Case Study Report:
Age Concern Rotherham Hospital Aftercare Service

1. Introduction

This is one of two case study reports produced as part of research designed to demonstrate the value for money of third sector activity in Rotherham. The research was commissioned by the Rotherham Infrastructure Network and funded through a grant provided by South Yorkshire Community Foundation.

This case study explored the economic and social benefits of Age Concern Rotherham's Hospital Aftercare Service. This report provides an overview of the case study findings.

About Age Concern Rotherham

Age Concern Rotherham (ACR) is one of the largest local voluntary organisations supporting older people in Rotherham. They provide a range of personal, health and social services through their Centre for Older People as well as a series of home and domestic supports. ACR is also an advocate and point of contact for older people in the borough, and provides advice and information about issues such as benefit entitlements, housing, health and general welfare. ACR's activities are funded through a mixture of contracts with the local authority, grants from charitable trusts, fundraising, and traded services to members of the public.

An Overview of the Aftercare Service

Since April 2009 ACR has delivered a Hospital Aftercare Service through a contract with Rotherham Primary Care Trust. The contract, worth £157 thousand a year, initially covered a two year pilot period but it has recently been extended by an extra year to March 2012. The service provides enabling support on discharge from hospital to older people who need assistance to regain their independence after a spell in hospital but do not qualify for homecare under the current Fair Access to Care Services (FACS) criteria. It is delivered by a combination of paid staff and volunteers (8 volunteers provide 2 hours per week each).

Policy context

1 In April 2011 ACR joined Age UK as a local confederate and are now known as Age UK Rotherham
There is strong evidence that a care enabling approach can reduce health and social care costs further along the care pathway. This is emphasised in the NHS and Social Care Model for Long Term Conditions (DH, 2005) which includes an expectation that very high intensity users of unplanned secondary care should be case managed by community matrons. Community matrons should work closely with transitional and immediate care services to ensure hospital capacity is used appropriately. The overall aim is a year-on-year reduction in the overall number of inpatient emergency bed days through a more personalised care approach for vulnerable people most at risk.

But there is also evidence that people with long-term conditions that are not case managed by a community matron would also benefit from improved transitional and intermediate care services that prevent admission or readmission to hospital and facilitate the discharge process. Against this background the Hospital Aftercare Service was commissioned to provide support for the process through which a patient’s care is transferred from the ward to the home environment and for their onward transition to independence and well-being.

**Service specification**

There are three key elements to the service:

1) A seven day *intensive support package* available to people being discharged from hospital and people living in the community who are experiencing an exacerbation in multiple long term conditions. The package includes:

- ward assessments designed to support the pre-discharge and discharge process, including appropriate transport home
- low level support in areas such as food preparation, shopping, prescription and pension collection, bill payment, cleaning and laundry etc
- support to take prescribed medicine at the appropriate time
- help identifying benefit entitlements and support for the claim process
- signposting to relevant agencies and service providers where appropriate

2) A series of *enabling services* offering follow-up support to people who have received an intensive support package or where there is an identified need for enabling support. The overall aim is to improve physical function, social integration and independence. Support available includes:

- ongoing low level support in areas such as food preparation, shopping, prescription and pension collection, bill payment, cleaning and laundry etc
- support to engage in activities which reduce social isolation
- advice and guidance on healthy lifestyles
- befriending
3) A telephone support service providing advice and support to registered clients of the intensive and enabling services. This provides a point of contact for clients experiencing social isolation or if they require assistance around a particular issue.

2. Identifying Stakeholder Benefits

As a first step the research explored the range of benefits accruing to different stakeholders of the Hospital Aftercare Service. Three main stakeholder groups were identified:

- **The public sector**: this includes the PCT who fund the service, but also the NHS Foundation Trust (Hospital) and the Local Authority Adult Services Department

- **Clients**: those in direct receipt of Aftercare services

- **Carers, families and friends**: the immediate support network of Aftercare service clients

The benefits accruing to each stakeholder were mapped in detail, including the nature of the benefit (economic or social), how it could be measured, and the extent to which evidence about the benefit was available. The outcome of this process is discussed in more detail below.

