Focus on Frailty - Return on Investment

In 2024, Healthcare Improvement Scotland conducted a Return on Investment analysis (ROI) as part of its Focus on Frailty Improvement Programme. The purpose of this Return on Investment analysis is to help inform NHS board and Health and Social Care Partnership (HSCP) business cases for:

- Community-based interventions for preventing, treating and supporting frailty
- Hospital-based Comprehensive Geriatric Assessments (CGA).

1 About the analysis

This analysis is based on a review of evidence and literature available from secondary sources. It describes the reasonably expected return from interventions based on the findings from other research conducted on similar interventions across the United Kingdom (with some international evidence where suitable evidence was found). We have not analysed the activities undertaken by the six local partnerships in Scotland that participated in the Focus on Frailty programme.

The ROI analysis is designed to inform business cases. It aims to indicate the likely impact associated with a wide range of community-based interventions and hospital-based CGAs. Providing this can strengthen the case made for investing in these initiatives as part of local business case processes.

This analysis articulates 12 months of impact arising from the intervention. That is to say that when running the programme (as outlined in the literature), you will have twelve months' worth of impact. There are two things to note about this timeframe:

- Our analysis does not provide detailed information on when exactly those impacts will occur; for some initiatives, it may take some time for the impacts to be visible (for example, it may take time after exercise is initiated to see the impact of this). For others, the impact may be more immediate (for example, for adaptations made in someone's home to reduce fall risks). It is not possible to be more specific about the timing of interventions and their expected impact. This means that it cannot be used to say exactly what financial year each impact is expected to occur.
- Based on the evidence, we anticipate that the impacts will last longer than 12 months. However, the longer the estimate of an impact into the future, the more complex it becomes to have a reasonable level of robustness around it – as with anything, the further into the future we are expected to plan, the less certain things become. Therefore, we made the judgement call to limit this to 12 months.

We do not recommend using this analysis to inform detailed capacity and demand planning across NHS board or HSCP area. There are too many complexities that would need to be worked through to utilise it at that level of detail – including lag and duration of impacts, as well as long wait times for various services, which muddles the realisation of these resources. Instead, we hope that this analysis can provide a valuable and reasonable indication of the impact that an intervention can have on the overall demand and capacity across a local area over time associated with frailty.

2 About the outputs

This report provides a summary of the evidence used in the ROI analysis. It aims to provide:

- An explanation of how the calculations are made using the impact evidence.
- An example in action to help understand how use it to calculate returns and include it in a business case.
- A description of the interventions within the evidence gathered to help inform the design of initiatives.

There are other supporting resources to this analysis.

- This document is supported by a comprehensive Excel tool that outlines the methodology used, provides detailed calculations, and offers further information on the evidence used to inform the analysis. This document provides a summary of the analysis that is more accessible for use by local teams in developing their business cases.
- We have developed a summary of quantified impact analysis (of which ROI analysis is one methodology within this family of analysis) to provide some further information on interpreting this analysis. We will soon release a recording of this summary in a presentation.
- We have a summary of other qualitative evidence that was collected during the evidence review but was not used within the ROI analysis (because it was not articulated in a way that enabled us to quantify it). We hope to publish this soon.

3 Who is this tool for and where can you get help?

This tool can be used by anyone writing business cases or justifying investment in frailty initiatives. If not confident in understanding and using the tool, it may be helpful to seek local support in its use from:

- **Local support** – strategic planning, health economics, business intelligence, evidence, or data colleagues may be able to help with using the tool.

- **National support** – access training webinars by contacting his.transformationalsystemchange@nhs.scot or by visiting the webpage hosted at: Expressions of Interest form.

For any questions or to discuss the analysis, please get in touch with his.transformationalsystemchange@nhs.scot

4 Summary of the impact for use in business cases

The following provides a summary of the calculations we conducted as part of the Return on Investment analysis.

4.1 Exercise programmes

Exercise reduces the level of frailty, which reduces the demand for services. We found evidence that it leads to a reduction in seven different services. The calculation for this reduction is presented in the table below.

