Frailty data in the Edinburgh and South East Scotland Region

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Matter of Focus
Evidence. Action. Change.

About Matter of Focus

Matter of Focus is a mission-led company and certified B Corp based in Edinburgh.

We work with organisations, projects and programmes to explore, map, analyse and assess the outcomes that matter to them, the people and populations they care about, and their funders. We provide tools and techniques to bring together evidence, data and evaluation to ensure that projects and programmes can meet their outcomes, are successful and adaptable, and can demonstrate that success to funders, service-users and other stakeholders.

We have created an innovative and easy to use software tool, OutNav, that enables public service organisations and funders to make effective use of their data and information to learn, improve and tell the story about the difference they make.

Matter of Focus is led by Dr Ailsa Cook and Dr Sarah Morton. Ailsa and Sarah are internationally renowned thinkers, both well known for their ability to develop practical tools backed by robust evidence-based approaches, with extensive experience of delivering solutions for public service organisations.

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Introduction

Following a tender process, Matter of Focus was awarded a contract by the Data Driven Innovation Hub (DDI) at the University of Edinburgh to undertake a data systems analysis and review of current pathways related to the concept of "Frailty" in each of the six Health and Social Care Partnerships (HSCPs) in the Edinburgh and South East Scotland (ESES) region. This regional area includes six HSCPs within which data were reviewed: Edinburgh, East Lothian, West Lothian, Midlothian, Borders and Fife.

The identification and management of "frailty" was identified as an initial regional priority by the Health and Social Care element of the DDI Programme (HSC DDI) and its partners. We were asked to undertake a review of relevant electronic systems across the region. We were asked to consider primary and secondary care data systems but to place greater emphasis upon primary and social care which were considered harder to unravel. We were asked to focus on the identification and management of people who may be frail and also arrangements for sharing data. Findings were intended to inform the structure of a future frailty data in DataLoch.

Stakeholder engagement across the six HSCPs was considered central to this review to explore practitioner perspectives as well as opportunities and barriers for the current and future use of frailty data for improvement.

What we did

Central to our approach was a collective process of engagement of the six HSCPs and their representatives, building on our expertise of delivering collaborative improvement programmes. This engagement process was facilitated online, using Teams and the online whiteboard software Miro. We also used our own outcome planning software, OutNav, to capture information during and between the following workshop sessions.

1. Context analysis workshop to understand the factors helping and hindering the effective identification and management of people who are frail.
2. Success stories workshop using our framework to surface current practice in relation to identifying and managing frailty and information sharing.
3. Outcome mapping workshop, building on the work already carried out in the first two workshops to develop an outcome map.

We originally planned to have a fourth workshop to collaboratively review frailty data but agreed as a Project Group to reschedule the session and to use the time to review and validate emerging findings with stakeholders, which we did.

In addition to the workshop series, we worked with representatives from the six HSCPs to gather information about the current use of frailty data and related practices and systems. We developed a survey form for HSCPs to complete (Appendix 1), which asked a series of questions on frailty data and also invited examples of best local practices.

The work was steered by a Frailty Systems Analysis Project Group, made up of DDI and Matter of Focus staff. This group met every 3-4 weeks to discuss progress, sustain strategic buy in and ensure synergy with other work.

What we found

Findings are reported firstly in relation to our stakeholder engagement through the workshop series and secondly findings from our mapping of frailty data usage across the HSCPs.

Stakeholder engagement findings

Across the three workshops we found good levels of engagement and interest from the 32 HSCP representatives who took part. Participants expressed a strong interest in being involved in the process and in learning from each, as described in the following workshop feedback.

> Amazing to find out how many people are involved in frailty in various ways and to make those links/connections to share good practice/ideas.

> The scene setting really helped to bring a large and diverse group together at the beginning. I learned (had it confirmed) that we are all dealing with frailty differently according to our organisational culture and the focus that we have been able to apply.

In line with the second quote we found that practice in relation to frailty data was heterogenous across the six HSCPs. While we were able to relatively quickly agree a shared understanding of where we wanted to get to in relation to the future use of such data, the current landscape is enormously varied, both across the six HSCPs but also within individual partnerships. Some people described a sense of feeling overwhelmed by the varied systems and processes with multiple data owners involved and others expressed a desire for consistency.

> Do you think that we might all get to a stage where we are recommending use of the one single frailty assessment tool? There are several in use out there and I wondered if we should consider linking together to agree use of one?

All in, we believe that there is therefore unlikely to be one simple data solution and that any solutions must continue to be developed in close collaboration with HSCP stakeholders.

Findings from the three workshops are summarised below.

