VOICES

VOICES OF INDEPENDENCE CHANGE & EMPOWERMENT IN STOKE-ON-TRENT

Hard Edges

Stoke-on-Trent

Reducing the costs of multiple needs to people and services:
The second financial analysis of VOICES

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In partnership with Lankelly Chase & Expert Citizens

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Acknowledgements

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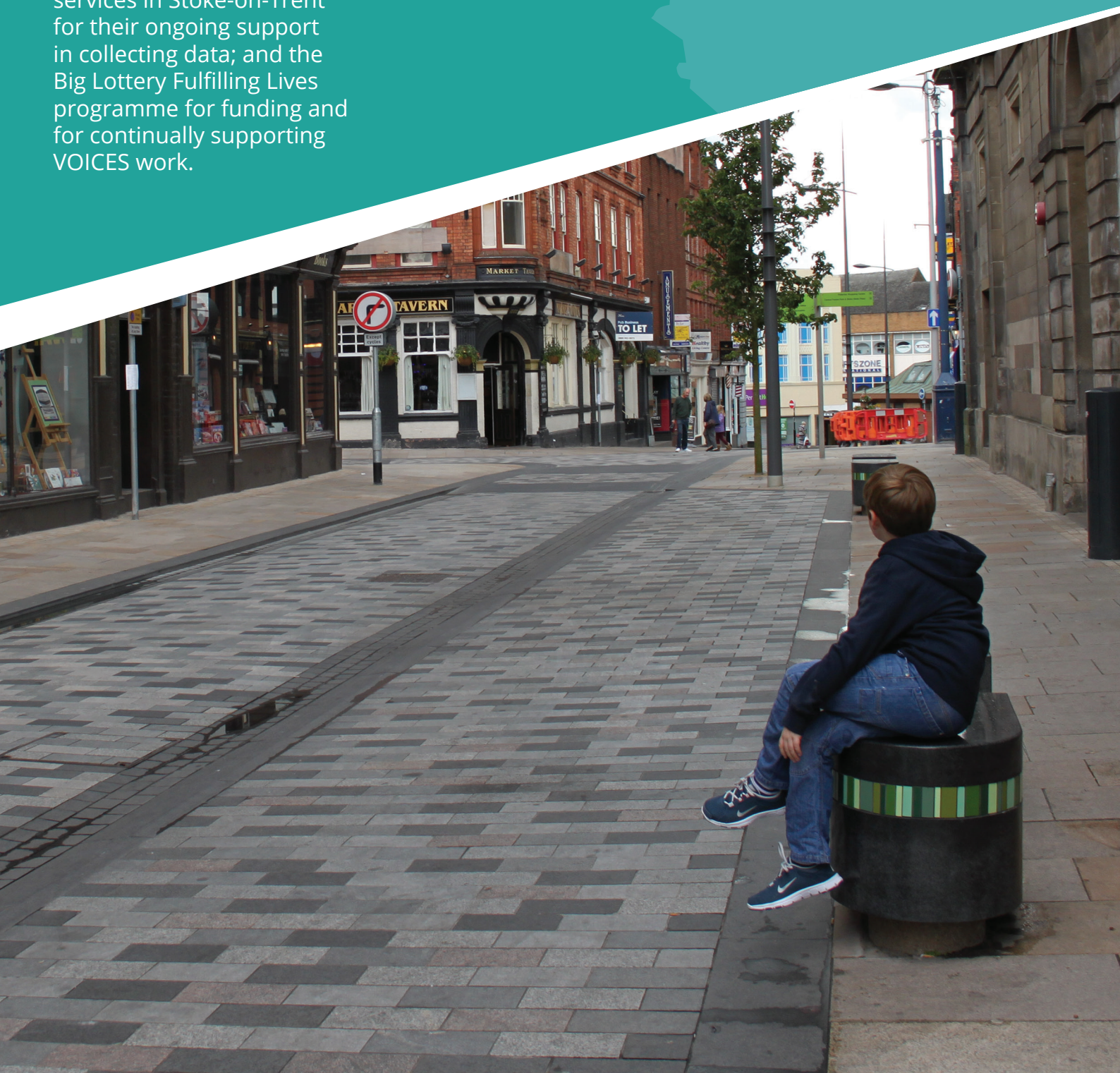


Contents

1 Executive summary

1.1 Introduction

- The Hard Edges report published by Lankelly Chase in 2015 explores the prevalence, nature, geographical spread and costs associated with severe and multiple disadvantage (SMD) in England.[1] For the purposes of Hard Edges, SMD means a combination of two or more of the following: homelessness, substance misuse and offending, as evidenced by contact with relevant services and systems. Stoke-on-Trent is ranked ninth in an index of the prevalence of SMD across local authorities in England. The report had great resonance with those seeking to improve the lives of people with complex and multiple needs in the city.
- The VOICES partnership wanted to explore the idea of 'Hard Edges' in Stoke-On-Trent – drawing on the methods and findings from the 2015 report.
- In 2016 Hard Edges in Stoke-on-Trent was published. This was based on data from 22 customers of the VOICES service. This work was well received and constituted a useful way of describing the impact of Service Coordination though the lens of customers' service contact and the potential financial implications of this.
- This report builds on the 2016 Hard Edges report, with a larger cohort of customers and longer observation periods. Hard Edges 2018 builds the evidence base with more robust findings. In this report we also introduce analysis by gender and consider the subgroup of customers who have received a Housing First service with VOICES.

1.2 Key findings

- Using a framework set up by the national evaluators of the Fulfilling Lives programme, data has been collected about VOICES customers' contact with criminal justice and health services before and during engagement with VOICES.
- The analysis shows that for a cohort of 56 customers there has been an overall drop in the instances of each of the following: arrests, magistrates' court proceedings, nights in custody, accident and emergency (A&E) attendances, and hospital inpatient episodes.

[1] Bramley G, et al (2015) Hard Edges, Mapping Severe and Multiple Disadvantage, Lankelly Chase, Appendix J.

- Where costs are applied to each contact with the above health and criminal justice services, there has been a drop of £206,625 for the cohort (or £3,131 per person) when costs for the year prior to engagement with VOICES are compared with those for a year of sustained engagement. The cost of providing the VOICES service is approximately £9,281 per customer.
- Ascribing costs to police, court and hospital services alone shows that around third of the running cost of the service is mitigated by reductions in the five health and criminal justice indictors used in this report alone. This data provides a partial picture, dependent on the data provided to VOICES by the police and the NHS locally. It is likely that further reductions in costs could be shown if data were collected, or estimates developed, about nights in prison and days as a mental health inpatient before accessing VOICES, to compare with contact while customers are working with the team. It is also likely that people with multiple needs require a more costly level of criminal justice and health service than the population overall – for example, they might require medical attention when spending the night in custody. There is a clear case that preventing these interactions reduces the burden on services and potentially the cost of services.
- Analysis of data for 13 customers where eight consecutive quarters of data (two years) was available revealed that reductions in their contact with services were not only maintained, but also increased in the second year of service coordination. For this group the reduction in year one was similar to the cohort overall (£3,837), but the reduction in year two was £9,003. This demonstrates the importance of investing in intensive, personalised support for a sustained period to enable people to consolidate and build on the changes they make in their lives and to ensure the service is appropriate to the often non-linear progress made by people who face multiple challenges in getting the support and accommodation they need.
- Drops in service use are not consistent across the cohort of 56 customers; topline figures hide a complex picture. For example, there is considerable variation in the level of service contact across the cohort with some customers seeing an increase in service contact during the observation period. In nine cases there is a very large decrease in overall service contact costs (over £10,000) and in two cases there were increases of over £10,000. For most customers changes were less extreme. For all five types of service contact explored, more people experienced reductions than increases.

