for Middlesbrough shows a rate of 8,635 per 100,000 population of adults over 65 requiring long term social care support compared to the England rate of 5,237. Middlesbrough were the 10th highest Local Authority in England. Redcar and Cleveland had a rate of 6,410 per 100,000 population and were the 64th highest Local Authority requiring long term social care support.

Figure 27 - Clients accessing long term social care support



Source – ASCOF

The number of older people approaching their local authority for publicly funded support is increasing and the social care system is struggling to keep up with demand. A growing number of older people in the population means that the number of people requiring support is increasing, even though today's older people live without care needs for longer than previous generations. Access to and provision of publicly funded care has become worse over the past seven years, with thousands waiting for assessments and waiting for the care they need to begin.[44]

There is evidence to support working with people living with frailty and their families, to put in place care and support plans tailored to meet individual needs, based around people's own goals and preferences. However, more research and practice is needed to explore positive effects of older people's participation in social and health care services.

Early identification of frailty matters for preventing avoidable decline in health and independence and we need to proactively support people in the community in order to anticipate and prevent avoidable deterioration with third and independent sector support.

Getting back to normal' or 'finding a new normal' are key focuses for frail older people when considering their preferences. Following acute illness, clinicians should discuss preferences and care planning in terms of an achievable normal, and carefully consider the social context and more research and insight is needed to explore the influences on preferences over time

Further work should also consider developing goal-oriented care for older people living with frailty which is personalised to their specific needs and we need to look across the whole health and social care economy and ensure that the right skills and services are in the right place at the right time; that we genuinely involve older people and their carers in designing services; that all agencies sign up to a shared vision and collaborate effectively; and that we build in meaningful outcome measures.

4.14 Reablement Services following discharge

Reablement is a strengths-based, person-centred approach that promotes and maximises independence and wellbeing. It aims to ensure positive change using user-defined goals and is designed to enable people to gain, or regain, their confidence, ability, and necessary skills to live as independently as possible, especially after an illness, deterioration in health or injury.

Since 2010 the UK Government has substantially invested in reablement services through NHS funding. It is now set within the context of the Government's broad prevention agenda, which aims to promote wellbeing and help reduce unnecessary hospital admissions, re-admissions and delayed discharges.

In England, reablement is seen as a core element of intermediate care that:

- promotes faster recovery from illness.
- prevents unnecessary acute hospital admissions and premature admissions to long-term care
- supports timely discharge from hospital
- maximises independent living and reduces or eliminates the need for an ongoing care package.

A successful hospital discharge is all about providing the right care, in the right place, at the right time. When people no longer need hospital care and being at home is the best place for them to continue their recovery.

Some examples of reablement include, supporting an individual when getting dressed, showering or bathing, preparing meals, moving around their house, participating in social activities, and managing medication. Any individual may need care after hospital for a short time to get back to normal. The focus is to try and reduce the length of stay in the acute setting to avoid delayed discharges and leaving patients more exposed to hospital acquired infection.

Many vulnerable people are discharged into unsafe home environments which exacerbate their frailties and leads to large numbers of re-admissions to hospital. For example, cold and damp homes can severely affect respiratory conditions such as asthma and COPD. A patient is more likely to be readmitted within 30 days of being discharged from hospital if their environment is not safe for them to live in.

Homecare reablement can be a successful cost-minimisation strategy for supporting some older people however, more research is needed about the impact of homecare reablement on health outcomes for different groups of older people; and the effects of different durations of reablement on outcomes and costs for different subpopulations.[45]

In South Tees Middlesbrough ranked the 12th lowest Local authority in England in 2021/22 with 0.6% of people over 65 offered a reablement service after discharge compared to 2.8% in England. Redcar and Cleveland's rate was higher at 2.4%.

Middlesbrough Council has a number of schemes that support hospital discharge, such as telecare with a telecare officer based within JCUH social work team and the handyperson service enabling adaptations and home environment checks to be carried out to prevent delayed discharged and reablement so people can be remain in their own homes and prevent readmission to hospital or to residential care.

The number of people accessing the Middlesbrough Council reablement services in a 6-month period from April – September 2023 was 244 compared to 239 from April 2021 to March 2022 which shows a rising demand in the service. Following the Reablement Team's intervention, 79.4% received reablement support and then had no further needs afterwards, 4.2% despite the intervention were unable to remain at home, 12.3% remained at home but had additional 'ongoing needs' to help them remain independent and 3.9% had passed away.

A new Home from Hospital Service is also available to support older, vulnerable and disabled Middlesbrough residents to live independently when discharged from hospital.

The Community Reablement Service provided in Redcar and Cleveland provides a structured programme of short-term support to enable adults to regain independence following discharge from hospital. The service also supports people in their own homes to prevent unnecessary hospital admission.

The number of people accessing the reablement service across Redcar and Cleveland over a 6-month period from January to June 2023 was 191 compared to 154 over the same period the previous year (Jan-June 2022). The data for Redcar and Cleveland also shows a rising demand for community reablement services.

Of the 191 people that started with the reablement service, 63.54% were discharged independently, 9.39% went home with a reduced package of care and 3.31% were discharged with family support.

3.87% required the same level of support and 1.66% had their POC increased. 15.47% were admitted into hospital and 1.10% were admitted to the intermediate care centre at Meadowgate. One person sadly passed away.

The average duration between start and end of service was 24.22 days compared to 27.11 days the previous year.

Housing providers such as Beyond Housing and Thirteen Housing Group, have a number of supported living schemes that offers the chance for older, disabled and more vulnerable people to live independently for longer with a helping hand if it's needed. The independent living teams are experts in finding suitable housing for vulnerable or disabled people. Working with Local councils and the NHS they can offer advice and major or minor adaptations to properties to meet people's individual needs.

Minor adaptations are small enhancements such as grab rails, lever taps and rails on front doors. In some cases a technical officer will visit the home to assess for any minor adaptations needed. Major adaptations can include installing ramps, widening doors or adding a level access shower. An occupational therapist and technical officer will decide on suitable options for larger adaptations.

Published research is limited and while well-designed reablement intervention programs can have a positive impact on function among older people there is heterogeneity of results in the literature with respect to quality of life, hospitalisation, and unplanned visits to the emergency department. Additional research and studies with rigorous methodological quality are needed.[46]

Evidence suggests that there are positive health impacts of housing with care including reductions in numbers of GP visits, community health nurse visits, non-elective admissions to hospital, length of stay and delayed discharges from hospital, and ambulance call outs, typically linked to reduced incidence of falls[47].