Workshop 1 Understanding the context

The purpose of the first workshop was to explore the current context for the use of frailty data across the six HSCPs. We used an adapted version of the ISM Behaviour Change Model (Scottish Government, 2013[1]) to aid reflection. This model asks people to describe helping and hindering factors at an individual, social and material level.

We identified consistent themes across the three spheres which should inform the development of frailty data systems in the region. People described the centrality of having capacity to effectively use frailty data. Skills and knowledge were needed to better understand and exploit available data and also to support the development of new systems. Support is needed for people in health and care systems to develop data and

[1] ISM is described in this briefing https://www.gov.scot/publications/influencing-behaviours-moving-beyond-individual-user-guide-ism-tool/

analytic skills but also to have time freed to allow them to make best use of frailty data for improvement. People also asked for support to navigate the complexities of partnership working around data usage.

A variety of issues around data sharing were identified by the group. Some related to reluctance to share data from individuals and their family, sometimes connected with a reluctance to accept a frailty label or the need for help. We also heard of inter and intra-professional reluctance to share data. Linked with this, we also heard about challenges in relation to different professional cultures and interpretations of the concept of frailty which hindered the effective use of data. On one level this was seen overtly through people using different tools for measurement, based on their professional background. The counter to this was where strong and positive partnerships were able to develop in local areas that helped people mutually benefit from data sharing. For example, this was seen between community bodies and statutory services.

It was widely acknowledged that this is an especially complex domain of care where many statutory, voluntary and informal actors contribute to helping people manage frailty. This makes data sharing and the analysis across disparate data sets more complex. As a result, partnership working and mutuality seem to be vital to building trust in relation to the better use of data. Despite the challenges, workshop participants spoke very positively of the renewed emphasis on frailty and welcomed the possibility of improving outcomes for citizens through the better use of data. They also welcomed the prospect of a more consistent definition of frailty regionally and spoke positively of the potential for improved usage of frailty data. Findings are summarised in Table 1.

	What helps the use of frailty data for improvement?	What hinders the use of frailty data for improvement?
Individual	• Agency being built through involvement in improvement processes which are clear • Being able to see the difference data can make • Having appropriate skills and knowledge	• The need to involve family • Reluctance to share data (from family and frail person but also within and between professional groups) • Reluctance to acknowledge frailty or need for help • Variations in clinical judgement of frailty • Lack of knowledge and skills (particularly analytic and evaluative)
Social	• Having data champions • Partnership working and trusting relationships (e.g., with third sector, GPs and community provision) • Opportunities to share learning • Understanding people's whole lives and community supports • Recognising the limits of data • Understanding the purpose of data collection • It being a policy priority	• Variations in language and culture (e.g., between health and social care) • Frailty stigma (term perceived negatively and stigma of help seeking) • Lack of agreed definition of frailty • Local/national data disconnect • Too many data owners • Social care is the 'poor relation' to health
Material	• Infrastructure for qualitative data • Prioritisation of frailty data with resource (local and national level) • Data sharing agreements • Investment in skills and capacity • Interoperability and data consistency • Ubiquity of technology	• Fear of new demand that could be generated • Mistaking data for outcomes • Lack of training for systems • Lack of staff resource (compounded by COVID) • Inconsistent and limited data • Multiple stakeholders making it harder to connect systems

Table 1. Factors which help and hinder the use of frailty data for improvement

Workshop 2 Sharing Success Stories

In our second workshop we shared examples of how frailty data had been used to improve outcomes from three different HSCP areas. We shared examples where the identification or management of people who were frail had been improved as a result of data usage and plotted those stories against our heading in OutNav. Learning from this workshop helped the group consider what success looked like and formed a central part of the process of informing later development of an outcome map and theory of change.