In the Health and Criminal Justice Services

there has been a drop of

£206,625

for the cohort

£3,131

per person

13 Customers with 8 consecutive quarters

Reduction in contact costs Year 1

£3,837

Reduction in contact costs Year 2

£9,003

Stoke-on-Trent
2,155 people with 2 or more needs

Reducing service contacts in

Stoke-on-Trent could save

£3.4m

per year

- In Hard Edges 2018 it was possible to undertake some individual analysis on gender differences in service contact and also to explore changes in service contact for a cohort who had received a Housing First service for a sustained period. Results should be treated with caution due to the low base numbers of women (18) and Housing First customers (17). Key findings from this analysis were:
  - Women experience less of a drop in contact with the criminal justice and health services than men after engagement with VOICES; the largest difference is in hospital inpatient stays.
  - Customers who have a sustained period with a Housing First service experienced higher drops in contacts with health and criminal justice services than the cohort as a whole.
- The cohort analysis was designed to fit with methodology used in the Lankelly Chase report, Hard Edges. All those in the VOICES customer cohort including in this report fall into the SMD2 and SMD3 groups from the report, which means that they have been experiencing multiple needs in the areas of offending, substance misuse and homelessness.
- It should also be noted that other areas not included in the analysis in this report or Hard Edges are important factors in the experiences of people facing multiple disadvantage, for example, domestic violence. The overall population of people facing multiple disadvantage is highly complex and diverse, making categorisations and definitions imperfect, even where they are helpful in facilitating analysis and improving our understanding of the issues.
- Hard Edges estimates that there are 2,155 people in Stoke-on-Trent who have a similar needs profile to the research cohort – i.e. two or more needs.[2] If the same reduction in service contact across the five indicators used in this report could be realised for half of this group (1,078) through better coordination of services, the cost reduction could be £3.4 million per year of service contact. This is an illustrative estimate and should be treated with some caution. For a more detailed picture, the costs of support services required to achieve this would need to be taken into account, as would reductions in the use of other costly services including prison and mental health inpatient services and the cost benefits of providing the service that are not included in this analysis due to lack of data – for example, the economic benefits of customers gaining employment once receiving support and more settled.

[2] Bramley, G, et al (2015) Hard Edges, Mapping Severe and Multiple Disadvantage, Lankelly Chase, Appendix J: a mean average of the two estimates for SMD3 have been used to establish the estimated number of people in the SMD2 and 3 categories.

2 About the organisations involved in this report

2.1 VOICES: Voices of Independence, Changes and Empowerment in Stoke-on-Trent

VOICES seeks to empower people with multiple needs to change their lives and to influence services. VOICES is a partnership project delivered by an operational team that coordinates a range of services and stakeholders around people with multiple needs. Part of its mission is to change systems through casework and assertive advocacy to help people access appropriate services. Even within the partnership this is not always easy. Work needs to be done to understand the drivers behind these barriers, which may be, for example, skills-based, culturally constructed, or process driven. Central to all the work undertaken are the voices of those with lived experience. The Expert Citizens supported by VOICES have formed their own Community Interest Company and are central to the progress of change in the city and the legacy of the VOICES project.[3]

VOICES customers are people whose lives have been seriously affected by events and conditions over a prolonged period. They may present frequently at emergency health care facilities, drug and alcohol services, homelessness services or mental health services. Some are well known to 'blue light' services such as the fire, police, and ambulance services. Labels such as 'chaotic', 'hard to reach', or 'frequent flyer' may have been applied to VOICES customers by some services. There may also have been specific exclusions from services in the past. Some VOICES customers even feel that services have given up on them.

VOICES is funded by the National Lottery through the Big Lottery Fund as part of Fulfilling Lives: Supporting people with multiple needs. Stoke-on-Trent is one of 12 areas to share £112m over eight years. The programme is aimed at testing alternative approaches to tackling multiple needs.

2.2 Lankelly Chase

Lankelly Chase aims to bring about lasting change in the lives of the most disadvantaged people in our society. In 2015 the foundation published Hard Edges, Mapping Severe and Multiple Disadvantage in England, a ground-breaking report drawing together previously separate datasets from homelessness, offending and substance-misuse treatment systems. The report also takes into account available data around mental health and poverty. It explores the geographical spread of SMD and the costs of failing to effectively meet the needs of those experiencing it.

The heart of Lankelly Chase's work is to challenge the fragmented approach often taken to dealing with multiple problems – promoting a holistic approach and services that connect with people, and work with them, rather than seeking to impose a 'sticking plaster' solution on individual problems.

Lankelly Chase has contributed non-financially to this project with their continuing support to the researchers' efforts to draw on Hard Edges in the analysis of data collected by VOICES and by reviewing and inputting on the content of the report.

[3] For more information about the Expert Citizens see www.expertcitizens.org.uk

3 Background

3.1 Background to the analysis and definitions

VOICES works with people who are experiencing multiple and complex needs as defined by the Big Lottery for the Fulfilling Lives programme:

'For this investment we have defined people with multiple and complex needs as individuals who experience at least two of the following: homelessness, re-offending, problematic substance misuse and mental ill-health.'

The Hard Edges report uses quantitative data on the following areas of severe and multiple disadvantage (SMD): homelessness, offending and substance misuse.[4] Data was taken from the large datasets available in these areas and was used to group people accessing services into categories: SMD1 (appears in one dataset), SMD2 (appears in two datasets), and SMD3 (appears in all three datasets). Other areas of need were considered in the report, including mental health, but suitable data was not available for inclusion in the main quantitative analysis.

'The extreme nature of SMD, as defined in this report, was often said to lie in the multiplicity and interlocking nature of these issues, and their cumulative impact.'

Hard Edges report, 2015, p11

Hard Edges developed an index of local authorities with the highest and lowest prevalence of SMD based on three national data sources for England from 2010/11. Stoke-on-Trent is ninth on the list, with an estimated 4,975 people falling within the SMD1-3 categories and 2,155 in the SMD2 or 3 categories. This was unsurprising to stakeholders involved in the VOICES partnership.

VOICES has worked hard to capture high-quality data about the service interactions of their customers; this illustrates their level of need and also, potentially, provides a source of evidence about the impact of the VOICES service on customers.

3.2 Aims of the research

The Hard Edges report had great resonance for organisations in Stoke-on-Trent supporting people with multiple and complex needs. People within the VOICES partnership wanted to explore the idea of 'Hard Edges' in Stoke-On-Trent, drawing on the methods and findings from the original report to deliver financial analysis. VOICES developed a project to:

- Create meaningful ways to analyse and present the high-quality data collected

[4] Bramley, G, et al (2015) Hard Edges, Mapping Severe and Multiple Disadvantage, Lankelly Chase, Appendix J.

by VOICES, drawing on the Hard Edges SMD model and findings.

- Develop the evidence about the impact of VOICES and the potential for service coordination efforts to reduce service contact costs resulting from negative events (e.g. health crises or arrests).
- Share the experience of gathering and analysing data for the interest of others working in this area.
- Promote a robust and transparent approach to looking at costs data in relation to multiple and complex needs.
- Engage people in this area of work and seek ideas for taking the analysis forward.

3.3 Why costs?

3.3.1 The benefits of cost measurement

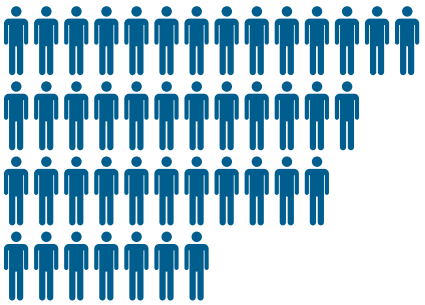
Services often seek to describe their impact in terms of 'costs' or 'cost savings'. Cost-benefit analysis and social return on investment (SROI) analysis are viewed as good ways to attract the interest and support of commissioners and central government. These types of analysis can help services describe their value or contribution to society in a more rounded and accessible way than outputs or outcomes data alone, and they can help to make the case for investment with 'spend to save' arguments.

This report focuses on service contacts, which VOICES aims to reduce through its work. They are interactions with services that usually reflect a negative event related to a person's health problems and offending.

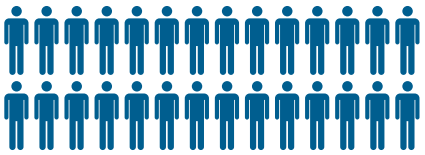
3.3.2 The risks of cost measurement

There is a danger that presenting the costs of service interactions implies that recipients of services are a 'burden' or 'problem'. However, many service interactions experienced by people with multiple needs result from 'failure demand'. This refers to where the failure to effectively meet the needs of someone who has both a drug and a mental health problem creates avoidable demands on accident and emergency (A&E) and police services. These demands are created when, for example, an individual experiences a mental health crisis, self-harms or commits crimes associated with addiction and requires a police or ambulance call out.