4.15 Delayed transfers of care

A 'delayed transfer of care' (DTOC) occurs when a patient is ready to leave a hospital or similar care provider but is still occupying a bed. Delays can occur when patients are being discharged home or to a supported care facility, such as a residential or nursing home, or are awaiting transfer to a community hospital or hospice.

Older people living with mild, moderate or severe frailty are more likely to have delayed transfers of care as discharging these patients can take longer as it often involves several different professionals and organisations. It can be difficult to organise the next stage of care for frail patients.

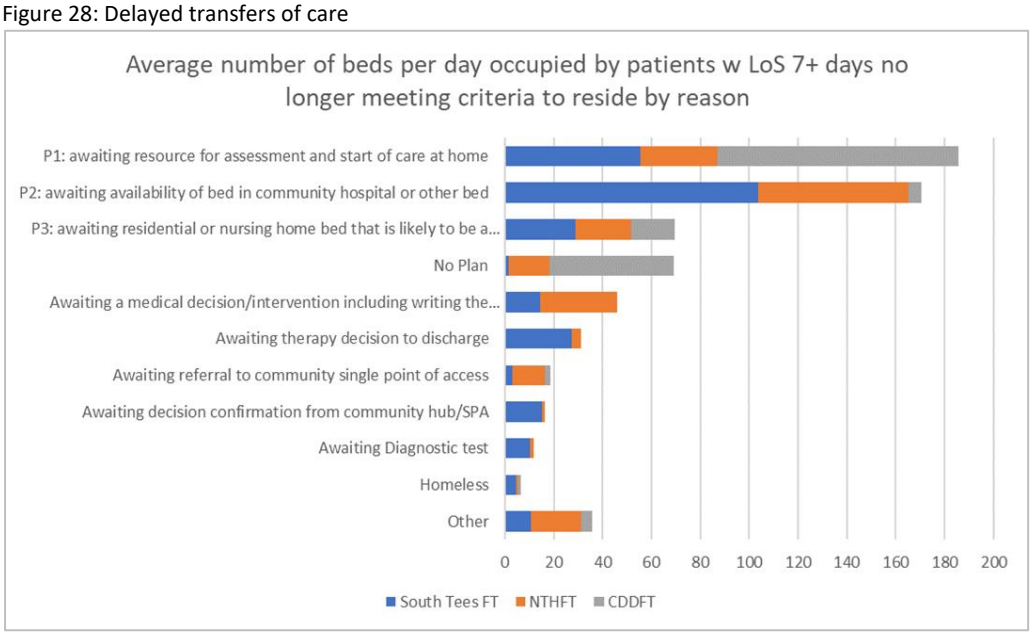
The rate of people over 65 experiencing delayed transfer of care across South Tees is 6% compared to the UK rate of 4.2%.

It is estimated that 45% of people experiencing delayed transfers of care are over 85 and approximately 50% of people aged 85 and over will encounter frailty. Severe frailty often brings over four times the costs of non-frailty although people living with mild, moderate or severe frailty could often have their needs met best in settings outside of acute hospital care.

National data collections on delayed transfer of care (DTOC) was paused during the COVID disruptions. There are not directly equivalent measures, however several measures within the daily discharge sitrep provided by NECS business intelligence team covers similar issues. Most delays in discharging longer stay patients (7+ day length of stay) result from waiting for home care packages (P1) or temporary placement in community hospital / residential care. South Tees has a large number of beds

days for those awaiting bed in community hospital compared to other local NHS trust, as shown in Figure 28 below for the end of September 2023.

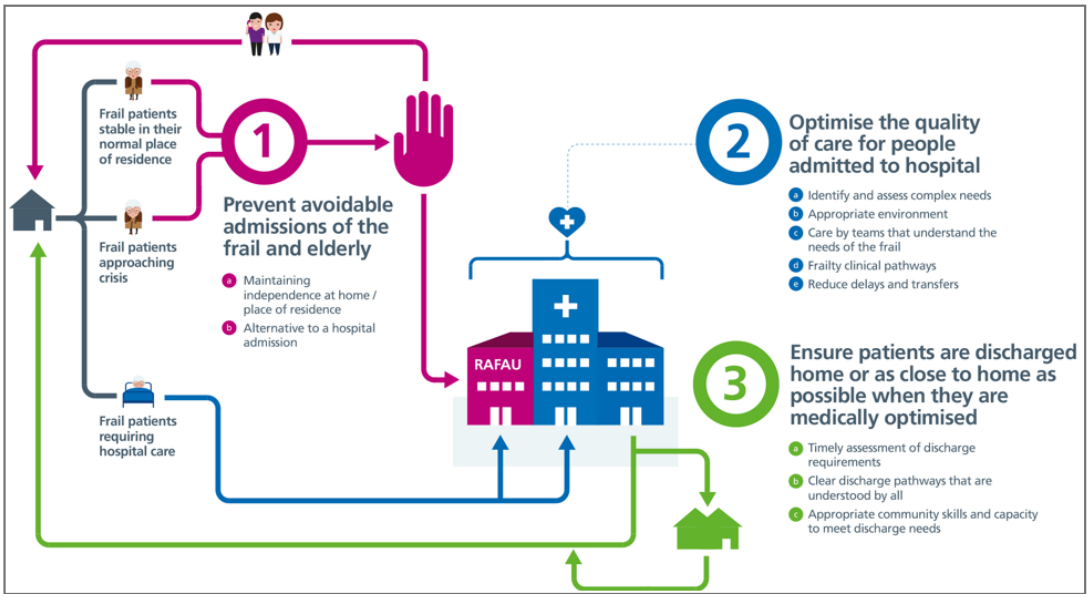
Figure 28: Delayed transfers of care



Source – NECS business intelligence team

The South Tees Hospital NHS Foundation Trust (STFT) are developing a frailty strategy. Figure 29 below shows the 3 strategic aims which are to improve care and support for people living with frailty.

Figure 29 - Strategic aims of South Tees NHS Trust frailty strategy



Source - South Tees Hospitals NHS Foundation Trust

There is strong evidence that by implementing an end-to-end frailty pathway across whole health and care system can raise quality of care and through shifting activity from the hospital sector to the community with health and social care services working together to provide better support at home and earlier treatment in the community to prevent people needing emergency care in hospital or care homes.

Good discharge planning and post-discharge support should include.

