FINAL REPORT

Evaluation of the Social Care Role in Integrated Primary Care Teams for Older Adults who have Complex Needs in Nottinghamshire

Prepared for the LGA Care and Health Improvement Programme as Commissioned by Nottinghamshire County Council

Professor Di Bailey, Dr Dominic Holland and Dr Gabriella Mutale in collaboration with Peopletoo

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1. GLOSSARY

Acronym	Acronym in full	Explanation
CCG	**Clinical Commissioning Group**	
CCO	**Community Care Officer**	A person who undertakes social care work similar to that undertaken by social workers but where there are no safeguarding issues.
CfC	**Call for Care**	A clinical navigation system for health and social care workers in Mid-Nottinghamshire (Mansfield, Ashfield, Newark and Sherwood) that helps them to find the most appropriate service for service users with complex care needs who require additional support but not necessarily in hospital (7 days per week, 8am – 8pm); Provided by Nottinghamshire Healthcare NHS Foundation Trust.
COPD	**Chronic Obstructive Pulmonary Disease**	
LICT	**Local Integrated Care Team**	
OT	**Occupational Therapist**	
PERSON CENTRED		Person centred care is different for each individual and is an evolving concept. It is underpinned by principles of offering coordinated care, support and treatment, that promotes an individual's dignity and respect by allowing them to recognise and develop their own strengths and abilities to enable them to live an independent and fulfilling life.
PICS	**Primary Integrated Community Services Limited**	A GP-owned and -run provider of community health care services; Based in Nottingham West CCG.
PRISM	**Profiling Risk, Integrated Care, Self-Management**	The alternative name for the 7 Local Integrated Care Teams in Mid-Nottinghamshire.
SALT	**Speech & Language Therapy**	

SOCIAL CARE WORKER		A social worker or a community care officer providing social care input.
SOCIAL WORKER		A qualified and registered social worker.
START	**Short-Term Assessment & Reablement Team**	This is a short-term service provided by NCC across the county to support people to regain confidence with independent living skills. The aim is to enable people to stay living at home as independently as possible, reducing or delaying the need for other long-term support services.

2. EXECUTIVE SUMMARY & KEY FINDINGS

The purpose of the evaluation was to determine:

- the benefits of social care interventions delivered by integrated primary care teams for older adults with complex care needs compared with interventions delivered by district social work teams for adults;
- the extent to which these integrated teams could deliver efficiencies by having a social care worker incorporated within them;
- how integrated primary care teams could achieve savings through managing demand and reducing costs by promoting independence and keeping people in control of their care and health;
- how integrated primary care teams could deliver a better individual experience with more effective, personalised and independent outcomes.

We used a tried and tested realistic evaluation design for the evaluation that triangulated quantitative and qualitative data from three different sources:

- estimated costs of delivering social care (quantitative);
- indicators of care quality (quantitative);
- service user, carer and staff experiences of receiving and delivering social care (qualitative).

Peopletoo worked with us as an expert reference group to review the data and benchmark how we were utilising the evaluation data with best practice nationally.

The strength of our evaluation lies in the combining of different types of data to answer the evaluation questions. To the best of our knowledge, this is the first time in any study that both quantitative and qualitative data have been combined to produce a more robust evaluation of the social care role in an integrated primary care team.

We selected, purposively, three integrated teams in Nottinghamshire to take part in the evaluation along with their respective District Team equivalents. We costed 10 cases that we selected from each team in accordance with given criteria, to standardise these social care costs as far as possible.

We identified care quality outcomes from our review of the literature on the integration of health and social care, including research papers and relevant reports. We recorded the presence or absence of these quality outcomes for each of the 10 cases, along with final outcomes for the case and the duration of social care involvement.

During the evaluation we conducted interviews with:

- 5 service users and 9 carers
- 30 health care professionals
- 29 social care workers
- 3 GPs

We organised a stakeholder event to deliver and discuss emerging findings from our evaluation. The stakeholder event was attended by 25 health and social care workers.

Key Findings

In fulfilment of the aims of the evaluation we provided answers to the following four questions.

1. 'To what extent has the embedding of social care workers in integrated care teams been effectively delivered?'

- Embedding of the social care role, and its related effect on integration was found to be at different levels across the three teams with:
  - ✓ The level of embeddedness and integration being highest in Newark Integrated Team and lowest in Broxtowe Integrated Team.

- Embedding social care workers effectively saves social care costs but requires the right conditions including:
  - ✓ Leadership;
  - ✓ Training;
  - ✓ A shared sense of purpose;
  - ✓ Sharing social care identity;
  - ✓ Confidence in the social care worker role.
- If these conditions are not in place integrated teams increase social care costs

2. 'What difference has it made, for whom and why?'

- Greater embeddedness of the social care role encouraged a more positive, risk-taking approach with service users than might otherwise have been adopted by health colleagues. This led to cost savings and improve outcomes through:
  - ✓ A reduction in hospital admissions;
  - ✓ A reduction in admissions to residential and nursing care;
  - ✓ Greater use of lower level services that helped maintain service users' wellbeing and independence, enabling them to remain at home;
  - ✓ Service users remaining at home with care packages.

3. 'What is the value for money and cost-effectiveness of having social care workers embedded within integrated care teams?'

- Where integrated working was at its best cost savings were made. For example in Bassetlaw Integrated Team total social care costs were on average **£4,445.72** less per service (over the standardised period of 135 days used in the study) compared to Bassetlaw District. Total social care costs were found to be **£2,750.28 less** per service user (over the standardised period used in the study) in Newark Integrated Team compared to Newark District Team.

- Savings were made because the teams were working more efficiently and making better decisions collectively.

- Taken together, the cost data and the care quality data suggest that effective integration offers higher quality **and** more cost-effective care for this cohort of older people with complex health and social care needs.

- Thematic analysis of the qualitative data from interviews with service users and staff supports this conclusion because it tells us how service users and carers experience the ways of working in an integrated team that generates decreased costs and increased standards of care.

- The finding that cost savings were only evident in Newark and Bassetlaw Integrated Teams supports a relationship between better integration and greater cost savings.

4. 'How could the care model be improved further?

- Integrated teams can deliver better outcomes and reduce costs for health and social care if the right conditions are in place. These conditions are:
  - ✓ Social care worker embedded in an integrated team;
  - ✓ High frequency of joint assessments between health and social care staff;
  - ✓ Shared access to ICT;
  - ✓ Regular multi-disciplinary team meetings;
  - ✓ Co-location of health and social care workers;
  - ✓ Security of funding;
  - ✓ Trust and respect between health and social care workers;
  - ✓ A good understanding of integration and collective decision making;
  - ✓ Social care workers who are skilled, experienced and confident in the social care role.

3. INTRODUCTION

The purpose of the evaluation was to explore possible savings, efficiencies and other benefits for social care and health by comparing the social care input for adults who have complex care needs across integrated and district teams.

In particular, the purpose of the evaluation was to determine

- the benefits of social care interventions delivered by integrated primary care teams compared with district social work teams for adults
- the extent to which integrated primary care teams could deliver efficiencies by having social care workers incorporated within them
- how integrated primary care teams could achieve savings through managing demand and reducing costs by promoting independence and keeping people in control of their care and health
- how integrated primary care teams could deliver a better individual experience with more effective, personalised and independent outcomes.

To inform the design of the evaluation and learn from previous research about how to measure the social care contribution to the provision of integrated care, the research team carried out an extensive review of the literature on the integration of health and social care in the UK since 2000. This review revealed three, key themes.

3.1 Literature Review

3.1.1 The Social Work Contribution to Integrated Care

The first theme was a **lack of focus on the social work contribution**. Studies focusing on the social work role within integrated care teams were scarce (only three having been identified to date) and provided no robust evidence that enabled us (a) to understand how social care workers operate in integrated primary care teams and (b) to quantify the contribution they make. Despite this lack of evidence, an Advice Note published by the Department of Health, the Adults Principal social care workers' Network and the Association of Directors of Adults Social Services (ADASS) in 2017 asserts that social work is an 'essential' component in the integration of health and social care provision:

> *Social work is essential to integration, to support the social model and social care alongside the medical model and treatment. Social work enables people to be included in work and communities. It safeguards their rights when doctors are considering compulsory admission or treatment, when they may be at risk of deprivation of their liberty or when they have experienced abuse or neglect.* (p. 4)

3.1.2 Assessing the Effectiveness of Providing Health and Social Care

The second theme was **bias in the conceptualisation of effectiveness**. Whilst a number of studies and reports referred to different care outcomes that should be quantified in order to answer questions about the relative cost effectiveness of providing care through integrated and non-integrated approaches, the majority of studies conceptualised and measured effectiveness qualitatively by asking service users and staff about their experiences of delivering and receiving care. Whilst it is important to capture service users, carers and practitioners' experience of receiving and delivering care, any study of effectiveness needs to capture whether or not the delivery of care is shown to be cost effective, as this is of particular concern to local authorities seeking to achieve targets relating to service improvements as detailed in Sustainability and Transformation Plans (STPs) (NHS, 2015). Therefore, although the body of literature relating to assessing health and social care effectiveness told us something about the consensus regarding what outcomes to measure if we wanted to understand what a good, cost-effective experience of receiving care should look like, they told us little about tried and tested ways to measure these outcomes.

Goodwin (2013) suggests that the way researchers should respond to these gaps in the research and grey literature is to deploy multi-level evaluation frameworks and/or realistic evaluation methods. The tried and tested, realistic evaluation approach, that we adopted for this evaluation

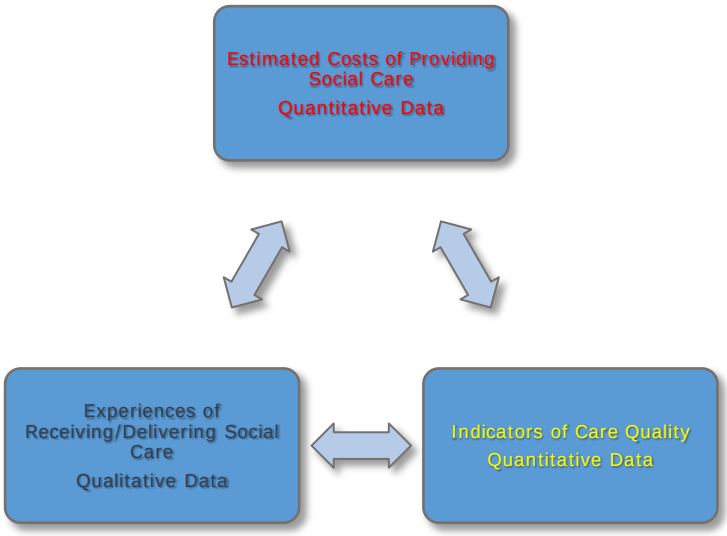
(Bailey, 2002 and 2007; Bailey and Kerlin, 2015; Ward and Bailey, 2016) is an example of such a framework since it combined the collection of qualitative and quantitative data from a number of sources across a range of levels (see Appendix 1).

3.1.3 Facilitating or Delivering Integration

The third key theme in the literature was that, despite an exponential increase in the body of research on health and social care integration, **studies continued to be concerned with what Dickinson (2014) refers to as the 'science' of the approach (the factors that facilitate integration) rather than the working practices (the 'craft or graft') of those delivering it (p. 190),** an observation previously offered by Glasby et al. (2013). Using the combination of data sources and methods set out below, the research team at Nottingham Trent University attempted to understand and quantify the contribution of the social work role to the integration of health and social care provision from both perspectives by focusing on the **context** in which integration can be supported or hindered as well as the **inputs** and expertise that social care workers contribute.

The way in which we combined the respective sources of data to meet the objectives of the evaluation is represented by the diagram below (Figure 1). To the best of our knowledge, this is the first time in any study that quantitative and qualitative data have been combined in this way. This model of data integration has informed a toolkit that we have developed to support the embedding of the social care role in integrated health and social care teams and which will be available on request from Professor Di Bailey: Di.Bailey@ntu.ac.uk.

Figure 1: Data sources for measuring the social work contribution to integrated care in Nottinghamshire



3.2 Definitions

3.2.1 Integrated Care

For the purposes of the evaluation we used the following statement from National Voices (2013) as our definition of integrated care:

"I can plan my care with people who work together to understand me and my carer(s), allow me control, and bring together services to achieve the outcomes important to me".

Humphries (2015) cites this definition as the foundation of current policy because it comes from a coalition of health and care charities and so reflects the lived experience of those receiving and delivering integrated care.

As we understood integrated working to be synonymous with interdisciplinary working, we used the conceptual distinction made by Bailey (2012) to determine what this should look like in practice. Therefore, we defined integrated working to mean

"many professionals going beyond working together to become many professionals interacting to work collaboratively, a collaboration that results in a level of 'magic' or synergy within the team such that the collective knowledge available to the integrated health and social care team members is greater than the knowledge of each individual member put together".

3.2.2 Adult Social Care

For the evaluation we used the definition of adult social care contained within the Adult Social Care and Public Health Strategy (2017), which has been published by Nottinghamshire County Council: Link to site

The Adult Social Care and Public Health Strategy defines adult social care as follows.

Adult social care provides support to adults over the age of 18 who have a physical disability, a long-term health condition and/or mental health issues; in 2016/17 over 10,000 people received care and support services. The department provides a range of statutory services under the Care Act 2014 including:

- *advice and information;*
- *promotion of well-being and prevention;*
- *market management (so all members of the public can benefit from and use care services with confidence);*
- *assessment of social care needs;*
- *person centred care and support planning;*
- *adult safeguarding, mental capacity, mental health and deprivation of liberty assessments to protect vulnerable people from harm;*
- *support to carers;*
- *charging, financial assessments and deferred payments (to ensure people do not have to sell their home in their lifetime).*

The department also runs a range of services that provide care and support such as day services, short breaks units, Care and Support Centres, Shared Lives and enablement-focused support teams that work with people in their homes and communities.

With regard to social care, the department works, on an individual basis, with service users and their carers/families to provide advice, information, guidance and care and support in a way that is meaningful to each individual person involved. At a more strategic level we involve and consult service users and carers on our services and changes proposed about how support is provided.

In Appendix 7 we have provided some examples of service users' journeys through the care system, with the sequence of health and social care inputs identified.

3.2.3 Service User

We have used the term 'service user' rather than patient throughout this report in recognition of the term that is generally used in social care policies and the research literature to refer to people who use social care and health services. Exceptions occur in direct quotations where health and social care practitioners interviewed refer to individuals as patients.

4. METHODS OF DATA COLLECTION AND ANALYSIS

Data were collected for three integrated primary health care teams and three matched district social work teams for adults (see Appendix 2 for a description of the teams). By observing team meetings of integrated health and social care workers and district social care workers, we learned that integrated primary care teams serving adults who have complex health and social care needs, include a wide range of professionals from different disciplines who attempt to work together to provide care with the aim of reducing a service user's risk of admission to hospital, residential and/or nursing care.

A typical range of professionals in an integrated primary care team is shown in Figure 2 below.

Figure 2: Typical range of professionals in an integrated care team

4.1 Sampling Issues

There are three health planning units in Nottinghamshire which are Bassetlaw, Mid-Nottinghamshire and South Nottinghamshire. The three integrated teams purposively selected for the evaluation were taken from each of these planning units, following discussion with the Project Steering Group. Each planning unit has a different history and approach to establishing integrated care, meaning that the impact of different approaches and level of maturity of the team could be assessed. The teams selected were:

- **Bassetlaw North West Integrated Neighbourhood Team (Bassetlaw)** had been running for the shortest amount of time since inception and because Clinical Commissioning Group (CCG) funding changes meant that social care workers had been withdrawn from the Team.
- **Newark West Local Integrated Care Team (Mid Nottinghamshire)** was the longest running of the different models of integrated care team in Nottinghamshire.
- **Broxtowe Care Delivery Group (South Nottinghamshire)** operated a different system for referral whereby four Care Coordinators (health care professionals) referred cases to the social care worker for assessment and/or intervention.

In each of the three areas the corresponding district team of social care workers was included for comparison, giving six teams in total.[1]

[1] In the remainder of the report we refer to the teams as Bassetlaw Integrated, Bassetlaw District, Broxtowe Integrated, Broxtowe District, Newark Integrated and Newark District.

The 10 cases costed in each of the six teams were selected using the following criteria.

1. Case has 3 or more professionals involved (this includes the social care worker).

2. Case has at least 2 but no more than 5 health and/or social care needs.

- *Examples of health care needs: COPD, diabetes, mental health illness and chronic kidney disease.*
- *Examples of social care needs: refusing help, carer stress, not eating and struggling to manage medication.*

3. Case is 70 years or older.

4. Case meets at least baseline criteria 3 on Workload Management Tool (see Appendix 5) but is more likely to meet criteria 4, given multi-professional input/decision making and risk concerns.

5. The total sample of cases from any team will have a minimum of 2 but a maximum of 5 cases requiring a complex piece of social work.

- *Examples of complex social work: safeguarding and mental capacity assessment.*

4.2 Data Collection

4.2.1 Cost of Providing Social Care

The social care activities to be costed for each of the individual cases were initially identified through observations of virtual ward rounds in the Newark Integrated Team and through discussions with the social care worker in this Team and the social care worker and in Rushcliffe Care Delivery Group. These observations and discussions helped us to identify and understand the main types of social care activity that service users and their families experience.

We identified the following types of social care activity, which we used in the analysis of the cost data.

- social care worker involvement from the point of referral through to case closure or to the current point in time, if the case was still open to the worker
- care package at home, which includes domiciliary care, day care, night response, etc.
- residential/nursing care costs for either short-term or permanent care in these settings.

To ensure that the cost of providing social care was standardised as far as practicable, we calculated the actual social care cost for each of the 10 cases sampled. We present these calculations in Section 5.3.

The cost of providing social care was estimated using information extracted from service users' records by the Research Assistant (GM) in discussion with either the social care worker responsible for the service user's care package (see Appendix 2). To ensure consistency in the way that costs were calculated between the integrated care teams and the district teams, the following parameters were applied.

- For service users who were referred into the team by the Customer Service Centre we included 45 minutes of time (£14.39 per hour) spent by the Service Advisor in the Customer Service Centre to reflect the processing and triaging time required before allocation of a case to a social care worker in the relevant team for assessment. This amount of time (45 minutes) emerged from discussions with individual social care workers and focus group participants as the minimum amount of time that would be given to a case before it was scheduled for assessment. (Referrals in Newark and Broxtowe Integrated teams were made directly to the social care workers in these Team and so were not incurring the costs associated with processing by the Customer Service Centre.)
- The cost of the social care workers' time included their time spent with the service user, time in multidisciplinary team meetings, time recording a contact assessment, time travelling to and from assessments and/or time fielding inappropriate referrals.