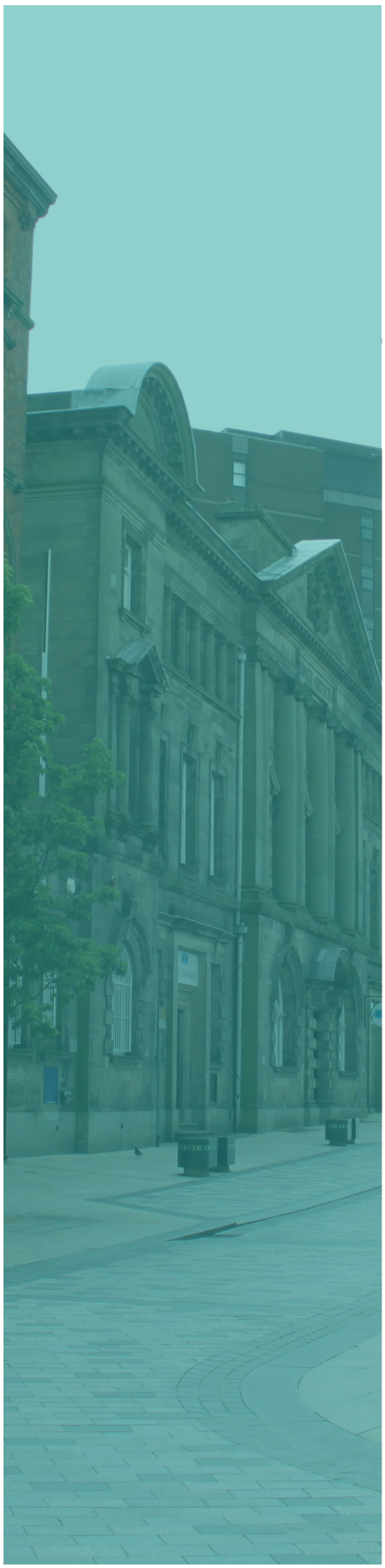
If systems worked better for people with this combination of problems, these expensive service interactions could be avoided. Furthermore, the contribution of people with multiple needs to communities would increase – for example, people could go into employment or become volunteers. It is also possible that there is a 'contagious recovery' effect, which means that one person making positive changes in their lives, such as desisting from drug use, increases the likelihood of others doing the same.



4,975
people in SMD1-3



2,155
people in SMD2-3



Another risk highlighted by the VOICES team is that cases where costs are not reduced could be viewed as less valuable than those where a cost saving can be identified. It is important to recognise that in some cases addressing multiple and complex needs will result in an increased cost in terms of health and mental health services, especially where these needs were previously hidden. The correct approach to addressing multiple and complex needs and supporting people towards fulfilling lives will not always result in reduced costs.

Supporting people with high levels of need takes time; changes may not be seen in the first 12 months of working with an individual or they may take steps forward and backwards in areas such as desistance from crime and drug use over a long period. This data shows that, if a cohort of people with multiple needs are provided with support, for many of them, and overall as a group, negative costly events will reduce. It does not assume that this kind of linear progress will be made for each individual the service works with.

3.4 This report

The findings presented in this report, Hard Edges 2018, help to make the case for addressing the barriers faced by people with multiple needs in accessing the right support and making changes in their lives. It shows how the investment made by the Big Lottery in VOICES has resulted in a reduction in costly service interactions stemming from negative events such as an arrest or court appearance. It is not SROI analysis, which seeks to measure and describe the value of a project in a very broad sense using a financial framework and working out the overall value-to-costs ratio of a project. SROI analysis would take into account the positive contribution of customers after receiving support from VOICES and also the reduced impacts on communities of crime and addiction.[5]

[5] For more information on SROI, see Cabinet Office (2012) A guide to Social Return on Investment and Big Lottery (2014) Well being programme: an introduction to Social Return on Investment.

4 Methodology

4.1 Overview of approach

The analysis was undertaken using the following methodology:

1. Identify a cohort of people who have multiple and complex needs, drawing on Hard Edges and Big Lottery definitions.
2. Use the high-quality data secured by VOICES to compare the number of service interactions in this group during a period before they engaged with VOICES (period A) to the number of interactions during a sustained period of 12 months of engagement with VOICES (period B) and, where possible, also a second 12 month period (period C).
3. Consider, if applicable, why there is a difference in the levels of service interaction before and during engagement and thereby demonstrate the impact of VOICES.
4. Ascribe costs data to interactions before and during engagement with VOICES.
5. Present changes in the costs and the likely reasons for these to make the case for service coordination.
6. Extrapolate data to draw conclusions about the potential reduction in service contact for people with SMD in Stoke-on-Trent if services were better coordinated for all people with SMD.
7. Share learning about gathering and analysing data about interactions with services and costs.

The analysis draws on data collected by VOICES between Q3 2014/15 to Q2 2017/18.

4.2 Data collection

CFE Research and the University of Sheffield are undertaking the national evaluation of the Fulfilling Lives programme.[6] They provided a framework for Fulfilling Lives projects to collect data about customers. VOICES was asked to gather information about customers' interactions with a range of services in the 12 months before they joined VOICES, and then each quarter while working with VOICES. A customer profile is also collected, including details of their support needs and demographic information. This is based on an assessment undertaken at the earliest appropriate opportunity in a customer's journey with the service. In addition, a New Directions Team (NDT) assessment is conducted with customers and data from these assessments is provided to the national evaluators.[7] The NDT assessment covers a wide range of areas relevant to people with multiple and complex needs, including engagement with services, housing, stress and anxiety, and self-harm. Information sent to evaluators does not include any names or identifying information and is only passed on with the customer's consent.

VOICES has had great success in collecting detailed data and has been recognised as a good practice example.[8] The key features of the VOICES approach to data collection are:

- ***Consent:*** To be included in the dataset customers need to have provided their informed consent to VOICES. The team request consent at an appropriate point – as soon as possible in a case, but not before rapport and trust have been developed sufficiently. Nearly all customers have given fully informed consent; in some cases people have waited for a while until they feel comfortable with providing their consent to share data. Where customers initially refuse or are unable to decide whether to consent, the issue is revisited in a sensitive way to ensure as much data as possible is collected.

[6] More information about the national evaluation of the Fulfilling Lives programme can be found here: http://mcnevaluation.co.uk/evaluation/overview.
[7] Also known as the 'Chaos Index'. More information about NDT assessment can be found here: http://www.meam.org.uk/wp-content/uploads/2010/05/NDT-Assessment-process-summary-April-2008.pdf
[8] Gibbs, N (2015) Good Practice Guide: An introduction to sharing service contact data, CFE Research.

1 year

of data from

56 people

2 years

of data from

13 people

- ***Robust data:*** The data used in this report is provided directly from relevant partners, as opposed to relying on the customers' recollections of events.
- ***Partnerships:*** VOICES has undertaken extensive partnership-building work with services that can assist them in collating data – for example, the police and NHS services. The quality and timeliness of data requires significant input from several key individuals. More recently (subsequent to the final quarter of data used in the analysis in this report), VOICES has been unable to secure data on criminal justice contacts because the individual in the police force who had kindly supported this work left their role. Work is being done to secure data again, including exploring a more automated approach to sharing data from an information team, which could ensure a more resilient arrangement.

4.3 Analysis

The data returns submitted to CFE Research were collated to create an Excel database for this analysis. Data from customer profiles, historical data and service data from four quarters were combined in one spreadsheet. Checks were undertaken to ensure that customers met the definition of 'multiple needs' and that they were not absent from the community due to being in prison for a sustained period during the observation window.

In Hard Edges 2016 a cohort of people who started working with VOICES in a specific period was identified. In Hard Edges 2018 the analysis is based on any consecutive 12 months working with the project, and the previous 12 months. This approach of identifying a 'before and after' observation period for each customer provides more cases for analysis, resulting in a year of data for 56 people for analysis. In addition, there were 13 customers for whom 24 months of consecutive data was available. For this report, the data was also analysed by gender and specifically for those who had received a Housing First service as part of their Service Coordination.

4.4 Interviews

Interviews were undertaken with VOICES customers to explore the link between VOICES' work and the reduction in service contacts from the customer's perspective, and in more detail than the data alone allows. Four people were interviewed from the research cohort. All the people interviewed had significantly reduced contact with health and criminal justice services since working with VOICES; they are therefore viewed as illustrative of people whose service interactions declined, rather than representative of the whole cohort. Case studies are included throughout the report.

5 Findings: 12 months of Service Coordination analysis

5.1 Overall level of service contact by the cohort

This analysis looked at the following data for period A (the 12 months before interacting with VOICES) and period B (12 months during engagement with VOICES):

- Nights in police custody
- Hospital inpatient episodes
- Arrests
- A&E attendance
- Magistrates' court proceedings.

All of these events relate to the customer's complex needs and are usually the result of a recent negative event – a criminal offence, an accident or a health problem. VOICES seeks to reduce these negative events and consequent service contacts by helping customers to engage with preventative and community-based services. For example, VOICES might support a customer to access drug services and thereby avoid the use of acute health care due to a drug overdose.