- Patient, carers and families involved in decision making from admission.
- Discharge to an older person's normal residence within 24 hours, seven days a week (unless continued hospital treatment is necessary)
- Older people should only be discharged from hospital with adequate support and with respect for their preferences.
- Older people being admitted following an urgent care episode should have an expected discharge date set within two hours.
- There is a hospital based multi-disciplinary team located at the front door of the hospital integrated with the community team focused on the facilitation of discharge.
- Care packages to support discharge should be available within 24 hours of referral to Adult Care and Support.
- Adequate and timely information shared between services whenever there is a transfer of care between services.
- When preparing for discharge, older people and carers should be offered details of local voluntary sector organisations, other sources of information, practical and emotional support including information on accessing financial support and re-ablement services.
- Voluntary sector services should be available to provide a 'welcome home' service for frail older people who live alone 7 days a week[48]

An outcome ambition for the NHS includes reducing the amount of time people spend avoidably in hospital through more integrated care in the community, outside of hospital. The NHS outcomes framework indicators have been grouped around five domains, which set out the high-level national outcomes that the NHS should be aiming to improve and focused on improving health and reducing health inequalities.

Figure 30 - NHS Outcomes Framework 5 Domains

NHS Outcome Framework 5 Domains	7 Outcome Ambitions
Domain 1: Preventing people from dying prematurely	1. Securing additional years of life for the people of England with treatable mental and physical health conditions.
	2. Improving the health related quality of life of the 15 million+ people with one or more long-term condition, including mental health conditions.
Domain 2: Enhancing quality of life for people with long-term conditions	3. Reducing the amount of time people spend avoidably in hospital through better and more integrated care in the community, outside of hospital.
Domain 3: Helping people to recover from episodes of ill health or following injury	4. Increasing the proportion of older people living independently at home following discharge from hospital.
Domain 4: Ensuring that people have a positive experience of care	5. Increasing the number of people having a positive experience of hospital care.
	6. Increasing the number of people with mental and physical health conditions having a positive experience of care outside hospital, in general practice and in the community.
Domain 5: Treating and caring for people in a safe environment and protecting them from avoidable harm	7. Making significant progress towards eliminating avoidable deaths in our hospitals caused by problems in care.

The NHS also identified 10 evidence-based high-impact interventions on emergency care which are focused around reducing waiting times for patients and crowding in A&E departments, improving flow and reducing length of stay in hospital settings [49] Interventions include:-

- Reducing variation in acute frailty service provision. Improving recognition of cases that could benefit from specific frailty services and ensuring referrals to avoid admissions and virtual wards to standardise and improve care across all.
- Virtual wards: standardising and improving care across all virtual ward services to improve the level of care to prevent admission to hospital and help with discharge.

South Tees NHSFT has introduced the expansion of virtual wards, which includes virtual ward capacity which will be scaled up to support patients with Frailty and Acute Respiratory Infection

Frailty virtual wards, otherwise known as Hospital at Home, provide a safe alternative to hospital for patients living with frailty through community-based acute health and care delivery. Central to this approach is services working towards providing a model that is patient centred, and in which home is an option for care. A Hospital at Home for frailty should be available as an option for clinicians to refer adults (aged 65 or over) who have an acute exacerbation of a frailty-related condition. The concept of a Hospital at Home or virtual ward for frailty is now well established in South Tees.

In Leeds the NHS and local authority have opened a new joint recovery centre offering rehabilitative care – to prevent hospital admission, facilitate earlier discharge and promote independence. In its first month of operation, it saw a 50% reduction in length of stay at hospital. Patients also benefit from an innovative approach which will enable people to access their information online.

In Greenwich - Teams of nurses, social workers, occupational therapists and physiotherapists work together to provide a multi-disciplinary response to emergencies arising within the community which require a response within 24 hours. The team responds to emergencies to which they are alerted within the community at care homes, A&E and through GP surgeries, and handle those which could be dealt with through treatment at home or through short-term residential care. Over a two-and-a-half-year period, over 2,000 patient admissions were avoided due to immediate intervention from a Joint Emergency Team and there were no delayed discharges for patients over 65 and over £1m has been saved from the social care budget.

4.16 Permanent admissions to care homes

It is estimated that more than 400,000 people live in UK care homes. These are long-term care facilities which provide 24-hour care to people with functional dependency. Almost half (47%) of beds are in homes with nursing care and the rest are in care homes without nursing (otherwise known as 'residential homes'). While 17% of homes provide care for people with learning difficulties, the bulk of provision is designed to provide care for older people with frailty.[50]

Across both categories of Care homes, care is predominantly provided by social care staff, and many have considerable experiential knowledge of how to provide highly specialised care.

Figure 31 below shows the number of care home and nursing home beds in our two local authorities and the rate of permanent admissions to residential and nursing care homes. Our local rates of permanent admissions to care homes were the highest in England in 2021/22 for those aged 65+ and Middlesbrough has a very high rate of care home and nursing home beds per population.

Figure 31 - Care home bed rates

Indicator	Period	Middlesbrough			Redcar & Cleveland			North East	England
		Count	*Rate*	*Rank**	*Count*	*Rate*	*Rank**	*Rate*	*Rate*
Permanent admissions to residential and nursing care homes per 100,000 aged 65+	2021/22	319	1,374	1st	335	1,071	2nd	739	539
Care home beds per 100 people 75+	2021	1,777	17.2	1st	1,348	9.3	75th	10.8	9.4
Nursing home beds per 100 people 75+	2021	845	8.2	2nd	549	3.8	111th	5.8	4.6

**Rank of out 150 local authorities*

Source – Fingertips, OHID

An analysis of available practice data extracted from the Primary Care RAIDR database for those identified as care home residents, showed that in Middlesbrough 362 have an existing severe frailty diagnosis, 365 have existing moderate frailty diagnosis and 200 have an existing mild frailty diagnosis and there are 364 without a frailty diagnosis. In Redcar 333 have an existing sever frailty diagnosis, 272 have existing moderate frailty diagnosis and 122 have an existing mild frailty diagnosis and there are 473 without a frailty diagnosis.

When older people with frailty move to a care home it is usually permanent, unless it is for time-limited assessment or rehabilitation as part of an intermediate care programme. The transition to a care home is frequently associated with sudden or marked deterioration in physical function, cognition or both and when a person is admitted, a Comprehensive Geriatric Assessment (CGA) should be considered and a personalised care plan put in place aimed at prevention of admission to hospital, optimising management of long-term conditions and ensuring the wishes of the resident are at the forefront of any decision made.