- Health costs (for example, an assessment bed that is either fully or partially funded by Health) were not used in the analyses, as these were not costs incurred to social care.[2]
- Hourly social care worker costs were calculated using a standard rate of pay (£23.75), regardless of the pay level of the social worker who dealt with the case. The hourly CCO rate was calculated using a standard rate of pay (£16.99). These costs were provided by Nottinghamshire County Council finance staff and did not include salary-related on-costs (pension and National Insurance). Neither did they include Nottinghamshire County Council on-costs such as accommodation and other corporate overheads.
- The Newark and Broxtowe Integrated Care Teams employ only social workers. At the time of producing this report it was not possible to agree a cost for the additional supervisory time that CCOs might incur when working with complex cases. Therefore, as the Newark and Broxtowe Integrated Care Teams do not use CCOs, worker costs for these teams may be slightly higher.
- The cases in the Integrated and District Teams were selected in accordance with agreed criteria for their level of complexity. According to the focus group discussion with the District Teams for adults, cases which involved safeguarding issues would be allocated to social care workers and supervised by the team manager. CCOs were supervised by senior practitioners and would not be allocated cases with safeguarding issues. In all other respects cases worked by the CCOs and social workers in the District Teams for adults were of a similar level of complexity.

The Research Assistant (GM) worked directly with all the social care workers in the six teams to extract the data and itemise the costing of cases to ensure that costs were attributed to the respective activities in a standardised way.

4.2.2 Indicators of Care Quality

Care quality outcomes were identified from our review of the literature on the integration of health and social care, including research papers and relevant reports. This literature reveals a degree of consensus about which outcomes are indicators of more effective, integrated care – for example, hospital admission avoided – and which outcomes are indicators of less effective, integrated care – for example, an unplanned hospital admission or a discharge delayed, because of the lack of a suitable care package at home being available.

4.2.3 Service User and Carer Experiences of Receiving Care and Staff Experiences of Delivering Care

The topic guides developed for use in the focus groups and interviews with social and health care professionals were piloted with two social care workers from an integrated care team not included in the evaluation (Rushcliffe Care Delivery Group). After the initial focus groups had been completed for the Newark Integrated Team, the topic guides were refined further to reflect the discussions that arose and to ensure that the similarities and differences of social work involvement between integrated and district teams would be explored fully in the evaluation. The topic guides for the interviews with service users and carers were developed considering this refinement, and further adjustments were made after an initial interview with a service user and carer.

Peopletoo, our expert reference group, were involved at each stage of the collection of the quantitative data. Peopletoo:

- gave guidance and reached agreement with us on which activities were costed and how this was achieved in a standardised way;
- agreed indicators of care quality and how these were measured;
- reviewed the emerging cost data with the Research Assistants (GM and DH). This ensured that the data were robust and could be compared across the Integrated and District Teams with confidence.

[2] Note that in Nottinghamshire the Local Authority provides assessment beds, which the NHS then pays to use.

To complete the evaluation, the following data were collected.

Quantitative Data:

- **60** fully costed cases – 10 from each of the 6 teams used in the evaluation (see Appendix 3 for details of how costs were calculated).
- Care Quality Indicator and Outcome data relating to the **60** costed cases (see Appendix 4 for breakdown of outcomes measured).
- Outcome data for a 12-month period from 1 April 2016 to 31 March 2017, for each of the six teams.

Qualitative Data:

Interviews and focus groups with GPs, social care workers, social work managers and other health staff who were working in the Integrated and District Teams in each locality (Table 1a).

Table 1a: Number of interviews and focus groups conducted with health and social care workers during the evaluation

	Bassetlaw			Broxtowe		Newark	
	Integrated	**District**	**Hospital**	**Integrated**	**District**	**Integrated**	**District**
Number of interviews with GPs	0	0	0	1	0	2	0
Number of interviews with social care workers	1	0	0	1	0	2	0
Number of interviews with health care staff	1	0	0	0	0	1	0
Number of interviews with social work managers	0	0	0	1	0	1	0
Number of focus groups	1	1	2	1	1	2	1
Total number of interviews and focus groups	**3**	**1**	**2**	**4**	**1**	**8**	**1**

Interviews with service users and their carers whose needs were being addressed by the Integrated and District Teams in each locality (Table 1b).

In Bassetlaw two focus groups were also conducted with members of the Integrated Hospital Discharge Team since Bassetlaw Integrated Team often works with the Integrated Hospital Discharge Team to support service users who are being transferred from a secondary to a community care setting.

Table 1b: Number of interviews conducted with service users and carers during the evaluation.

	Bassetlaw			Broxtowe		Newark	
	Integrated	**District**	**Hospital**	**Integrated**	**District**	**Integrated**	**District**
Number of service users and carers	2	0	0	3	1	5	3
Number of health care staff	13	0	2	5	0	9	0
Number of social care staff	1	8	4	2	4	2	8
Total number of participants	**16**	**8**	**6**	**10**	**5**	**16**	**11**

The total number of service users, carers and health and social care staff who participated in the evaluation is shown in Table 1c below. (The number of participants differs from the number of interviews and focus groups conducted because there were instances where the same person took part in both an interview and a focus group.) A total of 29 social care workers and social work managers participated. In addition, 29 health care professionals also participated

Table 1c: Total number of service users, carers and health and social care workers who participated in the evaluation.

	Bassetlaw			Broxtowe		Newark	
	Integrated	**District**	**Hospital**	**Integrated**	**District**	**Integrated**	**District**
Number of interviews with service users	1	0	0	1	0	2	1
Number of interviews with carers	1	0	0	2	1	3	2
Total number of service users and carers	**2**	**0**	**0**	**3**	**1**	**5**	**3**

In addition to the above interviews and focus groups, 25 health and social care workers attended a stakeholder event in September 2017 where emerging findings from the evaluation were fed back. Stakeholders discussed the relationships that appeared to be emerging between the degree of cost effectiveness of social care delivery and the difference in working practices between the integrated and district teams.

4.3 Data Analysis

4.3.1 Quantitative

The cost data were analysed in IBM SPSS statistics (version 23). The data were subjected to an analysis of covariance (ANCOVA). Analysis of variance (ANOVA) is a statistical technique used to compare 3 or more group means. ANCOVA extends the basic idea of ANOVA (which allows you to simultaneously compare multiple means in difference groups) by including a covariate in the analysis (Field, 2009).

Covariates are variables that are not variables of interest (independent variables) but may have an influence on the dependent variable (variables that are being measured). By including them in the analysis it is possible to see what effect the independent variables have on the dependent variable after the effect of the covariate has been controlled for (Field, 2009).

In this situation the covariate was the duration of time the case was open for. The duration the case was open for affects the type of social care delivered and amount of costs incurred. Therefore, it is necessary to include this information into the analysis otherwise the true effect of the integrated approach would be lost.

For example, if one of the teams has 10 cases, each of which requires one year of social work involvement, this team is likely to have higher costs than a team in which each case requires only one month of social work involvement. As this evaluation is interested in finding out if the integrated approach results in cost savings, the duration of each case (which is dictated by the needs of the individual concerned) needs to be accounted for (or equalised) across all the teams. As the cases were selected using strict criteria to ensure complexity was consistent across all teams, it was not possible to select, in addition, cases that were equal in duration. Therefore, by including duration in the analysis as a covariant its potential confounding effect could be controlled for across the different teams. This in turn allowed us to assess costs more accurately, because the effect of case duration was incorporated into to the analysis.

ANCOVA was therefore an appropriate technique to use to assess the differences in mean costs between the Integrated and District Teams across the 3 localities with the type of team (Integrated, District) and location (Bassetlaw, Broxtowe, Newark) acting as the independent variables, social care costs acting as the dependent variable (the unit of measure) and the duration of case acting as the covariant.

It could be argued that by controlling for duration of case length the effect of a short-term intervention (e.g. a reablement care package for a set period of weeks following hospital discharge) may be lost. However, it was thought this would not be the case in the current sample for two reasons.

- First, reablement is typically done by the START team in Nottinghamshire and therefore service users would have been referred to the START team if this was felt appropriate.
- Second, when reviewing the data, it was identified that all care packages set up had been intended for long term use and would only be stopped if declined by the service user.

The data relating to care quality outcomes are categorical data, which are unsuitable for analysis using inferential statistics. Therefore, simple descriptive statistics were calculated – that is, the amount of service users in the sample each indicator was present for. This was established to compare the difference between the two types of team.

4.3.2 Qualitative

Interviews with service users, carers and GPs, together with the focus groups with members of staff, were audio recorded and transcribed verbatim. Notes were taken of the discussions at the stakeholder event. These notes and transcripts were analysed thematically to identify overarching themes and sub-themes (Lincoln and Guba, 1985).

5. KEY FINDINGS

5.1 'To what extent has the embedding of social care workers in integrated care teams been effectively delivered?'

Embedding of the social care role, and its related effect on integration was found to be at different levels across the three teams with the level of embeddedness and integration being highest in Newark Integrated Team and lowest in Broxtowe Integrated Team

Evidence of the existence of different levels of embeddedness was supported by qualitative and quantitative data for each of the three integrated teams, and reinforced by the discussions that took place during the stakeholder event. Embedding social care workers effectively requires the right conditions which includes effective health and social care leadership, supported by the team having opportunities to train and learn together. This supports the development of a shared sense of purpose and a collective valuing of the social care identity with ensuing confidence in the social care worker role. If these conditions are not in place integrated teams increase social care costs.

A key indication that these 'right conditions' have been achieved is the presence of an observable and reported level of *collective knowledge between health and social care colleagues*, which is the outcome of a process of mutual educating and learning – that is, social care workers educating health care professionals about the social care role and, vice versa, health care professionals educating the social care workers about the health care role.

The extent to which team members engage in this process of mutual learning and educating will depend on

- their level of *trust in*, and *respect for*, the judgements made by colleagues who work in a discipline that is different from their own;
- whether or not complex cases are discussed in *team meetings;*
- whether or not *joint assessment* is practised.

The extent to which team members share information about service users across and within disciplines will depend on whether or not

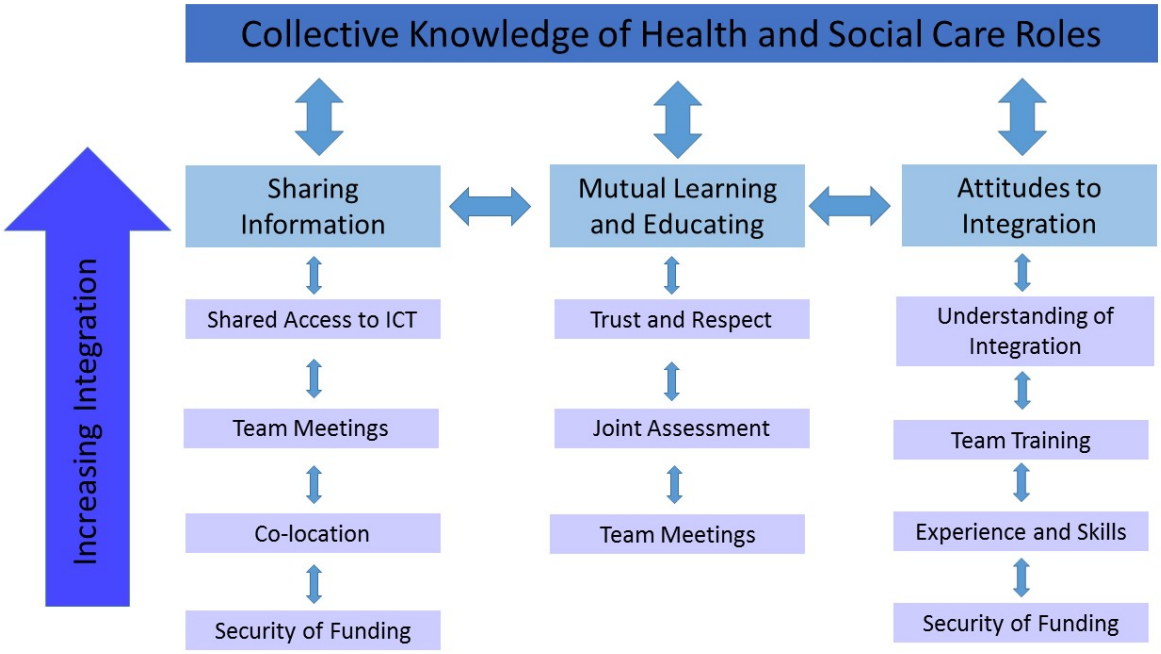
- there is *co-location* of team members;
- there is a *shared ICT* system in use;
- there are regular *team meetings;*
- there is *security of funding* for the social care role.

Team members' attitudes to integration will depend on

- their *understanding of integration* – that is, their understanding of the benefits of, and difficulties associated with, integrated ways of working;
- whether or not there is *security of funding* for the social care role;
- whether or not there is dedicated *team training*.

These relationships are represented graphically in Figure 3, below, which shows the set of critical success factors to support the embeddedness of the social care worker role to allow for the emergence of this collective knowledge between health and social care colleagues in an integrated team.

Figure 3: Critical success factors for the emergence of collective knowledge of the health and social care roles



5.1.1 Sharing Information Across / Within Disciplines

5.1.1.1 Access to Shared Information and Communications Technology (ICT)

Shared access to electronic databases facilitates information sharing within and across disciplines. For example, in Newark Integrated Team the social care worker works off a unit in SystmOne, the database used by the health care professionals in the Team. This means that they can read the medical history of a service user referred to them by a health care colleague without having to speak to that colleague in person.

Shared access to ICT is valuable because, even if social and health care professionals are co-located and work in the same office, it may not be possible for social care workers to speak to health care colleague in person to find out more about cases that have been referred to them – for example, if the colleague who made the referral is on visits, in a meeting, on leave, or otherwise unavailable.

Moreover, with shared access to ICT, social care workers can, in turn, add information about any intervention they have made to the service user's medical record. (Whether or not this happens in Newark Integrated Team is unknown.) This is also valuable because, if the social care worker decides to send the case back to a health care colleague – for example, because new health care needs are suspected to have arisen – that colleague can start to process the referral, even if the social care worker is unavailable to discuss the case in person.

In Broxtowe Integrated Team the social care worker does not have access to SystmOne and, in consequence, depends on the Care Coordinators relaying information about a service user's medical history to them either by email or by telephone. However, these methods of communication are problematic ways of sharing information because the social care worker might experience a delay in receiving the correct type of information and/or the Care Coordinators might not be available by telephone, should the social care worker want to discuss a complex case with the Care Coordinators. As the social care worker told us, "Often … the medical history [is] not on there … I've asked for that to be changed because I need to know the medical history of somebody, not just the communications that have been had with professionals." (I1SWK)

It should also be noted that, even though the social care worker in Newark Integrated Team had access to SystmOne, use of different ICT systems among the health care professionals in the Team constrained the sharing of information. One health care professional from focus group two pointed out that members of the Team were using "three different systems" since the social care worker was using Frameworki (in addition to SystmOne), while the health care professionals were using "the intermediate care system … [and] the nursing system." (FG2I) This situation prevented health care colleagues from making referrals for example between physiotherapy and the district nurses. As one health care colleague in focus group one explained, "I think, for me, it stops the referral … because we're supposed to pass to each other but, if patients aren't open on continence unit and the DN [District Nursing] unit then they can't pass over." (FG1I)

Other research supports the conclusion that shared access to ICT systems is a facilitator of the sharing of information between disciplines (Coxon, 2005; Hickey, 2008).

5.1.1.2 Team Meetings

Multi-disciplinary team meetings are opportunities for health and social care workers to exchange information about cases. For example, the former social care worker in Bassetlaw Integrated Team identified this as one of the advantages of integrated over traditional, district team working arrangements. Other research also identifies regular team meetings as supporting the sharing of information between disciplines (Coxon, 2005).

However, multi-disciplinary team meetings are potentially problematic ways of exchanging information about service users across disciplines for at least three reasons.

- First, the quality of the information that is exchanged (for example, its accuracy and comprehensiveness) will depend on how it is exchanged. For example, during the weekly virtual ward meetings of Newark Integrated Team the social care worker would access service user information that had been recorded on Frameworki and feed this into the interdisciplinary discussion while the SystmOne case record was displayed on a screen so that all participants could read it. (This type of information sharing was not observed in either Bassetlaw or Broxtowe Integrated Team.)

  However, if for any reason health and social care workers do not have remote access to SystmOne and Frameworki case records in MDT meetings, they will have to communicate a person's health and social care history verbally, a process that is limited by what they can remember and/or the amount of time that they have available to make a written copy of the electronic record before the start of the meeting.

- Second, for information to be exchanged between health and social care workers, the individuals in these roles must attend team meetings. If either one or the other is not present, the potential for information to be exchanged cannot be realised. In Broxtowe Integrated Team, for example, the social care worker told us that they had decided not to attend all the multi-disciplinary team meetings to which they were invited either because they are too busy with other casework or because in their opinion the cases to be discussed require little input from health care colleagues.

- Third, the frequency of multi-disciplinary team meetings imposes a time limit on how quickly a social care worker can obtain the required information from health care colleagues, if other ways of obtaining this information (email or telephone/face-to-face conversation) have proven to be unsatisfactory. Bassetlaw Integrated Team, for example, meets with each GP in its area of responsibility only once per month. This means that, if a GP were to refer an urgent case to the social care worker between team meetings and that professional had been unable to contact the GP to find out about the service user's medical history, there might be a delay in processing the referral until the next team meeting with that GP. These two potential problems demonstrate, once more, the value to social care workers of having shared access to NHS ICT systems.

5.1.1.3 Co-location

Co-location is a facilitator of information sharing across disciplines because, with a whole team of health and social care workers sharing a base, for example in a GP surgery, social care workers can discuss, informally and in person, cases that health care colleagues have referred to them. This is valuable because, even if social care workers have access to the service user's electronic record, they may not be able to understand everything that health care colleagues have written about that service users without engaging in face-to-face conversations with the colleague who made the record.

If health and social care workers are in separate buildings – as is the case with Bassetlaw Integrated Team and Broxtowe Integrated Team – social care workers are less able to engage in immediate face-to-face discussions with health care colleagues: either they have to attempt to contact them by telephone and/or email or wait until the next team meeting.

The effectiveness of co-location (i.e. the speed at which information can be exchanged and understood) is maximised if the relevant team members are in the office at the same time. If one of them is not present – for example, is on visits or in a meeting – there will be a delay in exchanging the required information. Once again, this potential problem demonstrates why it is useful for social care workers to have shared access to NHS databases as a back-up option so that they can at least read a service user's medical history and start to process the referral.

Other research confirms that co-location of health and social care workers is a facilitator of the sharing of information across disciplines (Coxon, 2008; Hickey, 2008).