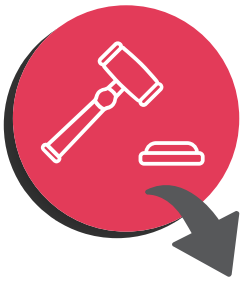
It is important to note that the analysis does not consider all areas of service use: this work focuses on the areas where 'service level' data has been routinely collected. Although the areas explored are good indicators of how far a person's multiple and complex needs are being addressed, they are selected partly because the data is available and do not provide a complete picture. Other areas where there is likely to be a reduction in service contact across the cohort were identified through qualitative evidence from interviews and feedback from the VOICES team as follows:

- Mental-health inpatient episodes
- Custodial sentences
- Use of rough sleeper services
- Repeated new benefits claims and related administration
- Evictions from supported housing and other types of accommodation
- Instances of behaviour that could be regarded as antisocial, e.g. begging and street drinking.

Figure (a) shows that the number of instances of each type of service contact reduced from period A to period B when looking at the cohort as a whole. The largest reductions were in magistrates' court proceedings, which went down by 185 proceedings between the two periods, and arrests, which dropped by 131 between the two periods.

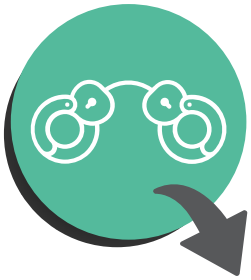
Largest reductions...

Magistrates' Court Proceedings



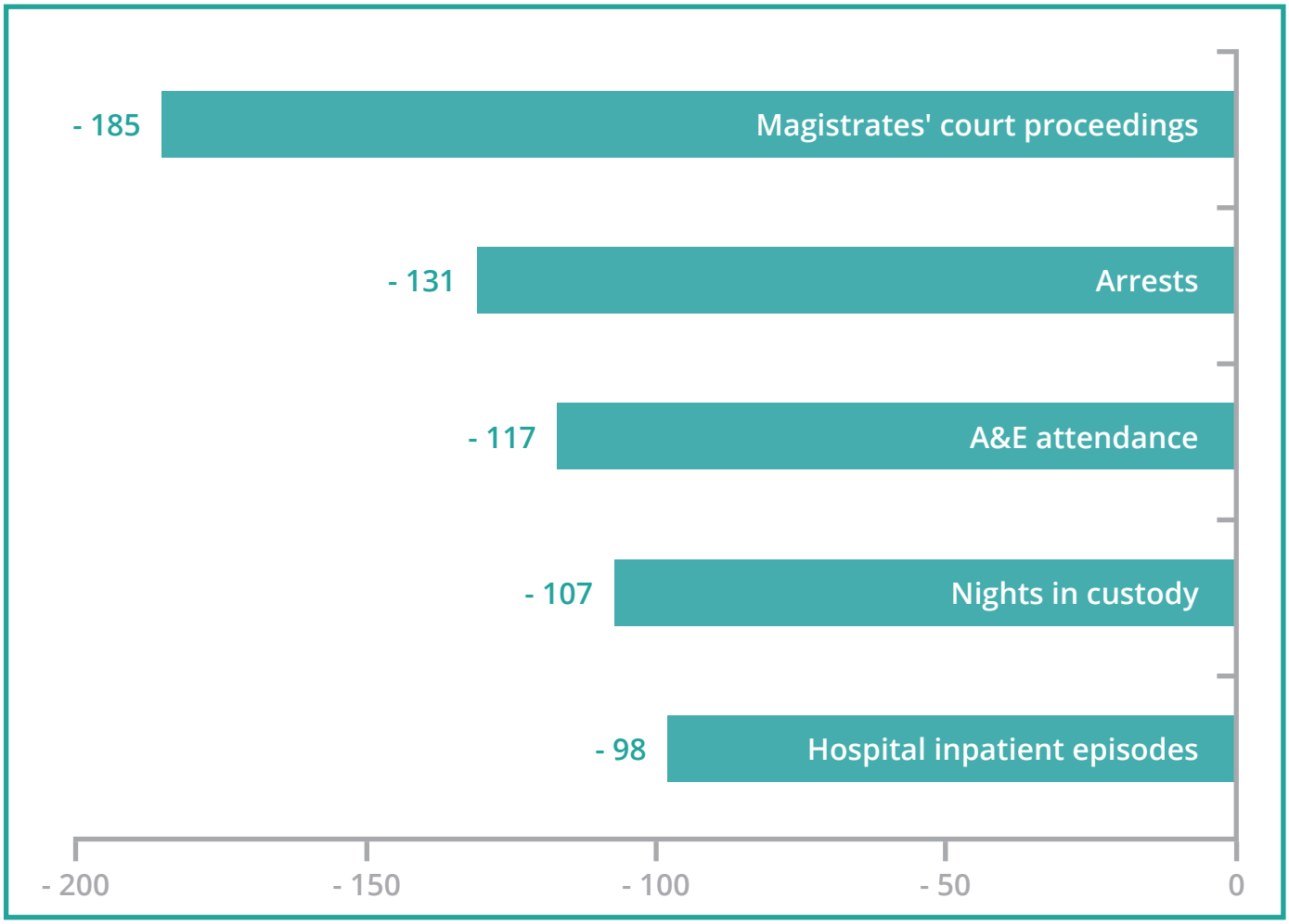
down by 185 between the 2 periods

Arrests



down by 131 between the 2 periods

Figure (a) Difference in service contact for the whole cohort between period A and period B



Base: 56 customers

Case study: Thomas

Thomas has a history of time in prison, homelessness and drug use. When he last left prison he had no fixed abode, and ended up squatting and rough sleeping. He sustained a serious wound on his foot, which is an ongoing health issue due to ulceration and severe pain. He describes how at that point he was not engaged with any services at all, having 'burnt his bridges' through anti-social behaviour and being in a 'bad place' with both his physical and mental health. His offending was linked to drug use and homelessness and included non-serious acquisitive crime.

Looking at data collected by VOICES, Thomas' case shows a clear downward trend in terms of contact with health and criminal justice services. For example, in the 12 month period prior to working with VOICES he was arrested 12 times and spent 28 nights in police custody, compared to three arrests and no nights in custody in the 12 months after. In the 12 months before engaging with VOICES he attended A&E 10 times compared to three times after.

VOICES took a Housing First approach in Thomas's case, using supported housing so he was able to move from rough sleeping straight into his own self-contained flat. This approach provided the foundation for maintaining a benefits claim and a script:

'Things get easier when you have somewhere to live. It's no joke; it's hard work but when you have somewhere to live it's not worth losing it. [I've] never had much help off hostels. It was [my] own place that I needed. I was always evicted or I would go to jail.'

Thomas' worker identified the key elements of maintaining this progress as ensuing that Thomas' benefits are in place and his script maintained, as well as supporting him to access nursing services for his foot and adhere to probation appointments. While the statistics show that there has been great progress in terms of A&E attendance and arrests, Thomas still faces many challenges and needs ongoing intensive support. At the time of the interview Thomas was awaiting a social care assessment to see if he would be eligible for support to ensure a comfortable and clean home environment.

Thomas feels he has made progress in terms of his offending and becoming more settled, having lived in his accommodation for two years at the time of the interview. Having started a journey with VOICES of re-engaging with services, he is now accessing a range of support. He also feels that having one trusted person to help him has been key to moving forwards.

'Support and help makes it a lot easier when someone has got your best interests in mind – someone who cares.'

Cost of service contact for cohort was

£206,625

LOWER

in period B than in period A

An average reduction of

£3,131

Per customer in a year

5.2 Applying costs to reductions in service contact

In figure (b) on page 17, costs are ascribed to service contact. Nationally available costs were used and are referenced below the data table. It shows that the cost of service contact for the cohort was £206,625 lower in period B than period A, an average reduction of £3,131 per customer in a year.

The VOICES Service Coordination team cost £445,525 to run in year one. The team works with 48 clients per year, which equates to a cost of £9,281 per customer. More than one-third of the running costs of the service are mitigated by the reductions in contact with police, magistrates' courts and hospital services. If data could be collected for other service contacts such as nights in prison and days as a mental health inpatient, and incorporated into the analysis, it is likely that the cost reduction would be far greater.