CGA is currently the best evidence base for diagnosing and assessing a person with frailty. The process is often multi-disciplinary and carried out over a period of time. Not all people with frailty will require a CGA but it is likely that as a person's level of frailty becomes more severe, then a CGA will need to be undertaken, prior to a case management approach to ongoing care delivery. As part of the Care and Support Planning approach, it will become clear in the 'conversation step' whether a wider professional dialogue is required based on a person's increasing complex needs resulting in an onward referral for a CGA.

The average life expectancy in UK care homes is 24 months for care homes without nursing and 12 months for care homes with nursing. Many residents are admitted to a care home with one or more rapidly deteriorating medical conditions. Many of this group die shortly after admission, while another group of residents live in care homes for much longer. It could be argued that all care home residents should be considered for end-of-life care, but it should not be taken for granted that all will need it straight away.

5. What are we already doing in relation to this goal?

A consultation workshop held in July 2023 at Inspire to Learn in Redcar and Cleveland, included over 40 professionals including ICB leads, NHS Clinical Leads and other representatives from Statutory and Voluntary Community Organisations, to share their expertise, knowledge, and experience in relation to the frailty goal and other age well goals, with a focus on the below questions.

- What partnerships, programmes and projects are in place in relation to this goal and what is the focus of their work?
- What services (including commissioned services) are in place to address local needs in relation to this goal?
- What are older people's experiences in relation to this goal?
- What are the key recommendations in relation to this goal?

Notes from the table discussions and further reflections are included in table_ below.

5.1 What services including commissioned services, are in place to address local needs in relation to this goal?

Middlesbrough Council are in the process of building on current productive partnerships and establishing relationships and referral pathways with a variety of teams within James Cook Hospital, this includes the Transfer of Care Hub and Frailty Team.

The aim is to build on this integration to be a "One-stop Shop" for older and vulnerable people who require support in attending hospital or being discharged and require assistance from numerous wrap around services.

Primary Care Networks have Social Prescribers in place to offer proactive and preventative support for people through GP practice. This support can reduce impact on GP appointment times and other services. PCN are looking to work in partnership with social care and South Tees NHS Trust. Further investment in social prescribing would support 'one stop' approach for people being discharged from hospital.

Frailty ward rounds introduced in 2019 at James Cook University Hospital to help improve the care of older people following a traumatic injury. This ensures that all patients aged 65 or over have a Clinical Frailty Scale completed by an older people's consultant within 72 hours of admission. The ward rounds involve a bone assessment and liaising with therapists to try and identify any underlying signs of osteoporosis.

Public Health South Tees launched a new service following the pandemic and sees referrals coming in from any Health Care provider and focuses on three main offers. Clients are offered a range of physical activities that may improve their circumstances with a person-centred approach, individual goals are set up to support a positive outcome over the 12 weeks. Prior to discharge an exit plan is created identifying suitable community-based activities. By working collaboratively clients are passed to external providers to ensure continuity, and reduced costs to all clients who take up offers through the team. An additional programme focusing on long Covid and "Waiting Well " offer in conjunction with Impact, allowing people on waiting list for Mental Health service free access to gym and lifestyle support sessions.

The SPA is working with between 48 and 100 clients per month, a total of 716 clients since January 2023.

Workshop notes – frailty discussions

Workshop Notes	Further comments and reflections
Chair based exercises in care homes needed and staff trained appropriately.	Dementia Friendly Care Home Guide /self-assessment tool is designed to increase opportunities for Staff training and physical activities in care homes including chair exercise (include hyperlink)
Waiting Well service is in place at South Tees Hospital	Waiting Well is a service supporting patients who are waiting for planned surgery or treatment, such as knee and hip replacements. Waiting Well - South Tees Hospitals NHS Foundation Trust
Dementia Friendly Community Activity – this can address frailty too so we should recognise joint benefits.	See dementia goal needs assessment report for more information on inclusive dementia friendly community activities
Beyond Housing – Reach and Respond home support system in place	See 4.12 for more information on reablement services
Middlesbrough Telecare Services	See 4.12 for more information on telecare support
We need to map what reablement services like these are available across South Tees	See recommendation 1
Hospital at Home activity – positive approach to getting people on their feet through a "virtual ward" approach supported by acute medical and community teams at home (usually 14 days involvement). Working with South Tees Social Care Teams	See 4.13 for more information on virtual wards
Ambulance Service – do frailty assessments on every visit (frailty questionnaire used)	Ambulance services are well positioned to identify frailty and influence the 'care pathways'
New PA facility at Neptune Centre, Berwick Hills aimed at frail/disabled people	This new facility utilises power-assisted exercise equipment to empower individuals to improve their fitness and strength in a supportive and social environment
Live Longer Better work (national initiative) – needs more advocates	See 4.7 for more information on the Live Longer Better Programme

5.2 What are older people's experiences in relation to this goal

Workshop notes	Further comments and reflections
Older people tend to stop exercising as they age, as though this is what is normal or expected.	This was further impacted by COVID and lockdown measures
People struggle to find community activities or therapies and there are long waiting lists for support	Social prescribing link workers are based within PCNs and work with people referred to support them to access a wide range of communities activities. This support depends on GP practices referring people to social prescribing to access this support.

High re-admission rates if discharged too quickly from hospital – also, patients often just “left in bed” whilst in hospital which increases their immobility and frailty.	See recommendation 6
People who have previously been very physically active and then become frail, often feel the impact of this more	The NHS Steady On Your Feet campaign includes advice, guidance and resources designed for anyone worried about feeling unsteady on their feet. They aim to equip people with simple tips to stay active, independent and safe during everyday activities. Welcome to Steady on Your Feet South Tees
Lack of PA sessions; costs involved; access and less community sessions. Travel is an issue for many older people	Transport and accessible activities is a priority for the Age Friendly Communities Programme. See recommendation _
Must accept that lots of older people are hesitant to admit they are frail or having falls	The steady on your feet self-assessment tool is designed to prevent falls Falls Prevention - Self Assessment
Lack of GP appointments available – e-consults don’t work for older people	Healthwatch top tips for accessing a GP HW ST GP Booklet Digital Aug 2023.pdf
We often tell frail family members to “sit down and stay safe” – we should give better advice.	Strength and balance programme for patients and carers and supported by physiotherapist. Strength and balance exercise programme for falls prevention Keeping well at home – local videos Keeping well at home – Teesside TV
Older people end up with multiple contacts around their ageing / physical conditions and can be very confusing for them.	Different teams and clinicians can result in lack of familiarity, safety and awareness. Communications with patients’ needs improving.