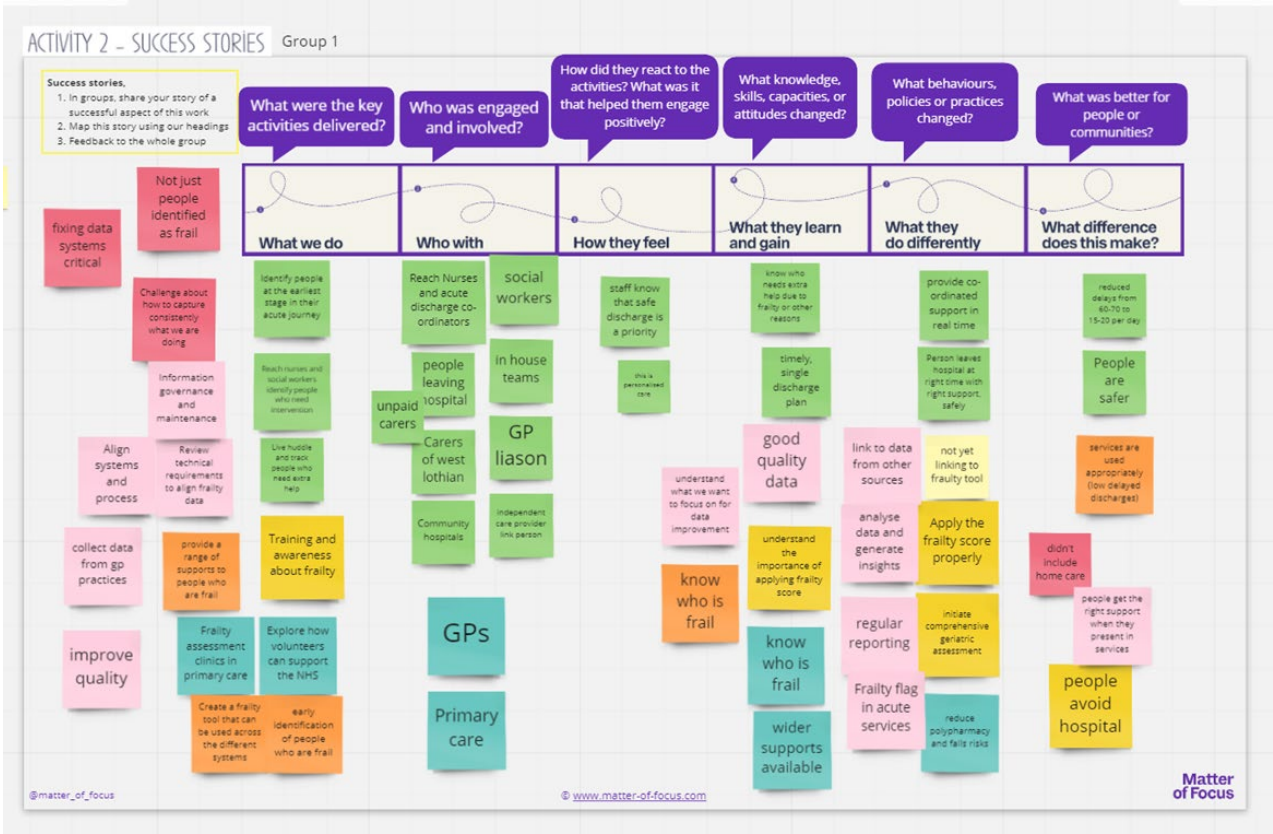

Figure 1. Example of a success story mapped against the OutNav using Miro software

Workshop 3 Developing an Outcome Map

In the third workshop we built upon our learning from the first two sessions to develop a draft outcome map which was later translated to our mapping software OutNav. This map provides a useful framework for understanding the context for, and facilitators of, the current and future use of frailty data for improvement. It is an aspirational document and while its ambitions may stretch beyond the current goals of the DDI programme on frailty its strengths are that:

- It has been built collaboratively with over 30 key stakeholders from across the six HSCPs,
- It can be used to form the basis of an evaluation framework for the future development of this work programme or to inform programme planning,
- It can be refined and developed over time as the project develops and grows.

We developed pathways both for the identification and management of people who are frail and also for data sharing (the latter of which we do not report here). Figure 2 shows the draft outcome for the identification and management pathway. The map and its constituent pathways can be reviewed in more detail via OutNav: https://www.outnav.net/view-live-report/g/t2pIw61Hbyc1DPaxnHz9zKkxZdEpZY6l

Risks and assumptions

As part of the outcome mapping process the group agreed a set of risks and assumptions which underpin the outcome map. Ordinarily in our approach these are used to inform the analysis of progress within an evaluation. In this context, while it is recognised that addressing some of the risks and assumptions are already objectives for the frailty programme, for example, investment in building a data infrastructure, it useful to understand this shared perspective as one means of validation of those objectives and for the identification of potentially new areas of priority for the programme.