5.1.1.4 Security of Funding

Finally, security of funding is also a facilitator of the exchange of information across disciplines. For example, in the case of Bassetlaw Integrated Team the CCG withdrew funding for the position of social care worker. This has resulted in the sharing of information between health and social care workers being limited now to email and/or telephone communication between the remaining health care professionals in the Team and the District Team in Bassetlaw.[3] It is also now much more difficult for the remaining health care professionals to organise joint assessment visits with a social care worker. As one of the health care professionals told us in the focus group, "When they were here, [at] MDT meetings, we used to be able to go on joint visits with them. … we haven't got that coordination now." (FG4I)

The further consequence of the withdrawal of the aligned social care role in Bassetlaw is that communication about the outcome of a social work assessment or other type of intervention will be subject to the time that the District social care worker has available to give feedback on the case to the health care professionals in the Integrated Team. The evidence suggests that, owing to the size of their caseloads, social care workers in Bassetlaw District Team do not have enough time in the working day to give this sort of feedback, leaving health care professionals in the Integrated Team uncertain about what sort of intervention, if any, the District Team has made.

5.1.2 Mutual Learning and Educating

Information sharing between health and social care workers is a condition of the development of collective knowledge of the social care role and the health care role because, without this sort of exchange taking place, mutual learning about the different roles and inputs in a multi-disciplinary team cannot take place. It is through discussion of complex cases in person that (a) social care workers can understand and increase their knowledge of health care needs arising from physical and/or mental health conditions and of the interventions that are designed to meet those needs (for example, the size of a catheter tube) and (b) health care professionals can understand and increase their knowledge of social care needs arising from physical and/or

[3] A full-time post of social worker was aligned to the Team between December 2015 and September 2016. A CCO was then aligned to the Team from September 2016 to March 2017 when the CCG ceased funding the social care roles in all four Integrated Neighbourhood Teams in Bassetlaw.

mental health conditions and of interventions that are designed to meet those needs (for example, types of care package, financial eligibility thresholds, carer's assessment, etc.).

In short, mutual learning and educating cannot take place unless health and social care workers in the team have shared access to information about cases from which they can learn about the health and social care inputs through face-to-face discussion and thereby increase their knowledge of the health and social care roles.

5.1.2.1 Trust and Respect

Research indicates that the potential for mutual learning and educating to be realised among health and social care workers may be determined by their level of trust in, and respect for, each other's expertise (Cameron et al., 2014; Coxon, 2005; Mangan et al., 2015; Maslin-Prothero and Bennion, 2010). If health care professionals regard themselves as being of a higher professional status than social care workers, this perceived status differential, if not challenged, may lead to health care professionals (especially GPs) failing to respect the judgements of social care workers such as social care workers.

Again, there is evidence from the focus groups and interviews that what was driving the lack of willingness to engage in mutual learning and educating in Broxtowe Integrated Team was an absence of inter-professional trust and respect. By contrast, there was evidence in Newark Integrated Team of the presence of a high
level of inter-professional trust and respect that was promoting mutual learning and educating. For example, one of the health care professionals told us in the focus group that the presence of the social care worker was highly valued by the health care professionals in the Team because this meant that they could consult the social care worker about matters pertaining to a "social perspective" and because this stopped them from "panicking" (FG1I). Similarly, those health care professionals in the Team who had previously worked in secondary care roles (for example, as nurses in hospital) valued being able to work alongside a social care worker in addition to a range of other health care professionals; and one of the GPs who worked with the social care worker also gave a response that indicated a certain level of mutual respect and trust: "Because I know him so well, I can be much more frank about what I expect him to do. Or he can be very frank with me about what he's intending to do and to offer and what might be available to this person." (I4GP)

5.1.2.2 Joint Assessment

The practice of joint assessment is also a facilitator of the emergence of collective knowledge of the health and social care roles because it is when health and social care workers work side by side and listen to each other's questions and to the responses that service users give that they can understand in greater detail the nature of physical and mental health conditions and the arising care needs from a social care perspective on the one hand and a health care perspective on the other.

Moreover, if, having completed the assessment of a service user's needs, both types of professional reflect jointly on the results of the assessment, they will be able to learn from one another how specialist knowledge can be applied to the case in question; that is, through a process of collective reflection and discussion they can understand why particular assessment questions are asked, what the service user's responses mean from a health care perspective and a social care perspective and thus the decisions that a social care worker and a health care professional makes about how to intervene (which should be in line with a person-centred approach to meeting health and social care needs).

There is evidence that joint assessment visits are taking place in all three types of integrated care team that we evaluated. For example, one of the Care Coordinators from Broxtowe Integrated Team, who is an occupational therapist, told us from experience that joint assessment visits enabled a health care professional to find out more about social services and the role of the social care worker.

5.1.2.3 Team Meetings

Team meetings are a condition for the emergence of collective knowledge because it is in team meetings that detailed discussion of complex cases and mutual learning and educating can take place between health and social care workers; the more frequently the team can meet, the greater the number of opportunities there will be for practitioners to engage in mutual learning and educating via discussion of complex cases. For example, of the three types of integrated care team evaluated, it is Newark Integrated Team that meets the most often, and it is in this Team where evidence for the emergence of collective knowledge of the health and social care roles is strongest.

By contrast, Broxtowe Integrated Team meets the least often since meetings with GPs in the area of responsibility take place every two months (compared with once per month in both Newark and Bassetlaw) and full MDT meetings (or review meetings as they are called in Broxtowe) take place every three months (compared with once per week in Newark and once per month in Bassetlaw); and it is in Broxtowe where the evidence for the emergence of collective knowledge is weakest.

However, the potential for team meetings to be a facilitator of the development of collective knowledge can only be realised if both health and social care workers are present at the meeting; if either one or the other discipline is absent, mutual learning and educating through discussion cannot take place. It is not surprising, therefore, that in the case of Broxtowe Integrated Team, there is also little evidence of engagement in mutual learning and educating – at least not to the extent observed in Newark Integrated Team.

5.1.3 Attitudes to Integration

5.1.3.1 Understanding of Integration

The emergence of collective knowledge of the health and social care roles also depends on the qualities of the people who occupy these roles – in particular, their attitudes to integrated ways of working.

Evidence obtained through the interviews and focus groups suggests that in team meetings, for example, both social care and health care professionals must be willing to engage in discussion and to learn about a discipline in which they have not been trained. However, if the social care worker decides not to attend a team meeting, the consequence for the health care professionals who are in attendance is that, even if their input is not required for a case, they will not have the opportunity to learn about social services and the social care input from the social care worker.

Similarly, for the social care worker to learn about the health care role in a team meeting, the health care professionals must be willing to help the social care workers to understand the health care input; otherwise the process of learning will tend to be one-sided, with the health care professionals learning about the social care role but with the social care workers not learning about the health care role.

It seems that, in the case of Broxtowe Integrated Team, educating and learning has tended to be one-sided since the health care professionals' responses in the focus group suggested that they valued the participation of the social care worker in Team meetings only to the extent that this enabled them to develop a multi-disciplinary care plan. In other words, the evidence suggests that discussion in meetings of Broxtowe Integrated Team tends to lead to the addition of insights from different disciplines rather than the emergence of collective knowledge of the health and social care roles.

5.1.3.2 Team Training

Health and social care workers' understanding of the benefits of, and the difficulties associated with, integrated ways of working will depend on whether or not appropriate team training has been provided to health and social care workers. For example, it was reported to us in the focus groups that everyone working in Newark Integrated Team had attended an induction week

before the Team started work and that this had helped members of staff to understand each other's roles. However, we were not made aware that a similar level of training had taken place for members of staff working in Bassetlaw and Broxtowe Integrated Teams.

Team training is important because it helps to overcome the differences that may exist in working practices and culture between health and social care workers. It is through appropriate team training that health and social care workers can develop an understanding of the aims of the team in which they will be working and how these aims are to be realised in practice. In other words, it is through appropriate team training, in which health and social care managers communicate clearly their vision for the team and their expectations with regards to working practices and culture, that expectations can be changed.

Other research confirms that appropriate team training is a condition for integration. Syson and Bond (2010), for example, found that inadequate training for practitioners concerning team working, expectations and problem solving, in addition to lack of follow-up training, was a barrier to the integration of disciplines within a single team.

5.1.3.3 Experience and Skills

Attitudes to integrated ways of working and mutual educating and learning also depend on the level of experience and skills of the professionals involved, especially if one of them is the sole representative of their discipline within the team. This is typically the case with the social care worker, who needs to have enough experience of carrying out the social care role to be able to work apart from colleagues who remain in the district social care team. Indeed, the Social Worker who was aligned to Bassetlaw Integrated Team reminded us that, through experience of working in a district social care team, social care workers can acquire a clear understanding of how a specific social services department operates and what the boundaries of responsibility of the social care workers in that department are.

However, in an integrated setting both the social care worker and health care colleagues need to possess the right set of skills so that they can explain to colleagues who have not been trained in their respective disciplines how they assess and meet the needs of service users. In other words, in an integrated setting both social care workers and health care professionals need to possess a level of communication skills that will enable them to engage in a process of mutual educating and learning.

5.1.3.4 Security of Funding

Security of funding is also key to the attitudes of team members towards integration. For example, in the case of Broxtowe Integrated Team funding arrangements for the social care role seemed to be uncertain and unstable, resulting in frustration and resentment among the health care professionals in the team.

5.1.4 Level of Integration

The outcome of a process of mutual learning and educating is a level of collective knowledge of the health and social care roles within the team. The presence of this form of knowledge is an indication that the right conditions for effective integration have been achieved.

As we have seen, the level of integration of a team of health and social care workers depends on both a structural context (for example, funding, shared access to ICT systems, and co-location) and the personal qualities of the professionals in the team (their understanding of integration, their level of disciplinary expertise and their level of trust in and respect for other professionals); variations in both these elements determine the extent to which a team of multi-disciplinary professionals can engage in mutual learning and educating and thereby develop a level of collective knowledge of the health and social care roles.

Hence, collective knowledge of the health and social care roles is a type of emergent property; that is, it is a form of knowledge that is the outcome of the specific organisation of the ways of working of a set of multidisciplinary professionals. As an emergent property, this inter-

disciplinary form of knowledge (the whole) is more than the sum of its parts (the different uni-disciplinary forms of knowledge): it would not emerge, if the professionals were working in separate, disciplinary-specific teams. For example, if the social care and health care inputs were provided through separate teams of professionals working together but without integration, the form of knowledge that would be achieved (ceteris paribus) would be additive – that is, a combination of different disciplinary insights; and this combination (the whole) would not be more than the sum of its different insights (the parts).

Additive knowledge may be arrived at through a holistic assessment of a person's care needs and depends on effective sharing of service user-related information between health and social care workers; as such it is a condition for effective person-centred care planning and ensures that care interventions are coordinated and timely. However, as we shall see in Section 5.2, the emergence of collective knowledge enables health and social care workers to deliver a higher standard of person-centred care and to achieve, simultaneously, greater cost effectiveness because this sort of knowledge enables them to work more efficiently; that is, the presence of collective knowledge of the health and social care roles changes the way professionals work. Only emergent properties have this characteristic – that is, of acting back on the parts in which they are rooted.

Comparing the strength of the evidence for the presence of collective knowledge of the health and social care roles across the three types of integrated care team that were evaluated indicates that Newark Integrated Team has achieved the highest level of integration and that Broxtowe Integrated Team has achieved the lowest level of integration, with Bassetlaw Integrated Team (when the social care worker was aligned to it) having achieved a level of integration that is in between the two. In each case the way in which the social care role has been embedded differs: in Newark it is an embedded role, in Bassetlaw it was an aligned role and in Broxtowe it is an attached role.

Table 2, below, summarises the relationships between outcomes (the level of integration achieved and the associated level of collective knowledge that has emerged), process (the level of engagement of team members in mutual learning and educating and the frequency of joint assessment) and the structural and person-level conditions corresponding to the different levels of integration pertaining to the three models of integrated care team that we evaluated.

Table 2: Co-ordinates for the level of integration

Team	Level of Integration	Social Care Role	Outcome	Process		Structural Context				Personal Context		
			Level of Collective Knowledge	*Level of Engagement in Mutual Learning & Educating*	*Frequency of Joint Assessment*	*Shared Access to ICT*	*Co-location*	*Frequency of Team Meetings*	*Security of Funding*	*Level of Trust & Respect*	*Level of Understanding of Integration*	*Level of Experience & Skills*
Newark	High	Embedded	High	High	High	Yes	Yes	High	Yes	High	High	High
Bassetlaw	Medium	Aligned	Medium	Medium	Medium	No	No	Medium	No	High	Medium	High
Broxtowe	Low	Attached	Low	Low	Low	No	No	Low	Yes	Low	Medium	High

5.2 'What difference has integration made, for whom and why?'

Greater embeddedness of the social care role encouraged a more positive, risk-taking approach with service users than might otherwise have been adopted by health colleagues. This led to cost savings and improve outcomes. In this section we therefore consider the difference that integration has made to the different groups of stakeholders notably

- ✓ Service users and carers;
- ✓ Health and social care workers;
- ✓ The healthcare system.

5.2.1 Differences for Service Users and Carers

5.2.1.1 Care Quality Indicators

Outcomes of the quality of care were identified using data taken from the case records of the 60 service users purposively selected from the 6 teams. For each service user the presence (Yes or No) of a care quality indicator was identified from these records. Care quality indicators were categorised as being either positive or negative.

Maintaining Wellbeing and Independence was defined as a positive indicator of care quality and taken to be any recorded action by the social care worker to support a service user maintain their wellbeing or independence. Examples of these types of social care activities recorded in service users' records included providing information about local groups, services or charities that the service user could access, setting up a hot meals service or helping a service user with a benefits application.

Assistive technology related to any technology (e.g. night call response, medication prompt) that had been implemented as a result of the social care worker.

The number of service users, in the cohort of 10 in each team, for whom either a positive or negative care quality indicator was present is shown for each Team in Table 3.

Table 3: Presence of Care Quality Indicators in Each Team

	Bassetlaw		Broxtowe		Newark	
Negative Indicators	**Integrated**	**District**	**Integrated**	**District**	**Integrated**	**District**
Admission to Short-Term Care	2 ✓	8	4	4	4 ✓	7
Admission to Permanent Care	1	0 ✓	2	2	1 ✓	3
Hospital Admissions	2 ✓	3	4	3 ✓	5 ✓	8
Positive Indicators						
Assistive Technology	3 ✓	0	0	3 ✓	2	2
Maintaining Wellbeing and Independence	5 ✓	2	4 ✓	1	5 ✓	1

✓ Indicates the team has outperformed its equivalent team in the locality. A ✓ therefore indicates a positive indicator is higher than the comparison team or a negative indicator is lower than the comparison team.

Positive Indicator is higher/Negative Indicator is lower than District control

Positive Indicator is lower/Negative Indicator is higher than District control

Positive/Negative Indicator is the same as in District control

Comparison of the presence of negative and positive care quality indicators between the Integrated and District Teams in each of the three localities is also shown in Figures 4, 5 and 6 below.

Figure 4 demonstrates that negative indicators; admission to short term care and hospital admissions were lower in Bassetlaw Integrated Team. However admission to permanent care was higher in the Integrated Team. Both positive indicators were higher in Bassetlaw Integrated Team.

Figure 4: Care quality indicators in Bassetlaw

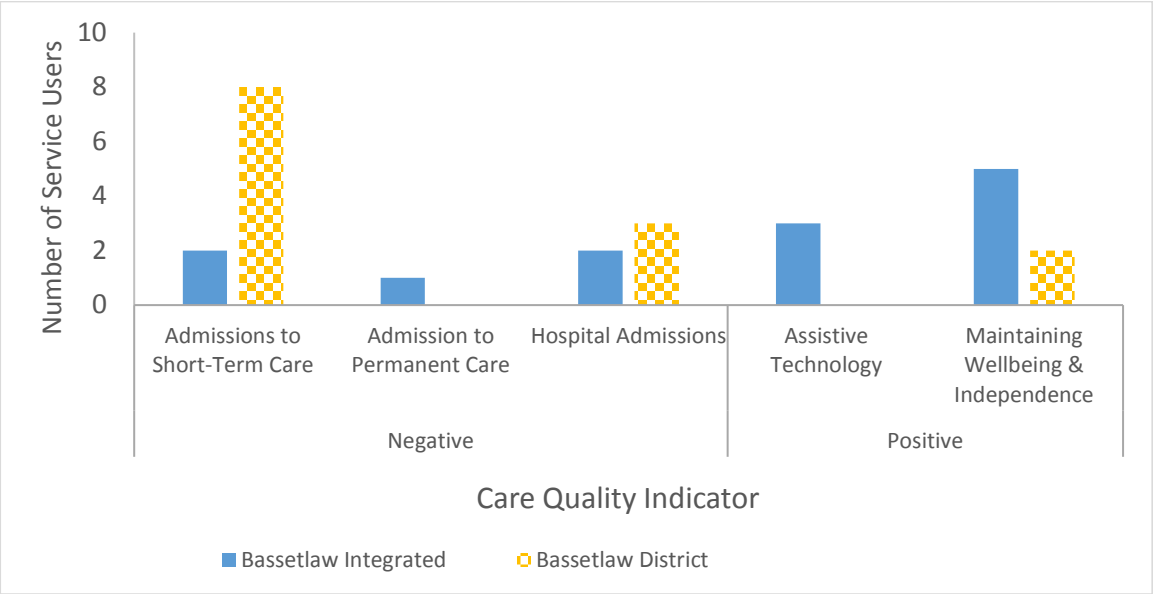
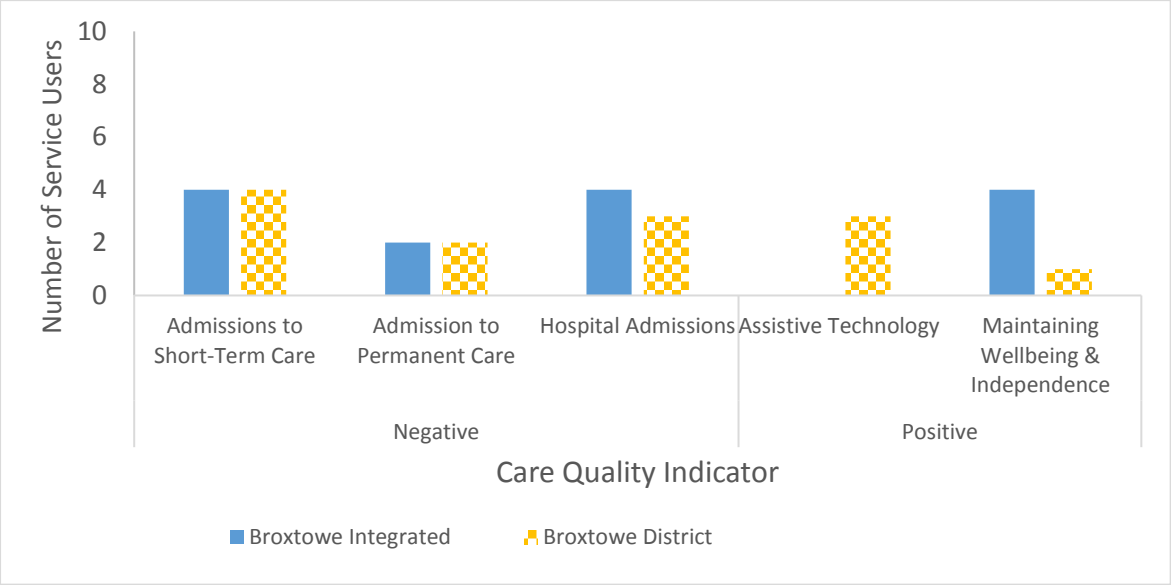


