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Evaluation of the Rotherham Social Prescribing Service for Long Term Conditions

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Evaluation of the Rotherham Social Prescribing Service for Long Term Conditions

A review of data for 2016/17-2017/18

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1. Introduction

This is latest report from a long-term **Evaluation of the Rotherham Social Prescribing Service (RSPS)** being undertaken by the Centre for Regional Economic and Social Research (CRESR) at Sheffield Hallam University.[1] This report focuses on the 'Long-Term Conditions' component of the RSPS[2] which is commissioned by NHS Rotherham Clinical Commissioning Group (CCG) as part of GP-led Integrated Case Management. It is delivered by Voluntary Action Rotherham (VAR) in partnership with more than 20 local voluntary and community organisations (VCOs). The service aims to increase the capacity of GPs to meet the non-clinical needs of patients with complex long-term conditions (LTCs) who are the most intensive users of primary care resources. Specific support for the carers of case-managed patients is also provided. At its core, RSPS is a voluntary and community sector (VCS) liaison service for the whole borough which:

- Enables **patients and their carers to access support from local VCS organisations**.

- Contributes **a VCS perspective to the assessment of needs and care planning for patients** referred to multi-disciplinary Integrated Case Management Teams (ICMTs).

- Facilitates the development of new community-based services to fill gaps in provision, and funds additional capacity within existing VCS to meet the increase in demand created by RSPS.

The Service was first commissioned as a two-year Pilot in 2012. In 2014-15 it was re-commissioned for a further year as part of Rotherham's multi-agency proposal to the Better Care Fund, with an additional 3 years of service provision commissioned in April 2015 and then again in April 2018. RSPS is currently fully funded by the CCG up to March 2022.

The annual funding agreement covers the core cost of delivering RSPS alongside a 'micro-commissioning' budget to procure a 'menu' of VCS activities that have been specifically developed to meet the needs of Service users. A core team consisting of a Service Manager and seven Voluntary and Community Sector Advisors (VCSAs) is employed by VAR. The Service Manager oversees the day-to-day running of the Service, including management of service commissioning and acting as a liaison between VCS providers and wider NHS structures. The VCSA role provides the link between the Service and the multidisciplinary ICMTs. They receive referrals from GP practices of eligible patients and carers and make an assessment of their support needs before referring them on to appropriate VCS services (commissioned and non-

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[1] Previous Evaluation reports have discussed in more detail the development and implementation of the RSPS since its inception in 2013. A full list of these reports is provided in Appendix 1.

[2] The RSPS also includes a community mental health service component, delivered in partnership with Rotherham Doncaster and South Humber NHS Foundation Trust (RDASH). The evaluation findings for this are published separately.

commissioned). The assessment typically takes place during a home visit where the VCSA will talk through the Service user's needs and discuss the options available to them through Social Prescribing. VSCAs also form part of the ICMT and attend meetings when Service users are discussed.

This report provides **an in-depth review of data for the Long-Term Conditions (LTC) component of RSPS for the two-year period April 2016-March 2018**. The data presented covers:

- An **overview of patient referrals** in and out of RSPS, covering features such as age, gender, ethnicity and the most common types of services and activities patients have been referred to.

- Analysis of **wellbeing outcomes**, drawing on data from a wellbeing outcome measurement tool that covers eight different components of personal wellbeing relevant to patients with LTCs.

- Analysis of **NHS secondary care Service User Statistics (SUS)**, exploring LTC patients' unplanned hospital admissions and accident and emergency attendances in the 12 months prior to and following their engagement with the social prescribing service.

2. An Overview of Social Prescribing Referrals

This section provides an overview of RSPS referral patterns between April 2016 and March 2018. It covers **referrals-in** to the Service (i.e. by GPs and other health practitioners) and **referrals-out** (i.e. to funded VCS services and activities, wider VCS provision and public services). Voluntary and Community Sector Advisors (VCSAs) are at the heart of this referral process: they receive the referral-in, make contact with and then engage patients through a supportive assessment process, and then make the referral-out and broker access to other appropriate services and activities.

Referrals-in to RSPS

Between April 2016 and March 2018 1,730 Service users were actively engaged[3] by RSPS. An annual breakdown of this engagement is provided in Table 2.1 with a breakdown of referrals by key characteristics provided in Table 2.2 and discussed in the sections that follow.

