

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 third financial analysis of VOICES

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VOICES is a partnership project led by Brighter Futures.

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Executive Summary

1.1 Introduction

- In 2015, Lankelly Chase's Hard Edges report explored the prevalence, nature, geography and costs associated with severe and multiple disadvantage (SMD) in England. Hard Edges defines SMD as a combination of two or more of homelessness, substance misuse and offending, as evidenced by contact with relevant services and systems. Stoke-on-Trent was ranked ninth in an index of the prevalence of SMD across local authorities in England.
- The VOICES partnership was Stoke-on-Trent's implementation of the National Lottery's Fulfilling Lives programme; one of 12 programmes across the country aiming to improve support for people who experience multiple disadvantage, to enable them to better manage their lives. VOICES wanted to explore the idea of 'Hard Edges' in Stoke-On-Trent, and commissioned Hard Edges reports in 2016 and 2018.
- This report builds on Hard Edges 2016 (customers 2014-2016, n=22) and 2018 (customers 2014-2018, n=56), analysing data for all 116 customers across the total VOICES customer base (2014-2020) for whom at least 12 months of data were available. Data were not analysed for 136 customers (out of a total customer population of 252) for whom less than 12

months of consecutive data were available or consent was not provided. Using a framework set up by the national evaluators of the Fulfilling Lives programme, data were collated on VOICES customers' contact with criminal justice and health services before and during engagement with VOICES. We explored changes in service use and associated costs, overall, by gender and for those referred to Housing First.

1.2 Key findings

- During year 1 of VOICES support, analysis of data for 116 customers indicated substantial reductions in service use, with the largest reductions in Magistrates' court appearances and A&E episodes, followed by number of arrests, nights in police custody, and hospital in-patient episodes.
- Applying unit cost estimates to each type of service contact showed an overall reduction from one year of VOICES support of £604,060, with an average reduction of £5,207 per customer.
- Analysis of data for 60 customers supported for at least two years showed that after the first year of support, there were modest reductions (magistrates court appearances, arrests), stabilising of year one reductions (nights in custody, A&E episodes) or increases (in-patient episodes) in service use. Analysis of data for 27 customers supported for a third year showed that, after year 2,

contact with the criminal justice system remained stable, but health service use increased (both planned and emergency). These data showed a non-linear response and a particularly complex picture for changes in health service use over time.

- Overall changes in service use appeared to reflect large reductions in a small number of customers who had the highest level of contact, with a disproportionate impact on the observed overall patterns.
- Data indicated substantially smaller reductions in service contact and costs among female customers compared with males. The marked difference in the cost of changes from pre-support to year 1 (women -£475; males -£7,258) was largely attributable to a small increase in planned hospital care in women and a large corresponding decrease in men. Therefore, what appeared to be a costly lack of a reduction in hospital care in women, could show a marked benefit in terms of better access to planned care in female vs. male VOICES customers, or gender differences in using healthcare when it is available. This requires further investigation.
- In customers referred to Housing First who held a tenancy for at least 12 months (n=11), criminal justice system contact continued to reduce (after the initial reduction from pre-support to VOICES), but patterns of health service use were less consistent. Small numbers are a limitation, but these data gave an estimated reduction in cost of service contact from pre-VOICES

to 12 months of a Housing First tenancy of £11,085 per customer (more than twice that for the overall cohort).

- Objective indicators of service use and cost provide useful proxies for impact on customer need and the potential financial benefit of intervention in terms of demand avoided. However, outcomes do not reflect all relevant areas of service use and related behaviours (e.g., 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, behaviour that could be regarded as antisocial, e.g., begging and street drinking). Nor do they reflect the wider impact on customers' quality of life and experience.
- Hard Edges estimated that there were 2,155 people in Stoke-on-Trent who have a similar needs profile to the research cohort (this is now likely to be higher and will continue to rise). If the same reduction in service contact across the five indicators used in this report were realised through better coordination of services for half of this group (1,078), the cost reduction could be over £5.6 million per year of service contact. A more nuanced analysis would be required to consider the increase in cost of support services required to meet this need, in addition to the expansion of Service Coordinators, and the unmeasured impacts on other services (e.g. prison and mental health inpatient services).

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116

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¹ Bramley G, Fitzpatrick S, Edwards J, Ford D, Johnsen S, Sosenko F and Watkins D (2015) Hard Edges, Mapping Severe and Multiple Disadvantage. London: Lankelly Chase. Available at: <https://lankellychase.org.uk/wp-content/uploads/2015/07/Hard-Edges-Mapping-SMD-2015.pdf>



1. Organisations involved

1.1 VOICES: Voice of Independence, Changes and Empowerment in Stoke-on-Trent

VOICES is a partnership project delivered by an operational team that coordinates a range of services and stakeholders around people with multiple needs. It aims to empower people with multiple needs to change their lives and to influence services. 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 is required 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.

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 was made possible by the National Lottery Community Fund through 'Fulfilling Lives: Supporting people with multiple needs'. Stoke-on-Trent was one of 12 areas to share £112m over eight years to test alternative approaches to tackling multiple needs. The VOICES partnership is funded until March 2022. As part of an overall 'Legacy evaluation', this third and final Hard Edges report presents data for the overall cohort (up to the end of 2020).