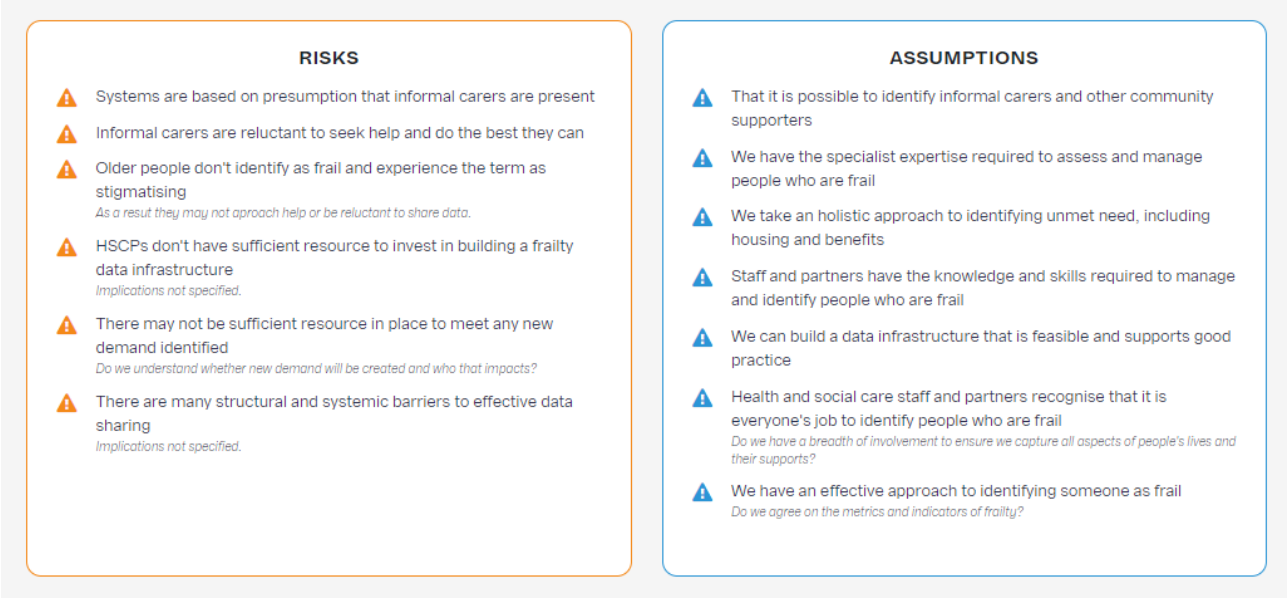

Figure 2. Risks and assumptions generated during the outcome mapping process

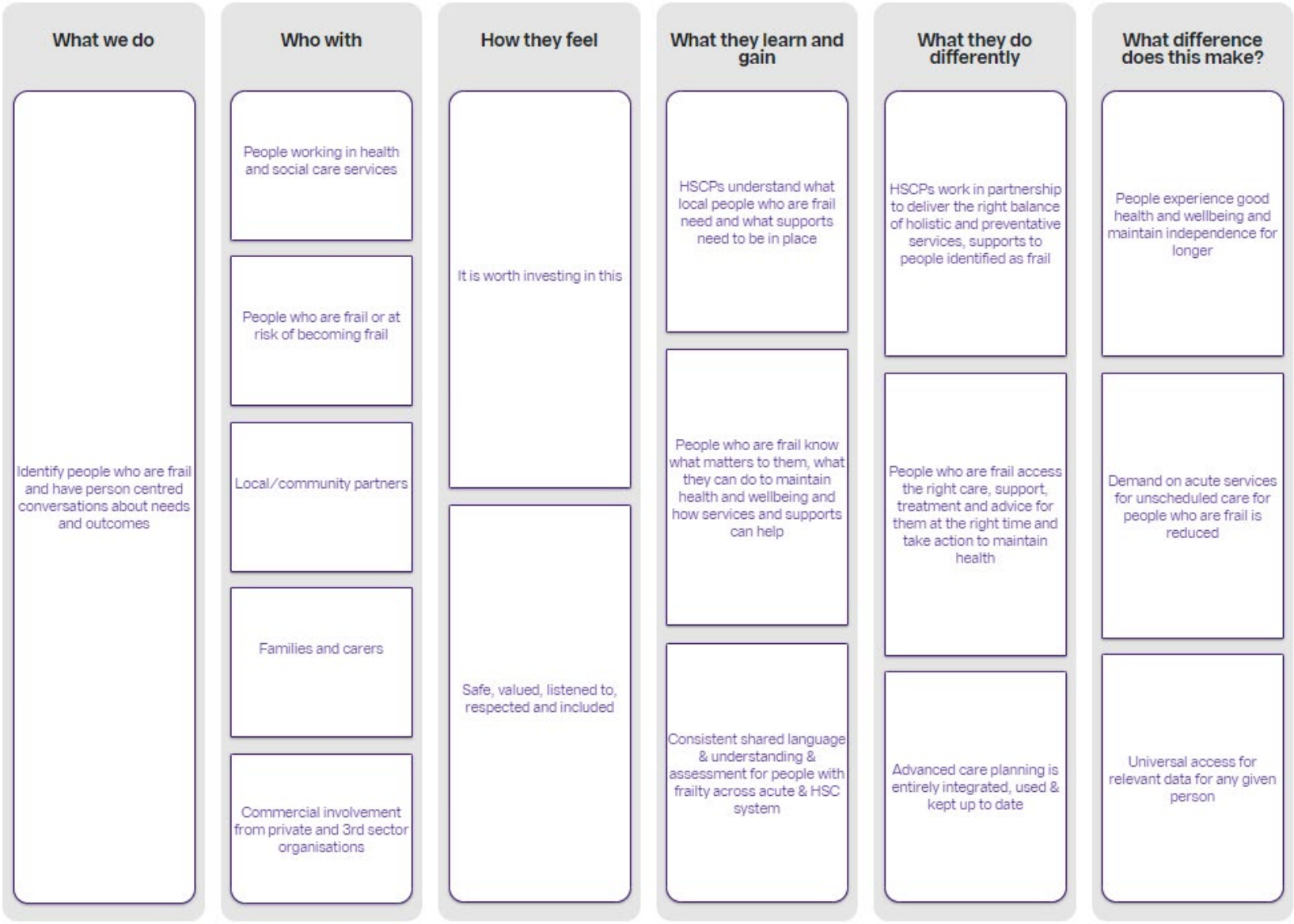

Figure 2 Outcome map pathway: Identify and manage people who are frail

HSCP frailty data mapping results

Introduction and context

The following is based on feedback received from designated leads in the six HSCPs which was gathered in a survey. A copy of the survey form, developed in partnership with DDI leads is included at Appendix 1. In some instances survey data is supplemented by information we gathered via the stakeholder engagement process or from our additional enquiries within local areas.

Some limitations should be considered when reviewing these findings. Firstly, we were unable to gather data from one of the six HSCP areas. We also had challenges in following up with some HSCPs to fill gaps in data and to clarify points they had made. This reporting therefore provides a potentially incomplete picture of what is happening in relation to frailty data across the included HSCPs and should therefore be interpreted with some caution.

Defining and identifying frailty

We asked about how HSCPs defined frailty and while most were able to describe their work in the area none reported working to an agreed definition.

In all areas teams were using tools to identify and then work with people who were frail or potentially frail. Most commonly used tools, which are summarised in Appendix 2, were the Clinical Frailty Scale (also known as the Rockwood scale),[1] used in four of the five areas and across various settings, and the electronic Frailty Index (eFI),[2] which is currently being used in two areas (East Lothian and Midlothian).

In East Lothian the PRISMA-7[3] frailty scale and the EQ 5D[4] (generic health assessment tool) were being used as part of frailty assessment but this was being replaced by Clinical Frailty Scale. In the Borders the Australian version of the Therapy Outcome Measure (AusTOMs),[5] which can be used across conditions to demonstrate change over time, was applied to measure the impact of multi-disciplinary teams working with frail elderly in home settings. In Fife and the Borders the Comprehensive Geriatric Assessment[6] is used in secondary care and the Edmonton Frail Scale[7] is used by District Nurses in Fife. There were also references to the use of Scottish Patients at Risk of Readmission and Admission (SPARRA[8]), with data held in primary care and not necessarily shared within the wider HSCPs.

While less concerned with the identification of people who may be frail and more with management and support, two areas reported using Anticipatory Care Plans.[9] In Edinburgh this work is coordinated and supported via the 7 steps to ACP toolkit.[10]