6. What is the current evidence base?

See appendix_ For Health Determinants Research Collaboration (HDRC) for adults and frailty evidence base issues.

7. What do local people say?

See appendix _ Artists Brief (Creative Consultation)

8. What are the recommendations?

1.	Review reablement and rehabilitation Care with the aim of one integrated pathway which will contribute to preventing unnecessary admissions to hospitals and residential care, as well as ensuring a timely transfer from hospital to community. (Will also support the NHS long term plan 2-hour crisis response, for people living in their own home)
2.	Raise awareness in communities re the need for patients to seek regular medication reviews to reduce potential adverse consequences of polypharmacy, through increased uptake of medication reviews.
3.	Review current processes in primary care for identifying and managing frailty to determine a model that enhances the care planning for people living with frailty. Need to standardise frailty screening tools and ensure consistent reviews.
4.	Work with community partners to review current education programmes on how to prevent frailty such as the importance of staying physically active. Working with key partners to embed frailty awareness and education into the community.
5.	Develop a process to ensure existing and future referrals to IAPT who are identified with low mood/depression on the eFIregister are also offered a referral to befriending services to address isolation.
6.	Explore potential for an integrated frailty service or Team within each hospital who work in a more integrated way to deliver frailty care across health, community, and social care services to optimise opportunities to provide effective person-centred care, to slow deterioration in people and avoid potential for admission to hospital.
7.	Frailty Service or Team within each hospital. All hospital wards and workforce trained in the management of frailty. Ensure the inclusion of a Dementia and Frailty protocol to encourage a more seamless pathway of care when people are admitted (To include Johns Law and the rights of Carers)
8.	Proactively work with health and social care services to ensure early identification and intervention to slow decline of frailty and avoid hospital admission.
9.	Consider including participatory arts as an integral and necessary component of quality care for older people living in care homes (Influenced by policy makers and those working in the care sector)

9. Appendix

NIHR | Health Determinants Research Collaboration South Tees

Adults and Frailty: Evidence Base and Issues

E Tuschick, M Din & A Divers

Mental Health:

- The impact of physical and social environment on mental health and potential mediating effects of loneliness in older adults (Domenech-Abella et al., 2021; Luo et al., 2020; McPhee et al., 2016).
- The long-term physical and mental health effects of shielding in response to COVID-19 for older people (aged 70+) and other effects of COVID 19. (Bailey et al., 2021; Steptoe & Di Gessa, 2021; Vrach & Tomar, 2020).
- The relationship between loneliness and mental health in older people accessing interventions delivered through the voluntary sector (Dayson et al., 2021).
- The exploration of frail older peoples' experiences of depression and/or anxiety and how services could be adapted to their needs (Frost et al., 2020; Furtado et al., 2020; Maier et al., 2021; Mutz et al., 2022; Orgeta et al., 2017).
- The prevalence of depression, self-harm, and suicidal behavior in older people, how it is measured and how care homes respond to these issues. (Gleeson et al., 2019).
- The value of maintaining social connections for mental health in older people (Newman & Zainal, 2020).
- Frailty and severe mental illness and depression (Pearson et al., 2022; Sutton et al., 2019; Veronese et al., 2017; Zechner et al., 2019)
- Socioeconomic effects on mental health in older people (Rahman et al., 2016)
- Spiritual care for older people with mental health conditions (Wade & House, 2022).

The main recommendations put forward by the above papers include:

- ❑ **There is a current need for policies designed to improve mobility and safety, promote social participation and create or preserve social capital in order to reduce feelings of loneliness and improve community mental health among older adults. Future studies with longitudinal data should be carried out to reinforce these findings.**
- ❑ **If in the future, COVID-19 brings further waves, clear policies and advice for older people around strategies to maintain social engagement, manage loneliness, continue physical activity and avoid deferring the need for medical attention when unwell should be a priority. Future studies in this area should also focus upon how people in this population have tackled social isolation due to the pandemic.**

- ❑ **Public health commissioners should invest in an ecosystem of voluntary organisations providing different types of loneliness interventions (either one-to-one or group based) if the epidemic of loneliness is to be addressed. Larger charities such as Mind may be best placed to provide these services.**
- ❑ **Better awareness is needed for older people for them to know about available support to address mental health issues and loneliness, including healthcare services such as cancer screening.**
- ❑ **Future research needs to assess the correlations between staff confidence in identifying depression in care home residents and impacts on the mental health of residents. Further, consideration of socio-economic and political factors impacting on the mental health experiences of older people living in a care home in a wider context should be explored.**
- ❑ **Identification of risk factors and protective factors for mental illnesses in older people is a highly relevant research topic. More longitudinal studies are needed using multivariate analysis to allow for more comparable assessment tools for risk factors of depression in older people.**
- ❑ **Participation in many kinds of physical activity is low for older people with mental illness. It is recommended that physical activity is helpful and should be encouraged more in this population.**
- ❑ **There is increasing evidence that frailty can be prevented, treated and potentially delayed. In order to achieve this, screening for frailty is recommended for individuals with mental disorders who are at risk of premature mortality. As well as the need for a reliable and valid tool to assess frailty in this population.**
- ❑ **In all areas it was suggested that future studies are needed which use a randomised control trial design with larger samples of people.**
- ❑ **Future studies to look at how services are currently providing 'person-centered care' and if any improvements are needed in this area.**

Screening & Vaccinations

- Vaccination uptake amongst older adults (including COVID-19, Influenza, shingles, and pneumococcal) (Bhanu et al., 2021; Cogan et al., 2022; Roller-Wirnsberger et al., 2021).
- Screening for malnutrition in older adults and their barriers and facilitators (Bracher et al., 2019; Dent et al., 2019; Guligowska et al., 2020).
- Screening for alcohol, smoking, and substance involvement in older adults (Cusack et al., 2019).
- Health related screening participation in older adults (Du & Mu, 2022; Franklin et al., 2020; Lamb et al., 2020).
- How COVID has impacted upon older adults views of vaccinations (Gallant et al., 2021).
- ❑ Cancer screening in older adults, the uptake and thoughts regarding this (Gonzalez-Senac et al., 2021; Hoover et al., 2019; Smith et al. 2022).

