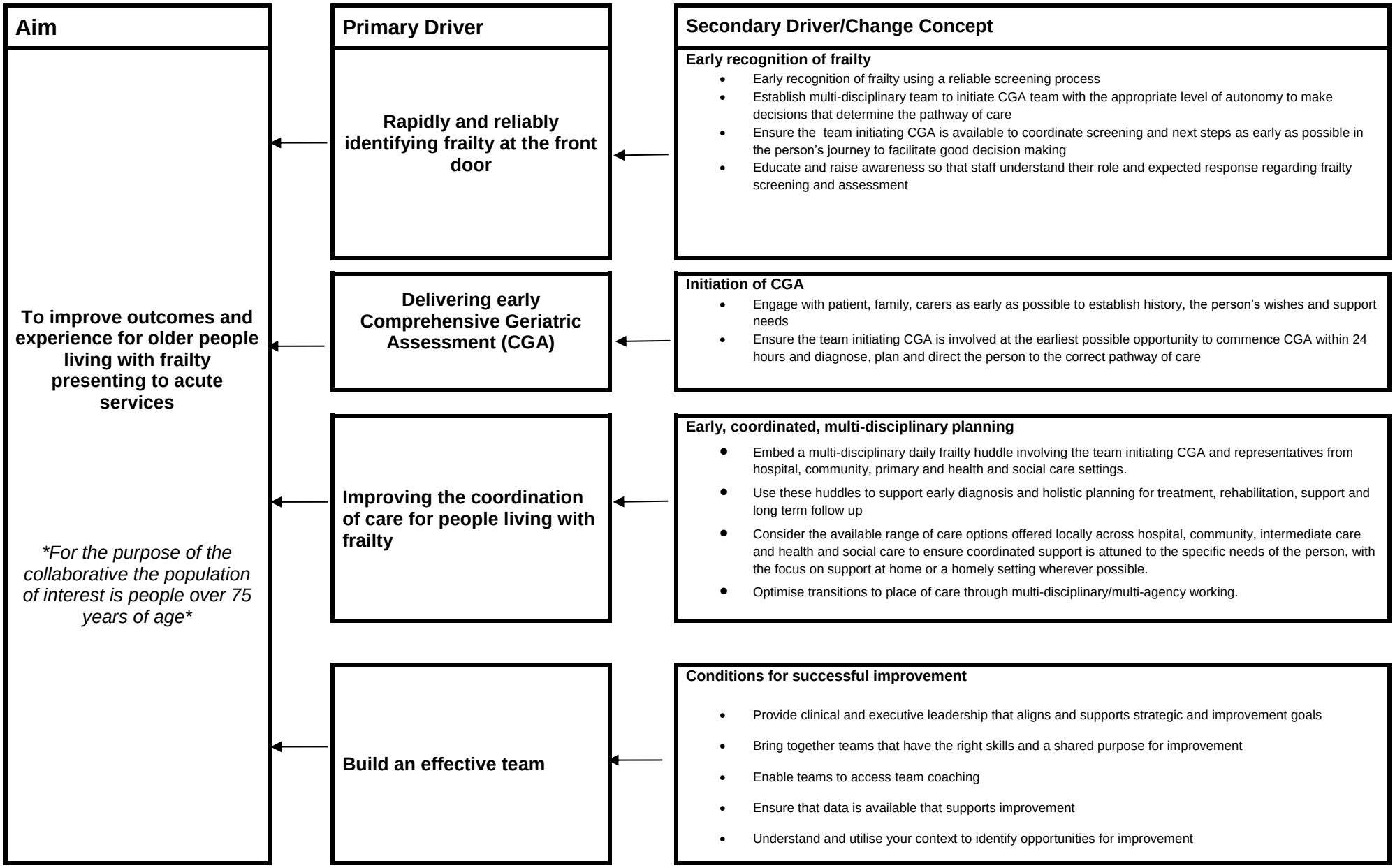
2019
Frailty Coordination at the Front Door Driver Diagram, Change Package and Measurement Plan: Phase 2