Information collected with these tools was used in various ways across the areas. Commonly, where assessments were completed in hospital settings, information was passed to community settings, for example, in Fife. In Midlothian data was shared from primary care with a commissioned third sector provider to support their direct engagement of people assessed as frail in the community. Overall, information sharing protocols were in early-stage development but projects are underway to improve sharing between primary care and wider community services. One area described using tools as a means of measuring change over time in frailty (East Lothian).

While some areas were able to provide an estimate of the numbers of people who were frail at primary care cluster level, only Midlothian was able to identify the number of people in their HSCP area who they identified as frail. Further, this data was also stratified by severity based on eFI segmentation and triangulated with SPARRA data. Through this process around 10,000 people in that HSCP area were

identified as frail, 1000 of whom were considered severely frail, 2500 moderately frail with the remainder being mildly frail. This suggests that something in the region of 11% of the population of Midlothian may be considered frail. Extrapolating from this data suggests there may be something in the region of 154,000 people who are frail across the wider region, albeit it is clearly important to recognise the influence of demographic variations across the region when considering this speculative estimate.

Supporting people identified as frail

All areas were able to identify services that would work with people who were frail by nature of having an older adult target population. These included 'home first' type services, OT led services and other generic older adult services. In two areas specific frailty services were in development including an Older People's Assessment Service (Borders) and a Community Frailty Project (Edinburgh). In Fife a frailty screening service operates at hospital admission. In Midlothian a specific pathway was being developed for frail people in the area. While this was not yet HSCP wide, two primary care areas had specific frailty models in operation. Mid Med in Newbattle is targeted at people who are severely or moderately frail while the Frailty MDM in the Penicuik cluster is less stratified by level of frailty. In addition, a third sector partner, The Red Cross, provide a specific frailty service across the area integrated within their wider services.