Table 2.1: Annual breakdown of GP referrals-in engaged by RSPS

	No. of Users Engaged by SPS		
	2016-17	*2017-18*	*Total*
No of referrals-in engaged	756	974	1,730

Table 2.2: Annual breakdown of GP referrals-in engaged by RSPS by key characteristics

	No. of Users Engaged by SPS		
	2016-17	*2017-18*	*Total*
Age:			
Under 50	33	54	87
50-59	57	61	118
60-69	80	100	180
70-79	154	203	357
80-89	267	361	628
90 and over	164	193	357
Gender:			
Male	296	392	688
Female	461	580	1,041
Ethnicity:			
White British	739	950	1,689
Asian	11	14	25
Black	0	2	2
White Other	1	2	3
Unknown	7	4	11

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[3] This defined for the purposes of evaluation as patients who were assessed by a VCSA and then agreed to be referred or signposted to commissioned VCS services, other VCS services or non-VCS services. Note that during this period there were 2,858 referrals to the service of whom 2,202 had an assessment with a VSCA (77%).

Age

The majority of people actively engaged by RSPS were aged 70 or older:

- 5 per cent were aged under 50
- 7 per cent were aged 50-59
- 10 per cent were aged 60-69
- 21 per cent were aged 70-79
- 36 per cent were aged 80-89
- 21 per cent were aged 90 or over.

Gender

Females (60 per cent) were more likely to be engaged by the Service than males (40 per cent).

Ethnicity

A large majority of people engaged were from a White ethnic background (98 per cent) with two per cent from other ethnic backgrounds.

Referrals-out of RSPS

Between 2016/17-2017/18 there were 4,706 onward referrals of 1,543 patients (many had more than one onward referral) by RSPS to other services. Figure 2.1 provides an overview of the 10 most common types of referrals-out by service type. This shows that the most common type of service referred to was information and advice about benefits entitlements (18 per cent of referrals) followed by enabling (10 per cent) and befriending (7 per cent).

Figure 2.1: 10 most common types of RSPS referrals-out by service type
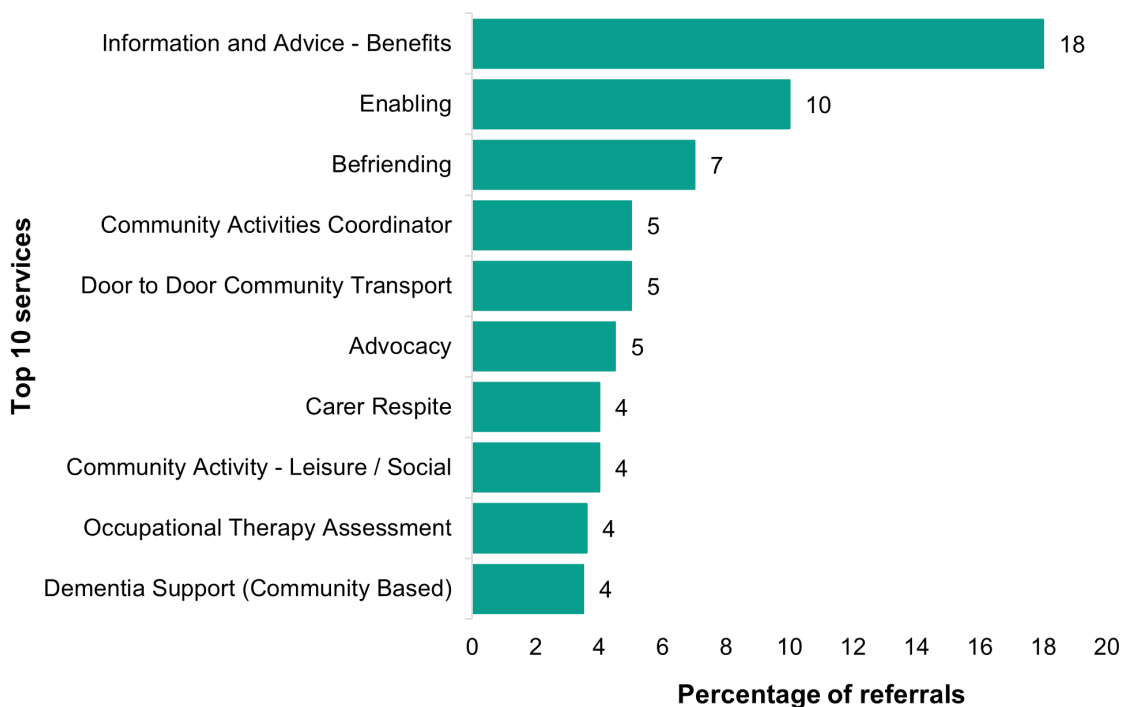
3. Wellbeing Outcomes