**Stakeholder group 1: public sector bodies**

The public sector benefits economically from the Aftercare service in the form of demonstrable savings to the public purse. These savings are achieved in three main ways:

- a reduction in hospital bed days required by Aftercare clients before they can be discharged

- a reduction in the use of hospital transport home following discharge

- a reduction in hospital admissions/readmissions for Aftercare clients, including those caused by falls.

These benefits are outlined in more detail in table 1 overleaf.

**Stakeholder group 2: Aftercare service users**

Clients of the Aftercare service receive a combination of social and economic benefits from the Aftercare service. First, they benefit from improvements in well-being as a result of the support they receive during and following the hospital discharge process. This includes improvements in their confidence, motivation, mobility and independence. Second, they benefit financially from improvements in their financial capability; this includes support to claim additional benefits that they might be entitled to. These benefits are outlined in more detail in table 2 overleaf.
### Table 1: Public sector impact map

<table>
<thead>
<tr>
<th>Nature of benefits (i.e. economic or social outcome)</th>
<th>Measure</th>
<th>Indicator</th>
<th>Evidence</th>
</tr>
</thead>
<tbody>
<tr>
<td>Economic: Demonstrable savings to the public purse as a result of service provided</td>
<td>Reduction in number of bed days used</td>
<td>Cost saving per bed</td>
<td>ACR monitor number of bed days saved per ward</td>
</tr>
<tr>
<td></td>
<td>Reduction in transport costs</td>
<td>Cost saving through not using hospital transport</td>
<td>ACR monitor no of people taken home per ward</td>
</tr>
<tr>
<td></td>
<td>Reduction in readmissions and use of other health services</td>
<td>Cost saving associated with fewer admissions</td>
<td>ACR do not monitor data on number of readmissions prevented but this can be estimated using secondary evidence</td>
</tr>
</tbody>
</table>

### Table 2: Aftercare service users impact map

<table>
<thead>
<tr>
<th>Nature of benefits (i.e. economic or social outcome)</th>
<th>Measure</th>
<th>Indicator</th>
<th>Evidence</th>
</tr>
</thead>
<tbody>
<tr>
<td>Social: Improvement in well-being following discharge from hospital</td>
<td>Increased confidence post discharge</td>
<td>Proportion of clients reporting increased confidence post discharge</td>
<td>ACR have developed a new outcome tool which measures client’s progress against personal goals across five well-being categories</td>
</tr>
<tr>
<td></td>
<td>Increased motivation post discharge</td>
<td>Proportion of clients reporting increased motivation post discharge</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Increased mobility post discharge</td>
<td>Proportion of clients reporting increased mobility post discharge</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Improved financial situation post discharge</td>
<td>Proportion of clients reporting increased improved financial situation post discharge</td>
<td></td>
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<tr>
<td></td>
<td>Increased independence post discharge</td>
<td>Proportion of clients reporting increased independence post discharge</td>
<td></td>
</tr>
<tr>
<td>Economic: Improvement in financial situation following discharge from hospital</td>
<td>Increased personal income through claimed benefits entitlements</td>
<td>Total value of new benefits claimed</td>
<td>ACR monitor this for each client supported</td>
</tr>
</tbody>
</table>
**Stakeholder group 3: carers, family and friends of Aftercare service users**

The carers, family and friends of Aftercare service users are also likely to benefit from the improvements in the social and economic well being of the older person they care for. There is anecdotal evidence of this but at this stage the Aftercare service has not collected specific data on these benefits. It was therefore decided to exclude this stakeholder group from the analysis.

### 3. Measuring Stakeholder Benefits

The next stage of the research involved measuring the benefits accruing to each stakeholder group. The stakeholder mapping process revealed that these benefits fall into two broad groups:

- **economic benefits**: where the outcome can be translated into genuine monetary value, and
- **social benefits**: where stakeholders experience outcomes in areas such as quality of life and well-being

The evidence base around these economic and social benefits is explored in more detail in the following sections.

**In Focus: Economic Benefits**

The stakeholder mapping process revealed the economic benefits of the Aftercare service to be twofold:

- demonstrable savings to the public purse
- an improvement in the financial situation of discharged patients

In addition, economic value is created by the volunteering element of the Aftercare service.