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over eight years to test alternative approaches to tackling multiple needs



1.2 Lankelly Chase 2. Background

Lankelly Chase aims to bring about lasting change in the lives of the most disadvantaged people in 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 considered available data around mental health and poverty. It explored 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, and promotes an holistic approach, with services that connect and work with people, 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 analysis of data collected by VOICES.

VOICES works with people with multiple and complex needs, defined by the National Lottery for the Fulfilling Lives programme: 'experience of two or more of homelessness, offending, 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. The authors drew on large datasets available in these areas 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 were not available for inclusion in the main quantitative analysis.

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 was ninth on the list, with an estimated 4,975 people falling within all SMD categories (1-3) and 2,155 in the SMD2 or SMD3 categories. This is in keeping with the deprivation and health profile of the city.

VOICES has worked hard to capture high-quality data about their customers interactions with services within the programme CRM database. These data offer a proxy measure of customer need and potential impact of VOICES.

Building on previous Hard Edges Stoke-on-Trent work, which explored impact from 2014-2016 and 2014-2017, this third and final Hard Edges report presents data for the overall cohort (2014-2020).

“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 impacts”

² Lamb, H. et al. (2019) What makes a difference. Evaluation of Fulfilling Lives: Supporting people with multiple needs. London: The National Lottery
³ Bramley G, Fitzpatrick S, Edwards J, Ford D, Johnsen S, Sosenko F and Watkins D (2015) Hard Edges, Mapping Severe and Multiple Disadvantage. London: Lankelly Chase. Available at: <https://lankellychase.org.uk/wp-content/uploads/2015/07/Hard-Edges-Mapping-SMD-2015.pdf>
⁴ PHE (2020) Local Authority Health Profile 2019: Stoke-on-Trent. London: PHE. Available at: <https://fingertips.phe.org.uk/static-reports/health-profiles/2019/e06000021.html?area-name=stoke-on-trent>
⁵ Rice B. Hard Edges Stoke-on-Trent. Stoke-on-Trent: VOICES; 2016
⁶ Rice. Hard Edges Stoke-on-Trent. Stoke-on-Trent: VOICES; 2018

3. Aims and Objectives

This report aims to explore the overall impact of VOICES (2014-2020) through addressing the following objectives:

- Analyse changes in service contact in VOICES customers (from pre-VOICES to 12, 24 and 36 months of support)
- Analyse changes in associated costs of service contact in VOICES customers (from pre-VOICES to 12, 24 and 36 months of support)
- Explore if these changes differ by gender and in those referred to Housing First
- Present illustrative case studies.



Analyse changes in service contact and associated costs in service contact

12, 24 and 36 months

4. Methods

4.1 Overview

The approach followed that used in the 2016 and 2018 Hard Edges Stoke-on-Trent reports, focusing on changes in the amount of contact VOICES customers had with secondary health care, and the criminal justice system (see 4.2). This focus is because such contacts in those with multiple and complex needs 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. Therefore, the outcomes listed below offer a useful proxy measure for the differences that VOICES service coordination is having to avoid such negative events and their consequences. These data are presented alongside case studies of VOICES customer.

Ethical approval for this work was granted by the Staffordshire University's Ethics Committee.



4.2 Quantitative data

Data were extracted from the CRM database maintained by VOICES of Stoke-on-Trent. Anonymised raw data for consenting customers were provided and processed case-by-case, for the following outcomes:

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

Data were extracted for four 12-month periods:

- Period A - 12 months prior to receiving VOICES support
- Period B - First 12 months of VOICES support, or Year 1
- Period C - Second 12 months of VOICES support, or Year 2
- Period D - Third 12 months of VOICES support, or Year 3

Estimates of the financial cost of service contacts were applied as described in previous Hard Edges reports, with updated unit costs for A&E episodes, hospital inpatient episodes, and magistrates' court appearances (Appendix 1).

Quantitative data subjects

4.3 Customer Case Studies

Customer interviews were supplemented with data from the CRM (where possible) to provide three customer case studies. Members of Expert Citizens identified and recruited customers and conducted semi-structured interviews using a topic guide adapted from that used in previous Hard Edges work. It was considered important that customers were interviewed by people they already knew and trusted, and with who they would feel comfortable and able to speak openly. Those conducting interviews talked through the Participant Information Sheet with each customer and obtained informed consent before the interview started. Discussions were audio-recorded and transcribed. Customers received a £20 voucher in appreciation of their time. To ensure that customers could not be identified from case studies, Expert Citizens removed all names and other identifying information from the transcripts before they were shared with the CHAD researchers for analysis. Expert Citizens also checked and provided feedback to ensure that case studies accurately reflected the discussions and participant experience.



3 Case Studies are presented based on customer interviews and corresponding CRM data



5 Findings: 12 months of Service Coordinator analysis

5.1 Sample

By 31st December 2020, the VOICES CRM data base included 252 customers. After exclusions the total cohort included in analysis was 116 (Table 1). Over two-thirds of the 116 customers were male, most were aged 40-69 years (85%), were classified as having White ethnic background

(94%), and approximately one-in-three had a disability (29%). Compared with the overall customer base of 252, the sample analysed were similar but with under-representation of females (who accounted for 44% of the total customer base) and over-representation of the over-60s.