This section presents analysis of well-being outcome data collected by RSPS from patients for the period 2016/17-2017/18. A wellbeing outcome tool is used to identify progress against eight separate outcome measures linked to well-being and positive functioning. The tool is completed by VCSAs with patients when they are first referred to RSPS (baseline) with progress measured after approximately 4-6 months (follow-up). It has eight measures associated with different aspects of self-management:[4]

- **Feeling positive**: hope, learning to cope and feeling calm.

- **Lifestyle**: sleeping habits, smoking, diet and exercise.

- **Looking after yourself**: shopping, going out, transport and personal care.

- **Managing symptoms**: energy levels, pain, information and medication.

- **Work, volunteering and other activities**: new roles, volunteering and social groups.

- **Money**: debt advice, benefits and managing money.

- **Where you live**: heating, local facilities, stairs and fire safety.

- **Family and friends**: isolation, carer support.

An overview of these outcome data is provided in Table 3.1 with more detailed analysis discussed in the sections that follow.

Table 3.1: Overview of well-being outcome baseline and follow-up data

Outcome area	Baseline		Follow-up			
	No of patients	Mean	Low scores* (per cent)	Mean	Progress made	
					All (per cent)	Low scores (per cent)
Feeling positive	878	2.8	40	3.3	47	65
Lifestyle	878	2.8	36	3.1	32	48
Looking after yourself	878	3.1	27	3.2	20	40
Managing symptoms	878	2.7	41	2.9	28	42
Work, volunteering and social groups	878	2.5	54	3.1	46	58
Money	878	3.5	14	3.9	30	73
Where you live	878	3.8	11	3.9	17	46
Family and friends	878	3.5	18	3.7	17	45

*A low score is defined as a baseline score of two or less

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[4] For each measure a five point scale was used: 1 = Not thinking about it/not doing anything; 2 = Finding out/thinking about; 3 = Making changes/doing something; 4 = Getting there/could do more; 5 = As good as it can be.

Baseline analysis

Between April 2016 and March 2018 baseline data were collected for 870 users (who would also go on to provide valid follow-up scores) who were referred to RSPS. In summary these baseline data (Table 3.1) show that:

- **Feeling positive**: the average score was 2.8; 40 per cent of patients recorded a low score (of two or less).

- **Lifestyle**: the average score was 2.8; 36 per cent recorded a low score.

- **Looking after yourself**: the average score was 3.1; 27 per cent recorded a low score.

- **Managing symptoms**: the average score was 2.7; 41 per cent recorded a low score.

- **Work, volunteering and other activities**: the average score was 2.5; 54 per cent recorded a low score.

- **Money**: the average score was 3.5; 14 per cent recorded a low score.

- **Where you live**: the average score was 3.8; 11 per cent recorded a low score.

- **Family and friends**: the average score was 3.5; 18 per cent recorded a low score.

This provides a useful insight into the social support needs of users at their point of engagement with RSPS. The lowest scoring outcome category was work, volunteering and other activities, followed by managing symptoms, feeling positive and lifestyle. This highlights the importance of services and activities that address the psychological and social components of wellbeing for people with long-term health conditions.

Follow-up data - distance travelled analysis

Overall, **81 per cent of Service users experienced positive change** on at least one outcome measure in 2016/18 and 2017/18. The results are broken down by outcome category in Table 3.1 which shows that average (mean) score improved for each outcome measure and that a higher proportion of low-scoring patients (with a baseline score of two or less) made progress:

- **Feeling positive**: 47 per cent of patients made progress; 65 per cent of patients with a low baseline score made progress.