**Public sector cost savings**

The Aftercare service saves the public sector money in a number of ways: it frees up valuable bed days in Rotherham General Hospital by speeding up the discharge process; it reduces the need for and use of hospital transport by transferring patients to their home; and it reduces readmissions (due to e.g. falls) by providing vulnerable people with support once they have been discharged. We have been able to estimate the value of these cost savings using a combination of the monitoring data collected by the Aftercare service and robust academic evidence on the cost of various health care interventions. These savings are outlined in more detail below.

1. **Reduction in the number of bed days required by Rotherham General Hospital**

   The Aftercare service has worked closely with hospital ward managers to measure the number of bed days saved by each ward using the service. Over the first 18 months of the service a total of 445 bed days were saved: this equates to an average of 296 beds each year.
The average cost of a day in a hospital bed is estimated to be £158\(^2\): this means that the Aftercare service creates estimated savings of at least £46,768 per year. However, this is likely to be an underestimate, as data provided by Rotherham Primary Care Trust puts the average cost of a bed day in Rotherham Hospital at £250. Using this figure, the estimated saving created by the Aftercare service is £74,000 per year.

2. Reduction in hospital transport costs

In the first 18 months of operation the Aftercare service transported 342 individuals home from hospital after they had been discharged: this equates to an average of 228 people each year. Without the transport provided by the Aftercare services these individuals would have required hospital transport at an average cost of £40 per journey\(^3\). This results in an estimate annual saving of at least £9,120 per year. Similar to the figure for bed day costs this could be an underestimate. Data provided by Rotherham Primary Care Trust puts the average cost of a hospital transport in Rotherham at £80 per journey. Using this figure, the estimated saving created by the Aftercare service is £18,240 per year.

3. Reduction in readmissions and use of other health services

In the absence of reliable monitoring data the research has drawn on findings from an evaluation of the ‘Partnership for Older People’s Project’ (POPP)\(^4\) to estimate the cost savings associated with the reduction in readmissions and use of other health services that can be attributed to 'secondary preventative services' for older people. POPP was a programme funded by the Department of Health (DH) with very similar objectives to the Aftercare service: to create a sustainable shift in the care of older people, moving away from a focus on institutional and hospital based crisis care, toward earlier and better targeted interventions within community third sector, social and health care settings.

The POPP evaluation grouped services as primary, secondary or tertiary according to the Kaiser Permanente Triangle. On this scale the Aftercare service is identifiable as 'secondary prevention': support to older people at risk of hospital admission in areas such as medicines management, falls prevention services, follow-up falls services and holistic assessments. For interventions focused on secondary prevention, the evaluation found a 50 per cent reduction in the number of hospital overnight stays and visits to accident and emergency following the intervention. In addition, a reduction of almost half (46 per cent) was found in hospital based physiotherapy attendances with GP appointments also showing a small


reduction (15 per cent). This resulted in a mean per person cost reduction of £277, measured over a three month period.

If it is assumed that the Aftercare service is broadly equivalent to the type of secondary prevention funded under POPP, it can be estimated (based on an average of 647 clients per year) that its preventative support generates total savings of £179,200 over a three month period. The POPP evaluation only explored savings after three months, but if the same level of prevention was sustained after six months savings would be £358,400 and after one year would be £716,900.

4. Overall public sector cost savings

Overall, it can be estimated that the Aftercare service saves the public sector at least £235,000 per year. This equates to a return on investment of £1.50 for every £1 invested by the public sector each year. Furthermore, it can be estimated that net savings after five years will be at least £1.1 million and after 10 years will be £2 million.

However, this is likely to be an underestimate as is based on low-estimate costs for bed days and hospital transport and assumes that readmission and use of other health services will only be reduced for three months following the intervention. Using the high-estimate costs for bed days and hospital transport, and assuming readmission benefits are sustained for at least one year, it can be estimated that the Aftercare service will save the public sector £988 thousand each year. This would be a return on investment of £6.30 for every £1 invested by the public sector each year and net savings of £4.6 million after five years and £8.5 million after 10 years.