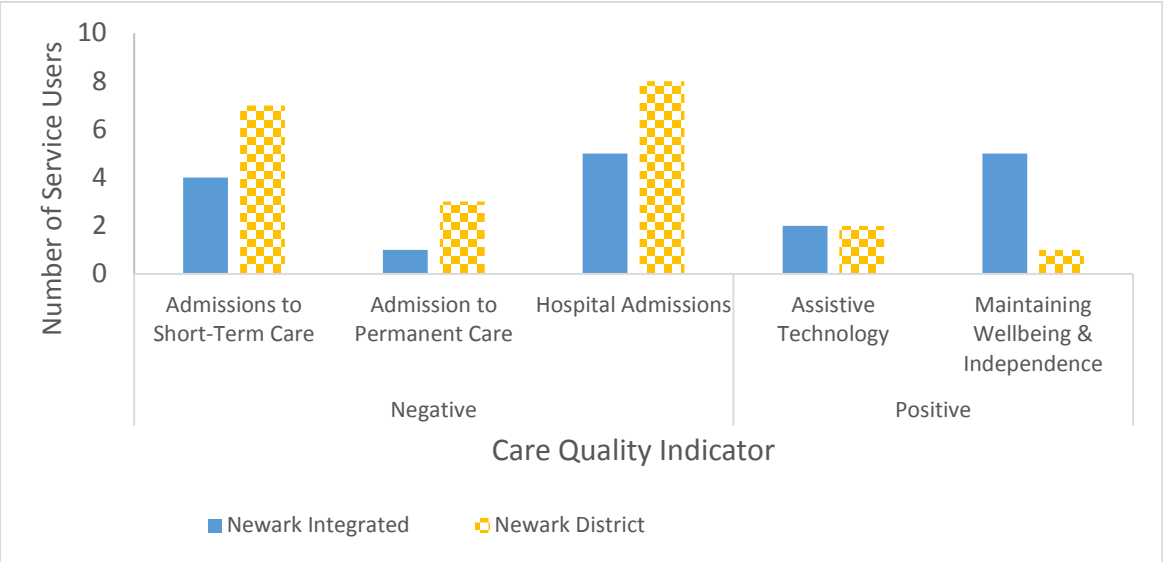
Figure 5 suggests that hospital admission was higher in Broxtowe Integrated Team compared to Broxtowe District Team. Other negative indicators; admission to short term and admission to permanent care, were the same across teams. Maintaining wellbeing and independence was higher in Broxtowe Integrated but use of assistive technology was lower.

Figure 5: Care quality indicators in Broxtowe



It is evident from looking at Figure 6 that all negative indicators were lower in Newark Integrated team compared to Newark District Team. Maintaining wellbeing and independence was higher in Newark Integrated Team and use of assistive technology was the same across both teams.

Figure 6: Care quality indicators in Newark



In conclusion the difference integration of the social care role makes for service users and carers is to improve the delivery of quality care. This improvement impacts in interrelated ways, to promote person centred care. According to the Health Foundation (2017) person centred care is different for each individual and is an evolving concept. It is underpinned by principles of offering coordinated care, support and treatment, that promotes an individual's dignity and respect by allowing them to recognise and develop their own strengths and abilities to enable them to live an independent and fulfilling life. The principle of coordinated care is embodied in legislation (The Care Act, 2014).

We found that the experiences of service users, carers and staff illustrated

- a timely response for an assessment prevents crises and meets the need of a person who has requested help (timely assessment ⇒ holistic approach)

For example a carer from Broxtowe Integrated Team discussed how everyone become involved quickly from contact with just one team member:

> *"We got referred to [social worker] via the occupational therapist. And then from the occupational therapist we also had erm physiotherapy …. and I think another person involved as well, the name escapes me. But it all came from the one person." (CA4I)*

This then led to better communication between health and social care professionals and a more holistic approach being taken:

> *"The communication between the professionals was excellent. They all seemed to be completely on the ball, knowledgeable. They were all very consistent in their approach. Erm my Mum didn't feel threatened by them at all." (CA4I)*

- the provision of services that promote independence meets the needs of service users who want to retain their independence and have expressed a desire to stay at home (promoting independence ⇒ person-centred care)

For example supporting service users to access day centre in the way that suits them:

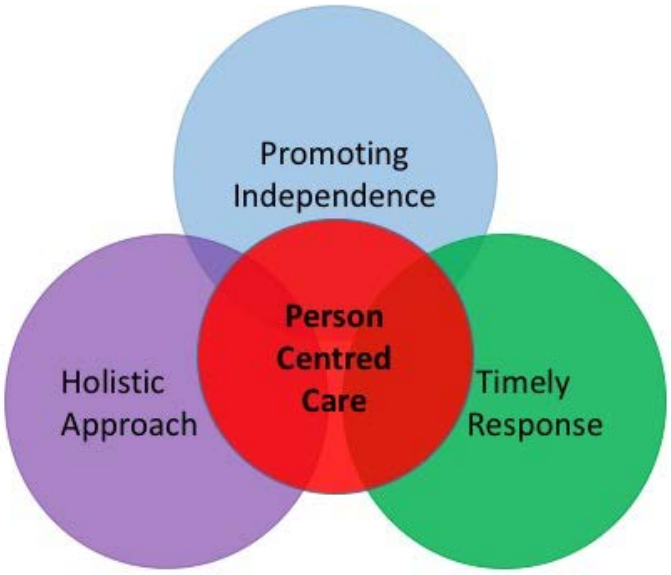
> *"I go on a Mondays they fetch me on a Mondays and I'm out till about 4 o'clock in the afternoon. I just like Mondays cause I, I, they do craft work and painting and them kind of things well I can't move my fingers that much…..so I don't, I can't do the other things. So I like to go Monday and then sometimes Tuesday they take us out for dinner." (SU2I)*

For this service user it was important for her them to remain independent in their own home:

> *"Well I want to be independent I don't want to have folks running after me." (SU2I).*

We have illustrated the interrelationship between promoting independence, holistic approach and timely response, the factors that contribute to care quality and person centred care in diagramatic form in Figure 7 below, before we discuss each of these three factors in more detail.

Figure 7: Ways in which the social care role in integrated teams impacts on quality care outcomes



5.2.1.2 Promoting Independence

Comparisons across the Teams suggest that admission to short-term care was lower in Newark and Bassetlaw Integrated Teams compared to their District equivalents but remained the same across Broxtowe Integrated and Broxtowe District teams. This suggests that for the cases sampled the Integrated Teams in Newark and Bassetlaw are preventing more admissions to short-term care than their District equivalents. Admission to permanent care was similar across the Integrated and District Teams in Bassetlaw and Broxtowe but slightly lower in Newark Integrated compared to Newark District.

The data suggest that integration can reduce the risk of admission to a care setting, contrary to a suggestion expressed by some members of staff, who believed that the integrated approach might lead to increased admissions to care settings – for example, health care professionals requesting respite care to avoid the cost of a hospital admission. Indeed, some of the health care professionals we spoke to said that integration "would never prevent admission to care settings" – rather, it "would probably increase it." (FG4I).

However, these assumptions are not supported by the quantitative data in any of the three areas. For example, in Broxtowe admissions to short-term and permanent care are similar across the Integrated and District Teams (see Figure 5). In Newark admissions to short-term and permanent care tend to be lower for the Integrated than for the District Team (see Figure 6), and in Bassetlaw admissions to short-term care tend to be lower for the Integrated than for the District Team (see Figure 4).

Hospital admissions were similar across Bassetlaw and Broxtowe Integrated Teams and their District equivalents. However, hospital admissions were lower in Newark Integrated Team than in Newark District Team. Given that only Newark Integrated Team operates the virtual ward model, it is possible that this way of working is making the Team relatively more effective at reducing hospital admissions. For example, one carer, whose grandfather had been supported by Newark District Team, described an experience of lack of coordination of health and social care services that contributed to several hospital admissions and eventual admission to a care home for her grandfather. The lack of coordination meant that health care professionals were treating her grandfather "several months" before the District social care worker intervened and had in fact "already discharged from what they were doing before [District social care worker] got involved." In her view, her grandfather could have been enabled to live at home safely, if the GP had responded more quickly to the changes in in his physical and mental health condition and if, at the same time, "an increasing care package" had been put in place for him (CA8D).

Maintaining wellbeing and independence though low-level/preventative services was higher in all the integrated teams compared to their district equivalents. Examples of these kinds of services include help with claiming benefits, setting up a hot meals service or supplying information about charities and groups that may be of help to the service user. This difference most likely reflects the fact that in the district teams low-level social care tasks are automatically screened out at triage via the Customer Service Centre (CSC) and the fact that social care workers in the integrated teams can still refer cases for low-level or preventative work via the CSC, should these services be required.

In the stakeholder event social care colleagues expressed the opinion that social care workers in the integrated teams tend to deal with some low-level tasks, as they arise, alongside more complex social care interventions. It should be noted that this way of working supports consistency of care and saves the time of going through a process of referral and/or signposting based only on task criteria.

The Workload Management Tool that is included in Appendix 5 is being used in Newark in the District and Integrated Teams but is yet to be implemented fully in other parts of Nottinghamshire. The use of the Tool supports the targeting of social care involvement to service users whose needs are more complex. This should allow for caseloads to become more standardised with regards to complexity across integrated and district teams. However, managers do acknowledge that where low-level tasks arise it may be more appropriate for these to be dealt with by the social care worker already involved with the service user rather than by a referral though the Customer Service Centre.

5.2.1.3 Timely Response

The mean (average) number of days from referral to assessment across all the service users in each sample is shown in Table 4 below.

Table 4: Mean days per service user from referral to assessment

	Bassetlaw		Broxtowe		Newark	
	Integrated	**District**	**Integrated**	**District**	**Integrated**	**District**
Mean Days from Referral to Assessment	6.8	6.89	8.2	6.3	3.3	8.4

To further explore the time from referral to assessment an ANOVA was conducted using this data (see Appendix 6 for details of the analysis). This analysis found no significant differences in mean time from referral to assessment across the teams.

If a difference between means is statistically significant, this indicates that this difference has not happened by chance, that it is a real difference that would be found again if the research were conducted with another sample.

The non-significant difference between referral to assessment may have occurred for one of three reasons.

- First, the sample size of 10 per team may be too small to detect a significant effect.
- Second, there may be too much variability in days from referral to assessment across the teams. In a small sample any variation in data will increase the spread of scores, meaning a significant effect is less likely to be detected.
- Third, it could be that the time from referral to assessment is not affected by an integrated approach and it is the processes following this – for example, the assessment itself or the implementation of care – that are more greatly influenced by the integrated approach.

There is some qualitative evidence in support of these conclusions: the experiences of service users and carers indicate that care is organised more quickly through an integrated team than through a district team because health and social care workers in an integrated team can share information about service users more easily than if they were working in separate teams. As the daughter of a user of Newark Integrated Team put it, commenting on the speed with which the social care worker had responded,

> *I spoke to somebody on the Sunday [and] I think it was the Monday he phoned me; and he's always been really quick to respond. Really pleased with the speed that things have been happening, you know." (CA1I)*

The daughter also recognised that the different professionals in the Team were coordinating the delivery of her mother's care by liaising with each other:

> *"… they definitely talk because when [Diabetes Nurse] [has] been or [social care worker] [has] been, [social care worker] said, 'Yes, actually I saw [Mental Health Nurse].' … 'cause like I say, we had a bit of a wobble at the weekend, so [social care worker] had spoken to [Mental Health Nurse] about that and, yeah, so they do liaise with each other, definitely." (CA1I)*

The difference mustering a timely response between an integrated and non-integrated model of care delivery was also recognised by members of Newark District Team, who told us:

> *"If we're on Duty and we think health needs to be input, we have to go through Call for Care, we have to do a lot of phoning round. If they're [Integrated Care Team social care worker] on Duty with us, they can simply just phone direct to that person and say 'Can you look on this?' and they get it straight away." (FG7D)*

> *"I've had some cases where I've spent days and days just chasing health professionals about them [service user]." (FG7D)*

5.2.1.4 Holistic Approach

Where the social care role in integrated teams was working well, adjustments to the care package were tailored to the changing needs of the service user and/or carer.

For one user of Newark Integrated Team a gradual introduction of domiciliary care was valued as it allowed the service user to adapt to coping with a situation of considerable change. This was echoed by their carer:

> *"if it had … been full on – 'cause I was getting so many phone calls from different services … I think sometimes, if that had come all at once, maybe that could … bamboozle a lot of people and you think, 'No. I can't cope with this.' So, for us, I think the gradual, the little steps have probably helped …" (CA1I)*

For another user of Newark Integrated Team, the social care worker increased the care package to reduce the risk of dizziness and related falls:

> *"we asked him … if it was possible to have a little bit of an increase because Mum wasn't getting her medication as she should be doing … So, we just settled for an hour." (CA2I)*

The service user reported a significant improvement in their wellbeing, both physical and mental:

> *"Well, I think the help … has got to be … behind the fact that … I feel tons and tons better than I did. … I really do feel better. … I used to sing round the house all time … And I just haven't wanted to but lately I've started to do it again and … I've always done things like that and it just became, I just wasn't interested. In fact, I wasn't interested in eating for a while. That's not like me. So, I really do feel tons better than I felt when I first came." (SU1I)*

5.2.1.5 Outcomes

The outcome of the social care worker's intervention with each of the 10 sampled cases, either at the point at which the case was closed or, if the case was still open, the date of data collection, was identified. The outcome in each of the 10 cases per team is broken down into the 7 categories listed in Table 5, which shows the number of service users out of the 10 in each team with each outcome. The data relating to the outcomes for each location are also presented in Figures 8, 9 and 10.

Table 5: Outcomes for service users by team

	Bassetlaw		Broxtowe		Newark	
Outcome	Integrated	District	Integrated	District	Integrated	District
Care Package at Home	9	5	7	4	5	4
In Hospital	0	1	0	1	0	2
In Short-Term Care	0	3	0	0	0	1
In Permanent Care	1	0	2	2	1	3
Refused Support	0	0	0	3	0	0
No Care Package – Low-Level Service Provided at Home	0	0	0	0	1	0
Death	0	1	1	0	3	0

From looking at Figure 8 it can be seen that 9 out of the 10 service users had a care package at home as the outcome when the case or data collection ended. This wasn't as high in Bassetlaw District Team.

Figure 8: Outcomes for service users in Bassetlaw

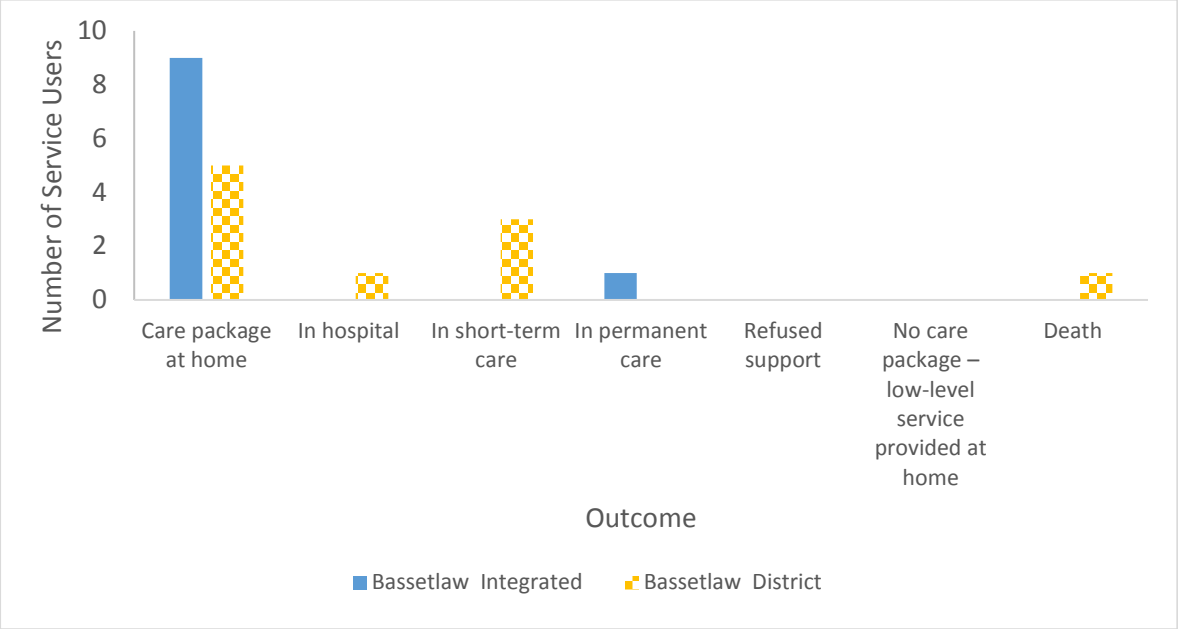
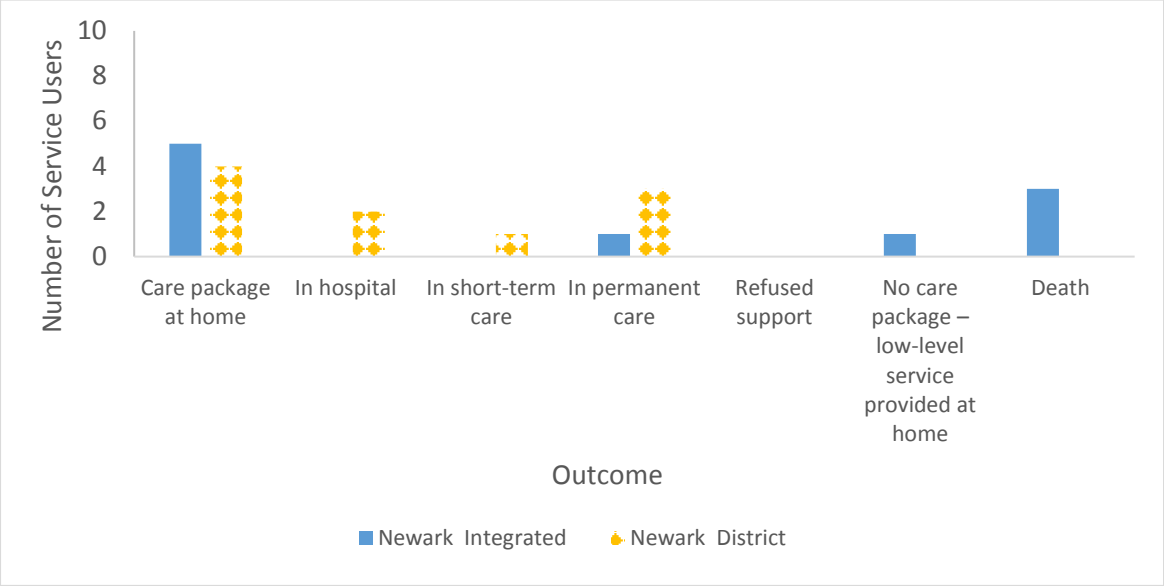


Figure 9 demonstrates that a higher number of service users in Broxtowe Integrated Team had a care package at home as the outcome compared to Broxtowe District. There was a higher number of service users refusing support in Broxtowe District team.