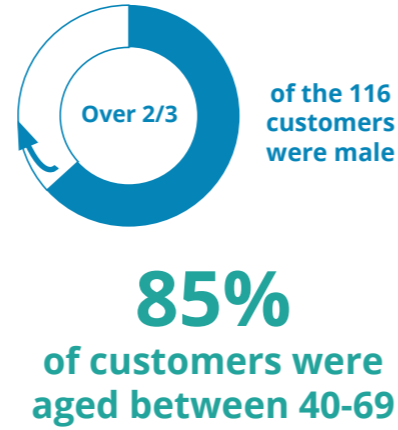


Table 1. Characteristics of VOICES customers, overall and those included in analysis

Characteristic	Total Sample		Sample Included	
	n	%*	n	%*
Total n	252		116	
Sex				
	n	%*	n	%*
Male	135	55.6	80	69
Female	108	44	36	31
Missing	9			
Age (years)				
	n	%*	n	%*
25-29	6	3.3	0	0
30-39	44	24.4	17	15.0
40-49	40	22.2	21	18.6
50-59	27	15.0	14	12.4
60-69	63	35.0	61	54.0
Missing	72		0	
Ethnicity				
	n	%*	n	%*
White	180	95.7	0	0
Irish	2	1.1	2	1.7
Gypsy or Irish traveller	1	0.5	1	0.9
Mixed - White/Black Caribbean	3	1.6	2	1.7
Mixed - White/Black African	1	0.5	1	0.9
Other Black	1	0.5	1	0.9
Missing	64		0	
Disability				
	n	%*	n	%*
Yes	43	33.9	24	29.3
No	84	66.1	58	70.7
Missing	123		34	
Housing First				
	n	%*	n	%*
Yes	21	8.3	17	14.7
No	237	91.7	99	85.3

5.2 Overall level of service contact by the cohort

5.2.1 One-year review

Figure 1 shows reductions in service contacts from pre-VOICES (period A) to the first 12 months of VOICES support (period B) for the complete cohort (n=116). Largest reductions were observed for magistrates' court proceedings and arrests, but with marked reductions for all outcomes.

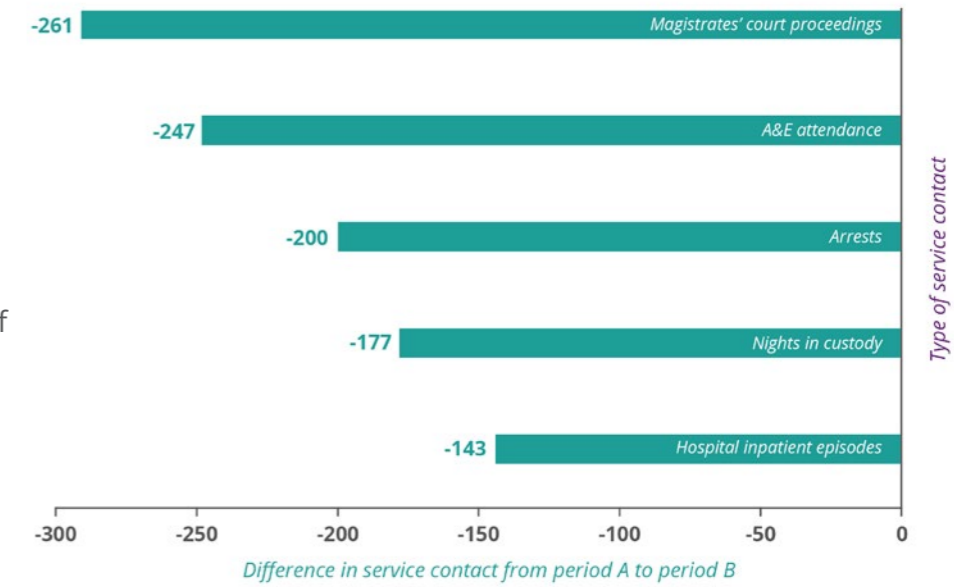


Figure 1. Difference in service contact for the whole cohort (n=116) between period A and period B

5.2.2 Two and three year reviews

Similar to the Hard Edges 2018 report [2], we explored the pattern of service contact in the cohort of VOICES customers with 24 months of continuous data (n=60), in addition to those with 36 months (n=27).

Figure 2 illustrates that, for the 60 customers with 24 months of data, marked reductions in service contacts from period A to B were observed (as they were for the total cohort). However, in their second 12 months of VOICES (period C), further reductions from period B to C were more modest: magistrates court appearances (-37) and arrests (-20) had reduced further, whereas nights and custody (-4) and A&E episodes (-10) appeared to have stabilised, and hospital inpatient episodes had risen (+41).

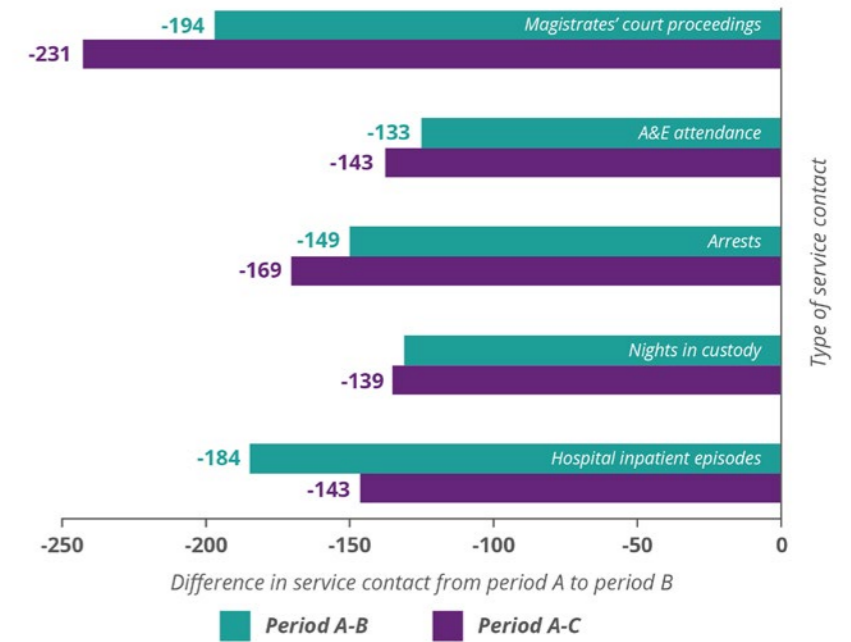


Figure 2. Difference in service contact between periods A and B, and A and C (n=60)