Targeting of services by level of frailty was less common elsewhere but a number of areas described work that would in effect allow for targeting of those most in need, but not necessarily founded on the construct of frailty. For example, Edinburgh's Long-Term Conditions Programme is targeted at those with multiple and complex needs and older people's assessment units in Borders and Fife allow, or will allow for, the stratification by level of need but only at point admission. In other areas service elements were described as targeted at certain levels of frailty but it was unclear how stratification was or would be achieved.

Exemplar projects

We asked local areas to provide examples of good practice in the collection and use of frailty data. We have included examples where we felt there was data relevance but acknowledge that these are not necessarily fully representative of the scale of local innovation. There may also be gaps in data as a result of difficulties we experienced in both gathering and clarifying information.

Borders

In the Borders the Home First and Community Assistance hubs were described as having been successful in the identification of frailty in early stages. Each involved a multidisciplinary team (MDT) approach with the need to align data sharing across teams identified as a key priority. Home First provides access to home care for people in hospital achieved by sharing data. This data influences the assessment of patient needs on the wards, and helps address gaps in home care, bringing Allied Healthcare Professional rehabilitation into home care. Analysis comparing Home First results to those for a matched cohort of people who had not used Home First service suggested a large reduction in unscheduled care for the Home First Group. Hospital capacity also increased with fewer readmissions in Home First areas. The approach was also welcomed by staff and patients, who described an improved discharge experience. Data derived from the system has informed the decision to expand the service.

Community Assistance hubs were established in five localities as a partnership response to COVID-19. Hubs included the establishment of multidisciplinary 'huddles' to identify people at the earliest stage in their acute journey who were at risk of admission or people whose condition was worsening, with data shared across the partnership to facilitate huddles. They included liaison with GPs for the collation of data, as well as nurses and acute discharge coordinators, social workers, community hospitals, independent care

provider link staff, in-house teams, unpaid carers and people leaving hospital. This more coordinated approach was described as having enabled joined up support in real time and for the more effective use of resource across the localities involved. Outcomes were improved for people receiving care including lower hospital admissions and reduction in delayed discharges. While challenges remain around staff engagement in the context of COVID and better linking to home care, there is agreement to develop the huddles and MDT-based working into a more virtual ward model within localities. Having good data and data sharing will be key to enabling this.

East Lothian

As a test of change a new pathway related to Advanced Practice Occupational Therapist in the management of long-term conditions has established a model of early intervention in frailty. This focuses on mild to moderate frailty with Occupation and Physical Therapists working across teams and different case loads to support people at the earliest stage possible. Practitioners currently use the PRISMA-7[3] and EQ 5D[4] scales to measure outcomes for people using the service, taking before and after measures. These tools will be replaced by use of the Clinical Frailty Scale.[1] This is a new project so its merits and challenges are not yet fully understood and available information is limited.

Edinburgh

Building from an Improvement Programme, Edinburgh Health and Social Care Partnership (EHSCP) have a well-developed approach to Anticipatory Care Planning, having worked with Care Homes and GP Practices across the partnership area. This approach is underpinned by a locally developed toolkit and methodology.[10] Data derived from the early stages of the programme suggested cost savings of £325,557, associated with the reduced number of avoidable hospital admissions across twenty care homes during 2018-19 (compared with the baseline year 2017-18).[11] The ACP approach has also been extended to people living with long-term conditions. An 'ACP bundle' provides practitioners with guidance, educational resources, and a process for sharing ACP quality criteria across the integrated system through Key Information Summaries. The number of Key Information Summaries for people living with long-term conditions has increased from 66,966 in March 2020 to 237,372 in March 2021 (254% increase).

Elsewhere, the HSCP is in the early stages of partnering, and consequently sharing data with, the British Red Cross to test alternative methods of identifying and engaging people who live at home, who are at risk of falling and who are not currently receiving support to manage falls risk.

Fife

We received limited information from Fife on exemplars. We are aware that GPs populate a frailty register and of the existence of a Complex Care Team (high health gain model) as well as the assessment of frailty at admission to hospital.

Midlothian

Following a GP frailty collaborative the Mid Med programme has featured a strong emphasis on the improved use of data to identify and stratify frailty using the electronic Frailty Index. It involved work in one GP practice and the employment of a GP with extensive experience of working with people who are frail to provide support to people identified as moderately or severely frail. There is evidence from this programme that clinicians and partners are providing more consistent and proactive care and that increasing capacity and improving continuity of primary care can lead to improved outcomes. These include a 38% reduction in Emergency Department attendance for people with frailty and a 46% reduction in likelihood of people

having a second admission. Additionally, 60 people had medications reduced or stopped as a result of a polypharmacy review. While results are promising, the approach has been hard to expand as a result of the pandemic. A TeC Pathfinder project is underway which will add impetus to expansion.