The Hard Edges report estimates that there are 2,155 people in Stoke-on-Trent who have the same needs profile as the research cohort (two or more needs). As an illustrative example of the potential impact of meeting the needs of people with SMD, if the same reduction in service contact could be realised for half of this group (1,078) through better coordination of services, the cost reduction could be £3.4 million per year of service contact across the five indictors used in this report alone. This figure is speculative, but the data overall contributes to the evidence that investment in improving support to people experiencing SMD is likely to reduce the number of arrests and A&E presentations, as well as helping people towards better outcomes such as sustaining a home.

The results of Hard Edges 2018 show less of a reduction in costs than in Hard Edges 2016. It is likely that the first customers taken onto the VOICES caseload were those who were high profile in the city and had the highest levels of contact with services. Analysis shows that those with the highest levels of contact with services tend to see the greatest drops in contact once engaged with VOICES. Hard Edges 2016 indicates that there is a need to test the initial figures on a larger cohort over a longer period.

[10] Bramley, G, et al (2015) Hard Edges, Mapping Severe and Multiple Disadvantage, Lankelly Chase, Appendix J: an average of the two estimates for SMD3 has been used to establish the estimated number of people in SMD2 and 3.

Figure (b) Service contact and costs for whole cohort

	Period A – count	Period B – count	Difference between A and B	Cost per event/ episode	Overall cost change
Magistrates' court proceedings	345	160	-185	£128	**-£23,680**
Arrests	285	154	-131	£336	**-£44,016**
Nights in custody	223	116	-107	£152	**-£16,264**
A&E	435	319	-116	£148	**-£17,168**
Hospital inpatient nights	259	161	-98	£1,075	**-£105,350**
Total					**-£206,478**

Source of data used in 'per unit' cost estimates

Data	2016 Source	Notes
A&E	NHS 'Combined costs collection' 2017. 2016/17 figures https://improvement.nhs.uk/uploads/documents/Reference_costs_collection_guidance_201617	Assumes no admission (because this will be captured by inpatient stays)
Hospital inpatient	NHS 'Combined costs collection' 2017. 2016/17 figures	An average of the following types of stay is used: elective inpatient, non-elective inpatient (long stay) and non-elective inpatient (short stay)
Arrest	Cabinet Office cost calculator – accessed January 2016	Assumes caution and no arrest
Nights in Custody	The Dorset Echo – Freedom of Information request July 2015, accessed February 2016.	Accommodation, food and staffing costs for Dorset Constabulary FOI request
Magistrates' court proceeding	Crown Prosecution Service – Scales of Cost 1, September 2009	Assumes 90% of proceedings result in an early guilty plea (the least expensive, but most common type of case with the customer group) and the remaining 10% are spilt across the following: summary guilty plea, summary trial, either way plea, either way trial.

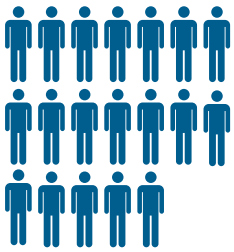
5.3 A two-year view

To what extent the impact of VOICES and partners' work can be maintained over time is an area for ongoing investigation through the local and national evaluations of the Fulfilling Lives programme.

There were 13 customers in the dataset who had data recorded for eight consecutive quarters. On average this group had a similar reduction in service contact costs in the first year of working with VOICES compared to previous 12 months; however, the reduction then increased further in the second consecutive 12 months. The reductions were £3,837 for the first 12 months (fairly similar to the drop observed across the larger cohort) and £9,003 respectively.

This indicative data from a small number of cases suggests that longer-term needs and exclusion take more than a year to resolve. In the first year of engagement, unmet health needs are often identified and an increase in service contact with the NHS may be experienced; the impact of offending, and the habit of offending, may still be felt (for example, in court appearances and ongoing acquisitive crime related to drug use). This initial data suggests that it may be in year two (and beyond) that larger reductions in service contact costs are observed as positive changes in offending behaviour are embedded in customers' lives, and access to healthcare results in better health outcomes. VOICES Service Coordinators also point out that it takes time to develop engagement with a customer so changes cannot be expected in the first few months of contact. Overall, this analysis supports VOICES staff and customers view that working with people with multiple needs in an ongoing and flexible way is key to success and progress can be built upon over longer periods.

13 customers with 2 years of data



Saw a reduction in service contact costs of

£3,837

in first year

Followed by

£9,003

in second year

Figure (c) Service contact and costs for 13 clients over two years

	Period A – count	Period B – count	Period C – count	Difference between A and B	Difference between A and C	Cost per event/ episode	Change year one	Change year two
A&E	188	144	51	-44	-137	£148	-£6,512	-£20,276
Arrests	80	37	20	-43	-60	£336	-£14,448	-£20,160
Hospital inpatient nights	65	48	8	-17	-57	£1,075	-£18,275	-£61,275
Nights in custody	51	29	15	-22	-36	£152	-£3,344	-£5,472
Magistrates' court proceedings	103	46	26	-57	-77	£128	-£7,296	-£9,856
Total change							-£49,875	-£117,039
Average change							-£3,836.54	-£9,003

Case study: Barry

Barry started drinking as a teenager, having struggled to settle into secondary school and been expelled. Now in his 30s he describes nearly 20 years of being in-and-out of hostels, spending time rough sleeping and struggling with alcohol and mental heath issues. He has also spent more settled periods in his own accommodation.

Data collected by VOICES shows that, in his first year of engagement with VOICES, Barry's A&E attendance dropped slightly from 29 to 26, but in the second year of engagement, a much greater reduction to 14 attendances was recorded. Barry's inpatient nights increased from eight to 11 once working with VOICES, but again in year two a considerable drop to just three nights was observed. In each of the three observation periods, Barry has been arrested two or three times and has spent one night in police custody.

In the past Barry often attended A&E due to anxiety and issues relating to alcohol use (for example, collapsing and vomiting blood). The Alcohol Liaison Nurse introduced him to VOICES during a stay in hospital. His offending was also related to heavy drinking.

'I was going up A&E. I was feeling weak quite a lot – I would start getting chest pains. It was more anxiety but it was worrying me that much... I would be ringing an ambulance – sometimes I would be admitted then I would be daft when I came out [and] I would start [drinking all] over again, when I had done all the hard work [detoxing in hospital] – Drunk and disorderly was the main one for going to court – I also breeched probation. [I remember saying] I wanted to go into prison to get off the drink – I went back on it the day I came out.'

Barry acknowledges that the hostel team were helping him 'as best they could' and showed concern for his situation, but he needed a different approach after 18 years in and out of hostels. He would leave a hostel place if he became overwhelmed or frustrated and sleep rough. VOICES was able to take a flexible and proactive approach to linking Barry into other services. This was a key area of work as previously he had forgotten or not felt confident or motivated enough to attend services. This work coordinating drug and alcohol, health and mental health services prepared the ground for a point when Barry became very ill, which provided a motivation for more radical changes in his life.

'I was in hospital... Steve from VOICES came up to see me a few times. They gave me three weeks to live in the end. I thought I have got to change my life round now and I did it – it's not been easy [given] how long I have drank [for]... I quit at that point.'

Barry is now living in supported accommodation and describes a network of support he engages with including a drug and alcohol worker who comes to see him, mental health support and medication for anxiety, and more recently a peer mentor arranged by VOICES.

'Things are going okay for me at the moment. I'm living in supported accommodation... My anxiety is going down quite a bit. I am on medication and seem to be a lot more calmer than at first when I moved in here when I was on edge quite a lot – I think I'm starting to realise now that there is more to my life than drinking and sleeping rough. I have got things to try and go for – one is seeing my son and trying to live a normal life instead of being unwell a lot through drinking and sleeping rough.'

5.4 Patterns in the change of service contact

The top-line reductions in service contact can hide a complex picture revealed by looking in more detail at patterns of service contact within the cohort. Figure (d) below shows that for each type of service contact some people saw a reduction, some remained static, and some saw an increase during their period of engagement with VOICES.

In terms of service contact related to criminal justice, more than half of customers saw a drop in service contact: this covers arrests, magistrates' court appearances and nights in police custody. The picture in relation to health services is more mixed. With A&E attendance similar numbers of customers had decreases (23) and increases (19). The decreases tended to be greater than increases, hence the overall reduction in A&E attendances observed in figure (a). 10 customers had increases in nights as a hospital inpatient, compared to 15 who had decreases.

Analysis of increases and decreases across the cohort hides a further area of complexity: those with the highest levels of service contact tend to see the greatest reductions.

Few people had no contact with services before or during engagement with VOICES, which shows that the data captures the relevant areas of service contact for the cohort. Notably though, in the case of hospital inpatient episodes, 23 of the 56 people included people had zero contacts in both periods.