	Outcome we are trying to achieve	Age group we are supporting	Incidence rate we are trying to reduce		Evidenced reduction achieved by the initiative	The cost of the care we are trying to reduce	
1	Reduced primary care face to face appointments	aged 65 - 84	4.82	number of additional primary care face-to-face appointments for someone with frailty	physical exercise reduces frailty by 49%	£49	cost of primary care face to face appointment
		aged 85+	3.5				
2	Reduced primary care home visits	aged 65 - 84	0.39	number of additional primary care home visits for someone with frailty		£100	cost of primary care home visit
		aged 85+	0.97				
3	Reduced primary care telephone triage	aged 65 - 84	0.95	number of additional primary care telephone triage for someone with frailty		£20	cost of primary care telephone triage
		aged 85+	1.21				
4	Reduced outpatient appointments	aged 65 - 84	2.08	number of additional outpatient appointments per year for someone with frailty		£230	cost of secondary care outpatient appointments
		aged 85+	1.35				
5	Reduced prescriptions and medication	aged 65 - 84	42.75	number of additional prescriptions for someone with frailty		£14	cost of prescriptions
		aged 85+	47.51				
6	Reduced emergency department visits	aged 65 - 84	0.21	number of additional emergency department visits per year for someone with frailty		£227	cost of emergency department attendances
		aged 85+	0.27				
7	Reduced hospital admissions	aged 65 - 84	0.45	number of additional hospital admissions per year for someone with frailty		£9,567	cost of secondary care hospital admission
		aged 85+	0.35			£18,139	

4.2 Occupational Therapy

Occupational Therapy home safety assessments and home modifications reduce the number of falls in the community, which reduce the demand for services. We found evidence that this reduces the demand for Emergency Department (ED) visits and inpatient stays in hospitals. The calculation for this reduction is presented in the table below.

Outcome we are trying to achieve		Incidence rates we are trying to reduce				Evidenced reduction achieved by the initiative	The cost of the care we are trying to reduce	
1	Reduced emergency department visits	30%	Over 65s fall each year	3.6%	of falls lead to emergency department visit without hospitalisation	Home safety assessments and modifications reduce falls by 22.5%	£227	cost of emergency department attendances
		50%	Over 80s fall each year					
2	Reduced hospital admissions	30%	Over 65s fall each year	5%	of falls lead to fracture and hospitalisation		£8,670	cost per fall related hospital admission
		50%	Over 80s fall each year					

4.3 Case Management

Effective case management reduces the demand for services. We found evidence that it leads to a reduction in four different services. The calculation for this reduction is presented in the table below.

Outcome we are trying to achieve		Age group we are supporting	Incidence rate we are trying to reduce			The cost of the care we are trying to reduce	
1	Reduced outpatient appointments	aged 65 - 84	2.08	number of additional outpatient appointments per year for someone with frailty	22% reduction in outpatient appointments from effective case management	£230	cost of secondary care outpatient appointments
		aged 85+	1.35				
2	Reduced emergency department visits	aged 65 - 84	0.21	number of additional emergency department visits per year for someone with frailty	36% reduction in emergency department visits from effective case management	£227	cost of emergency department attendances
		aged 85+	0.27				
3	Reduced hospital admissions	aged 65 - 84	0.45	number of additional hospital admissions per year for someone with frailty	26% reduction in hospital admissions from effective case management	£9,567	cost of secondary care hospital admission
		aged 85+	0.35			£18,139	
4		aged 65 - 84	11.9%			£49,327	

	Reduced admissions to nursing care home	aged 85+	12.9%	percentage of frail population admitted each year	13% reduction in nursing care home admissions from effective case management	annual cost of nursing case

4.4 Combination (nutrition, exercise, cognitive training)

A combination of nutrition, exercise and cognitive training reduces the level of frailty, which reduces the demand for services. We found evidence that it leads to a reduction in seven different services. The calculation for this reduction is presented in the table below.