Figure 9: Outcomes for service users in Broxtowe

It is demonstrated in Figure 10 that service users in Newark Integrated Team were more likely to have a care package at home or death as an outcome compared to Newark district where permanent care was more likely.

Figure 10: Outcomes for service users in Newark



Therefore, from looking at Figures 8, 9 and 10 it is evident that in all the Integrated Teams a higher number of service users received a care package at home compared with their District equivalent. This suggests that at the point the case closed, or data collection ended, the Integrated Teams were more likely to be keeping service users at home with care packages compared to their District equivalents.

The qualitative evidence supports this conclusion. For example, one of the focus group participants from Broxtowe District Team, who had previously worked in the Integrated Team, indicated that care packages at home were typically put in place quickly "to prevent a crisis" and "to prevent admission to hospital". They could be put in place quickly, if service users accepted "Direct Payments" (FG8D). By contrast, in the District Team Direct Payments were not used as much, with the result that the health of service users continued to deteriorate to the point where hospital admission and/or admission to residential or nursing care became a more likely outcome than continuing to live at home with a care package in place.

Of the three Integrated Teams Newark has the highest number of service users with death as the outcome. This result suggests either that cases are more likely to remain on the social care worker's caseload until death rather than being closed, or that the 10 service users sampled in Newark during the evaluation period were experiencing more critical health care conditions than the service users sampled in the other two localities.

Table 5 also shows that, out of all six Teams, only Broxtowe District had service users who refused support as an outcome. This could be due to these cases still being ongoing, with support accepted at a later stage after further work with and persuasion from the social care worker. (Note that a likely consequence of a service user refusing support is a lower social care cost, at least initially. See Section 5.3 below.)

As a further check to establish whether different outcomes were achieved for service users in the Integrated Teams compared with the District Teams, outcome data were analysed by team for a 12-month period from 1 April 2016 to 31 March 2017. (See Table 6 below.) There were two key challenges in analysing this data. The first challenge was that data values were obtained by workers rather than by individual service users, and workers had changed teams during the 12-month period analysed. The second challenge was that, because multiple services (outcomes) could be put in place for a service user, it was not

possible to establish the percentage of CASAs (care and support assessments) completed that resulted in a service. This difficulty was addressed by incorporating worker data for the defined period when they were part of the Integrated Team using percentages rather than total numbers and focusing only on admissions to residential and nursing care, as it is unlikely that this type of provision would have multiple outcomes per service user.

Table 6: Outcomes by team over a 12-month period

	Bassetlaw		Broxtowe		Newark	
Outcome	**Integrated**	**District**	**Integrated**	**District**	**Integrated**	**District**
% CASA completed resulting in admission to residential care	3%	26%	8%	18%	17%	9%
% CASA completed resulting in admission to nursing care	17%	15%	0%	14%	2%	3%

These data indicate that in Bassetlaw and Broxtowe admission to residential care as a percentage of CASAs completed is lower in the Integrated Teams than in the District Teams. However, this is not the case in Newark, where admissions to residential care are higher in the Integrated Team than in the District Team.

With regards to the proportion of admissions to nursing care in Bassetlaw and Newark, the Integrated and District Teams are similar. However, in Broxtowe the proportion of admissions to nursing care is much lower in the Integrated Team than in the District Team. Therefore, we cannot draw any firm conclusions about outcomes from this sample of data and recommend that a longitudinal study be undertaken to determine whether the differences in outcomes identified are the result of differences in behaviour between the teams or differences in presenting complexity of need.

5.2.2 Differences for Health and Social Care Workers

5.2.2.1 Referrals

The number of referrals across teams were analysed using ANCOVA (see Appendix 6 for details of this analysis). The analysis showed that mean number of referrals overall appeared to be higher in the Integrated Teams (2.5 referrals per service user) compared to the District Teams (1.13 referrals per service user). This suggests that an integrated approach helps facilitate referrals both to and from other services, a conclusion that is supported by a comment from the focus group discussion with Newark Integrated Team:

> *"a lot of the referrals are done, they're just done through the week … we don't say … 'Oh, we'll only do referrals once a week' – like at Byron House, they'll only except a referral on a Tuesday, when they do their Tuesday appointments." (FG1I)*

In the case of Broxtowe Integrated Team, the model of care delivery is more health-dominated than it is in either Newark or Bassetlaw, with the social care worker operating in a more 'arm's-length' way and receiving referrals only from the 4 Care Coordinators (who are health care colleagues employed by PICS Limited). Hence, unlike GPs in either Newark or Bassetlaw, GPs in Broxtowe must make referrals for social work involvement via the Care Coordinators: that is, they cannot refer directly to the social care worker in the Integrated Team.

5.2.2.2 Collective and Specialist Knowledge of the Social Care Role

The research and policy literature cautions against the integration of social care workers in health and social care services primarily because of their low numbers compared with health care colleagues, which can inadvertently result in an erosion of their specialist social work knowledge and skills. Also, there is some evidence that when social care workers are employed by the Health Service (for example, mental health social care workers), they can experience feeling abandoned and devalued by their local authority, manifest in a lack of professional social work supervision (Bailey and Liyanage, 2012).

However, in this evaluation we found evidence that, the more the social care worker is embedded in a multidisciplinary team, the more that health and social care colleagues in that team can learn with and from each other about each other's roles. For example, in the focus group discussion with Newark Integrated Team the social care worker revealed that they had been engaging in a process of mutual learning whereby they were educating health care colleagues about social care services and, vice versa, health care colleagues were educating them about health care services:

> *"because I've taught them effectively, they've learnt, and vice versa. … I learn about all sorts. … I've learnt how big catheter tubes are. … so sometimes the preamble's kind of already done … before they [service users] come to me, although … it's all very informal …" (FG1I)*

The beneficial consequence of this process is that the whole Team is more able to pursue a holistic approach to assessment, as one of the health care professionals revealed in the focus group:

> *"I think we have got better at being more holistic as well, I think. Because we all work together, we kind of jump outside the box, you know, and we do look differently. You know, we don't just look at what we're doing …" (FG1I)*

Indeed, by drawing on their knowledge of social services that they had developed through discussion with the social care worker, health care professionals in Newark Integrated Team were able not only to counter the negative stereotypes that service users might express about the social work profession but also to provide an immediate response to low-level queries about social services – for example, questions about eligibility for financial assistance:

> *"And you can answer [their] questions. You know, when they say, 'I don't want them digging in my money' and 'I'll never get it 'cause I've got a bit of money' and a bit of money to them is probably way below the threshold, when they can get some help [with] funding. On the other hand, when you've got people that have got a lot of money, that think it's free … you can explain that to them too. So, us knowing … what the threshold is for them to actually be able to receive some of their care…" (FG1I)*

Through learning about the social care role health care professionals in Newark Integrated Team also gained a clearer understanding of when it was appropriate to make a referral to the social care worker. In other words, it seems that the collective knowledge of the social care role that the Team had developed acted as an initial referral filter. As one of

the health care professionals in the focus group put it, "… we can say to our patients, you know, we can answer some of their questions before we actually refer." (FG1I)

If the existence of collective knowledge of the social care role is reducing the number of inappropriate referrals that are made to the social care worker, it may be allowing the social care worker more time to respond to referrals for which specialist social work involvement is required. For example, in one case the social care worker in Newark Integrated Team was able to advise the relatives about what sort of financial support was available from the Local Authority for the provision of social care at home and that this support could be back-dated, given that they had already organised a package of home care:

> "*So, he sort of helped us out with all that … what was … available, you know, systems that we could try …obviously not being in this situation before, you don't know that it is there."* (CA2I)

This case was complex, not only because a package of care was in place before the social care worker became involved but also because there were delays in the back-dating of the Local Authority's financial assistance and because a mistake had been in the calculations, with the result that the relatives had been overpaid.

Moreover, with his specialist knowledge of the legislative framework, the social care worker was able to advise the relatives of relevant aspects of the law that might be of use to them. For example, in response to the social care worker's suggestion about gaining power of attorney, the son and daughter-in-law had arranged for a solicitor to visit their mother and to set this up. As they put it, "we'd never even thought about doing that until [social care worker] asked us last time he visited, had we?" (CA2I)

It is not surprising, therefore, that in multidisciplinary teams characterised by a relatively high level of integration the health care professionals understand and in consequence value highly the role of the social care worker, whose specialist knowledge of social services is a crucial condition for the development of collective knowledge of social services. Indeed, it seems that, even in teams where the social care worker is aligned, rather than embedded, the value that the social care worker brings to the team is recognised. In the words of one of the health care professionals in Bassetlaw Integrated Team (from which the position of social care worker had been removed), "[i]f you can get our social care worker back in the team, we will love you forever." (I7HC)

5.2.3 Differences to the Health Care System

One of the key benefits to the health care system that this evaluation has identified is the reduction in hospital admissions which was presented in Section 5.2. This is not surprising given that the aim of the integrated teams is to reduce such admissions. Embeddedness of the social care role within an integrated team can help facilitate this by enabling a coordinated care package to be put in place quicker that consequently avoids an unnecessary hospital admission; perhaps because a crisis ensues. This was explained by a carer from a District Team who said that she cared for her Grandad, but for whom the social care worker's involvement came too late resulting in a care package that wasn't enough to manage his care needs at home and her Grandad was soon admitted to hospital.

Although it was beyond the scope of this evaluation to measure cost savings to the health system of having the social care worker embedded in integrated teams (see Section 5.3 for cost savings to social care) we anticipate that health care savings similar to those for social care, can be achieved when the right conditions for integration are in place. The reduction in hospital admissions that we identified will inevitably lead to reduced health care costs to health if service users are receiving their care at home. In addition, the data from the 60 cases we examined indicated that where hospital admission did occur this

followed an ambulance call out and/or presentation at an Accident and Emergency department thus incurring additional health care costs. Having a social care worker effectively embedded within an integrated team affords the potential to reduce related health care costs because appropriate care packages are more likely to be put in place in a timely manner.

Health care colleagues who participated in the evaluation told us that one of the benefits of having a social care worker in the integrated team is that their influence allows for a greater level of positive risk taking to be done with the service user. This was especially important for health staff in the Bassetlaw Hospital Integrated Discharge Team who said that social care workers' contributions can enable a more timely discharge because they can give reassurance that the right care package is in place to manage risks when a service user returns home.

To summarise the social care role in the integrated team is crucial in facilitating coordinated and effective health and social care packages for service users. When coordinated care packages are in place this can reduce unnecessary hospital admissions, ambulance call outs and presentations at Accident and Emergency. This in turn will result in cost savings to the health care system.

5.3 'What is the value for money and cost-effectiveness of having social care workers embedded within integrated care teams?'

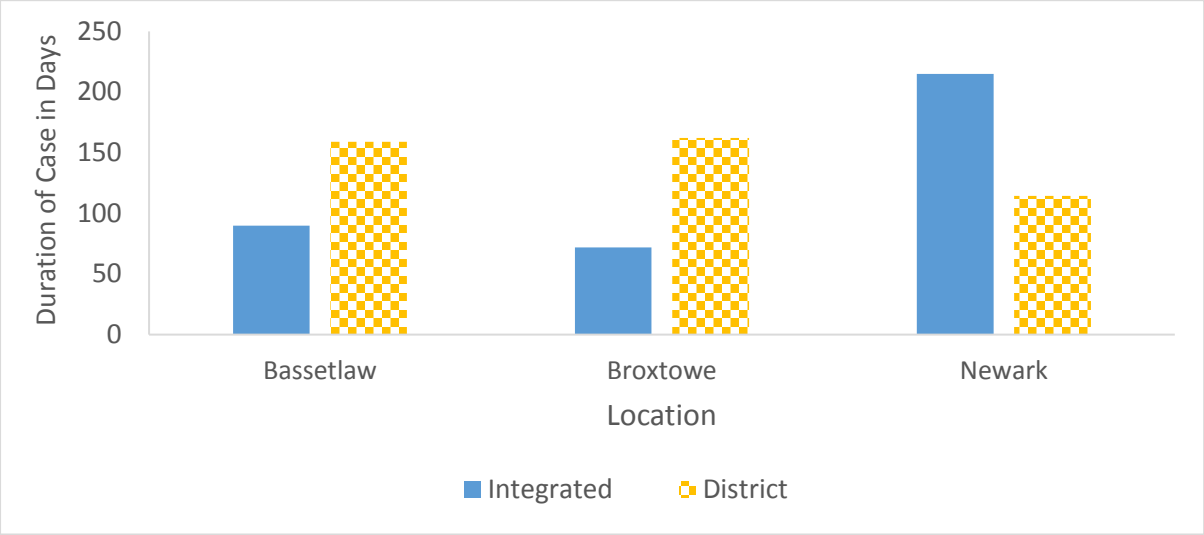
Where integrated working was at its best Savings were made because the teams were working more efficiently and making better decisions collectively. Cost data for 60 service users from all 6 teams (n = 10 per team) were collected and used in the analysis. The cost data was made up of 4 different social care cost components:

- worker costs
- care package at home costs
- short-term care costs
- permanent care costs.

These four cost components plus any costs incurred during referral e.g. Customer Service Centre costs were added together to create a total social care cost for the service user. Costs presented here by team, are the mean (average) cost calculated across the 10 cases sampled for each team. The mean therefore simply represents the average cost per service user for each team.

Costs were adjusted for the duration that the case was open for. Figure 11 shows how duration varied across the teams used in the evaluation.

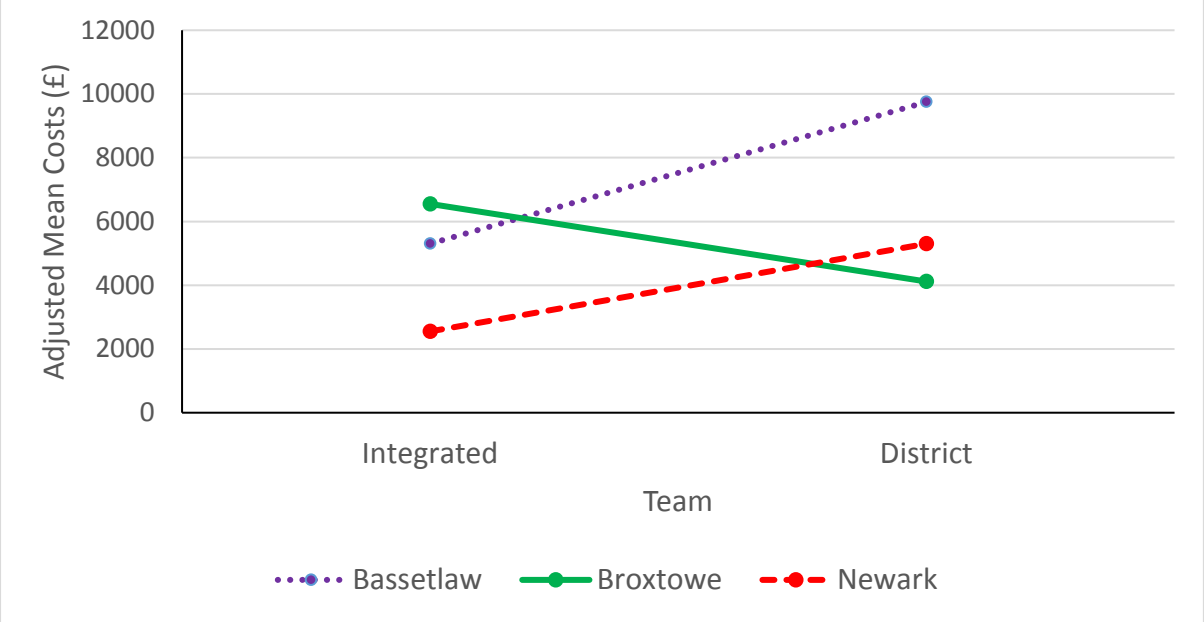
Figure 11: Mean duration (not standardised) of case across teams



The results of the analysis showed a significant interaction between the two variables; type of team and location (see Appendix 6 for details of the statistical analysis).This significant interaction between type of team and location suggests that there are significant differences in total costs when compared across the teams sampled in the evaluation. This is illustrated in Figure 12 which shows that in Bassetlaw and Newark Integrated Teams the mean total costs were lower than in their District equivalent team. However this was reversed in Broxtowe where the costs in the Integrated Team were higher than in the District Team.

Our analysis demonstrated that cost savings are being made in Newark and Bassetlaw Integrated Teams, with **Newark Integrated Team having an overall cost saving of £2,750.28** per service user compared with **Newark District. Bassetlaw Integrated Team has a cost saving of £4,445.72** per service user compared with **Bassetlaw District.**

Figure 12: Total mean social care costs per service user across all teams



To examine the data in more detail the different cost components were examined individually, and the results of this analysis are presented in Figures 13 to 16.

When costs are standardised across a time period they have to be either shifted up and down to reflect this standardisation. This results in some costs having a negative value. This does not mean that there are no costs for this team but that when these costs were standardised they had to be scaled down to less than zero. Therefore, for example, when looking at Figure 13 it can be interpreted that Newark Integrated Team's mean worker costs were **£600 less than** Newark District's when compared over the same standardised time period.

Figure 13 demonstrates that mean social care worker costs were lower in Bassetlaw and Newark Integrated Team compared to their District equivalent but this was reversed in Broxtowe. This means that **Newark Integrated had a cost saving of £660.85** compared with Newark District and **Bassetlaw Integrated had a cost saving of £791.17** compared with Bassetlaw District.