- **Lifestyle**: 32 per cent made progress; 48 per cent with a low baseline score made progress.

- **Looking after yourself**: 20 per cent made progress; 40 per cent with a low baseline score made progress.

- **Managing symptoms**: 28 per cent made progress; 42 per cent with a low baseline score made progress.

- **Work, volunteering and other activities**: 46 per cent made progress; 58 per cent with a low baseline score made progress.

- **Money**: 30 per cent made progress; 73 per cent with a low baseline score made progress.

- **Where you live**: 17 per cent made progress; 46 per cent with a low baseline score made progress.

- **Family and friends**: 17 per cent made progress; 45 per cent with a low baseline score made progress.

Summary

These findings are consistent with previous evaluation reports. The distance travelled by RSPS patients across different components of wellbeing after a relatively short period **demonstrates the potential of social interventions to address some of the key psycho-social determinants of health and wellbeing**. That most progress was made more frequently by some of the lowest scoring patients on each outcome measure **reflects positively on the effectiveness of the RSPS assessment and referral process** to identify patient's support needs and broker appropriate support from a variety of providers. It also **reflects positively on the ability of commissioned voluntary and community organisations** to meet the specific social support needs of patients.

4. Hospital Admissions and Accident and Emergency Attendances

This section presents analysis exploring RSPS service users' utilisation of secondary (i.e. hospital-based) care. It draws **on patient-level data provided by the NHS** to map the use of hospital resources by patients referred to the service. Three aspects of hospital episodes are considered: non-elective inpatient spells; Accident and Emergency attendances; and the cost of those episodes based on the NHS payments-by-results tariff. This analysis is an important component of the RSPS evaluation as the service was commissioned with a view to reduce the number and cost of secondary care interventions for hitherto 'intensive' or 'high cost' patients.

Data sources and method

The analysis presented is based on **pseudonymised patient-level hospital episode data for RSPS users** provided by NHS Rotherham CCG. Data linkage was made using the NHS numbers of RSPS users provided by Voluntary Action Rotherham for each patient. Following exploratory analysis of all the data provided a series of outcome variables were created to provide the basis of the analysis presented in this report:

- The number of **non-elective continuous inpatient spells**[5] in the 12 months before and after the first contact with RSPS.

- The number of **accident and emergency attendances** in the 12 months before and after the first contact with RSPS.

- The **cost of in-patient spells and accident and emergency attendances** in the 12 months before and after the first contact will RSPS.

Analysis focussed on users that were referred to RSPS in 2016/17 and 2017/18, which means that our data covers people who engaged with the service in a substantive way between 1st April 2016 and 31st March 2018. The time-lag between that period and the analysis of this data was necessary to ensure that sufficient time had elapsed post-referral to observe changes in their utilisation of hospital services over a 12-month period.

Key findings: headline data analysis

Table 4.1 provides a summary of data for non-elective inpatient spells and accident and emergency attendances. Across the full sample of patients there was consistent pattern, with **small increases in the number and cost of inpatient spells and accident and emergency attendances in the 12 months following referral**:

- **Non-elective inpatient spells**: the average (mean) number changed from 1.4 in the 12-month period before referral to RSPS to 1.5 in the 12 months following referral: an increase of 0.032. The average (mean) cost of these spells changed from £3,163 to £3,639: an increase of £476.

- **Accident and emergency attendances**: the average (mean) changed from 1.0 in the 12-month period before referral to RSPS to 1.1 in the 12 months following referral: an increase of 0.065. The average (mean) cost of these attendances changed from £209 to £238: an increase of £28.

This pattern of small increases represents a change from previous analyses,[6] which pointed to moderate reductions in in-patient spells and accident and emergency attendances across the whole RSPS cohort.[7]

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[5] A Hospital Provider Spell is the total continuous stay of a patient using a Hospital Bed on premises controlled by a Health Care Provider during which medical care is the responsibility of one or more consultants.

[6] Note that direct comparison with previous evaluation data is not possible due to changes in the way NHS data has been provided

[7] Previous analysis showed that for people who engaged with the service in 2012/13 and 2013/14 non-elective inpatient spells reduced by 11 per cent and accident and emergency attendances reduced by 17 per cent. This trend continued for the people referred to the service in 2014/15, albeit at a slightly reduce rate, with non-elective inpatient spells falling by six per cent and accident and emergency attendances falling by 13 per cent.