Largest reductions in service use were during the first year of support

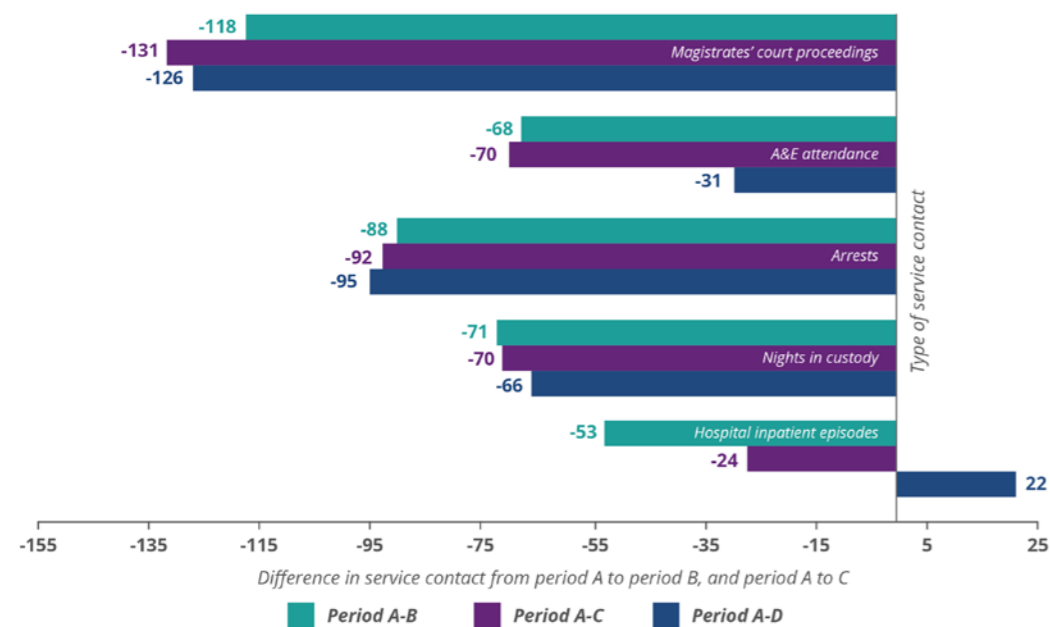


Figure 3. Difference in service contact between periods A and B, A and C, and A and D (n=27)

Figure 3 illustrates that, for the 27 customers with 36 months of data, marked reductions in service use during the first year of VOICES support were followed by modest further reductions or apparently stabilised levels of contact in year two. In year three, contact with the criminal justice system remained stable, with no marked increases/

decreases: magistrates court appearances (+5), arrests (-3), nights and custody (+4). However, there was increased use of health services: A&E attendance (+39) and hospital inpatient episodes increased (+46).

In year three, contact with the criminal justice system remained stable, with no marked increases or decreases

5.3 Applying costs to reductions in service contact

Table 2 and Figure 4 show the reduction in costs associated with the reduced service contact described above for the first year of VOICES support for the overall cohort (n=116).

The estimated overall cost of service contact for the cohort was £604,060 lower in period B than period A, with an average reduction of £5,207 per customer over a 12-month period.

Table 2. Differences in service contact and associated costs for the whole cohort (n=116) between period A and period B

	Period A	Period B	Difference between A and B	Cost per event/episode £	Overall cost change
Hospital inpatient episodes	492	349	-143	2,978	-£425,854
Nights in custody	337	160	-177	152	-£26,902
Arrests	436	236	-200	336	-£67,200
A&E attendance	598	351	-247	182	-£44,954
Magistrates' court proceedings	485	224	-261	150	-£39,150
Total					-£604,060
Per Customer					-£5,207