In qualitative research with VOICES customers and staff members, a recurring theme is the non-linear nature of progress made in customer's lives. For example, one of the interviewees for Hard Edges 2018 had been to court recently having had a period when he had not offended and as a result his use of public transport is curtailed for a period making accessing services more challenging. In another case study for this report, the customer experienced a relapse into alcohol use post detox but went on to dramatically reduce her drinking for a sustained period after another approach (home detox) was tried. A customer who has been interviewed three times over four years, experiences ongoing 'steps forward and backwards' related to his mental and physical health; his journey with VOICES has included losing and regaining accommodation and hospital stays.

The flexible, outreach approach of VOICES Service Coordination means that the service can respond to problems and crises as they arise – for example, spending time locating a customer or discussing the next accommodation option if a placement or tenancy has broken down. The service is not linked to staying in a particular accommodation project or attending a particular service regularly, which means that the team is able to develop trust with customers and provide continuity regardless of the ups and downs in customers' progress.

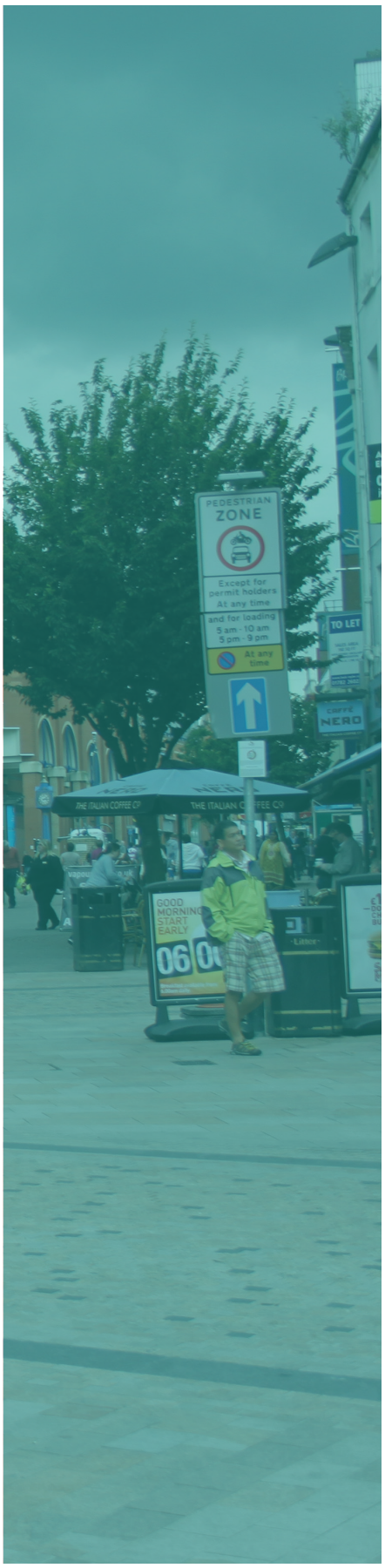


Figure (d) Spread of static, increased and reduced service interactions, average change and range of change

	Increased	Unchanged	Reduced	Zero interactions	Average change	Range of change
A&E	19	7	23	7	-2.1	-44 to +10
Arrests	12	6	39	9	-2.5	-22 - +5
Arrests	11	6	31	8	-2.3	-22 to +5
Nights in custody	15	1	35	15	-2	-28 - +4
Hospital inpatient episodes	10	8	15	23	-1.8	-40 to +17

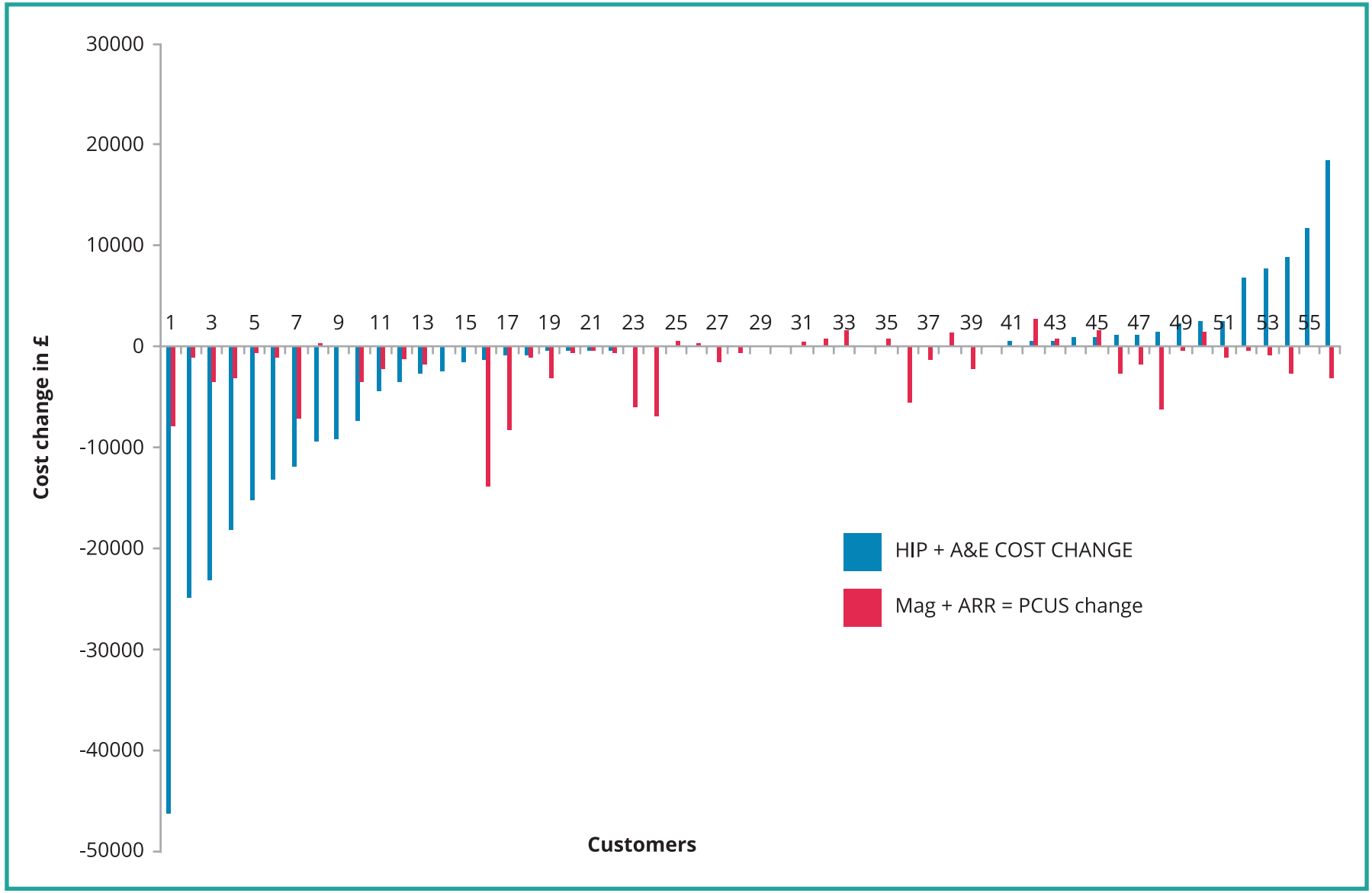
5.5 The spread of service contact across the cohort

Figure (e) shows that the use of services varies widely across the cohort. There are 12 cases that stand out; in nine there was a reduction in costs of more than £10,000 and in two cases there were increases of more than £10,000. In three of the12 cases with the largest reductions, customers are included in the cohort of 13 people where there is data for two years.

The reason for increased costs in the above cases relates predominantly to health service contact, weighted towards hospital inpatient stays, which are the most expensive interaction included in the analysis. The VOICES team reports that in some cases customers are more likely to identify and address previously hidden or ignored health problems once they are engaging with VOICES, which can result in increased hospital contact. It is also important to recognise that a proportion of the multiple needs cohort are likely to develop long-term health and care needs as they get older due to the impact of homelessness and other needs on their physical and mental health.