Figure 13: Mean social care worker costs per service user across teams

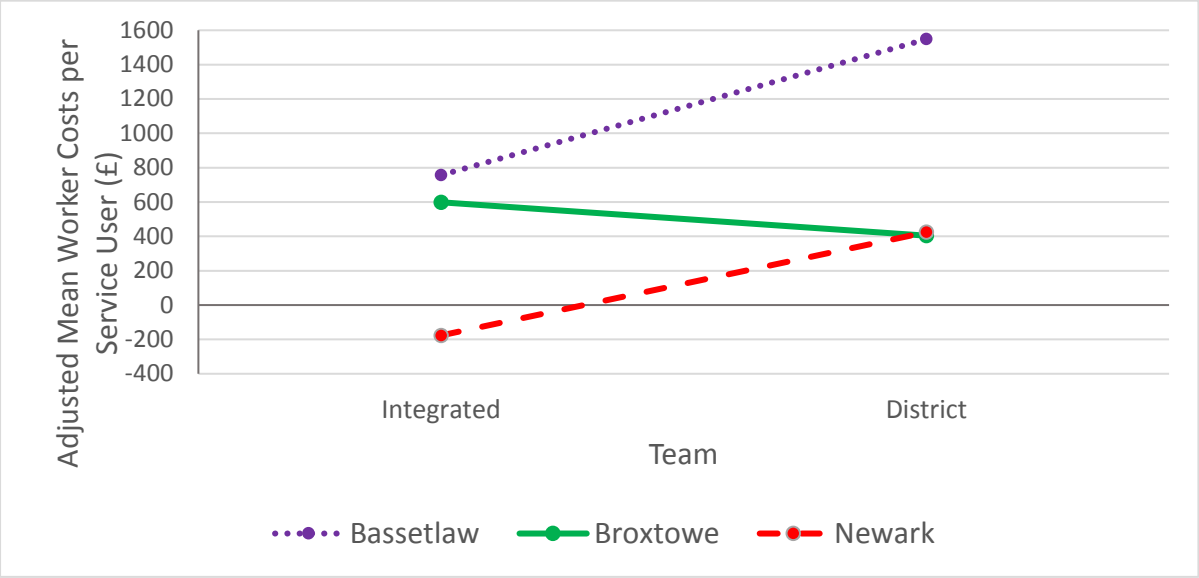


Figure 14 shows that mean care package costs were lower in all three Integrated Teams compared to their District Team equivalent.

Care package costs were **£2,653.35 less in Bassetlaw Integrated** compared to Bassetlaw District. Costs were **£1,399.20 less in Newark Integrated** compared with Newark District. There was also a saving of **£573.02 in Broxtowe Integrated Team** compared with Broxtowe District.

Figure 14: Mean care package cost per service user across teams

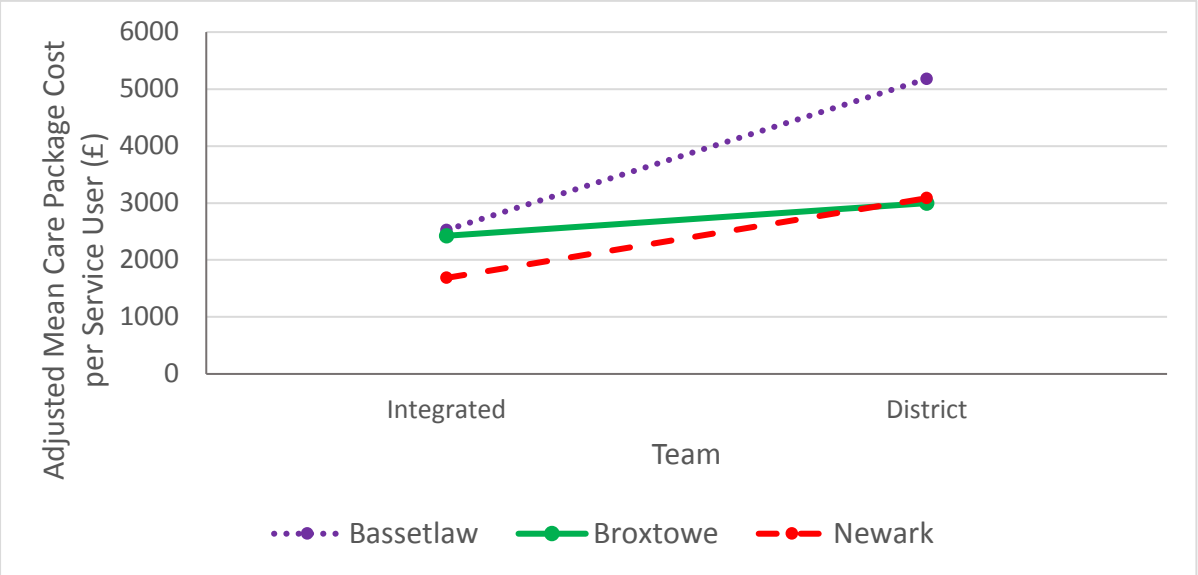
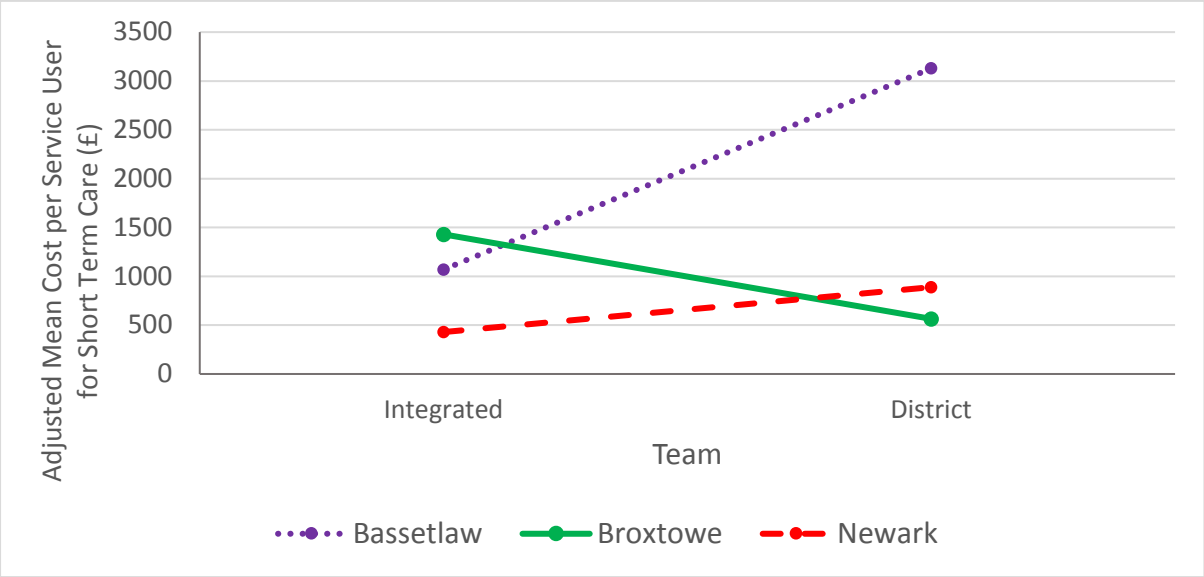


Figure 15 highlights that mean short term care costs were lower in Bassetlaw and Newark Integrated Teams compared to Bassetlaw and Newark District Teams. However costs were higher in Broxtowe Integrated compared to Broxtowe District.

Figure 15 shows that Newark Integrated had a cost saving of **£459.64** compared to Newark District. **Bassetlaw Integrated** had a cost saving of **£2,058.95** when compared with Bassetlaw District.

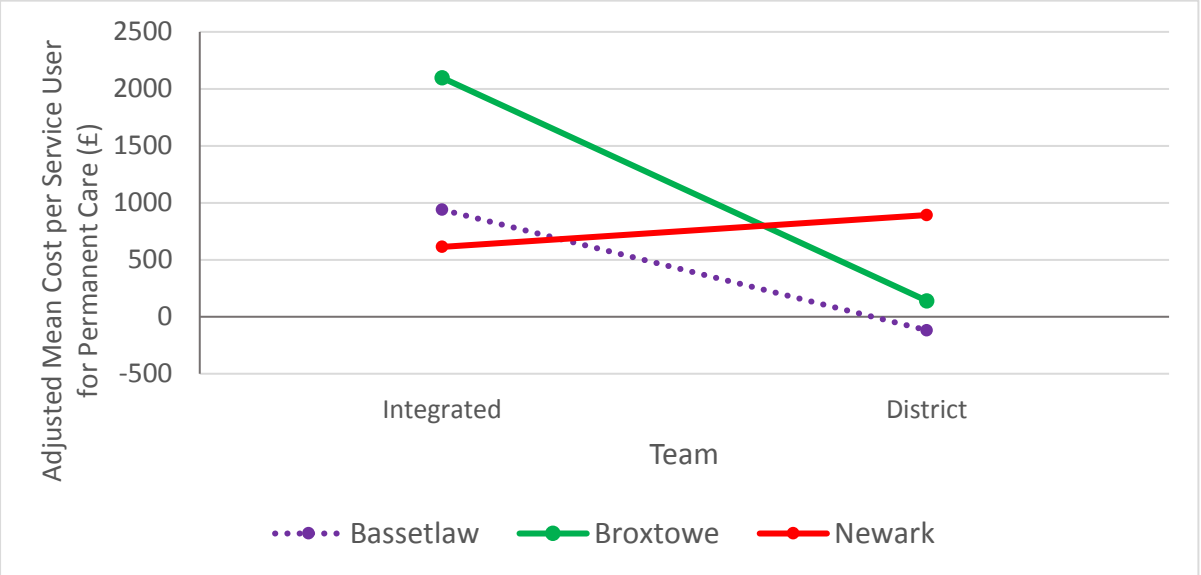
Figure 15: Short term care cost per service user across teams



From looking at Figure 16 it can be seen that mean permanent care costs were slightly lower in Newark Integrated Team compared to Newark District Team. Costs were higher in Bassetlaw and Broxtowe Integrated Team compared to their District Team equivalent.

Therefore **Newark Integrated Team has cost savings of £279.49** when compared to Newark District Team.

Figure 16: Permanent care cost per service user across teams



Although, when the components are analysed separately, there are no significant differences (see Appendix 6 for statistical analysis), it is still apparent that there are some differences between the types of costs being incurred. For example; worker costs, care packages costs and short-term care costs are lower in Newark and Bassetlaw Integrated teams compared to their District equivalents. It seems that it is only when all these cost savings are added into a total cost that the saving becomes large enough to become significant. Therefore, the data suggest all the individual components work together to result in an overall cost saving in Newark and Bassetlaw Integrated teams.

It is worthy of note that costs appear to be higher overall in the Bassetlaw area, compared with the Newark and Broxtowe areas. Therefore, the integrated team in this area has the potential to make the largest cost savings which is demonstrated in Figure 12.

These higher, overall costs for both integrated and district teams in Bassetlaw may relate to the size of the locality. If workers spend more time travelling across the locality this will be reflected in more time taken by social care workers to undertake assessments (resulting in higher costs) and similarly higher care package costs, because carers will also have to travel to provide the direct care. This issue was discussed at the stakeholder meeting and confirmed as a contributing factor to the higher costs we found.

Taken together, the cost data and the care quality data suggest that an integrated model of care delivery offers both higher quality and more cost-effective care for this cohort of older people with complex health and social care needs; rather than the traditional model of care delivery through separate teams of health and social care workers. The thematic analysis of the qualitative data concerning the experiences of service users and members of staff and presented in Sections 5.2.1 and 5.2.2 also supports this conclusion because it tells us how the different ways of working in an integrated team generate a decrease in costs and an increase in the standard of care being received. Moreover, the finding that cost savings appear to be greatest in Newark Integrated Team supports the conclusion in Section 5.1.1, that the level of integration is highest in Newark.

Therefore, the data suggest that an integrated approach can provide a high quality of care as well as cost-effective care provided that the conditions for integration are right. This was most evident in Newark and Bassetlaw Integrated Teams, which suggests that social care was being provided in a more embedded way in these Teams. It was shown in Section 5.1 that the levels of integration across the 3 teams are different, with Broxtowe having the lowest level of integration. Therefore, the findings suggest that this lower level of integration results in less cost efficiencies and less impact realised in terms of positive social care outcomes.

It is worthy of note that Newark Integrated Team does not incur any of the costs that are associated with “processing” cases at the Customer Service Centre/through triage before they reach the social care worker. The more streamlined approach to referral in Newark West Local Integrated Care Team is likely to be contributing in a range of ways to the significantly lower cost of providing the social care input through this Team. As referrals in Bassetlaw Integrated Team still had to be processed by the Customer Service Centre, this Team could have had the potential to make greater cost savings, if this had not been the case.

5.4 'How could the care model be improved further? Should it be scaled up?'

Evidence from the evaluation, which has been triangulated from (a) estimated costs of delivering social care, (b) indicators of care quality/outcomes and (c) reported experiences of service users, carers and members of staff, suggests that integrating the health and social care roles in a multidisciplinary team is a more cost-effective way of working and facilitates delivery of higher quality care. However, if the full benefits of integration are to be realised, certain conditions must be met. These conditions include

- embedding of the social care role within the integrated team from the outset with leadership support from both health and social care services.
- agreed funding arrangements in place between the CCG and Local Authority
- opportunities for team training so that health and social care colleagues can be supported to contribute to care delivery in a mutually beneficial way
- co-location and regular multidisciplinary team meetings where social care workers and health colleagues can share, proactively, service user-related information, discuss cases and learn with and from each other about their respective roles
- clarification of case complexity and criteria/thresholds for social care involvement and supporting this by an agreed workload management system that is implemented in a standardised way
- implementation of pragmatic solutions to the sharing of service user-related data that are stored on different ICT systems.

Based on our findings from this evaluation we have developed a toolkit to support health and social care managers, teams and individual social care workers create these conditions for effective integrated working. The toolkit will be available on request from January 2018 and can be obtained from Professor Di Bailey – di.bailey@ntu.ac.uk

Because of the challenges associated with embedding the social care role within a team of health care professionals, we heard repeatedly that it was important for social care workers to possess personal qualities that allow them to work effectively with health care professionals. Because they are working apart from larger teams of social care colleagues, they need to have sufficient prior experience of working in a social care role to be confident to work autonomously while promoting the social care contribution. As one of the focus group participants from Newark Integrated Team told us:

> *"But I think … when they first set this up, they wanted a social care worker to do it, they wanted somebody with experience. … they need to have a lot of pre-existing knowledge 'cause you are on your own. So that is a challenge. I think that's a challenge for anybody in the team." (FG1I)*

The specialist knowledge and expertise of social care workers enables them to take more (positive) risks than their health colleagues might take. This (positive) risk taking, in turn, contributes to better care quality outcomes either because it prevents admission to hospital (for example, through use of a care package at home) and/or because it facilitates a timely discharge from hospital (for example, through use of assistive technology at home). As one of the participants in a focus group with Bassetlaw Integrated Hospital Discharge Team told us,

> *"sometimes it's the health staff that can be risk adverse and actually don't want the patients to go home, and that can come from the therapist or the nurses. So, again, it's trying to change those aspects of care." (FG5I)*

Therefore, it is important that social care workers who are working in an integrated team are given the opportunity to update their disciplinary knowledge and expertise. One way in which they can do this, and thereby retain their registration with the Health Care

Professions Council, is by continuing to undertake 'duty' for the District Team. This is the case, for example, in Newark Integrated Team.

The way that information about service users is shared and knowledge of the health and social care roles is developed between members of Newark Integrated Team suggests that learning with and from each other is fundamental to effective interdisciplinary working, and that it is shared knowledge of the health and social care roles that contributes to more cost-effective care. As one of the health care professionals from Newark Integrated Team told us in the focus group,

> *"[y]ou're not repeating yourself either with the patient. Because … we speak about it, then we can go in to the patient knowing things. So, then we look more professional because we know what we're talking about and we know what's being done. So, there's less to me duplication." (FG1I)*

It is also important, therefore, that social care workers who work in integrated teams are willing to learn from health care colleagues about the health care role and willing to educate health care colleagues about the social care role. For this process of mutual training and learning to be effective, social care workers must not only be sufficiently experienced and confident, but must also have trust in and respect for the judgements of health care colleagues, and vice versa.

Moreover, if health and social care workers are to understand the value of a process of mutual learning and educating, and if they are to understand the aims of a multidisciplinary team and how these aims are to be realised in practice, they must be provided with appropriate team training before the commencement of their employment in an integrated team. (See Section 5.1.) It is during team training that health and social care managers should communicate clearly their vision for the team and their expectations with regards to working practices and culture, referring to examples of best practice where appropriate. It is notable, in this respect, that it was only Newark Integrated Team that had received a dedicated period of strategic support and leadership from senior management in both Health and Social Care at the time of the Team's establishment. County Health Partnerships had set out the aim and philosophy of the Team, including the virtual ward arrangements, and this aim was understood by all members of the Team as being to prevent unnecessary admissions to hospital and residential/nursing care through proactive care interventions.

A related problem is that, despite health and social care workers recognising that shared knowledge is beneficial, social care workers in the District and Integrated Teams appear to make assumptions and/or know little about how Integrated and District Teams operate in different areas of Nottinghamshire. In other words, the existence of very specific, localised knowledge has the potential to prevent teams from learning from best practice and from informing the introduction of new roles – for example, that of community independence worker – that are costly investments.

Whichever model/s is/are adopted, an opportunity for regular knowledge exchange across teams would seem to be welcomed by practitioners and may help to dismiss myths and stereotypes relating to the advantages and disadvantages of integrated working on the one hand and district working on the other. Given our findings, we would suggest that regular knowledge exchange that needs to be supported by common elements of standardised practice across all integrated teams (as highlighted above), with standardised collection of data relating to social care activity being supported by a 'dashboard', so that information about cost effectiveness can continue to inform CCG/commissioning decisions, continuing professional development for social care workers and evidence about what works.

Finally, because the effective sharing of information about service users is a crucial condition not only for the development of shared knowledge within a team of multidisciplinary professionals but also for effective care planning and delivery, it is vital that members of the team have shared access to an ICT system that allows them to record and find relevant information about service users and to refer cases to each other without having to go through either the Customer Service Centre (for social care referrals) or Single Point of Access (for health care referrals). As we have seen, it was only in Newark Integrated Team that there was shared access to SystmOne. However, even here information sharing could be made easier since the use of different Health-based ICT systems prevents the health care professionals in the Team from referring cases between themselves and thereby processing cases more quickly.

6. CONCLUSIONS AND RECOMMENDATIONS

The strength of this evaluation lies in the combining of different types of data to answer the evaluation questions. To the best of our knowledge, this is the first time that both quantitative and qualitative data have been combined to produce a robust approach to evaluating the costs of the social care role in integrated teams. Therefore, the results of this evaluation put Nottinghamshire at the forefront of research into integrated models of care delivery in the UK.