Change package

Primary Driver	Secondary Driver	Change concepts and ideas for PDSA testing
Rapidly and reliably identifying frailty at the front door	**Early recognition of frailty** • Early recognition of frailty using a reliable screening process • Establish multi-disciplinary team to initiate CGA team with the appropriate level of autonomy to make decisions that determine the pathway of care • Ensure the team initiating CGA is available to coordinate screening and next steps as early as possible in the person's journey to facilitate good decision making • Educate and raise awareness so that staff understand their role and expected response regarding frailty screening and assessment	Use a frailty assessment tool as an adjunct to clinical judgment that is reliable at identifying frailty and prioritising for CGA to reduce variation of process. Two suggested tools are- • The Healthcare Improvement Scotland "Think Frailty" Tool (https://ihub.scot/media/1430/20180523-think-frailty-screening-tool-v35.pdf) or • The Rockwood clinical frailty scale (https://docs.wixstatic.com/ugd/2a1cfa_e5e2c60f3d3d4449bbdd5e85aeb915f3.pdf) Agree your criteria for CGA: for example, with HIS tool you could agree a minimum number of elements ticked "yes" or with the Rockwood scale you could agree minimum cut off point. Prioritise screening for frailty as early as possible in the journey at the first point of access to the hospital Target screening for your agreed population of interest Develop a multidisciplinary team to initiate CGA that has the appropriate level of expertise (i.e. Geriatrician, Physiotherapist, Consultant Nurse, Advanced nurse practitioners, Occupational Therapists, Staff nurses specialising in Frailty and Assistant Frailty Practitioners) Use evidenced based standards and guidance to develop CGA team Access British Geriatric Society website for information https://www.bgs.org.uk/sites/default/files/content/resources/files/2018-05-23/fff_full.pdf
Primary Driver	**Secondary Driver**	**Change concepts and ideas for PDSA testing**

Delivering early Comprehensive Geriatric Assessment (CGA)	**Initiation of CGA** • Engage with patient, family, carers as early as possible to establish history, the person's wishes and support needs • Ensure the team initiating CGA is involved at the earliest possible opportunity to commence CGA within 24 hours and diagnose, plan and direct the person to the correct pathway of care • Initiate CGA to diagnose, plan and direct the person to the correct pathway of care	Test and implement a process to communicate people identified with frailty with the team initiating CGA. Commence Comprehensive Geriatric Assessment that include the following domains:- ○ Medical ○ Mental Health ○ Functional capacity ○ Social circumstances ○ Environment Develop advanced roles with a competency framework for front door teams. Access this link (https://ihub.scot/media/1785/frailty_advanced_nurse_practitioners_competences1-pdf-form.pdf) for an example of a competency framework developed by NHS Fife's frailty team. Maximise the flexibility of the team by defining role specific and non-role specific tasks i.e. define minimum grade within team that can conduct tasks such as history taking, blood sampling, physical observations and basic functional assessment Identify skill gaps and access local training

Primary Driver	**Secondary Driver**	**Change concepts and ideas for PDSA testing**

Improve the coordination of care for people living with frailty	**Early and coordinated, multi-disciplinary planning** • Embed a multi-disciplinary daily frailty huddle involving the team initiating CGA and representatives from hospital, community, primary and health and social care settings. • Use these discussions to support early diagnostics and holistic planning for treatment, rehabilitation, support and long term follow up • Consider the available range of care options offered locally across hospital, community, intermediate care and health and social care to ensure coordinated support is attuned to the specific needs of the person, with the focus on support at home or a homely setting wherever possible • Optimise transitions to place of care through multi-disciplinary/multi-agency working.	Develop and test a multi-disciplinary frailty focused huddle aiming for 7 day cover. The membership of the huddle should include • Geriatricians, • Advanced nurse practitioners, • Allied health professionals, • Service managers, • Discharge coordinators, • Inpatient ward staff, • Social work • Intermediate care representation. The huddle membership will vary depending on the site but must include individuals with the autonomy to make senior care decisions such as decision to discharge, admit to specialty ward or transfer Work in partnership with patients, their family, carers and multidisciplinary team members to facilitate timely transfer to point of care as determined by the CGA.