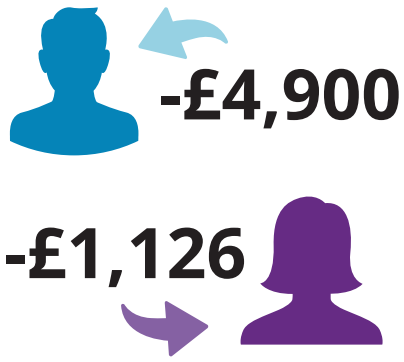
In this analysis the impact of offending indicators on overall costs is far lower than for health indicators. However, desistence in offending over the medium to long term is likely to result in fewer costly prison sentences, a factor which it is not possible to explore at the current time as earlier data on nights in prison was not collected. A reduction in crime perpetrated by the cohort also results in fewer victims and lower social and financial costs associated with the consequences of crime.

Figure (e) Overall increase/decrease in cost of service contact, for health and criminal justice indicators, by case (ordered by cost difference in health indicators)



6 Analysis by gender

Service contact costs



The data was analysed by gender for 18 women and 38 men who had data collected for 12 months prior to accessing VOICES and 12 months during engagement with VOICES. Overall the service contact cost reduction for women is far lower than for men, -£1,126 for women compared to -£4,900 for men – see figures (f) and (g).

Analysing the percentage drop in each type of service contact reveals that for each type of service contact the percentage drop in contacts was lower for women than for men. For A&E attendance, arrests and nights in police custody the differences were minimal (2% to 7% less of a reduction for women overall compared to men). For magistrates' court appearances the reduction for women overall was 9% less than for men. For hospital inpatient stays the difference is more marked: the number of nights for men as a whole drops by 42%, but for women the decrease was just10% So, much of the difference between the genders is accounted for by the lower reduction in hospital inpatient nights. It is still notable, however, where hospital inpatient data is excluded, that the reduction is still far greater for men than for women – £947 for women and £2,213 for men.

It is recognised that the experiences of women with multiple needs differ from those of men, including the issues women face related to domestic violence and sex working, which are more prevalent among women, and the response of services, including whether there are suitable gender sensitive or gender specific services available in a sphere where the majority of service users are men.

Figure (f) Service contact and costs – 18 women

	Period A – count	Period B – count	Difference between A and B	Cost per event/ episode	Overall cost change	% Change
A&E	99	77	-22	£148	-£3,256	-22%
Arrests	52	31	-21	£336	-£7,056	-40%
Hospital inpatient nights	31	28	-3	£1,075	-£3,225	-10%
Nights in custody	41	22	-19	£151.99	-£2,888	-46%
Magistrates' court proceedings	65	35	-30	£128	-£3,840	-46%
Total					-£20,265	
Per person					-£1,126	

Figure (g) Service contact and costs – 38 men

	Period A – count	Period B – count	Difference between A and B	Cost per event/ episode	Overall cost change	% Change
A&E	336	242	-94	£148	-£13,912	-28%
Arrests	233	123	-110	£336	-£36,960	-47%
Hospital inpatient nights	228	133	-95	£1,075	-£102,125	-42%
Nights in custody	182	94	-88	£151.99	-£13,375	-48%
Magistrates' court proceedings	280	125	-155	£128	-£19,840	-55%
Total					-£186,212	
Per person					-£4,900	

7 Housing First customers

An average reduction of

£6,775

Per Housing First customer

VOICES has undertaken extensive work to develop and promote the use of a Housing First approach in Stoke-on-Trent. Housing First projects provide long-term accommodation to homeless people with minimal conditionality but on-going support for as long as they want it. This is in contrast to existing systems for supporting homeless people in Stoke-on-Trent, as elsewhere in England, which generally operate with a transitional phase between homelessness and independent living, usually in hostels or supported accommodation. These 'staircase' approaches are sometimes unsuccessful for people with multiple and complex needs, resulting in eviction or exclusions from hostels, and putting these individuals at risk of long-term rough sleeping.

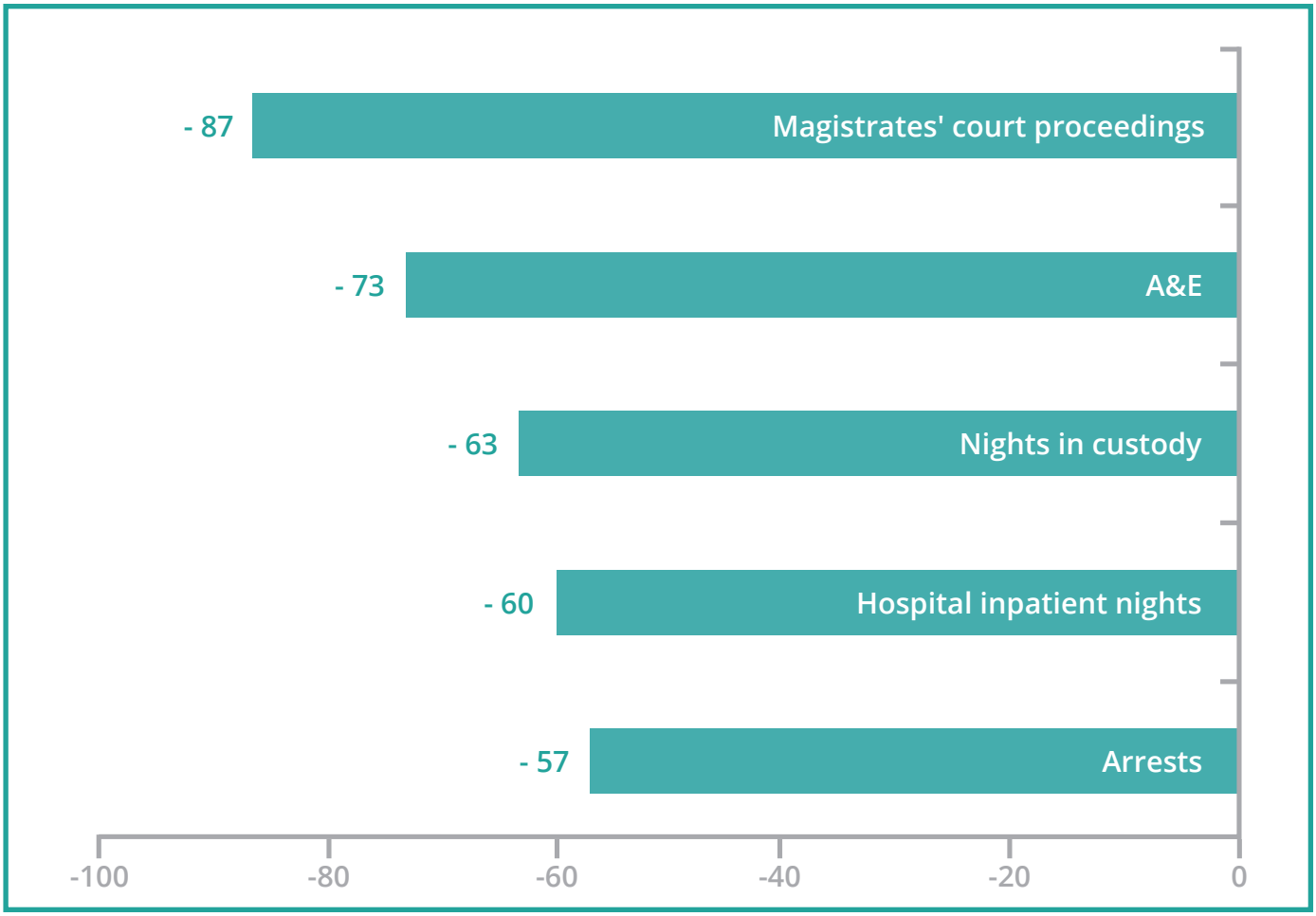
The Service Coordination team has adopted a 'proto Housing First' approach, which draws heavily on the principles of Housing First, but deviates in some aspects – for example, by placing people in self-contained supported housing as opposed to an independent tenancy, and sometime stepping back from support once services are in place and working well for the person. In addition to this ongoing work, VOICES has recently funded a three-year Housing First project under its Systems Change Charter, which created a fund for new systems change projects in Stoke-on-Trent.

There are 17 customers from whom there is data for 12 months prior to engaging with VOICES, who have also had a minimum of 12 months' living in a Housing First placement or are currently in a placement that has been sustained for over a year.

The main source of accommodation is the private rented sector (PRS), as is generally the case for Housing First across England. To provide the long-term accommodation option demanded by the Housing First model, where a landlord ends a tenancy, VOICES sources alternative PRS accommodation for the customer. Some VOICES Housing First tenancies are in supported housing. This is unusual given that one of the principles of Housing First is the separation of accommodation and support. VOICES only considers tenancies in supported housing to be Housing First under certain circumstances: the person must have a self-contained unit and will have moved into this unit from rough sleeping as opposed to via the hostel pathway.