	Outcome we are trying to achieve	Age group we are supporting	Incidence rate we are trying to reduce		Evidenced reduction achieved by the initiative	The cost of the care we are trying to reduce	
1	Reduced primary care face to face appointments	aged 65 - 84	4.82	number of additional primary care face-to-face appointments for someone with frailty	A combination of nutrition, exercise and cognitive training reduces frailty by 21.6%	£49	cost of primary care face to face appointment
		aged 85+	3.5				
2	Reduced primary care home visits	aged 65 - 84	0.39	number of additional primary care home visits for someone with frailty		£100	cost of primary care home visit
		aged 85+	0.97				
3	Reduced primary care telephone triage	aged 65 - 84	0.95	number of additional primary care telephone triage for someone with frailty		£20	cost of primary care telephone triage
		aged 85+	1.21				
4	Reduced outpatient appointments	aged 65 - 84	2.08	number of additional outpatient appointments per year for someone with frailty		£230	cost of secondary care outpatient appointments
		aged 85+	1.35				
5	Reduced prescriptions and medication	aged 65 - 84	42.75	number of additional prescriptions for someone with frailty		£14	cost of prescriptions
		aged 85+	47.51				
6	Reduced emergency department visits	aged 65 - 84	0.21	number of additional emergency department visits per year for someone with frailty		£227	cost of emergency department attendances
		aged 85+	0.27				
7	Reduced hospital admissions	aged 65 - 84	0.45	number of additional hospital admissions per year for someone with frailty		£9,567	cost of secondary care hospital admission
		aged 85+	0.35			£18,139	

4.5 Comprehensive Geriatric Assessment

A Comprehensive Geriatric Assessment within a hospital setting reduces the level of frailty, which in turn reduces the demand for services. We found evidence that it leads to a reduction in nine different services. The calculation for this reduction is presented in the table below.

	Outcome we are trying to achieve	Age group we are supporting	Incidence rate we are trying to reduce		Evidenced reduction achieved by the initiative	The cost of the care we are trying to reduce	
1	Reduced primary care face to face appointments	aged 65 - 84	4.82	number of additional primary care face-to-face appointments for someone with frailty	A Comprehensive Geriatric Assessment reduces frailty by 18.1%	£49	cost of primary care face to face appointment
		aged 85+	3.5				
2	Reduced primary care home visits	aged 65 - 84	0.39	number of additional primary care home visits for someone with frailty		£100	cost of primary care home visit
		aged 85+	0.97				
3	Reduced primary care telephone triage	aged 65 - 84	0.95	number of additional primary care telephone triage for someone with frailty		£20	cost of primary care telephone triage
		aged 85+	1.21				
4	Reduced outpatient appointments	aged 65 - 84	2.08	number of additional outpatient appointments per year for someone with frailty		£230	cost of secondary care outpatient appointments
		aged 85+	1.35				
5	Reduced prescriptions and medication	aged 65 - 84	42.75	number of additional prescriptions for someone with frailty		£14	cost of prescriptions
		aged 85+	47.51				
6	Reduced emergency department visits	aged 65 - 84	0.21	number of additional emergency department visits per year for someone with frailty		£227	cost of emergency department attendances
		aged 85+	0.27				
7	Reduced hospital admissions	aged 65 - 84	0.45	number of additional hospital admissions per year for someone with frailty		£9,567	cost of secondary care hospital admission
		aged 85+	0.35			£18,139	
8	Reduced admissions to nursing care home	aged 65 - 84	11.9%	percentage of frail population admitted each year	A Comprehensive Geriatric Assessment reduces admissions to care homes by 4%	£49,327	annual cost of nursing case
		aged 85+	12.9%				
9	Reduction in duration of hospital stays	aged 65 - 84	6.536	number of bed days per year for someone with frailty	A Comprehensive Geriatric Assessment reduces duration of hospital stays by 16%	£1,171	cost of a bed day
		aged 85+	12.2371				

4.6 Anticipatory Care Planning (ACP)

Effective Anticipatory Care Planning reduces the number of hospital admissions. The calculation for this reduction is presented in the table below

	Outcome we are trying to achieve	Age group we are supporting	Incidence rate we are trying to reduce			The cost of the care we are trying to reduce	
1	Reduced hospital admissions	aged 65 - 84	0.8	number of hospital admissions per year for someone with frailty	Anticipatory Care Planning reduces hospital admissions by 42.5%	£9,567	cost of secondary care hospital admission
		aged 85+	0.79			£18,139	

5 An example in action

To illustrate how this is used to calculate a return on investment and how it might be incorporated into a business case, we have developed an example.

