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# Why we need to invest in multiple needs: method notes

**Evaluation of  
Fulfilling Lives:**  
Supporting  
people with  
multiple needs

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## About the Fulfilling Lives programme

The Fulfilling Lives programme funds voluntary-sector led partnerships in 12 areas across England. The partnerships were awarded funding in February 2014 and began working with beneficiaries between May and December 2014. They are:

- Birmingham Changing Futures Together
- Fulfilling Lives Blackpool
- Fulfilling Lives South East Partnership (Brighton and Hove, Eastbourne and Hastings)
- Golden Key (Bristol)
- FLIC (Fulfilling Lives Islington and Camden)
- Liverpool Waves of Hope
- Inspiring Change Manchester
- Fulfilling Lives Newcastle and Gateshead
- Opportunity Nottingham
- Fulfilling Lives Lambeth, Southwark and Lewisham
- VOICES (Stoke on Trent)
- West Yorkshire – Finding Independence (WY-FI)

The National Lottery Community Fund commissioned CFE Research and the University of Sheffield to carry out a national evaluation of the programme.

This report provides further information on methods and data sources used to create the briefing: Why we need to invest in multiple needs.

## About the data sources

A Common Data Framework (CDF) was developed at the start of the Fulfilling Lives programme to ensure consistent data is collected by all 12 partnership areas. The CDF comprises:

- demographic information on beneficiaries and their engagement with the programme
- six monthly assessments of need and risk (Homelessness Outcomes Star and New Directions Team assessment)
- data on frequency of interactions with 18 different public services.

Local partnerships collect data in line with the CDF and submit this to the national evaluation team quarterly. Beneficiaries are recruited to the programme on a rolling basis.

This briefing mainly draws on the data on interactions with public services. The data covers the period from the start of the programme (May 2014) until September 2018.

All beneficiaries are asked to provide informed consent for their data to be collected by partnerships and shared with the national evaluation team. This is refreshed every two years. Where beneficiaries do not agree to share their data we know only their start and end dates (so that we can count them as beneficiaries of the programme).

To show the baseline position we used data from the first quarter (Q1) of each beneficiary's engagement with the programme. To show how service use changes over time we compare data for the first and fourth quarters (Q1 and Q4). This allows a reasonable time for the programme to have an impact. We intend to produce longer-term analysis of change in due course.

In total, 3,480 beneficiaries have started the programme to date, although not all of these have engaged with the programme for four quarters or more and can thus be included in the analysis of change over time. 1,665 beneficiaries have been on the programme for four quarters or more and have provided informed consent for their data to be shared with the national evaluation team.

Collecting information from people with multiple needs can be challenging. Data sets are not always complete; where data is missing we have excluded the case from our analysis. **As a result, base numbers vary** and represent between 38 and 72 per cent of beneficiaries who have been on the programme for at least four quarters.

We checked that the beneficiaries for whom we hold data on public service interactions were representative of the wider population of Fulfilling Lives beneficiaries that have provided informed consent and are still with the programme after four quarters. Overall the sample is broadly representative of Fulfilling Lives beneficiaries in terms of age, number of multiple needs and sex. There are some differences by partnership but all partnerships are sufficiently represented.

The data partnerships collect on interactions with public services comes from three different sources:

- administrative sources – that is, records kept by service providers such as local authorities, the NHS and police forces, for purposes other than research
- informal reporting by project workers – staff work closely with beneficiaries and are well placed to provide information on ongoing levels of service use
- self-report by beneficiary.

Each sources has its pros and cons but no source alone provides a substantial sample. We have therefore combined the data for public service interactions from all three of the above sources to ensure as large a sample as possible. There is only one service use estimate per quarter for each beneficiary and so no duplication.

## Analysis

Data provided by Fulfilling Lives partnerships is collated in an SQL database then exported to SPSS for analysis. For each service use variable we calculated mean number of interactions at Q1 and Q4, minimum and maximum number of interactions, and the proportion of beneficiaries who experienced a particular interaction at least once. Differences between Q1 and Q4 means were compared and statistical significance tested (paired sample t-test). We only report results in the briefing that are statistically significant at the 95 per cent confidence level. This means we can be reasonably confident that the results would be found in the wider population of Fulfilling Lives beneficiaries and not just in our sample. More detailed results for Q1 and Q4 service interactions are provided in Appendix 1.