Improvements in the financial situation of clients

In addition to savings to the public purse, the Aftercare service also produces wider economic benefits in the form of improvements in financial situation of clients following discharge from hospital. As part of the assessment process, the Aftercare service supports clients to identify any additional benefit they may be entitled to. In the first 18 months of the project a 31 clients were supported to claim an extra £110,000. This was broken down as follows:

- £77,000 in Attendance Allowance
- £7,700 in Disability Living Allowance
- £7,700 in Carers Allowance
- £17,600 in increases in Pension Credit

Annually, this works out at 20 clients gaining an average of £3,665 each, or a total of £73,300 in extra benefits claimed each year. However, this figure does not consider the additionality of the ACR intervention. That is, we cannot be sure what proportion of ACR

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5 An annual discount rate of 3.5 per cent has been applied to all economic projections in accordance with HM Treasury guidance.
clients would have gone on to claim these benefits by themselves or with the support of others, or how long it would have taken them.

If it is assumed that the intervention is additional for one year, and each client claims their extra benefits for at least a year, it can be estimated that this support enables clients to claim **net benefits worth £342 thousand after five years and £575 thousand after 10 years.**

The economic value of volunteering

In addition to paid staff funded through the contract with the PCT the Aftercare service also uses volunteer 'befrienders' who visit particularly isolated or vulnerable clients. They offer companionship and support and help identify and problems or concerns clients may have. Volunteers will typically visit clients once every two weeks, each visit lasting no more than two hours. In total, the service has eight volunteers who collectively provide an average of six hours of support each week.

This volunteer time has considerable economic value as it represents an additional input in the delivery of the service that the public sector does not have to pay for. The value of this input, that is how much it would cost to pay employees to do the work carried out by volunteers, can be used to value their contribution. It can be calculated by multiplying the number of hours that volunteers give per week by an estimate of how much it would cost to employ someone to do that work.

There are a number of widely accepted hourly rates that could be used to estimate this value. These include: the national minimum wage, the local median wage, the local mean wage and the reservation wage. The reservation wage, the minimum hourly rate associated with the actual role carried out volunteers, is the preferred option as it provides the most realistic measure of the value of the work undertaken. In the case of Aftercare volunteers the minimum wage and the reservation wage are likely to be similar as social care type roles are typically low paid. Therefore, assuming national minimum wage (£5.93 per hour), the annual economic contribution of Aftercare volunteers is estimated to be **£4,934.** This enhances the value of the resource input used to deliver the service by more than three percent.

Overall economic benefits

The overall economic impact of the Aftercare service can be estimated by summing the benefits discussed above. This produces a **net annual economic impact of at least £313 thousand** each year. Furthermore, it is estimated that **after five years the net economic impact will be £1.5 million and after 10 years £2.7 million.**

However, this is likely to be an underestimate and the **actual net economic impact could be as high as £1.1 million a year, £5 million after five years and £9.1 million after ten years.**

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6 This is the approach recommended by Volunteering England
**In Focus: Social Benefits**

The stakeholder mapping process revealed a range of social benefits of the Aftercare service linked to improvements in the well-being of service beneficiaries. ACR has recently used the Aftercare service to pilot a new 'service outcome tool', based on an Outcome Star model\(^7\), that has been developed to measure improvements in the personal outcomes experienced by service users following their discharge from hospital. The tool asks service beneficiaries to identify up to five personal goals upon their return home against which progress is measured at the end of the support period.

**Measurable benefits**

ACR categorise each goal according to whether it will lead to progress in each of the following areas associated with personal well-being:

- **Motivation**: for example, wanting to get mobile as soon as possible
- **Confidence**: for example, feeling able to carry-out day to day tasks with our fear of an accident
- **Finances**: for example, claiming additional entitlements such as Attendance Allowance
- **Mobility**: for example, being physically able to move around the house with/without aids
- **Independence**: for example, not having to rely on others for tasks such a meal/drink preparation

Data collected through the service outcome tool can therefore be aggregated at service level or analysed according the different aspects of beneficiary well-being. The results of the pilot (24 clients) are outlined below.