Primary Driver	**Secondary Driver**	**Change concepts and ideas for PDSA testing**

Build an effective team	**Conditions for successful improvement** • Clinical and executive leadership that aligns and supports strategic and improvement goals	• Alignment of clear improvement goals and vision by organisational, operational and clinical leaders • Visible commitment from organisational, operational and clinical leaders to guide, sustain or spread improvements across clinical areas, service or organisation. • Organisational, operational and clinical leaders use coaching conversations, appreciative inquiry, and learning from data to build will, engage others and develop improvement ideas • Organisational, operational and clinical leaders remove barriers and support teams to prioritise, plan and test improvement ideas • Organisational, operational and clinical leaders and teams use evidence, quantitative and qualitative data, service user and staff feedback to understand current state, diagnose problems and prioritise improvements • Data, case studies and service user stories are used through board and governance structures to maximise opportunities for learning and spread of quality improvement activity. • Organisational, operational and clinical leaders role model behaviours that build will, generate engagement and support innovation • Service users and their families are involved in the design and delivery of improvement projects
	• Teams that have the right skills and a shared purpose for improvement	• Teams have access to resources (people, data and information, knowledge and skills) to engage in improvement activity and build improvement expertise • Teams are able to align improvement activity with experiences and outcomes for people in their care

	• Enable teams to access team coaching	• All people who are working in the service e.g. clinical support workers or housekeeping staff have the opportunity to inform improvement ideas and participate in improvement activity • Service users have the opportunity to inform improvement ideas and participate in improvement activity. • Team and leadership use the Model for Understanding Success in Quality (MUSIQ calculator) to assess their readiness for change. The MUSIQ calculator includes factors to do with the context in which you work that will impact on the viability of your quality improvement project. Mapping your team against these factors at the start of your work can help identify and address areas of weakness and support discussions with your executive sponsor https://ihub.scot/media/1570/bmjqs-aug-2011-musiq.pdf • Project charters are developed to communicate your vision, project plan, change ideas and measures. https://ihub.scot/media/1325/20171204fatfdcollabteamcharter-blank-v02-pdf-form.pdf • Team communication approaches that flatten hierarchy to influence shared values, respect for roles and ability to challenge. • Teams have access to support from Organisational Development for team coaching • Teams understand the characteristics of high performing teams and the dysfunctions that undermine them

		• Teams have the skills to develop their objectives and influence, for example, through team coaching and simulation
	• Data is available that supports improvement	• Teams have access to data and expertise that helps them to understand their baseline state, map their progress and demonstrate the impact of their improvement • Data is used in wards and departments to encourage conversations that help to plan your improvements. • Close the learning and feedback loop by developing reporting, sharing and evaluation mechanisms which connect data and learning from improvement initiatives with board and governance agendas.
	• Understand and utilise your context	A suite of quality improvement and project management tools are used to help understand your system, generate ideas, identify challenges and develop solutions, for example • Task analysis • Process and value stream mapping • Shadowing • Simulation • Service user and staff experience • Pareto analysis • Learn from data, service user and staff experience to inform improvement plans

		• Improvement activity is aligned with relevant local or organisational initiatives or aims in order to build clear and joined up clinical and improvement goals • Environment, workspace and relationships maximise opportunity for inter professional/ inter- disciplinary joint working, communication and integration of clinical and improvement goals across team or service boundaries • Walk the patient pathway from front door to discharge to understand time, journey, decision making, and interface with community or discharge support services, including transport. • Process map the frailty patient pathway involving all appropriate stakeholders and ihub improvement and data team to demonstrate the pathway and support understanding of the system to develop high impact changes that inform testing of new ways of working. • Use culture or climate surveys (for staff and / or patients) to identify areas of need to maximise team engagement and generate ideas for improvement. • Develop improvement and subject matter knowledge and skills for teams and leaders, (e.g. process mapping; PDSA cycles, run charts and interpretation of improvement data) through education and coaching e.g. through face to face, using a multi-professional approach; or online QI learning such as on TURAS platform (NES) • Use huddles or leadership walk rounds to facilitate a close interface and sharing of learning between teams, disciplines and leaders.