The main recommendations put forward by the above papers include:

- ❑ **Vaccination studies recognised a gap for evidence on system-based level or political strategies to improve vaccination uptake, including that of interventions. These strategies should include how to increase uptake levels and decrease hesitancy among older adults and build upon the existing evidence [COVID]. Overall, more studies are needed to provide a stronger evidence base for planning more effective influenza vaccination programs. A tailored, multi-level approach combining increased education, access, and culturally competent discussions with trusted healthcare professionals to address health beliefs can maximise the potential impact of widespread vaccination policies**
- ❑ **Cancer screening studies suggested a uniform approach be developed to strengthen communication and decision-making for older adults in general practice (such as why there is an upper age limit for screening, and the benefits and risks to screening) to allow for more informed screening choices. An additional suggestion for this area is more randomised control trials that evaluate the benefits of assessments and interventions for older people concerning screening. It was also suggested that efforts are needed to consider strategies such as involving community groups as they may represent a more feasible approach to engaging older women in decision-making about breast cancer screening and prepare them for conversations with their healthcare providers.**
- ❑ **Current nutritional screening tools are currently not well validated against nutritional assessment; therefore, it is recommended that further research is needed to validate nutritional screening tools for older adults in the hospital setting, particularly regarding domains of nutritional assessment.**
- ❑ **Overall, better awareness of health screening is needed in this population.**

Social Isolation & Loneliness

- The impacts of social isolation and loneliness in older adults and how to reduce this (Asante & Tuffour, 2022; Gardiner et al., 2018; Hoang et al., 2022; Welch et al., 2022; Wiwatkunupakarn et al., 2022; Zaccaria et al., 2020)
- Detecting social isolation and loneliness in older adults (Badal et al., 2021; Dare et al., 2019; Davies et al., 2021; Joseph et al., 2023; Kojima et al., 2022; Lennartsson et al., 2022; Madani et al., 2022; Neves et al., 2019; Peterson et al., 2016; Prabhu et al., 2022; Yu et al., 2023)
- How COVID-19 has impacted upon older adults in regards to social isolation and loneliness (Gaeta & Brydges, 2021; Kasar & Karaman, 2021; Lazzari & Rabottini, 2022; Stuart et al., 2022; Wilson-Genderson et al., 2022)

The main recommendations put forward by the above papers include:

- ❑ **Proper conceptualisations of social isolation and loneliness in research and practice is urgently needed (with both concepts having to do with human connectedness and relating uniquely to structural and functional aspects of social relationships, it is important that the concepts of social isolation and loneliness be not used interchangeably in research).**

- ❑ **Future studies should incorporate diverse linguistic features as well as other behavioural data streams to capture the complexity of social functioning in older adults.**
- ❑ **E-Learning for older adults to relieve feelings of loneliness needs to be researched further (such as online activities, teaching and learning, communicating).**
- ❑ **Future collaborative research with local authorities, program developers, and administrators, aimed at minimizing social isolation and loneliness among older people are needed. These include the need for clear communication and documentation of mutually agreed research objectives and responsibilities from project initiation to completion, identifying and working with local agencies to maximize recruitment among "hard to reach" groups, understanding the dimensions of loneliness addressed in the selected instrument used to screen for loneliness, and integrating innovative data collection techniques when working with vulnerable groups such as socially isolated older people.**
- ❑ **COVID-19 has increased the feelings of loneliness and social isolation. Families and friends should place greater emphasis on connecting with older adults in their social networks, and providers should follow up with their patients to ensure that they are participating in activities that address their social needs.**
- ❑ **A wide range of interventions have been developed to tackle social isolation and loneliness among older people (such as animal therapy, behavioural therapies, and technology). However, the quality of the evidence base is weak and further research is required to provide more robust data on the effectiveness of interventions, including demographic data (such as sex and age). Furthermore, there is an urgent need to further develop theoretical understandings of how successful interventions mediate social isolation and loneliness.**
- ❑ **The biopsychosocial model of dementia supports the need for more integrated social programmes and reduced risks for the older persons who, during the COVID-19 lockdown, have suffered from deprivation of support from primary carers and restricted social interactions.**

Long-Term Conditions

- Patient activation (the confidence in managing one's own health) in older people with long-term conditions and multimorbidity (Blakemore et al., 2016; Lawless et al., 2021; Moody et al., 2022; Panagioti et al., 2018)
- Behavioural activation (behaviour treatment for depression) to reduce depression and loneliness in older adults with long-term conditions (Burke et al., 2022)
- Improving the well-being of older people with long-term conditions and multimorbidity (Elston et al., 2019; Lunt et al., 2018; Vaismoradi et al., 2021; Varey et al., 2021; Woerden et al., 2021)
- Trajectories and analysis of long-term conditions and multimorbidity in older people and frailty (Han et al., 2022; Hanlon et al., 2021)
- Influences on long-term conditions in older people (LeBlanc et al., 2022; Okeowo et al., 2019; Spiers et al., 2021)

The main recommendations put forward by the above papers include:

- ❑ **Analyses of longitudinal studies are needed to better understand the causal relationships between older people and long-term health conditions such as depression.**
- ❑ **Larger, better conceptualised, controlled studies are needed to strengthen claims of causality and develop national policy in this area.**
- ❑ **Treatment and management strategies targeting individuals with a high-risk trajectory of long-term health conditions are recommended.**
- ❑ **Health care providers need to prepare older adults to engage actively with shared decision making and the goal setting process by employing patient-centred communication resources. These could assist with identifying different types of goals that are realistic and relevant to patients in daily life.**
- ❑ **Designing care systems that include small trusted formal and informal caregivers that integrate social network members could improve health outcomes and improve access to supportive resources.**
- ❑ **Robust research with collection of meaningful outcomes is required to ensure that the increasing number of older people with long-term conditions are enabled to access high-quality day care provision.**
- ❑ **Research specifically looking at day care homes for older people with long-term health conditions is recommended to measure attendance levels and the effects this has upon them.**
- ❑ **There is often a lack of information regarding specific treatment recommendations for older people with life-limiting illness and multimorbidity. While guidelines frequently explain how and when a medication should be initiated, there is often no information concerning when and how the medications should be reduced or stopped. Therefore, research is urgently needed in this area to improve this and develop a strategy.**
- ❑ **There is a need to pay more attention to the safety of the medication process in home care and explore factors that cause over-prescription of medications and polypharmacy influencing the safety of older people with long-term mental health condition in home care. Healthcare professionals in the multidisciplinary healthcare team should assess and monitor the use of prescribed, non-prescribed, and 'Pro Re Nata' (PRN) medications in home care and develop individualised programmes for PRN medicines optimisation.**