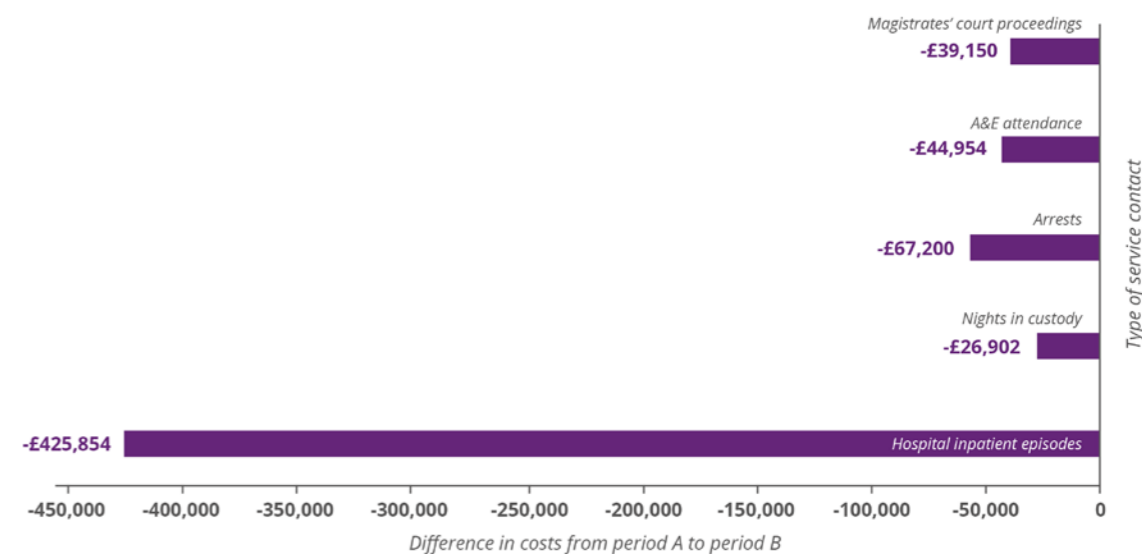


Figure 4. Difference in the cost of service contact for the whole cohort (n=116) between period A and period B

5.4 Distribution of service contact across the cohort

Table 3 shows that for each indicator, during the first 12 months of VOICES support, some customers reduced their use of services, some were unchanged and some customers increased service contact.

For contact with the criminal justice system a higher proportion of customers reduced contact across all services

For contact with the criminal justice system, a higher proportion of customers reduced contact (31-37% of the 116) than increased contact (23-25% of 116) across all services. Conversely, for health service contact, the pattern was reversed: A&E episodes increased in 41% of customers and reduced in 28%; inpatient episodes increased in 36% of customers and reduced in 18%. Given the overall reductions for both outcomes observed in Figure 1, these data

suggest that a small number of customers with extremely frequent contact had reduced their use of services, leading to a reduction in episodes, despite more customers engaging with health care. This raises two points. Firstly, this should not be considered as a means of reducing attendances and associated costs of hospital inpatients, but secondly, this increase might reflect a positive change toward someone taking better care of hitherto neglected health problems.



Table 3. Distribution of static, increased and reduced service interactions, average change and range of change for whole cohort (12 months of data, n=116), cohort with 24 months (n=60) and 36 months (n=27) of data

	Increased		Unchanged		Reduced		Zero interactions	Average Change	Rate of change
	n	%	n	%	n	%			
Year 1									
Arrests	29	25.0	9	7.8	43	37.1	13	-0.59	-20 to +20
Nights in custody	28	24.1	4	3.4	37	31.9	25	-0.55	-26 to +17
Magistrates' court proceedings	27	23.3	7	6.0	42	36.2	18	-1.23	-24 to +20
A&E attendance	47	40.5	11	9.5	32	27.6	16	0.67	-44 to +32
Hospital inpatient episodes	42	36.2	5	4.3	21	18.1	39	0.20	-84 to +26
Year 1 and 2									
Arrests	21	35.0	3	5.0	18	30.0	6	0.27	-20 to +20
Nights in custody	20	33.3	2	3.3	18	30.0	8	-0.06	-26 to +17
Magistrates' court proceedings	20	33.3	2	3.3	19	31.7	7	-0.75	-23 to +20
A&E attendance	34	56.7	1	1.7	14	23.3	3	3.43	-15 to +32
Hospital inpatient episodes	24	40.0	3	5.0	11	18.3	16	1.35	-29 to +24
Year 1 and 3									
Arrests	12	44.4	2	7.4	6	22.2	2	0.41	-20 to +16
Nights in custody	12	44.4	0	0.0	6	22.2	4	0.41	-26 to +15
Magistrates' court proceedings	11	40.7	0	0.0	8	29.6	3	-0.82	-23 to +20
A&E attendance	18	66.7	0	0.0	7	25.9	0	4.88	-15 to +32
Hospital inpatient episodes	14	51.9	2	7.4	3	11.1	6	5.00	-6 to +24

Over years 1 and 2 (in the 60 customers with available data), the proportion of customers who increased versus reduced contact with the criminal justice system was approximately equal (30-32% reduced contact, 33-35% increased contact). The proportion of customers who reported A&E and inpatient episodes was, again, higher than the proportion who reduced use of these services, with a greater discrepancy than observed for the overall cohort (Table 3).

Over three years, this changing pattern continued. Among of the 27 customers with 36 months of data, there was a clear pattern of more customers increasing (rather than decreasing) contact with the criminal justice system (41-44% increased, 22-29% reduced) and with health services, emergency and planned (52-67% increased, 11-26% reduced).

Figures 5-7 shows that the use of services varies widely across the cohort, with a relatively small number of customers accounting for large increase and decreases. Of note, there were reductions in costs of more than £10,000 in 18 customers and increases of more than £10,000 in nine customers (Figure 5). These cost changes were largely explained by changes in healthcare costs (Figure 6), particularly hospital inpatient stays, given the large unit cost. **There was no evidence of an association between customer changes in costs of contact with health care and criminal justice systems (rho=-.005).**

Possible explanations for increased hospital inpatient episodes include customers engaging with health problems

that were previously hidden or ignored. Moreover, 54% of this sample of 116 were aged 60 years or over. The cumulative health effects of potentially many years of neglected health needs and unhealthy lifestyles and living conditions, is likely to manifest in chronic and acute health conditions requiring hospital care.