We have triangulated the results of the statistical analyses of the quantitative data with the results of the thematic analyses of the qualitative data in accordance with our mixed-methods, multi-level, realistic evaluation design. By comparing the effects of an integrated with a non-integrated approach to care delivery (the care quality and the cost outcomes) and by connecting the results of the thematic analyses with the results of the statistical analyses, we have been able, not only to explain the differences in effects that are observed between the integrated and non-integrated approaches but also to identify different levels of integration and corresponding outcomes.

We suggest that our findings are *theoretically* generalizable; that is, we would expect to observe similar effects, if an integrated model of care delivery were introduced in other parts of the UK. Therefore, we recommend upscaling of an integrated model of health and social care provision for older adults who have complex needs. However, if the intended outcomes of an integrated model are to be realised in full at a higher scale, health and social care managers must ensure that the conditions for maximising the benefits of integration – where the main benefits are lower costs and a higher standard of care – are met when planning services. (See Section 5.4.) It is vital that, when managers are designing service provision, they ensure that the social care role is an embedded role, not simply an aligned or attached role, within a multidisciplinary team.

7. ACKNOWLEDGEMENTS

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9. APPENDICES

APPENDIX 1: LEVELS OF THE EVALUATION FRAMEWORK EMPLOYED, RESPECTIVE DATA SOURCES AND METHODS OF ANALYSIS AS DETAILED IN THE ORIGINAL TENDER PROPOSAL

Level of Evaluation	Data Sources	Methods of Data Analysis	Research Questions we will aim to answer (based on research questions listed in the LGA bid)
Context	Qualitative data collected from: • Observations of integrated care team meetings • Stakeholder event(s) • Interview with integrated care Team Leaders and Commissioners • Interviews/focus groups with integrated care team staff Quantitative data collected from: • Benchmark mapping of demand, costs, and referrals before integration.	Thematic analysis Descriptive statistics	• What integrated care models or approaches have been employed in different areas? • Which models have worked well, and in what sort of contexts? • What have been the challenges and barriers faced in delivering the social care input within integrated care teams? How have these been overcome (where relevant)? • If the integrated care model could be scaled up, what are the pros and cons/key success indicators?
Inputs (social care inputs delivered by the teams)	Qualitative data collected from: • Interviews with service users • Interviews/focus groups with integrated care team staff • Interviews with integrated care Team Leaders Quantitative data collected from: • Analysis of risk stratification tools/case records to identify what social care inputs are being provided • Critical incident analyses, unplanned hospital admissions, referral data	Thematic analysis Descriptive statistics	• What inputs have made a difference in terms of outcomes for service users and why is this the case? • To what extent have social care inputs been delivered differently from what would have happened anyway with district social care teams' involvement rather than that of an embedded social care worker?

Outcomes (benefits for service users/families and carers)	Quantitative data collected from: • Costs on a case-by-case basis • Types of social care need worked with • Year-on-year demand level comparisons for services • Referral/unplanned hospital admission data, where available • Critical incident analyses Qualitative data collected from: • Interviews with service users • Interviews with integrated team staff • Stakeholder event 2	Descriptive statistics of costs and benefits Thematic analysis	• What difference has integrated working made to the lives of service users/families and carers with respect to the type of intervention and quality of care that people have received? • What impact has integrated working had on health and wellbeing outcomes for service users? • What impact has integrated working had on health and wellbeing outcomes for families and carers?
Outcomes (change in practice at team and organisational levels)	Qualitative data from: • Interviews with integrated care team leaders • Interviews with integrated care staff • Stakeholder event(s) Quantitative data from: • Costs on a case-by-case basis • Types of social care need worked with • Year-on-year demand level comparisons for services • Referral/unplanned hospital admission data, where available • Critical incident analyses • Mapping and quantifying service demand data, including workforce efficiencies and costs • Case studies re scaling up	Thematic analysis Descriptive statistics to include value of money and return on investment	• Are there any differences in pathways or outcomes, comparing the standard referral route in a district social care team and to an integrated care team? • How can the integrated care model be improved further? • Is the team working differently in terms of eligibility criteria, signposting, assessment and discharge support? • What is the impact on the sharing of information and communication between different workers/teams/ organisations? • Are there any changes in staff satisfaction, confidence and capability? • What is the value for money and cost effectiveness of having social care workers embedded in integrated care teams? • Can we try to identify/extrapolate the value of integrated care teams for health as distinct from social care sectors? • If the contextual factors suggest the model can be scaled up, what outcomes will result for the teams/organisations? What might be the unintended consequences?

APPENDIX 2: TEAMS USED IN THE EVALUATION

Newark Integrated Team

Location Within the locality covered by Newark and Sherwood CCG there are 3 Local Integrated Care Teams: North Ward, West Ward and Newark and Trent Ward. Together they provide services for the whole of Newark and Sherwood, with the primary aim of preventing hospital admissions. The West Team was chosen to be part of the evaluation. The Core part of this Team is based at Rainworth Health Centre alongside the Falls, Intermediate Care and District Nursing Teams.

Social care input In Newark West Local Integrated Care Team there is one social worker, who is based at Rainworth Health centre alongside the health care professionals in the Team.

Team meetings Newark West Local Integrated Care Team holds a weekly meeting in which all service users who are currently on the virtual ward are discussed. All staff in the team attend ward round meetings except for GPs.

Service users are referred to the virtual ward, not only because of a deterioration in their physical and/or mental health but also as a result of a change in their social circumstances: for example, they are no longer able to cope with living at home safely, their care package no longer meets their needs, or there is no care package in place.

In addition to the weekly ward meeting, MDT meetings for team staff and GPs in the locality are held once a month. During these meetings service users identified as being at high risk of admission to hospital are discussed with the GPs and admitted to the virtual ward. (These meetings are also known as PRISM meetings.) Those service users who become known to the team through being referred from other services are also admitted to the virtual ward, while GPs can also refer service users to the Team between MDT meetings, if they feel a service user might benefit.

Referrals to social care Health care professionals in the Integrated Team and GPs can make a referral to the social care worker directly during the ward round or during the GP-based MDT meetings. They can also make a referral at any other time by contacting the social care worker to discuss a case, and the social care worker can decline any referrals deemed to be inappropriate.

Broxtowe Integrated Care Team

Location Within the locality covered by Nottingham West CCG there are 3 Integrated Care Teams that are managed by 4 Care Co-ordinators employed by Primary Integrated Community Services (PICS) Limited. The 3 Integrated Care Teams and the PICS Care Co-ordinators together are known as Broxtowe Care Delivery Group. The three localities served by this Group are Beeston and Chilwell, Stapleford and Kimberley and Eastwood and Ilkeston. Together they provide services for the whole of Broxtowe, with the primary aim of preventing hospital admissions.

Social care input Two social care roles cover the three localities within Broxtowe Care Delivery Group. At present, only the role of social worker has been filled; the role of CCO remains vacant. The social care worker who is in post covers only the locality of Beeston and Chilwell.

The social care worker is not co-located with health care colleagues and works across various sites including Stapleford Health Centre, Prospect House (where Broxtowe Older Adults Social Work Team is based) and the PICS office at Nottingham Business Park.

Team meetings MDT risk stratification meetings are held once per month at GP surgeries across the area covered by Broxtowe Care Delivery Group. The Care Coordinators attend these meetings. Review meetings take place every two to three months and include GPs, the 4 Care Coordinators, social care workers, other health care professionals and representatives of the CCG.

Referrals to social care The 4 PICS Care Coordinators refer cases directly to the social care worker. GPs wishing to make a referral to social care can refer a case to the Care Coordinators, who will then refer it to the social care worker.

The social care worker is permitted to take only 3 new referrals per week. Once this weekly limit has been reached, all cases requiring social work involvement have to be referred via the Customer Service Centre either to the District Team or to any of the social care clinics that operate in the locality.

Bassetlaw Integrated Care Team

Location Within the locality covered by Bassetlaw CCG there are 4 Integrated Neighbourhood Teams. Together they provide services for the whole of Bassetlaw with the primary aim of preventing hospital admissions. Bassetlaw North West Integrated Neighbourhood Team was chosen to be part of the evaluation.

Social care input The role of social worker in Bassetlaw North West was aligned to the Integrated Neighbourhood Team from December 2015 until September 2016. A CCO was then aligned to the Team from September 2016 until March 2017, when the social care role was removed from all 4 Integrated Neighbourhood Teams in Bassetlaw. When the social care worker was aligned to the North-West Team, they were not co-located with the health care professionals in the Team, who were based at Larwood Surgery, but could attend all meetings.

Team meetings MDT meetings are held once a month at GP surgeries across the relevant area of responsibility. Service users are referred into the Team via GPs, self-referral or referral from secondary care. The Team also holds a risk stratification meeting once a month to identify the two per cent of the practice population who are most likely to visit their GP or be admitted to hospital.

Referrals to social care The social care worker who was aligned to the Team could accept informally referrals from health colleagues at MDT meetings. However, these referrals would still need to be processed by Nottinghamshire County Council's Customer Service Centre.

The social care worker would informally discuss with health staff what referrals it would be appropriate for them to accept.

Newark District Team

Newark and Sherwood Older Adults Team was identified as the control group equivalent to Newark Integrated Team. It covers the whole of Newark and Sherwood and accepts referrals only via the Customer Service Centre. Team members are based at Sherwood Energy Village in Ollerton.

Broxtowe District Team

Broxtowe Older Adults Team was identified as the control group equivalent to Broxtowe Integrated Team. It covers the whole of Broxtowe and accepts referrals only via the Customer Service Centre. Team members are based at Prospect House in Beeston.

Bassetlaw District Team

Bassetlaw Older Adults Team was identified as the control group equivalent to Bassetlaw Integrated Team. It covers the whole of Bassetlaw and accepts referrals only via the Customer Service Centre. Team members are based at Sherwood Energy Village in Ollerton.

APPENDIX 3: GUIDANCE FOR SOCIAL CARE WORKERS COMPLETING COST/BENEFIT DATA FOR 10 CASES

Thank you for agreeing to help us with collecting the following important information, which will enable us to estimate, as accurately as possible, the costs and benefits for those in receipt of adult social care via the integrated care and district social work teams in Nottinghamshire. Some of the information below may have already been shared with you. However, we have put it all in one document so that it is easier to refer to.

Gabriella Mutale, who is the Research Assistant for this project at Nottingham Trent University, will be arranging to visit your team to offer further support, should need it. In the meantime, please do begin to collect the data as outlined below and insert it into the spread sheet attached. If you have any queries or need to check anything with Gaby in advance of her coming to visit the team, please send an email to gabriella.mutale@ntu.ac.uk.

Inclusion criteria - we are seeking to find 10 cases in either a district social work or an integrated care team where …

- the case has 3 or more professions involved in it;
- the case has at least 2 health conditions (more likely 3) and, where there are only 2, there are likely to be other factors such as safeguarding/risk/resisting help issues;
- age is likely to be 70+ (if not, all other indicators 1, 2 and 4 met);
- the case meets at least baseline criteria 3 on the workload management tool (see attached) but is more likely to be 4 in terms of multi-professional input/decision making and risk concerns.

Estimated social care costs (for each service user)

- Weeks spent in residential care – we need to know the total number of weeks in residential care irrespective of how many admissions/episodes – Column B. Please also give us the cost per week of residential care – Column C.
- Weeks spent in nursing care – we need to know the total number of weeks in nursing care irrespective of how many admissions/episodes - Column E. Please also give us the cost per week of nursing care – Column F.
- Care package cost per week – this needs to be the actual cost of the care package – Column K.
- social care worker's hours – estimate the total hours you, the social care worker, have spent on the case – Column H.
- Number of referrals:
- from you, the social care worker, to other external services/health care professionals etc. – Column M
- from other external services to you, the social care worker – Column N.
- Date of initial referral to you, the social care worker – Column R.
- Date of assessment by you, the assessing social care worker – Column S.
- Date care package was implemented – Column T.
- Duration of social care worker involvement – this means the number of weeks from when you opened the case to when it was closed (or it may still be open and that's fine) – Column U.

Indicators of quality of care

The literature on integrated care tells us something about the kind of indicators that Councils like Nottinghamshire are exploring in relation to the quality of care they provide.

We are interested in collecting data in relation to the following indicators for the cases that you have selected.

- Avoidable hospital admissions (reasons why a hospital admission has been avoided can be recorded as anything a social care worker has done which has helped to avoid an admission to hospital – e.g. any alterations to a care package which may have prevented a hospital admission).
    - Please tell us whether this has happened (either Yes or No) in Column V.
    - If hospital admission has been avoided, please tell us (if you can) the number of times for this case a hospital admission has been avoided in total in Column W.
- If end of life care has been provided at home – tell us (either Yes or No) in Column Z.
- Use of assistive technology (e.g. social care worker has set up FLO medication prompt, a pendant alarm, etc.) – tell us (either Yes or No) in Column X.
- The service user is controlling their own health using supported self-care (e.g. social care worker has set up a hot meals service for them) – tell us (either Yes or No) in Column Y.
- Hospital admissions – tell us (either Yes or No) in Column AA, and give us the number of admissions since the start of your involvement in Column AB.
- Re-admission to hospital within 30 days of discharge – tell us (either Yes or No) in Column AC.
- A&E presentations (number of) – tell us (either Yes or No) in Column AD.
- Delayed discharge from hospital – tell us (either Yes or No) in Column AE.
- Ambulance call-outs – tell us (either Yes or No) in Column AF.
- Admission to residential/nursing care (temporary/respite) – tell us (either Yes or No) in Column AG (temporary) or AI (for respite).
- Admission to residential/nursing care (permanent) – tell us (either Yes or No) in Column AK (for permanent residential care) or AL (for permanent nursing care).

Thank you for your time in giving us this information.

Di Bailey and Gabriella Mutale

APPENDIX 4: MEASURING THE QUALITY OF SOCIAL CARE

Outcome indicators of care quality for fully costed cases:

Positive

- low-level or preventative services to maintain wellbeing and independence
- use of assistive technology
- less time from assessment to referral

Negative

- hospital admissions
- admission to residential/nursing care – temporary
- admission to residential/nursing care – permanent
- greater time from assessment to referral

Outcomes found in the sample:

- Care package at home
- Death
- In hospital
- In short-term care
- In permanent care
- Refused support
- No care package at home – low-level intervention provided

APPENDIX 5: WORKLOAD MANAGEMENT TOOL SCORING GUIDANCE

Workload Management Tool Guidance for Assessment and Countywide Adult Social Care Teams

Nottinghamshire County Council

The workload management tool (WMT):

The workload management tool (WMT) has been designed to be a transparent and easy to understand system, which enables workers, managers and senior managers to have a consistent measure of workload allocation to individuals and teams within and across services.

The WTM tool has been developed to work alongside and support new ways of working, including the scheduling of appointments to district teams, the use of Think Pads and ensuring the most proportionate choice of method of assessment/review.

This differs from assessing workload based solely on the number of cases dealt with by an individual because it aims to take into account issues such as complexity, risk, time and type of work that would be involved.

The purpose of a workload management tool (WMT) is to:

- Measure the workloads of individuals and provide a guide to supervisors on work allocation.
- Ensure that workers make best use of their time by using the most efficient and proportionate ways of completing work using all the tools and guidance available.
- Safeguard the interests of service users by checking that workers have the skills and capacity to undertake the work required.
- Measuring and identifying ways that the workload of the individual can be balanced against demand.
- Set a reduced and protected workload for newly qualified social care workers undertaking their Assessed and Supervised Year of Employment (ASYE).
- Generate management information for monitoring demand against available resources to support business planning.

Work levels for service areas

The following teams will use the workload management tool:

- Assessment Teams across the Districts and in hospital services (Younger and older Adults)
- County wide Teams including Transitions, DoLS,, Asperger's, ADVIS

Some teams where cases are not generally held open for a long period of time will do the Workload Management tool over a period of a week preceding supervision and collate scores for the week's total. This is likely to include hospital teams, the AMHP team, Start/intermediate care teams, for example but Team managers will determine the right approach for their team.

The tool is designed to be used for those workers who have an individual caseload. It is not envisaged that this will be used by those workers who hold joint responsibility (such as workers in START).

Workload Management process

Individual workloads will be recorded using a **Workload Management Individual Scoring Sheet**.

- The WMT form will be completed during supervision or immediately prior to supervision of the worker, which can then be negotiated and agreed at supervision.
- The allocation of points should be agreed by both the supervisor and the worker and may include some explanatory comments.
- All workers in a team should be included in the WMT process.
- Mosaic and Business Interests/Hub reports should be used to check that all open work is considered. An individual caseload report can be downloaded from Mosaic which will detail allocations. The supervisor may need to add other pieces of work which may not be represented e.g. safeguarding work.
- The workers score can be calculated as required but at a minimum time period of 4-6 weekly in line with when supervision is held.
  The WMT scores are intended to be used as a tool to assist analysis and decision making about workloads, rather than as an absolute determinant of capacity/action. It should complement rather than replace the judgment of the supervisor who will continue to incorporate a range of factors in their decision making e.g. stage of development of the worker, personal circumstances such as returning from long term sickness, newly appointed or newly qualified worker, etc. Supervisors may need to retain discretion in allocating priority or urgent work.

Workloads will vary according to the workers' training, skills and experience as well as responding to demand in the service. Further discussion/support and possibly HR advice may be needed to ensure that good performance is maintained.

How workloads should be calculated:

The scores recorded should represent the work which is **currently being completed** or where you are **planning to have involvement within the next week**. It should not be used to record work which has already been completed or which you believe will be or could be required at some point in the future.

Essentially, this is a snapshot of your current active workload or workload over the last week.

Each case will be given a score from 0 to 5 (1 being low and 5 being high). A score of 0 can be used where there is an open case with no activity or planned intervention e.g. where a case should be closed. Half scores should not be used.

The WMT tool will not be prescriptive about scores for each case type; this is to be determined by the supervisor. Both case complexity and time required should be taken into consideration when scoring a case and evidenced on the form. However, a **generic scoring sheet** has been developed to support some consistency of scoring. It is important to recognise that it is not the 'type' of work that necessarily generates the score but the time and complexity that does. For example, safeguarding work is not always a 5 because it may be a priority. Safeguarding work can generate a score of between 0 and 5 depending on the circumstances of the case and the particular intervention to be completed by the worker for that particular case.

Where there is a co-working arrangement within a team, the points for the case can be split proportionally for the work undertaken by each team member.

Additional supervisory responsibilities should also be scored. This applies when part of the workload relates to supporting a student social care worker or a newly qualified social care worker on the ASYE programme. The score and an explanation should be entered in the comments field of the form.

Reporting

As well as a tool for the management of individual workloads, collectively the completed WMTs will also help to inform resourcing decisions across wider areas of the department. The Team Manager will collect all the individual scores of team members and will forward a summary of the team position on a quarterly basis, who can feed this into the senior leadership team as required.

We would like all teams to use the WMT on a trial basis starting 1st July 2017 with a review after 3 months.