Measurement Plan

This measurement plan has been produced to guide teams to collect data on process reliability that will inform the tests they undertake as part of their improvement work. The measurement plan includes outcome and balancing measures that should be accessed from existing data sources and reported as part of collaborative activity.

Process Measures

Process reliability is a critical step in improving outcomes. These process measures include guidance on eligible patients, data sources and operational definitions. These are intended to offer guidance and are not prescriptive as they may need to be amended according to local context.
The process measures below have been produced to support teams who are not able to capture process reliability on the entire population of interest. Sampling will allow teams to generate enough data on the reliability of their processes which is a critical step to achieving the desired outcomes.

	Process measures			
Identifier	**Measure Name**	**Rationale**	**Operational Definition**	**Data Collection Guidance**
CGAP1	Percentage of people over 75 years old who are screened for frailty on arrival to front door	To measure the reliability of the screening process. Improvement noted by an increase in percentage By consistently screening potentially frail arrivals at the front door, patients requiring a comprehensive geriatric assessment can be identified immediately. Low percentages on this measure will have knock-on effects later on in the system, which will not be captured by the measurement plan.	• Numerator = total number of people aged 75 or more who are screened for frailty using a reliable screening tool on arrival • Denominator = total number of people aged 75 or over arriving at front door • Calculate the percentage by dividing the numerator by the denominator then multiplying by 100	Teams will define their own front door. Data should be collected from electronic systems if available. If data is collected from case notes a sample of arrivals at front door aged over 75 may be used (minimum 5 cases per week). If sampling, the denominator is the sample size (at least 20). It may be useful at the early stages of your improvement to capture data on each element of screening. This will help focus your efforts on areas where reliability is less strong. Inclusion criteria: People aged over 75 arriving at the front door during the time period of interest. Acute care team will provide a toolkit to support data collection.

Identifier	Measure Name	Rationale	Operational Definition	Data Collection Guidance
CGAP2	Percentage of people who meet the criteria for CGA who have CGA initiated within 24 hours	To measure the impact screening has on time to initiation of CGA. Improvement noted by increase in percentage After prompt identification of patients who would require CGA, this should be followed up with prompt commencement of CGA. Low percentages could indicate that resourcing or communication for commencing CGA is insufficient.	• Numerator = total number of people who met the criteria for CGA who have evidence of initiation of CGA within 24 hours of arrival in hospital • Denominator = total number of people identified as meeting the criteria for CGA • Calculate the percentage by dividing the numerator by the denominator then multiplying by 100	**Initiation of CGA is defined as the person's first contact with CGA team. Evidence for this includes written entry of discussion or outcome for CGA huddle together with a documented date and time.** **Time in hours and minutes between arrival at hospital and initiation of CGA needs to be less than 24 hours for inclusion in your numerator.** Data should be collected from electronic systems if available. If you have to sample, use a **minimum** of 20 case notes per month (5 notes per week) drawn from your ward/area of interest. Inclusion criteria: Patients identified as meeting the criteria for CGA during the time period of interest. Acute care team will provide toolkit to support data collection.
CGAP3	Mean time to specialist geriatric bed	To measure the effectiveness of CGA on early decision making Improvement noted by decrease in mean time. Once CGA has been commenced a decision can be made about whether to admit to a specialist geriatric bed (note,	• Numerator = total time in hours and minutes to reach specialist geriatric bed **following admission** • Denominator = number of people admitted or transferred to specialist bed that month. Calculate mean by dividing total time by number of patients.	Data should be collected from electronic systems if available. **Note: time needs to be inputted in hours and minutes.** Inclusion criteria: Patients reaching a specialist bed during the time period of interest.