Consistent with previous Hard Edges analysis of VOICES, the apparent reductions in offending (as indicated by reduced contact with the criminal justice system) have much lower impact on costs than health indicators (particularly inpatient episodes). Nevertheless, the consistency of this pattern gives confidence of sustained benefit and reduced costs that, over time, will represent marked reductions in the indicators measured and the subsequent and far more costly prison sentences that occur in some cases (but were not measured here). **The reduction in crime perpetrated by the cohort also results in fewer victims and lower social and financial costs associated with the consequences of crime.**


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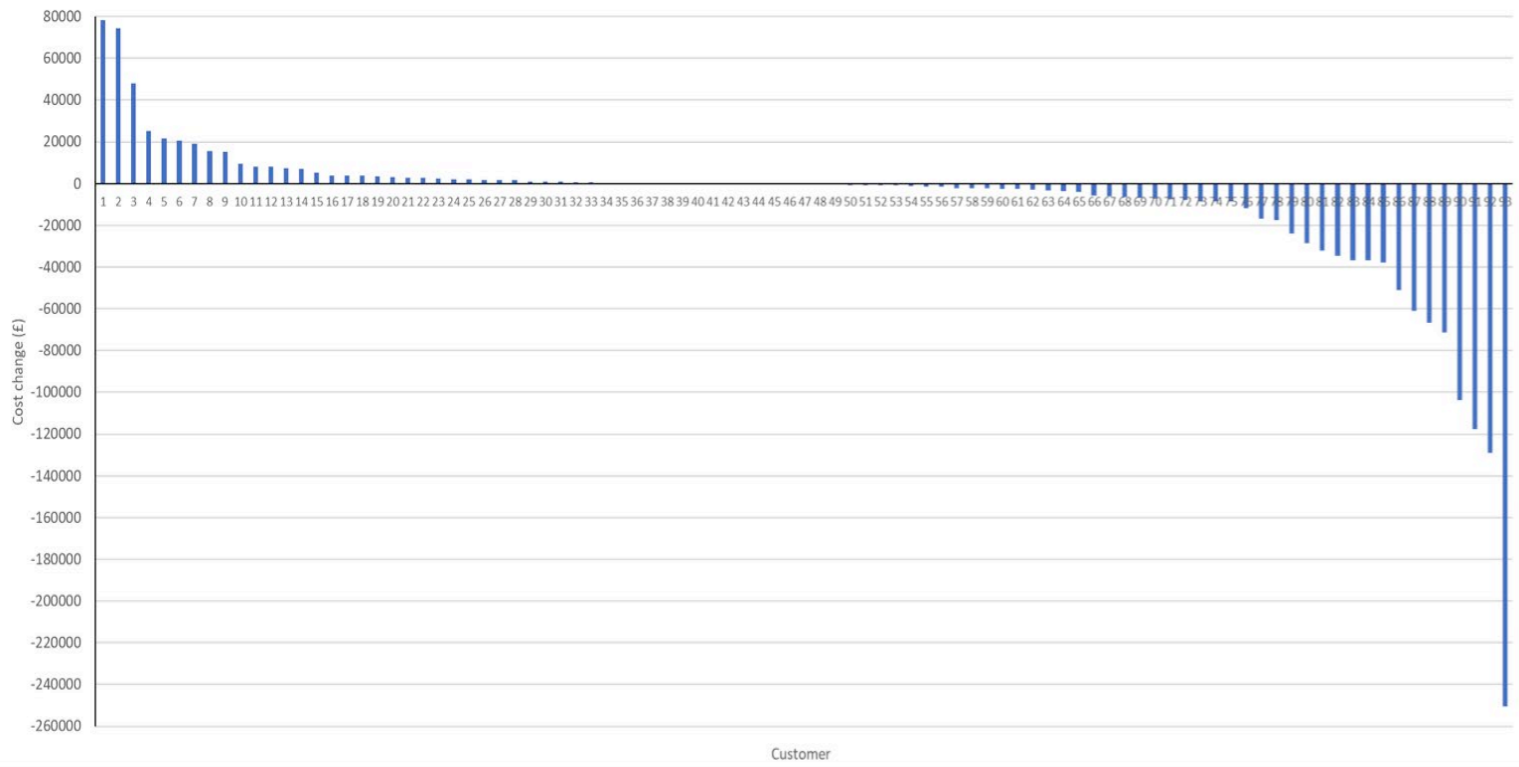


Figure 5. Increase/decrease in the combined cost of service contact for healthcare and criminal justice indicators, by case