## Costing service interactions

To calculate the cost of beneficiary interactions with public services we used published estimates of unit costs at the national level. We have tried to source the most recent and robust estimates available. Where necessary we have adjusted costs to 2017/18 prices using the GDP Deflator published by HM Treasury.<sup>1</sup> Appendix 2 lists unit costs and sources used.

We multiplied the mean number of interactions in Q1 for each service by the appropriate unit cost to arrive at a total per beneficiary baseline estimate. To derive an estimate of annual costs we simply multiplied this figure by four.

To calculate the value of increases/reductions in service use we only considered interactions where there was a statistically significant change between Q1 and Q4.

To estimate how much of the reduction in service use is likely to be 'cashable' – that is, can be converted to a reduction in expenditure – we used the assumptions set out by New Economy in their 2015 Discussion Paper.<sup>2</sup> This suggests 'cashability' values for different agencies, and for some core outcomes, over the short and longer-term. We used the following assumptions:

Agency / Outcome	Short term cashability	Long term cashability
Local authority	50%	90%
NHS	20%	50%
Police	30%	60%
Reduced housing evictions	75%	89%

## Appendix 1: Service use data for Q1 and Q4

	Mean number of interactions		% of beneficiaries with at least 1 interaction		Average cost per beneficiary per quarter		
	Q1	Q4	Q1	Q4	Q1	Q4	Increases/reductions
Nights in prison	4.1	5.4	11%	10%	£394	£513	-£119
Magistrates court proceedings	0.3	0.3	21%	18%	£237	£231	£6
Crown court proceedings	0.1	0.1	5%	4%	£788	£641	£147
Arrests	0.5	0.4	28%	20%	£351	£255	£96
Nights in police custody	0.4	0.2	19%	13%	£37	£23	£14
Police cautions	0.1	0.1	8%	5%	£41	£24	£17
Mental health service inpatient attendances	1.4	2.0	6%	6%	£525	£727	-£201
Face to face contacts with CMHT	0.9	0.8	20%	20%	£177	£166	£11
Presentations at A&E	0.8	0.5	27%	24%	£121	£85	£36
Counselling or psychotherapy sessions	0.4	0.4	9%	10%	£28	£29	-£1
Inpatient episodes	0.4	0.5	16%	14%	£255	£300	-£45
Outpatient appointments	0.4	0.5	17%	22%	£51	£68	-£17
Mental health service outpatient attendances	0.2	0.2	8%	9%	£35	£32	£3
Nights in temporary accommodation	15.1	10.4	25%	17%	£254	£175	£79
Nights rough sleeping	12.4	6.0	25%	14%	£295	£144	£151
Face to face contacts with drug and alcohol services	3.0	3.4	52%	52%	£371	£419	-£48
Days in in-patient detox	0.4	0.7	4%	4%	£66	£112	-£46
Evictions from a tenancy	0.2	0.1	14%	9%	£1,037	£675	£362
Weeks in residential rehabilitation	0.1	0.2	1%	2%	£45	£103	-£57

Shaded rows indicate where the difference between Q1 and Q4 means are statistically significant. Mean interactions have been rounded to one decimal point. Average costs have been calculated based on unrounded data.

## Appendix 2: Unit costs and sources

	Cost	Unit	Year of estimate	Inflated to 17/18 prices	Definition	Source
<b>Housing</b>						
<b>Rough sleeping</b>	£7,900	Per year	2010/11	£8,690	Average annual local authority expenditure per individual	Department for Communities and Local Government (2012) <i>Evidence review of the costs of homelessness</i> p.12–13
<b>Temporary accommodation (hostels)</b>	£107	Per week	2010/11	£118	Average weekly cost of housing a homeless household in hostel accommodation	Shelter (2012) <i>Research briefing: Immediate costs to government of loss of home</i> p.4
<b>Eviction from a tenancy</b>	£5,806	Per incident	2010/11	£6,387	Cost of eviction from LA property including rent arrears write off and cost of re-letting property	As above
<b>Health</b>						
<b>Outpatients appointment attendances</b>	£134	Per attendance	2017/18	£134	Weighted average of all outpatient attendances	Curtis, L. & Burns, A. (2018) <i>Unit Costs of Health and Social Care 2017</i> , Personal Social Services Research Unit, University of Kent, Canterbury p.89
<b>Inpatient episodes</b>	£626	Per episode	2017/18	£626	Average cost per episode for non-elective inpatient short stays	As above
<b>Presentations at A&amp;E</b>	£160	Per attendance	2017/18	£160	A&E Attendance	NHS Improvement (2018) <i>Reference costs 2017/18: highlights, analysis and introduction to the data</i> , NHS Improvement
<b>Mental health</b>						
<b>Face to face contacts with CMHT</b>	£189	Per contact	2014/15	£198	Mean average weighted cost per contact with a community mental health team specialist for adults with mental health problems	Curtis, L. (2015) <i>Unit Costs of Health and Social Care 2015</i> Canterbury: University of Kent p.200
<b>Counselling or psychotherapy sessions</b>	£59	Per consultation	2011/12	£65	–	Curtis, L. (2012) <i>Unit Costs of Health and Social Care 2012</i> Canterbury: University of Kent p.53