Table 4.1: Summary of data for non-elective inpatient spells and accident and emergency attendances

	Average (mean) number of episodes			Change in number of episodes		
	12m before	*12m after*	*Change*	*% ↓*	*% ↑*	*% no change*
Non-elective inpatient spells:						
Number	1.4	1.5	+0.032	32	32	36
Cost (£)	3,163	3,639	+476	35	36	29
Accident and emergency attendances:						
Number	1.0	1.1	+0.065	28	30	42
Cost (£)	209	238	+28	31	36	34

Base: 1,730 RSPS users

In interpreting these headline findings it is **important to be aware that a significant proportion of RSPS did not utilise any hospital-based services in 2016/17 or 2017/18**: 476 (28 per cent) did not have any inpatient spells and 568 (33 per cent) did not have any accident emergency attendances. In the most recent previous evaluation analysis for RSPS patients referred in 2014/15 87 (10.4 per cent) did not have any inpatient spells and 138 (17 per cent) did not have any accident emergency attendances in the 12 months prior to and following their referral.

This suggests that **RSPS is now engaging with a 'less unhealthy' cohort of patients than was previously the case**. Our discussions with the RSPS team and commissioners suggest that this is **reflective of a strategy by RSPS, GPs and commissioners to target the service towards patients for whom the benefits of social prescribing are preventative** (i.e. those with less complex LTCs and/or in a more positive state of general health), rather than reactive. This has involved placing less reliance on a risk stratification tool[8] and allow more room for the use of clinical judgement by GPs when identifying which patients to refer to RSPS. The following section explores the data on non-elective inpatient spells and accident and emergency attendances in more detail to highlight some patterns that lie beneath the headline data.

Key findings: detailed data analysis

The data suggests that **a majority of RSPS patients were not 'intensive' or 'high cost' users of secondary care**. More than two-thirds of patients (69 per cent; n=1,200) had either zero or one non-elective inpatient spell in the 12 months prior to their RSPS referral and more than three-quarters (76 per cent; n=1,316) had either zero or one accident and emergency attendances during the same period. These patients had an increase in the average (mean) number of spells in the 12 months following their referral of 0.77 (patients with zero prior spells) and 0.22 (patients with one prior spell), and an increase in the average (mean) number of accident and emergency attendances in the 12 months following their referral of 0.62 (patients with zero prior attendances) and 0.15 (patients with one prior attendance). Looking at the data as a whole it is clear that is **increases in health service utilisation by these patients that are driving the overall increases** reported above and more detailed analysis of the data is needed to understand properly understand patterns in health care utilisation by RSPS patients.

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[8] GPs use a risk stratification tool to identify which patients to refer RPSPs, with a focus on those most at risk of unplanned hospital admission.

Detailed analysis of the data is presented in tables 4.2-4.5 and its implications discussed in the section that follows. Table 4.2 presents the average (mean) number of non-elective inpatient spells and the percentage change in the number of spells in the 12 months prior to and following a referral to RSPS. Table 4.3 presents average cost of non-elective inpatient spells in the 12 months prior to and following a referral. Table 4.4 presents the average (mean) number of accident and emergency attendances and the percentage change in the number of attendances in the 12 months prior to and following a referral to RSPS. Table 4.5 presents average cost of accident and emergency attendances in the 12 months prior to and following a referral. Each table is broken down by the number of spells and attendances in the previous 12 months, gender and age.

Table 4.2: Overview of RSPS patients' non-elective inpatient spells 12m before and 12m prior to referral