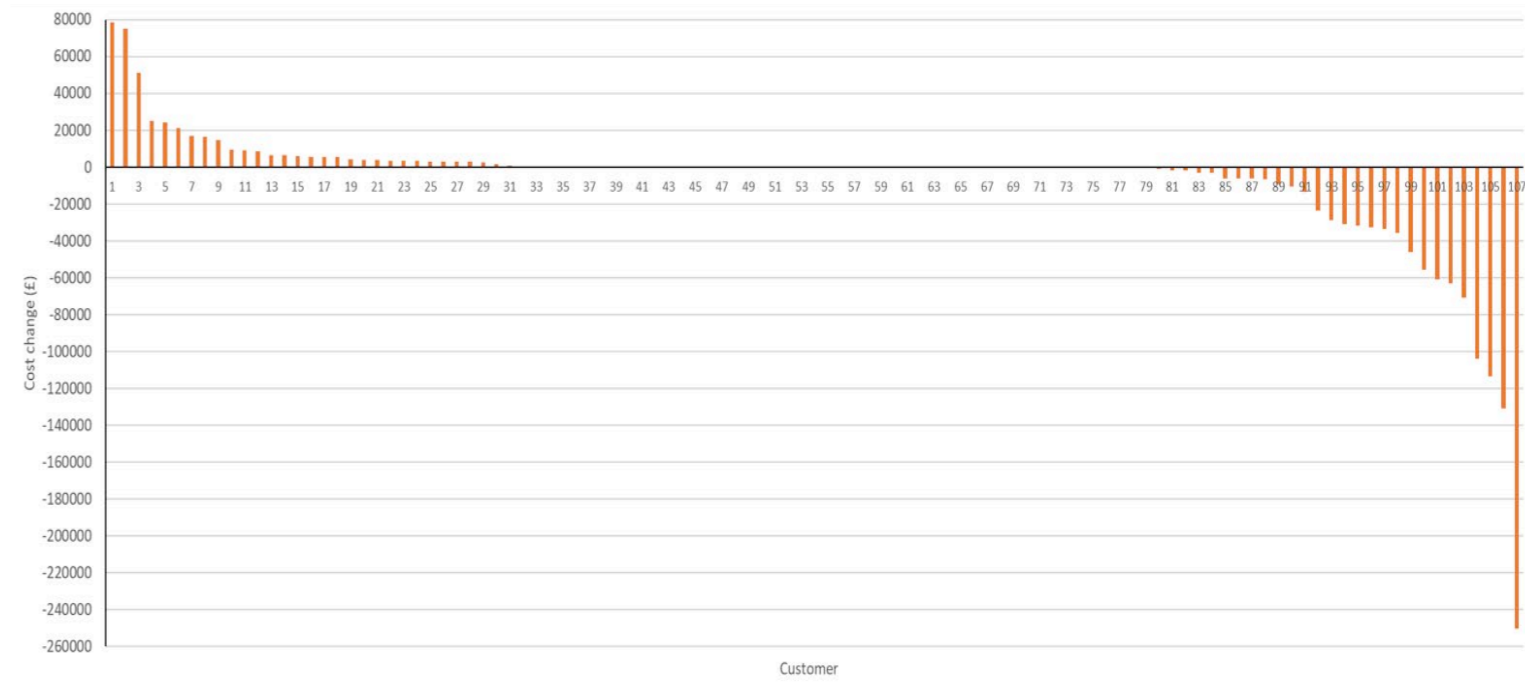


Figure 6. Increase/decrease in the cost of service contact for healthcare indicators, by case