Reablement services

- The costs of reablement for older people (Bauer et al., 2019)
- Evaluations and impacts of reablement services for older people (Bramble et al., 2022; Chen et al., 2022; Chua et al., 2020; Clotworthy et al., 2021; Doh et al., 2020; Pettersson et al., 2021)
- Perceptions of reablement services by older people and others (Caesar & Morley, 2019; Ingstad et al., 2021; Jakobsen et al., 2019; Mulquiny & Oakman, 2022)

The main recommendations put forward by the above papers include:

- **Homecare reablement can be a successful cost-minimisation strategy for supporting some older people. More research is needed about the impact of homecare reablement on health outcomes for different groups of older people; and the effects of different durations of reablement on outcomes and costs for different subpopulations.**
- **Different programmes of training and assessment are being designed based on single disciplinary approaches and the context in which they are delivered. Further developmental work is required to integrate the components of discipline-specific training programmes within interdisciplinary frameworks. This will achieve not only an integrated framework for delivery across reablement settings but also further the success of 'ageing in place' policy.**
- **Published research on reablement programs is currently limited. While well-designed reablement intervention programs can have a positive impact on function among older people there is heterogeneity of results in the literature with respect to quality of life, hospitalisation and unplanned visits to the emergency department. Additional research and studies with rigorous methodological quality are needed in this important space.**
- **Future studies should focus on enabling health and social participation outside the home, taking social and cultural norms into account. Therefore, an interdisciplinary team is important, and that everyone has a clear role and makes clear assessments.**
- **Current and future reablement services for older people should focus on ensuring an awareness of the processes and principles of reablement and collaboration between practitioner, the older person and their carer when developing goals to increase engagement.**
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Care Homes

- Medication given in care homes to older people (Alharthi et al., 2023)
- The impact upon COVID 19 on care homes for older people (Anand et al., 2022; Bethell et al., 2021; Burton et al., 2020; Green et al., 2022; Hanratty et al., 2020)
- Suicide and prevention in care homes (Chauliac et al., 2020; Gleeson et al., 2019)
- Health, well-being, relationships, and quality of life in care homes (Curtis et al., 2018; Dadswell et al., 2020; Heikkila et al., 2022)
- Staff and resident views on care homes for older people (Day et al., 2022; Lao et al., 2019)
- Handovers in care homes for older people (Moriarty et al., 2019)

The main recommendations put forward by the above papers include:

- ❑ **Future interventions to increase physical activity levels in care homes for older people are needed.**
- ❑ **It is suggested that an urgent call for a re-examination of the role of social work in relationship to care homes and the importance of re-engaging with human rights issues for care home residents since COVID-19.**

- ❑ **Interventions to prevent suicidal ideation or behaviors in nursing homes are not rigorously evaluated and no conclusion can be drawn on their effectiveness in preventing suicidal behaviors. It is therefore proposed for this to be undertaken.**
- ❑ **International evidence emerging to date for arts for health activities for older people in care homes whether within or external to the home looks promising and can benefit residents' health, wellbeing and quality of life. However, more research is required, particularly in relation to lesser evidenced arts activities such as crafts. Larger mixed methods complex intervention studies with qualitative elements embedded that adhere to internationally recognised standards for conduct and reporting are warranted. Where possible future meta-synthesis of qualitative evidence and meta-analysis of quantitative outcomes should be conducted.**
- ❑ **Policy makers and those working in the care sector should consider including participatory arts as an integral and necessary component of quality care for older people living in care homes.**
- ❑ **There is a need to maintain and review research and knowledge about depression, self-harm and suicide ideation and behaviours impacting on older people living in care homes to better understand and predict risk and to understand mental health in the context of the institutional environment in which it occurs in order to develop appropriate and applicable prevention strategies.**
- ❑ **Future research could include more in-depth observations of where and how handovers in care homes take place between staff members, adopting some of the practice of research undertaken in hospitals to consider aspects such as the artefacts used and the different styles of verbal and non-verbal communication. There is also scope for investigating if handovers differ between different types of care home, or between different types of residents and their levels of need.**
- ❑ **Current areas of research interest for care homes include; post-COVID-19 experiences, mealtime interventions, support given to staff and managers, suicidal thoughts, short and long-term memory, bowel care, loneliness, and comfort and heating levels for residents.**

Social Care

- Association between depression and dementia, and social care/support for older people (Anantapong et al., 2020; Kontrimiene et al., 2021)
- Social workers perspectives on older adults drinking alcohol and taking drugs (Bareham et al., 2020; Matheson et al., 2019)
- Evaluations and impacts of social care for older people (Carey, 2022; Curtis et al., 2018; Eccles, 2021; Elston et al., 2019; Higgs et al., 2018; Iparraguirre & Ma, 2015; Iparraguirre, 2020; Lewis, 2022; Lloyd et al., 2018; Nikolova et al., 2022; Seamer et al., 2019; Toms et al., 2019)
- Older peoples, and others perspectives on social care (Casado et al., 2020; Dixon et al., 2022; Etkind et al., 2019; Phelps et al., 2022; Tanner et al., 2018)

The main recommendations put forward by the above papers include:

- ❑ **Interventions promoting aspects of social support in older people with depression and/or other mental health disorders should be developed and studied further.**
- ❑ **Excessive alcohol consumption must be addressed to ensure older adults receive appropriate support to meet their needs, including proactive preventive care. However, developing approaches must consider the feasibility of care providers' involvement given their workload, in a climate where care systems are becoming increasingly overburdened.**
- ❑ **More research and practice are needed to explore the positive effects of older people's participation in social and health care services.**
- ❑ **Social work is a principal key to ensure wide and inclusive participation of users in decision making and services. Therefore, literature needs to go further into this topic. Future research lines must gain insight into questions such as the kind of social and care services older people would like to have, how they would like to relate to social workers, or how they would like to engage in effective participation.**
- ❑ **'Getting back to normal' or 'finding a new normal' are key focuses for frail older people when considering their preferences. Following acute illness, clinicians should discuss preferences and care planning in terms of an achievable normal, and carefully consider the social context. Longitudinal research is needed to explore the influences on preferences over time.**
- ❑ **There is a pressing need for more information about social workers' views and perceptions about the ethical dilemmas they face and whether or not they feel equipped by their training, education and workplace support to address this dimension of their practice.**
- ❑ **Further work is needed to develop goal-oriented care for older people living with frailty which is personalised to their specific needs.**
- ❑ **Other areas of interest include; cost analysis of social care, why certain people leave social care services, the relationship between emergency hospital admissions and social care, and the funding sources and the managerial, financial, and legal developments on the quality of life of older people of social care services.**