	Base	Average (mean) number of non-elective inpatient spells			Change in number of non-elective inpatient spells		
		12m before	*12m after*	*Change*	*% ↓*	*% ↑*	*% no change*
All	1,730	1.4	1.5	+0.032	32	32	36
No of spells in previous 12 months:							
0	812	0	0.77	+0.77	0	41	59
1	388	1	1.2	+0.22	47	30	23
2	203	2	1.7	-0.32	62	23	15
3	142	3	2.4	-0.6	70	20	10
4	65	4	2.2	-1.8	74	11	15
5 or more	120	8.2	4.9	-3.3	82	14	4
Gender:							
Female	1,041	1.3	1.4	+0.097	30	32	37
Male	688	1.7	1.6	-0.067	34	31	35
Age:							
30 or younger	8	1.5	0.62	-0.88	38	12	50
30-39	27	0.63	0.3	-0.33	26	11	63
40-49	52	1.7	1.4	-0.37	35	19	46
50-59	118	1.8	1.2	-0.54	37	25	38
60-69	180	2.1	2.1	+0.044	34	28	38
70-79	357	1.7	1.7	+0.0084	37	31	32
80-89	628	1.2	1.3	+0.064	30	33	36
90-99	339	1.1	1.3	+0.28	26	38	36
100 or older	18	1.3	1.8	+0.5	17	39	44

Table 4.3: Overview of average cost of RSPS patients' non-elective inpatient spells 12m before and 12m prior to referral

	Base	Average (mean) cost of non-elective inpatient spells (£)		
		12m before	*12m after*	*Change*
All	1,730	3,163	3,639	+476
No of spells in previous 12 months:				
0	812	0	1,736	+1,736
1	388	2,013	2,445	+432
2	203	3,747	2,949	-798
3	142	5,070	4,036	-1,035
4	65	6,642	3,840	-2,801
5 or more	120	9,948	5,772	-4,176
Gender:				
Female	1,041	2,047	2,416	+369
Male	688	2,552	2,845	+293
Age:				
30 or younger	8	4,804	404	-4,400
30-39	27	811	134	-677
40-49	52	1,060	1640	581
50-59	118	2,468	2,055	-414
60-69	180	3,093	2,588	-505
70-79	357	2,663	2,687	+24
80-89	628	2,052	2,685	+633
90-99	339	1,858	2,815	+957
100 or older	18	2,506	3,879	+1,373

Table 4.4: Overview RSPS patients' accident and emergency attendances 12m before and 12m prior to referral

	Base	Average (mean) number A&E attendances			Change in number of A&E attendances		
		12m before	*12m after*	*Change*	*% ↓*	*% ↑*	*% no change*
All	1,730	1.0	1.1	+0.065	28	30	42
No of spells in previous 12 months:							
0	903	0	0.62	0.62	0	37	63
1	413	1	1.2	0.15	48	27	24
2	207	2	1.4	-0.63	62	19	18
3	94	3	2	-1	66	22	12
4	33	4	2.5	-1.5	79	21	0
5 or more	77	7.1	4	-3.1	87	12	1
Gender:							
Female	1,041	1	1.1	0.083	27	30	43
Male	688	1.1	1.1	0.038	29	31	39
Age:							
30 or younger	8	2.8	1	-1.8	25	25	50
30-39	27	0.67	0.63	-0.037	19	15	67
40-49	52	1.1	1.1	0.019	25	29	46
50-59	118	1.2	0.98	-0.23	27	25	47
60-69	180	1.4	1.3	-0.1	34	23	43
70-79	357	1.1	1.1	0	29	28	43
80-89	628	0.89	1	0.15	29	33	39
90-99	339	0.94	1.1	0.19	25	35	40
100 or older	18	1.4	2.2	0.72	17	39	44

Table 4.5: Overview of average cost of RSPS patients' accident and emergency 12m before and 12m prior to referral

	Base	Average (mean) cost of A&E attendances (£)		
		12m before	*12m after*	*Change*
All	1,730	209	238	+28
No of spells in previous 12 months:				
0	903	0	90	90
1	413	137	168	31
2	207	280	198	-82
3	94	412	291	-121
4	33	542	388	-155
5 or more	77	914	555	-359
Gender:				
Female	1,041	138	157	+20
Male	688	144	162	+18
Age:				
30 or younger	8	349	106	-242
30-39	27	77	76	-1
40-49	52	140	147	+8
50-59	118	162	143	-19
60-69	180	179	170	-9
70-79	357	149	157	+8
80-89	628	122	155	+33
90-99	339	131	170	+39
100 or older	18	220	345	+126

These data show that for the **patients with two or more non-elective inpatient spells or accident and emergency attendances** – those who might be considered **'more intensive' or 'higher cost'** users of secondary care - the picture was quite different than the headline findings:

● **The number of inpatient spells reduced:**

- For patients with two spells in the 12 months prior to their RSPS referral (12 per cent; n=203) the average (mean) number of spells reduced by 0.32 in the 12 months following their referral. 62 per cent of patients had fewer spells and 23 per cent had more spells.