Elsewhere, the Frailty MDM has a broader scope than Mid Med given it includes people with mild frailty at times, again identified through the use of eFI. Mid Med involves an MDT meeting each fortnight to review and assess people with moderate or severe frailty. The service is focused on co-ordination of care and ensuring a 'joined up' experience as their needs increase.

The HSCP initially started working with the Red Cross to offer proactive support to people identified as mildly frail. Over time the relationship has deepened with the Red Cross being a valued partner in the MDT. This included the Red Cross offering proactive support to people identified as moderately or severely frail during the pandemic. This has been facilitated by data sharing agreements between the parties. For example, stratified frailty data was transferred directly from GPs to the Red Cross who have passed about their subsequent interactions.

Conclusions

The outcome map developed through HSCP stakeholder engagement process offers an aspirational perspective on how things *could* be in relation to the use of frailty data. It also describes what needs to be in place to ensure outcomes are more likely to be achieved. While some of these needs are already part of the objectives for DDI, we believe this process provides a robust and inclusively developed framework for development. It also represents a collaboratively developed framework of how change mechanisms operate. Going forward DDI and partnerships can use these frameworks as a way of thinking about where they are and *what good looks like*. The map can also be developed and refined and potentially forms the basis of an evaluation tool for this work programme.

We were struck by the high levels of engagement (given the current pressures on HSCPs), the apparent appetite to for improvement through data in this domain and also by the desire for regional collaboration and community building. We think this bodes well for the future work of DDI on this domain and recommend efforts continue to develop a regional community of interest. There is clear evidence that the involvement of stakeholders is vital for the realisation of successful data driven change programmes in health and social care.[12,13] Further, given the challenges surfaced through the stakeholder process in relation to the reluctance of both family members and people described as frail to accept the label and share data we think there is also a clear argument for the extension of stakeholder engagement to include older people and informal carers, as well as organisations which represent their interests.

Across our work we see a lack of analytic capacity in HSCPs which was echoed in this process. There is a desire to make better use of data but also a concern around having the correct skills and capacity in place. We welcome the DDI's recognition of the need to upskill the health and workforce to make better use of data for improvement. Moving forward it will be important to further develop a new type of worker armed with an understanding both of both health and care systems as well as analytic abilities.

We saw a strong appetite among stakeholders for a greater degree of consistency in the use of frailty tools regionally. There are many different tools and approaches in use and while the most commonly used are the Clinical Frailty Scale (Rockwood)[1] and the electronic Frailty Index (eFI),[2] it is beyond the scope of this report to make recommendations about respective merits. However, work elsewhere usefully reviews frailty tools in Scotland.[14]

While the use of these tools brought inevitable and well-rehearsed challenges around interoperability and data sharing, we generally saw a very positive response in relation to the application of frailty data for improvement. We saw good examples of data being used to identify and stratify frailty at population level and to bring new insights about service delivery, personal outcomes and system efficiencies. Based on what we have seen the potential to develop such approaches regionally is significant and is matched by an appetite for collaboration and shared learning. While some of the exemplar projects we saw were short term or in development those which were more advanced described promising and evidence-based outcomes and innovations were typically being extended, despite significant wider pressures on HSCP systems.

We saw no clear definition of frailty at a local level and therefore see real potential benefits in DDI playing some role in helping to agree a regional definition and to inform a shared language for frailty. Such efforts might also usefully involve people who are considered frail, their informal carers and representative bodies,

given the suggestion of a sense of stigma in relation to the term which might impede help seeking and data sharing.

There is no question that there is massive opportunity to use data in this domain to support the long-term management of people's health and care needs. However, this is also a highly complex domain with multiple stakeholders. For example, Health and Social Care Partnerships and their constituent elements, complex as they are, represent just one aspect of people's whole life experience so effectively linking with community and voluntary sector partners will also be important. This complexity also means that change can be slow and that the potential sources of resistance to data-driven change may be varied. By speaking to the needs, wishes and interest of these multiple stakeholders and a shared sense of purpose and buy in will enhance the likelihood of sustainable change.

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Appendix 1: Frailty data survey form

DDI Frailty Data Review

Please return this question set to simon@matter-of-focus.com by Friday the 10th of September.