		CGA does not need to be completed in full in order for this decision to be made). Long times could indicate a lack of capacity of specialist geriatric beds, or of decision makers at the point of CGA.		Exclusion criteria: Patients specifically referred to destination other than specialist geriatric bed as the decision from CGA, for example admission for cardiac arrest.
CGAP3 Alt	Median time to specialist geriatric bed	To measure the effectiveness of CGA on early decision making Improvement noted by decrease in median time. Once CGA has been commenced a decision can be made about whether to admit to a specialist geriatric bed (note, CGA does not need to be completed in full in order for this decision to be made). Long times could indicate a lack of capacity of specialist geriatric beds, or of decision makers at the point of CGA.	Where the exclusion criteria above cannot be applied, i.e. admissions that are appropriately directed to other specialties cannot be excluded from the sample, the median may be used to account for skew from these cases. Data items: • Patient ID (use a sequential count each month, e.g. 1, 2, 3….. 1, 2, 3 etc), **do not use CHI numbers**. • Date and Time of admission • Date and Time of arrival to specialist bed	Data needs to be entered at patient-level. To identify patients, use a sequential count **(not CHI).** **Note: date and time need to be inputted in order to account for individual times taking longer than 24 hours.** Where aggregate data is not available use a sample of 20 patients per month Inclusion criteria: Patients reaching a specialist geriatric bed during the time period of interest.

Outcome measures

These outcome measures are a critical element of understanding your current system and measuring the impact of your changes. The data team at HIS will provide a template that will support regular reporting of these measures to the acute care portfolio.

N.B. For the purpose of these outcome measures ‘geriatric medicine’ is defined as any patient under the care of a geriatrician on discharge

		Outcome Measures		
Identifier	**Measure Name**	**Rationale**	**Operational Definition**	**Data Collection Guidance**
CGAO1	Percentage of people discharged from geriatric medicine within 24 hours of admission to hospital	This will determine if CGA has improved the fast turnaround of frail patients arriving at the front door. Improvement noted by increase in percentage. By enabling frail patients to rapidly repatriate to their place of residence with appropriate support, outcomes can be greatly enhanced.	• Numerator = number of people discharged from geriatric medicine within 24 hours of admission to the acute hospital • Denominator = total number of people discharged from geriatric medicine • Calculate the percentage by dividing the numerator by the denominator then multiplying by 100	Data should be collected monthly from local systems and submitted to the acute care portfolio Inclusion criteria: Discharges from geriatric medicine during the time period of interest.
CGAO2	Percentage of people discharged from geriatric medicine whose length of stay is longer than 7 days	This will determine if CGA has reduced the occurrence of long hospital stays for frail patients. Improvement noted by decrease in percentage. By reducing the occurrence of long hospital stays, patient outcomes can improve.	• Numerator = total number of people discharged from geriatric medicine whose stay is longer than 7 days • Denominator = total number of people discharged from geriatric medicine • Calculate the percentage by dividing the numerator by the denominator then multiplying by 100	Data should be collected monthly from local systems and submitted to the acute care portfolio. To determine if CGA has reduced the number of people in geriatric medicine whose stay exceeds 7 days Inclusion criteria: Discharges from geriatric medicine during the time period of interest.

Identifier	Measure Name	Rationale	Operational Definition	Data Collection Guidance