- For patients with three spells (8 per cent; n=142) the average (mean) reduced by 0.6. 70 per cent had fewer spells and 20 per cent had more.

- For patients with four spells (4 per cent; n=65) the average (mean) reduced by 1.8. 74 per cent had fewer spells and 11 per cent had more.

- For patients with five spells or more (7 per cent; n=120) the average (mean) reduced by 3.3. 82 per cent had fewer spells and 14 per cent had more.

- **The cost of inpatient spells reduced:**

  - For patients with two spells in the 12 months prior to their RSPS referral the average (mean) cost of spells reduced by £798 in the 12 months following their referral.

  - For patients with three spells the average (mean) cost reduced by £1,035.

  - For patients with four spells (the average (mean) cost reduced by £2,801.

  - For patients with five spells or more the average (mean) cost reduced by £4,176.

- **The number of accident and emergency attendances reduced:**

  - For patients with two attendances in the 12 months prior to their RSPS referral (12 per cent; n=207) the average (mean) number of attendances reduced by 0.63 in the 12 months following their referral. 62 per cent of patients had fewer attendances and 19 per cent had more attendances.

  - For patients with three attendances (5 per cent; n=94) the average (mean) reduced by 1.0. 66 per cent had fewer attendances and 22 per cent had more.

  - For patients with four attendances (2 per cent; n=33) the average (mean) reduced by 1.5. 79 per cent had fewer attendances and 21 per cent had more.

  - For patients with five attendances or more (4 per cent; n=77) the average (mean) reduced by 3.1. 87 per cent had fewer attendances and 12 per cent had more.

- **The cost of accident and emergency attendances reduced:**

  - For patients with two attendances in the 12 months prior to their RSPS referral the average (mean) cost of attendance reduced by £82 in the 12 months following their referral.

  - For patients with three attendances the average (mean) cost reduced by £121.

  - For patients with four attendances (the average (mean) cost reduced by £155.

  - For patients with five attendances or more the average (mean) cost reduced by £359.

When the data are broken down **by gender**, they show that **men appear to be 'more intensive' or 'higher cost' users of secondary care than women**, with pronounced differences in the number and cost of inpatient spells:

- **Men tended to have more inpatient spells than women**: men had an average of 1.7 spells in the 12 months prior to their RSPS referral compared to 1.3 for women; and an average of 1.6 spells in the 12 months following their RSPS referral compared to 1.4 for women.

- **Men's inpatient spells tended to be costlier than women's**: the average cost of a spell for men was £2,552 in the 12 months prior to their RSPS referral compared to £2,047 for women; and £2,845 in the 12 months following their RSPS referral compared to £2,416 for women.

By contrast, the differences were far less pronounced for accident and emergency attendances.

There were also **pronounced differences when these data were broken down by age**. Although age does not appear to be a major driver of the number or cost of RSPS patients' secondary care utilisation in the 12 month months prior to their referral it does appear to be an important factor associated with whether or not their utilisation increases or reduces in the 12 months following referral, with younger patients more likely to record:

- For patients aged under 60 the average number and cost of inpatient spells reduced.

- For patients aged over 60 the average number and cost of inpatient spells increased.

- For patients aged under 70 the average number and cost of accident and emergency attendances reduced.

- For patients aged over 80 the average number and cost of accident and emergency attendances increased.

Summary

Overall, there was a **small overall increase** in the number and cost of RSPS patients' inpatient spells and accident and emergency attendances in the 12 months following referral but these masks a much more complex picture. When the data are explored in more detail our analysis suggests that the likelihood of an RSPS patient seeing a reduction in their secondary care utilisation in the 12 months following their referral is predominantly affected by two factors:

- How many times they accessed secondary in the previous 12 months, with the highest users seeing the biggest reductions.

- Age, with younger patients more likely to see a reduction than older patients.

This does not necessarily mean that these reductions are wholly or partially caused but the RSPS referral and subsequent support and intervention. **Further comparative analysis is required** to understand this trend in the context of the wider Rotherham population and how patterns of secondary care use vary by age, health condition and other contextual factors.