5.1 An example

To support the following number of people who are considered frail or may be frail.

Age group we are supporting	Number of people we are supporting
aged 65 - 84	80
aged 85+	70

Then, expect a return of the following over 12 months (note that we have rounded these figures for simplicity; the Excel spreadsheet will provide you with exact figures). Approximately 80% of the financial value is derived from reducing the demand for hospital bed days. This is because the cost of a bed day is vastly more expensive than the other services, such as a single primary care appointment or a telephone triage appointment.

Reduced demand from the intervention			Which has a financial value of
Reduced primary care face to face appointments	240	appointments	£11,800
Reduced primary care home visits	38	home visits	£3,800
Reduced primary care telephone triage	62	telephone triage contacts	£1,200
Reduced outpatient appointments	100	appointments	£23,00
Reduced prescriptions and medication	2600	medication units	£36,000
Reduced emergency department visits	14	ED visits	£3,100
Reduced hospital admissions	260	bed days	£302,000
			£357,900 in total

To understand the return on investment, those impacts need to be combined with the cost of running the programme. Say that the programme costs £150,000 to run for 12 months, then the Excel calculator will show that this would represent a **Return on Investment of £2.54 for every £1 spent on the exercise programme.**

5.2 Using it within a business case

Using this information within a business case may be presented as follows:

We are proposing to support 150 people over the age of 65 who have been assessed as being frail, or who we suspect may be frail with our 12-month exercise programme. Participants will be supported to participate in moderate exercise and mobility three times a week within community settings. Based on evidence from similar studies, we expect that this will reduce frailty levels among this cohort by 49%. Evidence suggests that this will lead to a decrease in their demand for health and social care services. We expect these reductions to generate around £357,900 in savings over the next 12 months. This includes:

240	fewer primary care face to face appoints	2600	fewer medication units prescribed
38	fewer primary care home visits	14	Fewer visits to ED
62	fewer primary care telephone triage contacts	260	fewer hospital bed days
100	fewer outpatient appointments		

6 Summary of interventions in the literature

The tables below summarise the descriptions of the interventions available within the literature. Some pieces of literature provided more comprehensive summaries of the interventions than others.

6.1 Exercise programmes

What exercise counts there appears to have a relatively broad consensus.

Exercise	Link
• 150 minutes per week moderate activity	https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/586382/falls_and_fractures_consensus_statement.pdf
• Balance and coordination at least two days per week	https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/586382/falls_and_fractures_consensus_statement.pdf https://www.cochrane.org/CD012424/MUSKINJ_exercise-preventing-falls-older-people-living-community
• Active daily	https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/586382/falls_and_fractures_consensus_statement.pdf
• 50 hours or more delivered over at least two hours per week	https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/586382/falls_and_fractures_consensus_statement.pdf

Studies on impact are below.