Dementia

- Issues surrounding the design of outdoor environments that are dementia-friendly (Blackman, Van Schaik, and Martyr (2007). Gan, D.R., *et al.* (2022) Chaudhury, H., Mann, J. and Wister, A.V. (2022)). Dementia-friendly neighbourhoods and the built environment
- Transport for those with dementia and how to design and run appropriate services Jarvis, A., Mountain, A., Crow, R. and Moroney, M. (2019)
- Projections of older people with dementia and costs of dementia care in the United Kingdom, Wittenberg, R., Hu, B., Barraza-Araiza, L. and Rehill, A. (2019)
- The changing prevalence and incidence of dementia over time (Wu *et al* 2017)

The main recommendations put forward by the above papers include:

- ❑ **Post-diagnostic support programmes can provide people with dementia and their carers the opportunity to think about what 'home' means and plan for their future housing needs, alongside financial planning, making a will and Lasting Powers of Attorney.**
- ❑ **Registered social landlords should review the information they produce about the types of housing that they offer so they are clear to people with dementia.**
- ❑ **Local authorities to endeavour to include older people, people with dementia and carers in strategic development and service design.**
- ❑ **By informing staff, building robust community services and working together across services to identify early help needs, individuals can remain at home for longer.**
- ❑ **Informal carers are a huge resource that all services have but do not support and utilise enough. Building on community activity and support, identifying carers at an earlier stage and developing staff to inform and signpost family/carers provides service users with the opportunity to remain supported in their own homes for longer and support the health and wellbeing of the carers to do this.**
- ❑ **Informal settings are important for delivering information to people who might not naturally identify dementia in themselves or a loved one**

Falls and Fractures

- Importance of discharge timing and support after hip fracture (and other fracture) surgery: Sheehan, K.J., *et al* (2021),
- Orthogeriatrics and hip fracture care in the UK and the factors driving change to more integrated models of care: Middleton, M. (2018).
- A systematic review of the effectiveness and cost-effectiveness of different models of community-based respite care for frail older people and their carers.
- Supporting frail older people with depression and anxiety Frost, R. *et al*, 2020.

The main recommendations put forward by the above papers include:

- ❑ **Inclusion of mobilisation within 36 h of surgery as a new UK Best Practice Tariff to help reduce delays to mobilisation currently experienced by one-fifth of patients surgically treated for hip fracture.**
- ❑ **There is a mounting body of evidence that the more integrated models of care result in improvements in both quality indicators and outcomes. Such collaborative care appears to be increasing in popularity in the UK in response to clinical governance, national audit data and financial incentives.**
- ❑ **Mental health support for frail older people needs to address late-life anxieties as well as depression, account for physical health issues, align with older people's need for independence and facilitate coping skills**

Sensory Loss

- Communication and psychosocial consequences of sensory loss in older adults

- Late life acquired dual-sensory impairment and its impact on everyday competence. Tiwana, R., Benbow, S.M. and Kingston, P., 2016.
- Visual and hearing impairments and their association with cognitive decline in older people. Maharani, A. *et al.,* 2018.
- The prevalence and impact of COVID-induced sensory loss. York, A., 2022.

The main recommendations put forward by the above papers include:

- ❑ **Dual Sensory Inhibition (DSI) often leads increased difficulty in mobility (in terms of walking, getting outside, getting into or out of bed/chair); in meal preparation; and medication management as well as restrictions in social participation**
- ❑ **A multi-facetted approach to intervention is likely to be helpful and might be a fruitful area for future research, combining holistic assessment with access to acceptable non-stigmatising aids and adaptations to assist with both sensory impairments and physical co-morbidities**
- ❑ **There is a need for a public health message about the importance of physical, mental and social activity contributing to health in later life. The Foresight Project proposed five ways to mental well-being: connect; be active; take notice; keep learning; and give (The Government Office for Science, 2008). These five areas could offer a structure for supporting everyday competence in older people with DSI.**
- ❑ **While anosmia and ageusia appear to be present in around 12% of people 12 weeks post COVID-19, the prevalence of hyposmia and hypogeusia appears to be much higher, with prevalence rates being 30% and 31% respectively. Considering that changes in taste, smell, vision, and hearing are associated with decreases in quality of life and also reduced overall well-being, future research is required to ascertain the mechanisms behind this phenomenon and the creation of therapeutic interventions**

MSK

- Work-related MSK conditions and their impact in older individuals (see https://www.hse.gov.uk/statistics/causdis/msd.pdf -for GB statistics (2022))
- Impact of COVID-19 on services providing care for MSK conditions Oxtoby, K. (2021)

The main recommendations put forward by the above papers include:

- ❑ **Along with mental health, poor MSK health accounts for most of the sickness absence in the UK. It is estimated that 9.5 million working days are lost each year in the UK due to MSK conditions which affect over 10 million people.**
- ❑ **Measures taken to prevent the spread of the coronavirus have impacted on employee mental and physical health. As such, there is a need to start looking at longer-term targeted interventions for staff with pre-existing or new conditions. For employers this means a need for improved engagement with existing mental health and wellbeing activity to better identify support requirements and target interventions appropriately**

- ❑ **There is also a need to develop suitable risk assessments for increased home working due to the potential impact on MSK**.
- ❑ **Interventions to optimise symptom control and provide a more flexible adaptive work environment can substantially improve older people's prospects of working. On present evidence, far more needs to done in these areas if patients are to realise this possibility.**

Polypharmacy

- High prevalence of polypharmacy in older people (more than 1 in 10 people aged over 65 take at least eight different prescribed medications each week. This increases to nearly 1 in 4 people aged over 85 (Age UK) - https://www.ageuk.org.uk/globalassets/age-uk/documents/reports-and-publications/reports-and-briefings/health--wellbeing/medication/190819_more_harm_than_good.pdf
- Association between polypharmacy and poor health outcomes. Delara *et al.,* 2022.
- Gendered aspect to polypharmacy with women at the greatest risk for drug-related harm. Rochon *et al.,* 2021.

The main recommendations put forward by the above papers include:

- ❑ **Repeat prescribing systems should be audited where possible to ensure accurate and timely supply of medicines in accordance with a written repeat prescribing protocol**
- ❑ **Practices should demonstrate that medication review is done regularly and effectively**
  and to a high standard. Clinical pharmacists should be involved where practicable
- ❑ **Extra support should be provided to assess patients who need to take six or more medicines**
  (appropriate polypharmacy)
- ❑ **Both sex and gender (in addition to age) should be considered in polypharmacy in both medical and socio-cultural contexts**

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