1	How do you define people as frail or potentially frail in your HSCP (if at all)?
2	Are recognised tools or measures use within your HSCP service to identify people who are frail or potentially frail?
3	If yes, please specify which tools are used and in each case which professionals use them.
4	What happens to the information generated when you use those tools. For example: • Is it shared out with the team where it is used? • Is it shared within a multidisciplinary team? • Is it retained in a single disciplinary team?
5	Are you able to estimate the number of people in your area who are either identified as frail or who are on a care pathway for frailty?
6	Please describe how you estimate the number of people in the area.
7	If you can estimate numbers, are people stratified according to their severity of frailty, e.g., mild, moderate or severe?
8	Further comments of the estimation of the number of people who are frail in your area

9	If you answered yes to question X how many people are there in your area who fit this description?
10	Do you have what might be described as specific frailty service within your HSCP?
11	If yes, what is that service called and who is involved in delivering it?
12	Is there service targeted towards a particular level of frailty, e.g., mild, moderate or severe?
13	If no, then what services does the HSCP provide for older people who potentially have multiple needs?
14	Are there innovative examples of the use of frailty data in the HSCP, which you might be happy to discuss in more detail? These may be used in our case study examples.
15	What was the project or initiative called?
16	Please provide contact details for people to speak with for further information about each project or initiative.

Appendix 2: Frailty tools summary

The following table summarise the use of tools and measures to identify or support people who are frail in local HSCP areas. As with other data it is based on incomplete feedback from local areas and therefore may not represent an entirely accurate picture of local tool and data usage.

Tool	HSCP area	Works well	Less well	Learning	Notes
Clinical Frailty Scale (Rockwood scale)[1]	• Borders • East Lothian • Edinburgh • Fife	• *Enabled the District Nursing team to offer an enhanced holistic assessment.* • *Provides person-centred risk bundles and allows the team to make a more comprehensive assessment.* • *It encourages the team to question why a patient might re-present to the service.* • *… allows us to work more collaboratively with our GP colleagues and the MDT and share learning.*	• *None, it has been easily adopted… and has a high degree of reproducibility and a low level of inter observer variation.*	• Better understanding of levels of frailty in the community. • *We have successfully tested and demonstrated… use of the Rockwood CFS and clinical judgment can improve the identification and coding of frailty in primary care.* • *A brief educational intervention and some simple tools are all that are required.*	Experience feedback based on Edinburgh only.
electronic Frailty Index (eFI)[2]	• East Lothian • Midlothian	• *Very good engagement from clinicians, partners and people who are frail* • *…have been successful in making services more joined up and integrated…* • *…12 GP practices… were engaged in the Frailty Collaborative.*	• COVID disrupted progress and affected quality of data. • *Some GPs felt the tool didn't give a true reflection of the level of frailty.* • *lack of consistent use of the EFI means that teams in East Lothian do not*	• *Understanding of who is frail and how to sustain data quality.* • [Understanding] *what is important in GP coding practice.* • *Understanding of key clinical issues and of what kinds of interventions are likely to be most effective*	Limited feedback from East Lothian.

Tool	HSCP area	Works well	Less well	Learning	Notes
			have a clear number of people identified as frail at present…	• *… value of connecting up different sources of data held in GP practices so people can be identified to receive tailored support.*	
Anticipatory Care Plans	• Edinburgh • Midlothian	• *Provides guidance for nurses and allows for frail people and their relatives to have information.* • *Inform[s] shared decision making, update reviews and inform improvements.* • *Valuable whole team approach… simple and straightforward approach for all involved.*	• *Interoperability is always a challenge.*	• *ACP is everyone's role.* • *[Involves] everyone that matters to the individual/having a system which enables shared decisions.*	
Comprehensive Geriatric Assessment[6]	• Borders • Fife	• *Helps provide guidance for HSCP professionals.* • Part of Fife's 'frailty at the front door' model which has increased response times and reduced admissions.	• No data	• No data	
Scottish Patients at Risk of Readmission and Admission (SPARRA)[8]	• Borders • Midlothian	• Used in combination with eFI to help stratify need in Midlothian.	• Problems with sharing information from GP practices.	• No data	Based on very limited data.

Tool	HSCP area	Works well	Less well	Learning	Notes
Therapy Outcome Measure (AusTOMs)[5]	• Borders	• *AHPs were able to demonstrate impact and evidence need for their outcomes.* • *… accessibility to outcome measurement.* • *Teams… liked.. consistency the tool provided, it allowed for both OT and physio scales to use like-for-like scales.* • *…contributes to AHPs having common language for outcome and better placed to prioritise, understand resource and set goals.*	• *not yet clear how to measure the financial impact of the tool.* • *There is also a lack of GP representation.* • *Loss of project support means that TOMs collation has stopped.*	*The tool allows for aggregation of data so that comparisons can be made to evidence impact and secure ongoing funding with success.*	

Table notes

Text in italics represent direct quotes.

The PRISMA-7[3] frailty scale and the EQ 5D[4] have note been included in this summary as they are being replaced in the one area where they were applied.