Impact	Description of intervention	Literature link
Reduction in falls • 23% reduction in falls from exercise • 24% fall reduction from balance and functional exercises • 23% reduction in falls from Tai Chi • 15% reduction in the number of people experiencing one or more falls • 28% reduced risk of falling from multiple forms of exercise (commonly balance and functional exercises plus resistance exercises)	Exercise that primarily involved balance and functional training resulted in fewer falls compared to an inactive control group. Programmes involving multiple types of exercise (most commonly balance and functional exercises plus resistance exercises) probably reduced falls, and Tai Chi may also reduce falls. We did not find enough evidence to determine the effects of exercise programmes classified as being mainly resistance exercises, dance, or walking programmes. We found no evidence to determine the effects of programmes that were mainly flexibility or endurance exercise.	Original 2019 paper Exercise for preventing falls in older people living in the community | Cochrane Updated 2020 paper https://ijbnpa.biomedcentral.com/articles/10.1186/s12966-020-01041-3
Reduction in falls • 29% reduction in falls from multiple components exercise	Group and home-based exercise programmes, usually containing some balance and strength training exercises, effectively reduced falls, as did Tai Chi. Overall, exercise programmes aimed at reducing falls appear to reduce fractures.	Interventions for preventing falls in older people living in the community - PubMed
Reduction in falls • 32% reduced risk of falling from exercise intervention	One of the main characteristics of home-based exercise interventions was the variety of tasks and their emphasis on fall-related risk factors such as strength, balance and mobility. The dose and the amount of exercise also determine the effectiveness of a fall programme. It is recommended that a higher total dose of	Effect of home-based exercise on falls in community-dwelling older adults: an umbrella review | Sport Sciences for Health

Impact	Description of intervention	Literature link
	exercise per week (minimum three hours per week) is a key factor for fall prevention.	
Reduction in frailty • 57% reduction in frailty from physical activity.	Physical activity reduced frailty, with resistance exercise being the most effective in reducing frailty in older adults, based on the results of this NMA.	Comparative effectiveness of non-pharmacological interventions for frailty: a systematic review and network meta-analysis - PubMed
Reduction in frailty • 41% reduction in frailty from physical activity.	Physical exercise was conducted at a moderate, gradually increasing intensity, tailored to participants' abilities, and lasted 90 minutes, two days per week for 12 weeks in classes led by a qualified trainer. This was followed by 12 weeks of home-based exercises. Participants performed the exercises in groups of 8 to 10 and were encouraged to continue with daily, individualised exercise assignments at home.	Nutritional, Physical, Cognitive, and Combination Interventions and Frailty Reversal Among Older Adults: A Randomized Controlled Trial - PubMed
Reduced chance of frailty • The odds of developing frailty are 45 times higher in the sedentary group than in the exercise group in this study. Please note, not included in the ROI as it could not be converted into the metric we needed.	This study explored the effectiveness of a level of exercise they defined as 'lifestyle active', which included 'self-selected exercise'.	https://academic.oup.com/biomedgerontology/article-abstract/64A/1/61/575569?redirectedFrom=fulltext

6.2 Occupational Therapy

Studies on impact are below

Impact	Description of intervention	Literature link
Reduction in falls • Home safety assessment and modification interventions reduce the rate of falls by 19% • Home adaptations reduce the number of falls by 26% for adults aged 60 and over	Home safety assessment and modification interventions were effective in reducing the rate of falls. These interventions were more effective in people at higher risk of falling, including those with severe visual impairment. Home safety interventions are more effective when delivered by an occupational therapist.	Interventions for preventing falls in older people living in the community - Gillespie, LD - 2012 | Cochrane Library

6.3 Case Management

Studies on impact are below

Impact	Description of intervention	Literature link
Reduction in emergency department visits. • Effective case management reduces emergency department visits by 36%	Our study shows that an integrated community care programme, implemented by an interdisciplinary team including a general practitioner and a case manager, reduced the risk of hospital admission and the length of stay in either hospital or nursing home. Despite a similar use of supportive home care resources, subjects in the intervention group showed less physical and cognitive decline; total health care costs per capita were also reduced.	Randomised trial of impact of model of integrated care and case management for older people living in the community - PMC
Reduction in outpatient appointments.	Generally, the CMs conducted one visit per month. It usually took some weeks before the CMs conducted their first visit. Some visits during the intervention program were also cancelled due to the participant being too sick. During the 12-month intervention, the nurse made an average of 11.1	Effects on healthcare utilization of case management for frail older people: a