Figure 2016 shows reductions in all types of service contact and an average cost reduction of £6,775 per Housing First customer; this exceeds the reduction observed in the wider cohort of VOICES customers. Findings should be treated with some caution due to the low base. The data does, however, back up the experience of the Service Coordination team that, where an independent tenancy can be secured and sustained with flexible support, other wider outcomes will follow for many people.

Figure 2016 Service contact and costs for Housing First customers (17)



	Period A – count	Period B – count	Difference between A and B	Cost per event/ episode	Overall cost change
A&E	183	110	-73	£148	-£10,804
Arrests	113	56	-57	£336	-£19,152
Hospital inpatient nights	89	29	-60	£1,075	-£64,500
Nights in custody	101	38	-63	£151.99	-£9,575
Magistrates' court proceedings	146	59	-87	£128	-£11,136
Total					-£115,167
Per customer					-£6,774.55

Case study: Kate

Kate was a heavy drinker from the age of 13 and by the time she met with VOICES in her late 20s was struggling with her addiction to alcohol, use of crack and heroin, poor mental health and experience of abusive relationships. Repeated stays in a local detoxification unit were missed opportunities because Kate had no option afterwards but to return to her old drinking haunts, including her family home, where she was surrounded by alcohol. At times she also slept rough.

'I have no qualifications; I was looking after family, brothers and sisters [when I was younger]. Basically it was always drinking – I was with my mum and step-dad and they are alcoholics and obviously there was always trouble with the police with alcohol involved… getting banned from the street and bad accidents… I was on 12 litres a day of cider – 7.5% strong cider.'

Kate attended A&E over 20 times in the year prior to working with VOICES, compared to just twice the following year. She was arrested four times the year prior, but in the following year was not arrested at all. Kate's A&E admissions and contact with the police tended to be related to her alcohol and drug use, or domestic violence. She describes a traumatic experience of being in police custody.

'[When I went to A&E] was when I fainted and had seizures and overdoses on drugs and alcohol… usually there would be an ambulance called… Being arrested was nasty. I was banging on the door, smashing my head off the door and everything. I told them the situation, they knew I was suicidal…'

VOICES took a Housing First approach in Kate's case, securing her a flat with her own front door in a supported housing setting. This avoided the need for her to spend time in hostels where she refused to stay because of previous bad experiences. She first stayed at the Housing First accommodation following her last residential detox, but found this hard to cope with and relapsed:

'I went straight out of detox straight into the flat. It was a shock in the house on my own at night. I was twiddling [my] thumbs… It's the way I am because of my mental health and anxiety and depression. I find it hard being on my own.'

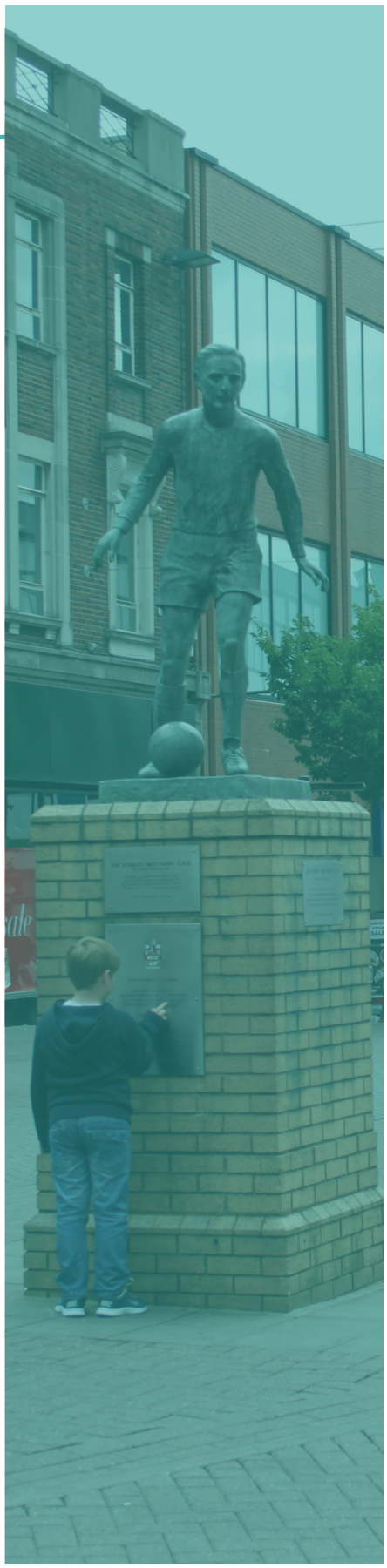
Although Kate was still drinking heavily in her new accommodation, VOICES was able to provide flexible support to ensure she paid her bills and that she was safe and managing her tenancy:

'[Caseworker] would be round "banging on" every morning make sure I was up and all right. She wanted to… 'cos she was concerned abut my drinking… She used to come at nine am on my pay day so we could go in the car to pay my bills.'

Once Kate had become more settled in her own accommodation, she could take a different approach to treatment and decided to do a home detox, which was successful, with Kate just drinking a small amount on occasion, as opposed to daily heavy drinking, and no longer using drugs. Kate feels that several services and people helped her make positive changes in her life, including her partner and his mum, VOICES, her current supported housing provider and mental health services. She describes having her own front door and a network of support and central to making change:

'It's been amazing. I've got my life back. I can do more; I'm more confident. I can talk to people more – not shout at them… I have a wide group of people that I can go to and talk to – I didn't used to go and associate with people, but now I have quite good, big support. [My flat] is very important. Having a place means the world to me – I would never want to loose it.'

8 Conclusions



- Hard Edges in Stoke-on-Trent 2018 begins to demonstrate the financial case for meeting the needs of those with multiple and complex needs and help them achieve better health and desist from offending. A larger sample for this research means the analysis is more robust than that presented in the previous report.
- The data again shows a drop across the five health and criminal justice indicators used in the report for those who work with VOICES for a year and a greater drop for those who work with the service for two years.
- The drop in service contact costs observed in Hard Edges 2018 is lower than those found in the smaller cohort for Hard Edges 2016. This may be because the first customers to be introduced to VOICES when it was launched were those with the highest profile in terms of their long-term support needs around homelessness, addiction etc. People with the highest level of service contacts before working with VOICES tend to see the largest reductions in contact once working with the service.
- The analysis is inevitably incomplete; it represents an attempt to make the best of the data collected and made available to VOICES. There are cost differences not included in the analysis, such as changes in rates of prison stays, mental health inpatient stays and employment. The data analysis does not take into account the benefits felt by individuals in terms of their quality of life and life chances. Case studies illustrate these benefits and also highlight the ongoing challenges faced by those with multiple needs, even where the data shows progress.
- It is important to recognise that the headline figures hide a complex picture of non-linear progress. Some customers experience a great deal of change, while others see minimal or no change in service contact as represented in this analysis. Applying a Service Coordination approach with a cohort of people facing multiple needs is likely to bring about financial benefits overall, but does not guarantee progress for any particular individual. A cohort of people with multiple needs will include some people who have life-long health conditions that will deteriorate over time.
- The greater level of change observed in the second year of working with VOICES for a small sample of 13 people gives an early indication that long-term needs and exclusion require a sustained

effort to address. These findings support VOICES approach of working with people in an ongoing way, though periods of high and low engagement, and including when people have stays in hospital or prison or loose their accommodation. This analysis also raises questions about the extent to which the overall population of people with multiple and complex needs changes overtime – how far people move in and out of this population; the size of new flow into this group and, related to this, how best to manage or extend the caseload.

- The data collection undertaken by VOICES relies on significant efforts across VOICES staff and the VOICES partnership. The fragility of this is illustrated by a period of missing data in some areas following this analysis.
- There are several ways in which the analysis could be developed and taken forward by VOICES, including creating a larger cohort of customers, establishing local costs (rather than relying on national ones), collecting data or creating estimates about the use of mental health inpatient services and time spent in prison, and looking more broadly at the far-reaching benefits of reducing the impact of complex and multiple needs on people's lives.
- The analysis raises many questions about the best way in which to bring about positive change for people experiencing SMD (and how to prevent people entering this group in the first place). An area for consideration is whether there are ways of restructuring services within existing resources to achieve the results indicated in this report. Some approaches to consider in light of VOICES' experience so far are:

  i. Small case loads

  ii. Specific focus on those with multiple needs

  iii. Asset-based approaches to supporting change

  iv. Multi-agency approach to addressing the need of those with very high interactions with costly services; for example, agencies working together to set aside usual access criteria to address a problem.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