## 01 Why we need to invest in multiple needs: method notes

	Cost	Unit	Year of estimate	Inflated to 17/18 prices	Definition	Source
<b>Mental health service outpatient attendances</b>	£146	Per attendance	2011/12	£161	Weighted average of all adult outpatient attendances for mental health services	As above, p.47
<b>Mental health services inpatient attendances</b>	£338	Per bed day	2011/12	£372	Weighted average of all adult mental health inpatient bed days	As above
<b>Substance misuse</b>						
<b>Face to face contacts with drug and alcohol services</b>	£123	Per contact	2017/18	£123	Contact with drug and alcohol services	NHS Improvement (2018) <i>Reference costs 2017/18: highlights, analysis and introduction to the data</i> , NHS Improvement
<b>Residential rehabilitation</b>	£688	Per resident week	2016/17	£699	Cost per resident week in residential rehabilitation for people who misuse drugs or alcohol	Curtis, L and Burns, A (2017) <i>Unit Costs of Health and Social Care 2017</i> , Personal Social Services Research Unit, University of Kent, Canterbury
<b>Inpatient detoxification</b>	£154	Per patient day	2016/17	£157	Cost per patient day of inpatient detoxification for people who misuse drugs or alcohol	As above, p.61
<b>Criminal justice</b>						
<b>Arrest</b>	£593	Per incident	2006/07	£720	Includes police and duty solicitor costs plus average for YOS input	New Economy Manchester Unit Cost Database v1.4 citing original sources as Salford Police Costs 2006/07
<b>Police caution</b>	£285	Per incident	2006/07	£346	All police costs	As above
<b>Prison</b>	£91	Per night	2014/15	£95	Average overall resource expenditure per prisoner for all prison types. Per night derived from annual cost estimate	Ministry of Justice (2015) <i>Costs per place and per prisoner NOMS Annual Report and Accounts 2014-15 Management Information Addendum</i> p.3
<b>Nights spent in police custody</b>	£91	Per night	2014/15	£95	Cost for night in prison used as proxy as unable to source unit cost	–

## Appendix 2: Unit costs and sources (continued)

	Cost	Unit	Year of estimate	Inflated to 17/18 prices	Definition	Source
<b>Magistrates court proceedings</b>	£550	Per proceeding	1997/98	£797	Average cost per magistrates court proceeding	Harries, R. (1999) <i>The cost of criminal justice</i> Home Office Research, Development and Statistics Directorate, Research Findings No. 103
<b>Crown court proceedings</b>	£8,600	Per proceeding	1997/98	£12,455	Average cost per crown court proceeding	As above
<b>Conviction (economic cost)</b>	£676	Per incident of crime	2010/11	£755	Economic cost per incident of crime across all types of crime	New Economy unit cost database
<b>Conviction (social cost)</b>	£1,648	Per incident of crime	2010/11	£1,841	Social cost per incident of crime across all types of crime	As above
<b>Welfare benefits</b>						
<b>Employment Support Allowance</b>	£73	Per week	2018	£73	Personal allowance 25 or over	Department for Work and Pensions (2018) <i>Benefit and pension rates 2018 to 2019 DWP</i>
<b>Housing Benefit</b>	£73	Per week	2018	£73	Personal allowance 25 or over	As above
<b>Incapacity Benefit</b>	£83	Per week	2018	£83	Short-term incapacity benefit (under state pension age)	As above
<b>Income Support</b>	£73	Per week	2018	£73	Personal allowance 25 or over	As above
<b>Universal credit</b>	£318	Per month	2018	£318	Single 25 or over	As above

## References

1. <https://www.gov.uk/government/collections/gdp-deflators-at-market-prices-and-money-gdp>
2. New Economy (2015) *Cashability Discussion Paper*  
<http://www.neweconomymanchester.com/media/1445/3314-150327-cashability-discussion-paper.pdf>

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