1. **Aggregated results**

   Overall, the 24 Aftercare clients identified 54 separate goals between them. **At the end of the support period progress had been recorded on 49 of those 54 goals** (91 per cent). The **average improvement was 3.14** (on a scale of 1-5) and only one client did not record progress on any of their goals.

2. **Confidence**

   Goals associated with confidence were most frequently identified by Aftercare clients. Of the 23 clients who identified confidence goals **22 (96 per cent) recorded an improvement at the end of the support period. The average improvement was 3.18.**

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\(^7\) For more information see [http://www.outcomesstar.org.uk/](http://www.outcomesstar.org.uk/)
3. Motivation

Goals associated with motivation were the second most frequently identified by Aftercare clients. Of the 20 clients who identified motivation goals 18 (90 per cent) recorded an improvement at the end of the support period. The average improvement was 3.25.

4. Mobility

18 Aftercare clients identified goals associated with their mobility of which 17 (94 per cent) recorded an improvement at the end of the support period. The average improvement was 3.33.

5. Independence

All 18 Aftercare clients who identified goals associated with their independence recorded an improvement at the end of the support period. The average improvement was 3.43.

6. Finances

Only one Aftercare client identified a personal goal associated with their financial situation. This client was supported to claim Attendance Allowance and recorded a 4 point improvement at the end of the support period.

Overall social benefits

The data collected through the service outcome tool pilot suggest that a large majority of clients of the Aftercare service make considerable progress against their personal well-being goals during the support period. However, at this stage it is difficult to know the extent to which these changes can be attributed to the support provided by the Aftercare service, whether this progress will be sustained, and if so for how long.

Conclusion

This case study report forms part of wider research into the value for money provided by third sector activity in Rotherham. It has provided clear evidence of the economic and social benefits of ACR's Aftercare service and some key lessons for third sector and public sector bodies across the borough have emerged.

The economic and social benefits of the Aftercare Service

The Aftercare service has an estimated economic impact amounting to at least £313 thousand each year. However, this is likely to be an underestimate and the actual economic impact could be as high as £1.1 million a year. Additionally, and importantly, it is also evident that a majority (more than 9 in 10) of clients of the Aftercare service make progress against their personal well-being goals in the areas of confidence, mobility, motivation and independence during the support period.

A challenge for ACR will be to demonstrate the extent to which these improvements in well-being can be attributed to the support provided through the Aftercare service, particularly
in cases were their clients are in receipt of a range of interventions from other health and social care providers.

**Key lessons**

There are a number of important lessons from this case study for organisations from both the third sector and the public sector:

1) The value of preventative services

The Aftercare service case study findings demonstrate quite clearly how investment in preventative services can have long term benefits, both economically (for the public sector and wider society) and in terms of the well-being of service beneficiaries.

2) Intelligent commissioning works

The development of the Aftercare service is a good example of intelligent commissioning in practice. The PCT worked closely with ACR to develop a service that is tailored to the needs of a specific group within a specific policy context and builds directly on ACR’s expertise in supporting vulnerable older people in the borough. It is arguable that impact of the service would not have been as great if a less joined-up approach to developing the service had been taken.

3) Good quality data is vital and often requires a partnership approach

Many of the calculations involved in estimating the economic impact of the Aftercare service would not have been possible if ACR had not developed effective data sharing and collection protocols with individual wards at Rotherham General Hospital. Each ward provides ACR with data on the number of bed days saved on a regular basis. This gives the data credibility and enables the NHS to see first hand the impact the service is having. However, the hospital does not collect all the data required to enable a full estimation of impact. For example, the savings associated with preventing readmission cannot be directly calculated because readmissions are not recorded in a systematic way.

4) When measuring social benefits it is important to consider attribution

ACR has made good progress in measuring the social benefits accruing to Aftercare service clients through the service outcome tool. The tool is designed to measure the progress of individual client's towards their personal well-being goals but it does not enable ACR to capture the extent to which progress made can be attributed to the Aftercare service. This is particularly important if clients are in receipt of additional health and social care interventions from other providers as progress made against well-being goals is likely be a product of multiple supports.

Chris Dayson and Ian Wilson
Centre for Economic and Social Research
Sheffield Hallam University
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