Area of Work	0	1	2	3	4	5
Safeguarding	Waiting for information or advice. No active work.	Done initial visit. Person has capacity. Abuse not occurred. Simple write up and close.	Discussions with manager - decision to progress. Tasks: Care Act Assessment for extra support - respite Section 42 enquiry	Undertaking enquiry - collecting information, analysing information and report writing. When OT providing expert opinion.	Carried out initial planning liaison - have a plan of actions needed - but not carried out yet (could be some newly allocated where have good initial information.) when doing intial coordination/phone calls/case notes.	Newly allocated planned a visit; capacity assessment possibly needed/communication and enabling decision making; liaison with others/agencies. When Immediate protection plan needed.
Moving and Handling (OT)	Waiting for info. No active work.	Quick M&H Review Over phone. Follow up phone calls needed to person.	Longer phone review Ordering equipment	Face to Face assessment - that is straightforward - person is 'on their feet' Supported by a carer. Where you have a clear idea of how to solve. Service User/Carer in agreement with plan.	Urgent immediate work - Face to face liaison with person and others over plan. Someone with equipment where we need to tweak/alter.	where repeated visits needed to try lots of equipment. Lots of visits/conversations with store/reps. Writing complex moving and handling risk asst. Where capacity issues around M&H.Where people/famly reluctant to change and not in agreement with plan. . People with two carers to support them.
Carers Assessment	Waiting for info. No active work.	Repeated Carers Assessment/Review. Assessment completed at same time as part of person's asst.	Carers asst over phone if person not known.	Carer Crisis - carers breaks respite.		
Care Act Assessment - new person	waiting for info - no active work	Completing phone assessment or supported self assessment	Clinic assessment - person can define own needs/outcomes	Scheduled assessment - face to face visit. Person engages and can share needs/ outcomes.	Multiple visits. Face to face - capacity issues, family complexities, risk concerns, safeguarding concerns, advocate/interpretor needed	Multiple Visits - People don't engage; liaison with multiple people/agencies; where need to use legislation to intervene e.g. MCA to move someone.

APPENDIX 6: DATA ANALYSIS

Mean time from referral to assessment

To further explore the time from referral to assessment a 2 (Type of Teams: Integrated, District) x 3 (Location: Bassetlaw, Broxtowe, Newark) independent measures ANOVA was carried out on the days from referral to assessment. The results of this analysis showed that there were no significant main effects of either type of team on the time from referral to assessment, F (1,52) = 0.3, p >.05, partial η^2 = .01, or of location on the time from referral to assessment, F (2,52) = 0.16, p >.05, partial η^2 = .01. There was also no significant interaction between type of team and location, F (2,52) = 1.06, p > .05, partial η^2 = .04. The results indicate that there are no significant differences across the teams regarding time from referral to assessment.

Referrals

The number of referrals both to and from the social care worker were also collected and analysed using a 2 (Type of Teams: Integrated, District) x 3 (Location: Bassetlaw, Broxtowe, Newark) independent measures ANCOVA. The covariate, duration, was not significantly related to the number of mean referrals for each team, F (1,53) = 0.01, p >.05, partial η^2 = <.001. The analysis showed that there was a significant main effect of type of team on the mean number of referrals, F (1,53) = 17.71, p <.05, partial η^2 = .25. A significant main effect of location on mean referrals was also found, F (2,53) = 3.32, p <.05, partial η^2 = .16. There was no significant interaction between type of team and location, F (2,53) = 2.86, p > .05, partial η^2 = .1.

Cost data

It is necessary to include the duration of case length as covariant in the analysis as it enables us to identify the real effects of the integrated approach. If costs were not standardised across a time period, the true effect of the integrated approach would be lost, and it would not be possible to know if any cost savings were due to the differences in approach or due to the variation in duration of case length across teams. It is demonstrated in Figure 11 how case length duration varied across the teams, supporting the need for this to be standardised. Therefore, ANCOVA allows the effects of duration to be removed from the analysis so that the true effect of the integrated approach on costs can be seen. This gives a set of means which reflect this adjustment.

For the purposes of the analysis, the covariate (duration) was calculated as being 135.42 days. This is simply the mean duration of case length as standardised across all teams.

Total costs:
To examine any differences in total costs across the teams a 2 (Type of Teams: Integrated, District) x 3 (Location: Bassetlaw, Broxtowe, Newark) independent measures ANCOVA was carried out on mean total social care costs. The covariate, duration, was significantly related to the mean total costs for each team, F (1,53) = 94.73, p <.05, partial η^2 = .64, suggesting that there is a relationship between duration of case length and total social care costs. This significant effect further establishes the need to include duration as a covariant in the analysis.

Controlling for the effect of duration, analysis of the data showed that there was no significant main effect of type of team on mean total social care costs, F (1,53) = 1.92, p >.05, partial η^2 = .04. However, a significant main effect of location on mean total costs

was found, F (2,53) = 3.32, p <.05, partial η^2 = .11. There was also a significant interaction between type of team and location, F (2,53) = 3.24, p < .05, partial η^2 = .11.

Worker costs:
A 2 (Type of Teams: Integrated, District) x 3 (Location: Bassetlaw, Broxtowe, Newark) independent measures ANCOVA was carried out on worker costs. The covariate, duration, was significantly related to the mean total costs for each team, F (1,53) = 21.11, p <.05, partial η^2 = .29, suggesting that there is a relationship between duration of case length and worker costs.

Controlling for the effect of duration, analysis of the data showed that there was no significant main effect of type of team on worker costs, F (1,53) = 2.2, p >.05, partial η^2 = .04. However, a significant main effect of location on worker costs was found, F (2,53) = 4.95, p <.05, partial η^2 = .16. There was no significant interaction between type of team and location, F (2,53) = 1.24, p > .05, partial η^2 = .04.

Care package costs:
A 2 (Type of Teams: Integrated, District) x 3 (Location: Bassetlaw, Broxtowe, Newark) independent measures ANCOVA was carried out on care package costs. The covariate, duration, was significantly related to the mean total costs for each team, F (1,53) = 49.03, p <.05, partial η^2 = .48, suggesting that there is a relationship between duration of case length and care package costs.

Controlling for the effect of duration, analysis of the data showed that there was no significant main effect of type of team on care package costs, F (1,53) = 2.31, p >.05, partial η^2 = .04, no significant main effect of location on care package costs, F (2,53) = 0.77, p >.05, partial η^2 = .03. There was also no significant interaction between type of team and location, F (2,53) = 0.36, p > .05, partial η^2 = .01.

Short term care costs:
A 2 (Type of Teams: Integrated, District) x 3 (Location: Bassetlaw, Broxtowe, Newark) independent measures ANCOVA was carried out on short term care costs. The covariate, duration, was significantly related to short term care costs for each team, F (1,53) = 7.8, p <.05, partial η^2 = .13, suggesting that there is a relationship between duration of case length and short term care costs.

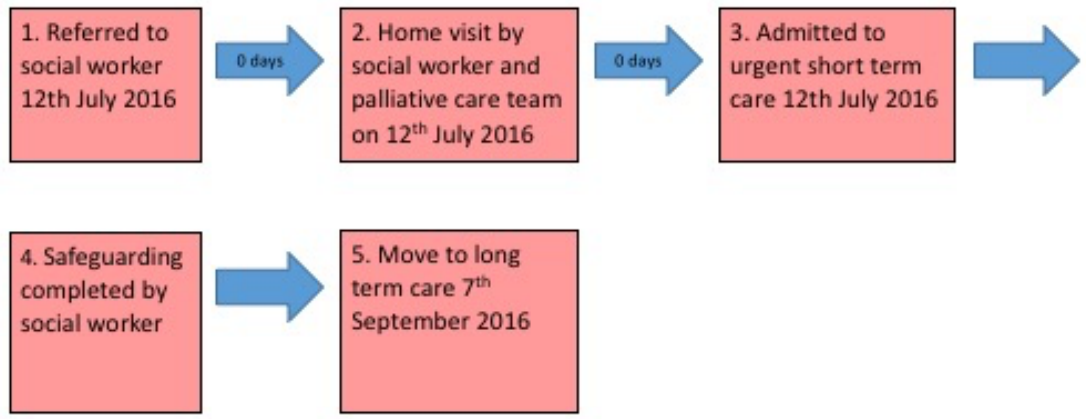
Controlling for the effect of duration, analysis of the data showed that there was no significant main effect of type of team on short term care costs, F (1,53) = 0.99, p >.05, partial η^2 = .02, no significant main effect of location on short term care costs, F (2,53) = 2.7, p >.05, partial η^2 = .09. There was also no significant interaction between type of team and location, F (2,53) = 2.35, p > .05, partial η^2 = .08.
Permanent care costs:
A 2 (Type of Teams: Integrated, District) x 3 (Location: Bassetlaw, Broxtowe, Newark) independent measures ANCOVA was carried out on permanent care costs. The covariate, duration, was not significantly related to the costs for permanent care for each team, F (1,53) = 3.08, p >.05, partial η^2 = .06.

Controlling for the effect of duration, analysis of the data showed that there was no significant main effect of type of team on permanent care costs, F (1,53) = 1.62, p >.05, partial η^2 = .03, no significant main effect of location on permanent care costs, F (2,53) = 0.33, p >.05, partial η^2 = .01. There was also no significant interaction between type of team and location, F (2,53) = 0.75, p > .05, partial η^2 = .03.

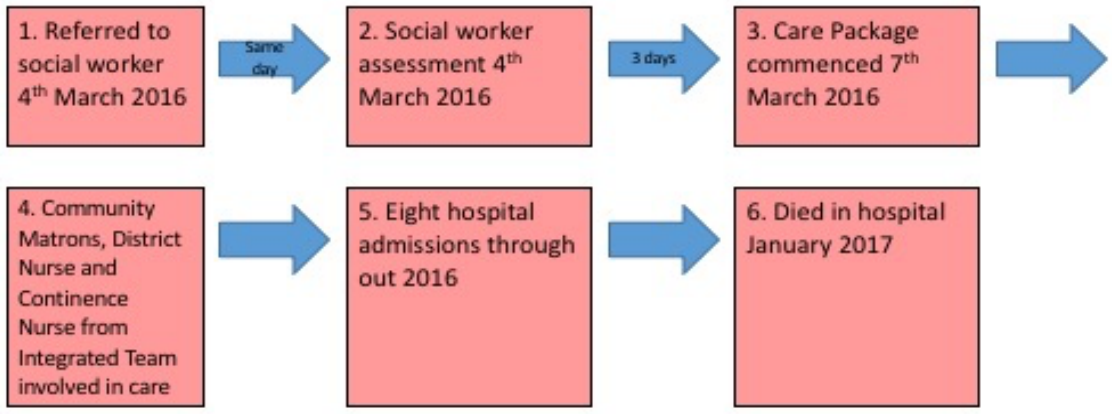
APPENDIX 7: SERVICE USER JOURNEYS THROUGH TIME SHOWING THE SEQUENCE OF HEALTH AND SOCIAL CARE INPUTS

Integrated Care Team

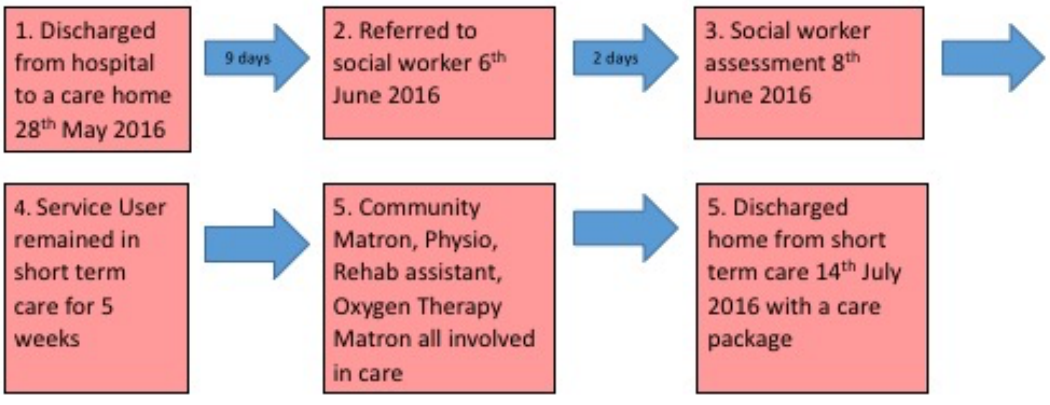
Example 1



Example 2

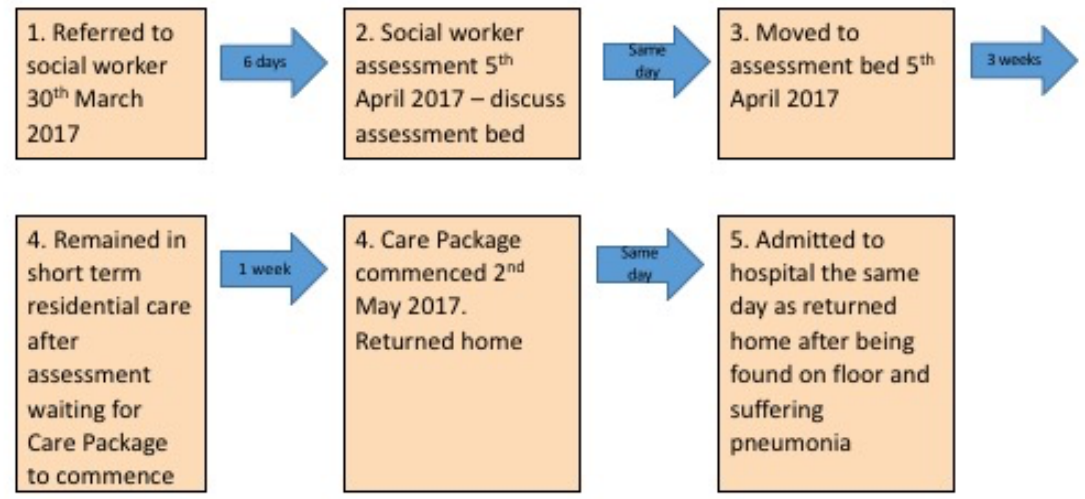


Example 3

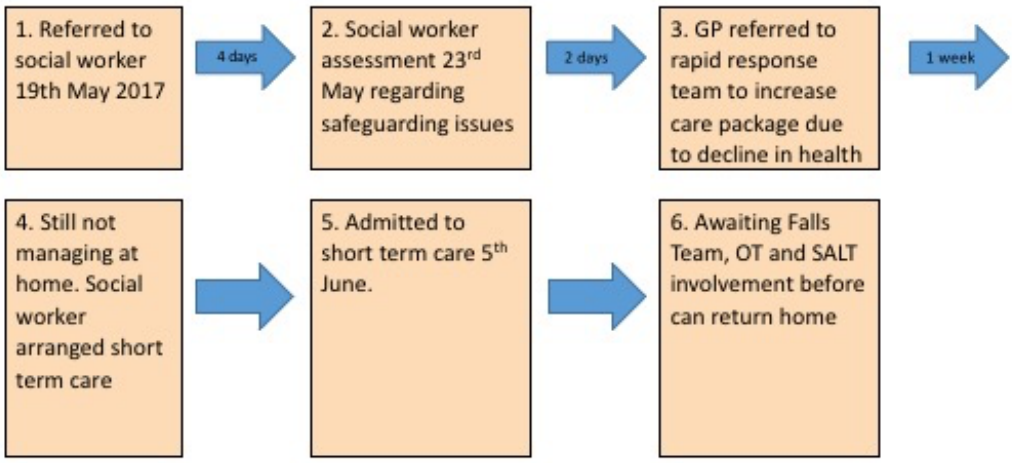


District Team

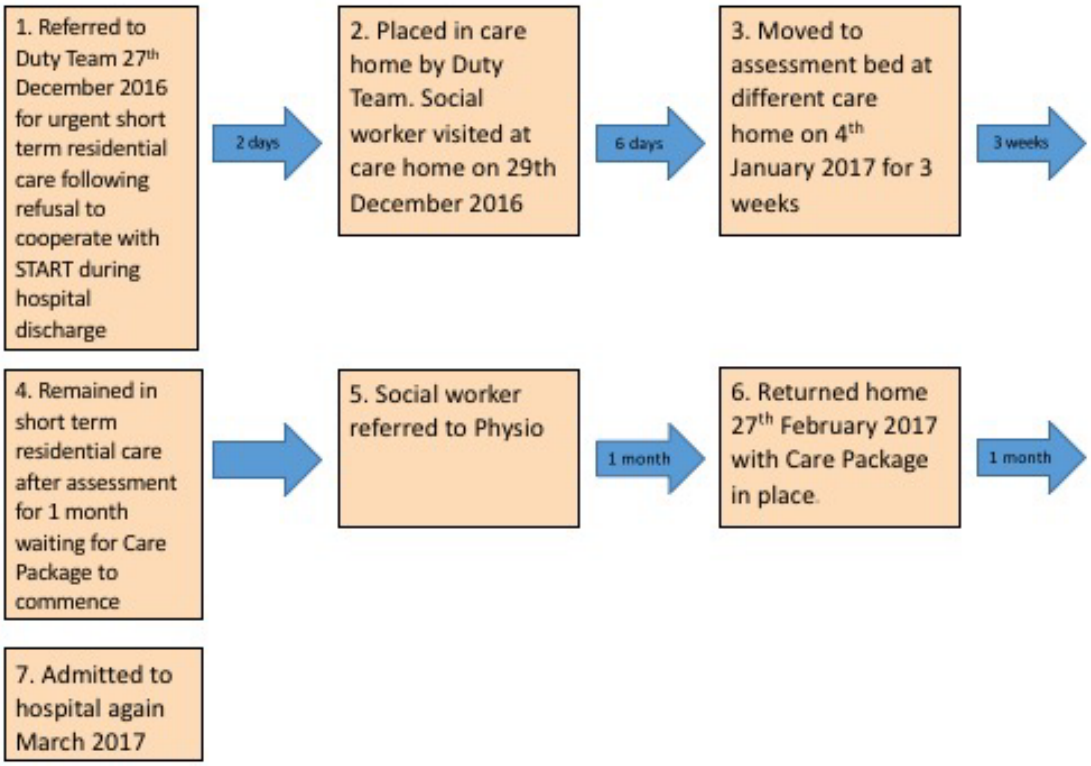
Example 1



Example 2



Example 3


1. Referred to Duty Team 27th December 2016 for urgent short term residential care following refusal to cooperate with START during hospital discharge
2 days
2. Placed in care home by Duty Team. Social worker visited at care home on 29th December 2016
6 days
3. Moved to assessment bed at different care home on 4th January 2017 for 3 weeks
3 weeks
4. Remained in short term residential care after assessment for 1 month waiting for Care Package to commence
5. Social worker referred to Physio
1 month
6. Returned home 27th February 2017 with Care Package in place.
1 month
7. Admitted to hospital again March 2017