Impact	Description of intervention	Literature link
• Effective case management reduces outpatient appointments by 22%	home visits and 1.9 telephone calls, while the physiotherapist made 10.4 visits and 0.8 telephone calls for those who completed the intervention period. For attritions (Fig. 1) the mean intervention time was 5 months, and they received an average of 3.7 visits and 1.0 telephone calls from the nurse and 2.5 visits and 1.0 telephone calls from the physiotherapist respectively.	randomized controlled trial (RCT) - PubMed
Reduction in hospital admissions • Effective case management reduces hospital admissions by 26%	The intervention group received case management and care planning from the community geriatric evaluation unit and general practitioners. All the services considered necessary were provided in an integrated manner following a formal agreement between the municipality and the local health agency.	Randomised trial of impact of model of integrated care and case management for older people living in the community - PMC
Reduction in nursing home admissions • Effective case management reduces nursing home admissions by 6%	This model involved nurse-led assessment and case management for people with long-term conditions.	doi:10.1016/S0140-6736(08)60342-6
Reduction in nursing home admissions • Effective case management reduces case home admissions by 31%	Allocation to an intervention group receiving integrated social and medical care and case management. It delays admission to a hospital or a nursing home with hazard ratio of 0.69 with a 95% confidence interval of 0.53 to 0.9.	Randomised trial of impact of model of integrated care and case management for older people living in the community - PMC
Reduction in falls • Effective case management reduces falls by 10%	This model involved nurse-led assessment and case management for people with long-term conditions	doi:10.1016/S0140-6736(08)60342-6

6.4 Combination (nutrition, exercise, cognitive training)

Studies on impact are below

Impact	Description of intervention	Literature link
Reduction in frailty • Combination interventions reduce frailty by 32.6%	Combination Intervention. Participants in this group underwent all three interventions. • Physical Intervention. Physical exercise was of moderate, gradually increasing intensity, tailored to participants' abilities, of 90 minutes duration, on two days per week for 12 weeks in classes conducted by a qualified trainer, followed by 12 weeks of home-based exercises • Nutritional Intervention. Each participant was provided with a commercial formula, an iron and folate supplement, a vitamin B6 and vitamin B12 supplement, and a calcium and Vitamin D supplement, which were taken daily for 24 weeks. These supplements were designed to augment caloric intake by approximately 20% and provide about one-third of the recommended daily allowances of vitamins and minerals. • Cognitive Training. In the first 12 weeks, participants attended 2-hour weekly sessions of cognitive training, where they engaged in cognitive-enhancing activities designed to stimulate short-term memory, enhance attention and information-processing skills, and reasoning and improve problem-solving abilities. For the subsequent 12 weeks, participants attended fortnightly two-hour "booster" sessions, where they reviewed the cognitive skills learned in the first 12 weeks.	Nutritional, Physical, Cognitive, and Combination Interventions and Frailty Reversal Among Older Adults: A Randomized Controlled Trial - PubMed
Reduction in frailty • Combination interventions reduce frailty by 14.7%	The interventions were individually tailored to each participant based on their frailty characteristics, as assessed at baseline, and additional problems identified during a detailed assessment by the two experienced physiotherapists providing the intervention program. Geriatric evaluation and management principles underpin both the assessment and intervention. Details of the intervention approach are described in the protocol paper.	Economic evaluation of a multifactorial, interdisciplinary intervention versus usual care to reduce frailty in frail older people - PubMed