5. Conclusion

This report has provided an in-depth review of data for the Long-Term Conditions (LTC) component of RSPS for the period April 2016-March 2018. The main findings are as follows.

i. Reach

RSPS continues to have considerable reach to people in Rotherham with LTCs. In the two-year period covered by the analysis 1,730 patients were actively engaged by the service. RSPS reaches predominantly older patients – 78 per cent were aged 70 or older; was accessed by more women (60 per cent) than men (40 percent); and a large majority of patients were from a white ethnic background (98 per cent). **The most common type of services referred to were information and advice about benefits entitlements** (18 per cent of referrals) followed by **enabling** (10 per cent) and **befriending** (7 per cent).

ii. Wellbeing outcomes

When a patient actively engages with an RSPS referral and the services or activities that are identified and tailored to their needs, there is a strong likelihood that they will experience several wellbeing benefits. Overall, **81 per cent of patients experienced positive change on at least one wellbeing measure** and when the results were broken down by outcome category we found that **the average (mean) score for each outcome measure improved, with a higher proportion of low-scoring patients making progress**.

The progress made by RSPS patients across different components of wellbeing after a relatively short period demonstrates **the potential of social interventions provided through social prescribing to address some of the main psycho-social determinants of health and wellbeing**. That progress was made more frequently by some of the lowest scoring patients on each outcome measure **reflects positively on the effectiveness of the RSPS assessment and referral process** to identify patient's support needs and broker appropriate support from a variety of providers and on **the ability of commissioned voluntary and community organisations** to meet the specific social support needs of patients.

iii. Hospital Admissions and Accident and Emergency Attendances

A majority of RSPS patients were not 'intensive' or 'high cost' users of secondary care. More than two-thirds of patients had either zero or one non-elective inpatient spell in the 12 months prior to their RSPS referral and more than three-quarters had either zero or one accident and emergency attendances during the same period. This is a key factor behind the finding that there was a **small overall increase in the number and cost of RSPS patients' inpatient spells and accident and emergency attendances in the 12 months following referral**. However, **this headline finding masks a much more complex picture**. When the data were explored in more detail we found that the likelihood of an RSPS patient seeing a reduction in their secondary care utilisation in the 12 months following their referral is predominantly affected by how many times they accessed secondary in the previous 12 months, with the highest users seeing the biggest reductions; and age, with younger patients more likely to see a reduction than older patients. It is not possible to say whether these reductions are wholly or partially caused but the RSPS referral and subsequent support and intervention. **Further comparative analysis is required to understand this trend in the context of the wider Rotherham population and how patterns of secondary care use vary by age, health condition and other contextual factors.**

Appendix 1: Previous RSPS Evaluation Reports

Dayson, C. and Bennett, E. (2017) *Evaluation of the Rotherham Mental Health Social Prescribing Service 2015/16-2016/17*. Sheffield: CRESR, Sheffield Hallam University.

Dayson, C. and Damm, C. (2017) *The Rotherham Social Prescribing Service for People with Long-term Conditions: Evaluation Update*. Sheffield: CRESR, Sheffield Hallam University.

Dayson, C. and Moss, B. (2017) *The Rotherham Social Prescribing Service for People with Long-term Conditions: A GP Perspective*. Sheffield: CRESR, Sheffield Hallam University.

Dayson, C. and Bennett, E. (2016) *Evaluation of the Rotherham Mental Health Social Prescribing Pilot*. Sheffield: CRESR, Sheffield Hallam University.

Dayson, C., Bashir, N., Bennett, E. and Sanderson, E. (2016) *The Rotherham Social Prescribing Service for People with Long-Term Health Conditions: Annual Report*. Sheffield: CRESR, Sheffield Hallam University.

Bashir, N. and Dayson, C. (2014) *The social and economic impact of the Rotherham Social Prescribing Pilot: Main Evaluation Report*. Sheffield: CRESR, Sheffield Hallam University.

Dayson, C., Bashir, N. and Pearson, S. (2013) *From dependence to independence: emerging lessons from the Rotherham Social Prescribing Pilot*. Sheffield: CRESR, Sheffield Hallam University.

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