CGAO3 *	Mean length of hospital stay for people admitted to geriatric medicine	To determine if CGA has had an impact on length of stay for people admitted to geriatric medicine Improvement noted by a decrease in length of stay. By reducing length of stay, patient outcomes can be improved.	• Numerator = total number of bed days occupied • Denominator = total number of people discharged from geriatric medicine • Calculate average by dividing your numerator with your denominator	Data should be collected monthly from local systems and submitted to the acute care portfolio ***Please note this is for total bed days occupied from admission. This should include days from other areas prior to geriatric medicine*** Inclusion criteria: Discharges from geriatric medicine during the time period of interest.
CGAO3 Alt	Median length of hospital stay for people admitted to geriatric medicine.	To determine if CGA has had an impact on length of stay for people admitted to geriatric medicine Improvement noted by a decrease in length of stay. By reducing length of stay, patient outcomes can be improved.	Data items: • Patient ID (use a sequential count each month, e.g. 1,2,3….. 1,2,3 etc), **do not use CHI numbers**. • Date and Time of admission • Date and Time of discharge	Data should be collected monthly from local systems and submitted to the acute care portfolio ***Please note this is for total bed days occupied from admission. This should include days from other areas prior to geriatric medicine*** Inclusion criteria: Discharges from geriatric medicine during the time period of interest. The median will be less prone to skew i.e. it will be less distorted by the presence of outliers.

Balancing Measures				
Identifier	**Measure Name**	**Rationale**	**Operational Definition**	**Data Collection Guidance**

CGAB1	Emergency readmissions within 7 days, percentage of total admissions.	To check that faster turnaround of patients is not having a negative effect on the quality of care provided. Improvement noted by a decrease (but should be reconciled with any change in CGAB2)	• Denominator = total number of people discharged from geriatric medicine that month. • Numerator = total number of those discharges who were readmitted within 7 days Calculate percentage by dividing your numerator with your denominator then multiplying by 100.	Data should be collected monthly from local systems Inclusion criteria: discharges from geriatric medicine during the month of interest. **** Note this should not include people attending for day procedures or clinic appointments.**
CGAB2 **	Emergency readmissions within 28 days for over 75s, percentage of total admissions.	To check that faster turnaround of patients is not having a negative effect on the quality of care provided. Improvement noted by a decrease (but should be reconciled with any change in CGAB1)	• Denominator = total number of people discharged from geriatric medicine that month • Numerator = total number of those discharges who were readmitted within 28 days Calculate percentage by dividing your numerator with your denominator then multiplying by 100.	Data should be collected monthly from local systems To determine whether CGA may have resulted in an increase in re-attendance Inclusion criteria: discharges from geriatric medicine during the month of interest. **** Note this should not include people attending for day procedures or clinic appointments.** A lag in the data is acceptable given that a window for readmission of 28 days is used.

Definition of frailty - Frailty is a distinctive health state related to the ageing process in which multiple body systems gradually lose their in-built reserves. Around 10% of people aged over 65 years have frailty, rising to between a quarter and a half of those aged over 85 years. Also about 5-10% of all emergency department (ED) attendees and 30% of patients in acute medical units are older people with frailty.

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. It is important to understand the difference between frailty, long term conditions and disability. Many people with multiple long term conditions (so called multi-morbidity) will also have frailty which may be masked when the focus is on other disease based long term conditions. Likewise, some people whose only long term condition is frailty may be low consumers of health care resources and not 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 identical.

Definition of comprehensive geriatric assessment (CGA) - Comprehensive geriatric assessment (CGA) is a multidimensional and usually interdisciplinary diagnostic process designed to determine a frail older person's medical conditions, mental health, functional capacity and social circumstances. The purpose is to plan and carry out a holistic plan for treatment, rehabilitation, support and long term follow up. CGA is part of an integrated approach to assessment based on the following principles:

- The older person is central to the process
- Their capacity to participate voluntarily must be assessed, and if lacking, then there needs be a system to address their needs in an ethical fashion.
- Links between social and health care should be good enough for older people who need comprehensive assessment to receive it in a timely and efficient manner, and proportionate to their degree of need.
- Assessments should be standardised and carried out to a reliable standard
- Evidence is strongest for CGA delivered in discrete units (wards)

Definition of a CGA huddle – A succinct multidisciplinary (and multiagency) discussion that uses the diagnostics from CGA to support early and effective care coordination. The membership of the huddle should include representation from across the pathway of care, with the appropriate level of expertise and autonomy to make care decisions regarding discharge, admission to specialty ward or transfer. Membership and format of the huddle will vary depending on the site but the principles of timely decision making, and the means to effectively coordinate care are essential