Impact	Description of intervention	Literature link
	To summarise, the CHS frailty components present in each participant were specifically targeted [12]. If the participant met the weight loss criterion, a dietician evaluated nutritional intake.	A multifactorial interdisciplinary intervention reduces frailty in older people: randomized trial | BMC Medicine | Full Text
Reduction in frailty • Combination interventions reduce frailty by 15.7%	Our intervention included a group session on the Mediterranean diet without intervention from a specific nutrition unit. Serra-Prat et al (44) found improvements in adherence to the Mediterranean diet, as well as in physical function (gait speed, TUG, and FTSST) and quality of life. However, they observed no positive effect on nutritional status despite referring patients to a nutrition unit as necessary. Romera-Liebana et al (43) observed functional and cognitive improvement in frail and pre-frail patients at 12 weeks and 18 months after a four-armed intervention but focused on protein nutritional supplements rather than the Mediterranean diet, and cognitive intervention instead of social assessment	Pre Frail 80: Multifactorial Intervention to Prevent Progression of Pre-Frailty to Frailty in the Elderly - PubMed
Reduction in frailty • Combination interventions reduce frailty by 23.5%	A three-month multifactorial intervention comprising resistance exercise, nutritional education, and psychosocial programs on frailty status and functional health, as well as the carryover effects during a three-month post-intervention period.	Effects of a multifactorial intervention comprising resistance exercise, nutritional and psychosocial programs on frailty and functional health in community-dwelling older adults: A randomized, controlled, cross-over trial - PubMed
Reduction in frailty • Combination interventions reduce frailty by 21.5%	The intervention group developed their life goals with the Occupational Therapist (OT) at the beginning and end of the program. Life goals for members of the control group established in collaboration with the care manager, as outlined in the care plan, prior to the program. Therefore, at three months a time lag had occurred after goal setting. The second point is	The effects of a life goal-setting technique in a preventive care program for frail community-dwelling older people: a cluster nonrandomized

Impact	Description of intervention	Literature link
	that the intervention group's goal setting included defining activities and participation levels that were tailored to the individuals and were more concrete within the context of their living conditions and values	controlled trial | BMC Geriatrics | Full Text

6.5 Comprehensive Geriatric Assessment

Studies on impact are below

Impact	Description of intervention	Literature link
Reduced care home admissions Comprehensive Geriatric Assessment reduces care home admission by 4%	Comprehensive Geriatric Assessment is a multidimensional, interdisciplinary diagnostic process that evaluates the medical, psychological and functional capabilities of a frail elderly person to develop a coordinated and integrated plan for treatment and long-term follow up. For every 25 people treated with CGA one residential care admission is avoided.	Comprehensive geriatric assessment for older adults admitted to hospital - PubMed Comprehensive geriatric assessment for older adults admitted to hospital: meta-analysis of randomised controlled trials | The BMJ
Reduction in frailty • Comprehensive Geriatric Assessment (CGA) reduces frailty by 21.4%	The participant was referred to a physical therapist (PT), a psychologist, a nutritionist, and a pharmacist for the corresponding interventions, according to the results of their Comprehensive Geriatric Assessment. All participants were provided with long-term care (LTC) resources and followed up by nursing case managers.	sgecm.org.tw/DB/ijge/21/460.pdf?Title=The Effectiveness of an Outpatient Personalized Multidisciplinary Intervention Model, Guided by Comprehensive Geriatric Assessment, for Pre-Frail and Frail Elderly&Keyword=frailty; geriatrics; outpatients; patient care team&v=1444

Impact	Description of intervention	Literature link
Reduction in frailty • Comprehensive Geriatric Assessment reduces frailty by 14.7%	Case management by the physiotherapist and regular case conferences involving the physiotherapist, geriatrician, rehabilitation physician, nurse and dietician facilitated the coordination of the intervention delivery.	A multifactorial interdisciplinary intervention reduces frailty in older people: randomized trial | BMC Medicine | Full Text
Reduced length of stay • Comprehensive Geriatric Assessment reduces length of stay following hospital admission by 16%	CGA-based protocol at home, with a full-time geriatrician integrated into the multidisciplinary team, could have an impact on the earlier resolution of the health crises attended by the hospital-at-home team.	Hospital-at-home Integrated Care Programme for the management of disabling health crises in older patients: comparison with bed-based Intermediate Care | Age and Ageing | Oxford Academic

6.6 Anticipatory Care Planning (ACP)

Studies on impact are below

Impact	Description of intervention	Literature link
Reduction in hospital admissions • Anticipatory care planning reduces admissions to hospital by 42.5%	The current study has shown that an ACP and a coordinated team-based approach targeting an identified population at high risk of hospitalisation can reduce admission rates and occupied bed days. This approach to care also leads to an increased likelihood of being allowed to die at home.	https://bjgp.org/content/62/595/e113