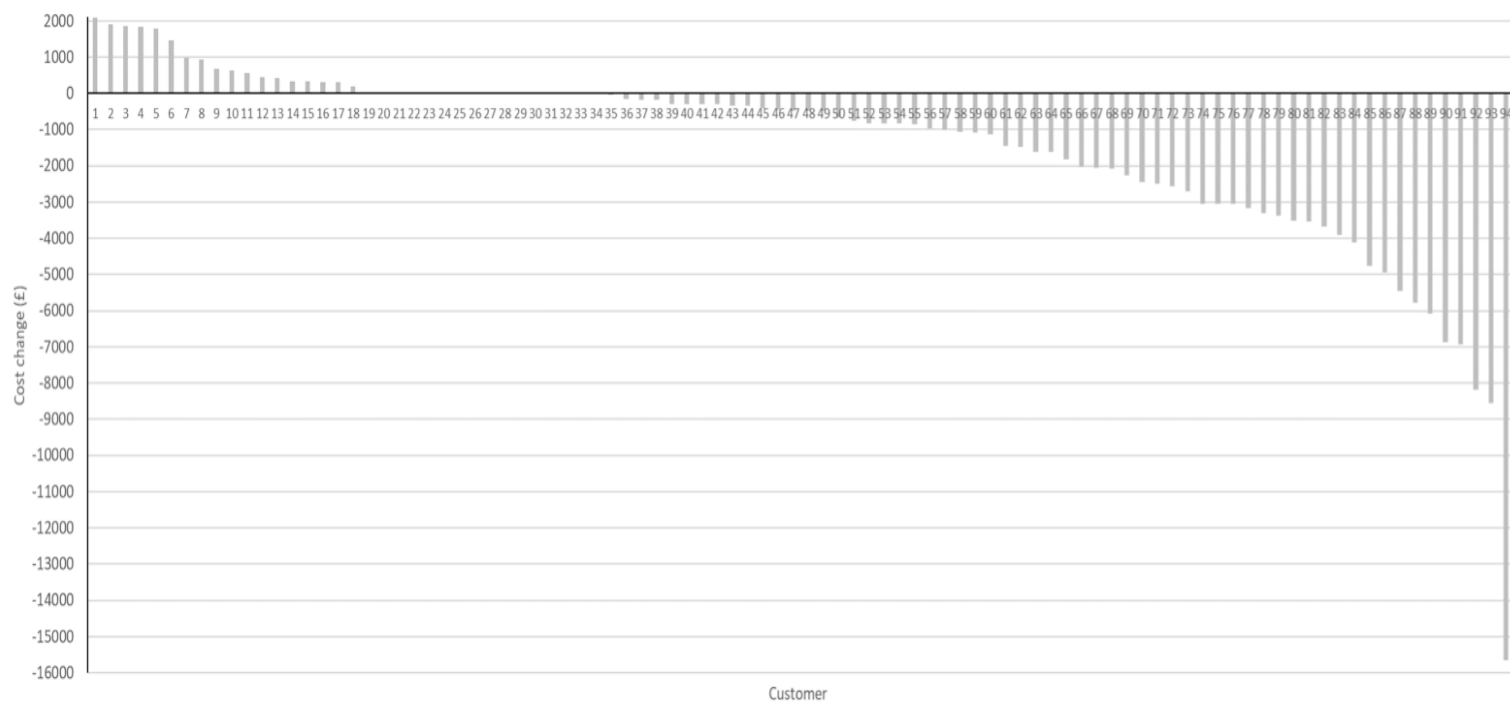


Figure 7. Increase/decrease in the cost of service contact for criminal justice indicators, by case



5.4 Analysis by Sex

Service contact and associated cost changes from pre-VOICES to the first year of VOICES support were examined by sex (n=36 women, n=80 men). Overall, the service contact cost reduction for women was substantially smaller than for men (-£475 vs. -£7,258 per customer; Table 4). The largest contributor to this discrepancy was the respective change in hospital inpatient episodes: a 9-episode increase in women costing a total of £26,802 (£745 per female customer)

and 152-episode reduction in men costing a total of -£452,656 (-£5,658 per male customer). This modest increase in planned hospital care, combined with a reduction in A&E episodes in women suggests an improvement in women's health care.

However, as Figure 8 illustrates, the per customer average cost of service contact was higher in men than women for all outcomes, except for arrests, which were similar.

Table 4. Change in service contact and cost from 12 months pre-VOICES (period A) to 12 months of VOICES support (Period B), by sex

	Period A	Period B	Difference between A and B	Cost per event / episode £	Overall cost change £	% Change
Women						
Arrests	97	36	-61	£336	-£20,496	-62.9
Nights in custody	77	34	-43	£152	-6,536	-55.8
Magistrates' court proceedings	123	64	-59	£150	-£8,850	-48.0
A&E attendance	151	107	-44	£182	-£8,008	-29.1
Hospital inpatient episodes	94	103	9	£2,978	£26,802	9.6
Total	542				-£17,088	
Change per customer					-£475	
Men						
Arrests	320	184	-136	£336	-£45,696	-42.5
Nights in custody	247	126	-121	£152	-£18,392	-49.0
Magistrates' court proceedings	348	160	-188	£150	-£28,200	-54.0
A&E attendance	440	244	-196	£182	-£35,672	-44.5
Hospital inpatient episodes	398	246	-152	£2,978	-£452,656	-38.2
Total	1,753				-£580,616	
Change per customer					-£7,258	

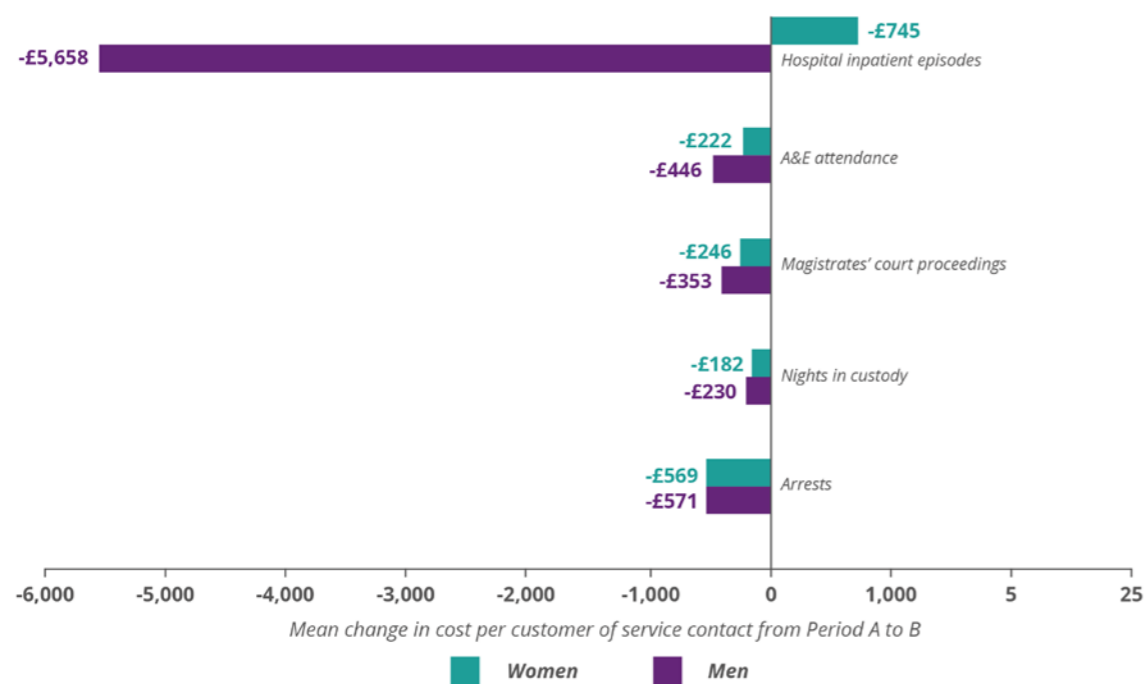


Figure 8. Changes in the cost of service contact from period A to B, by sex

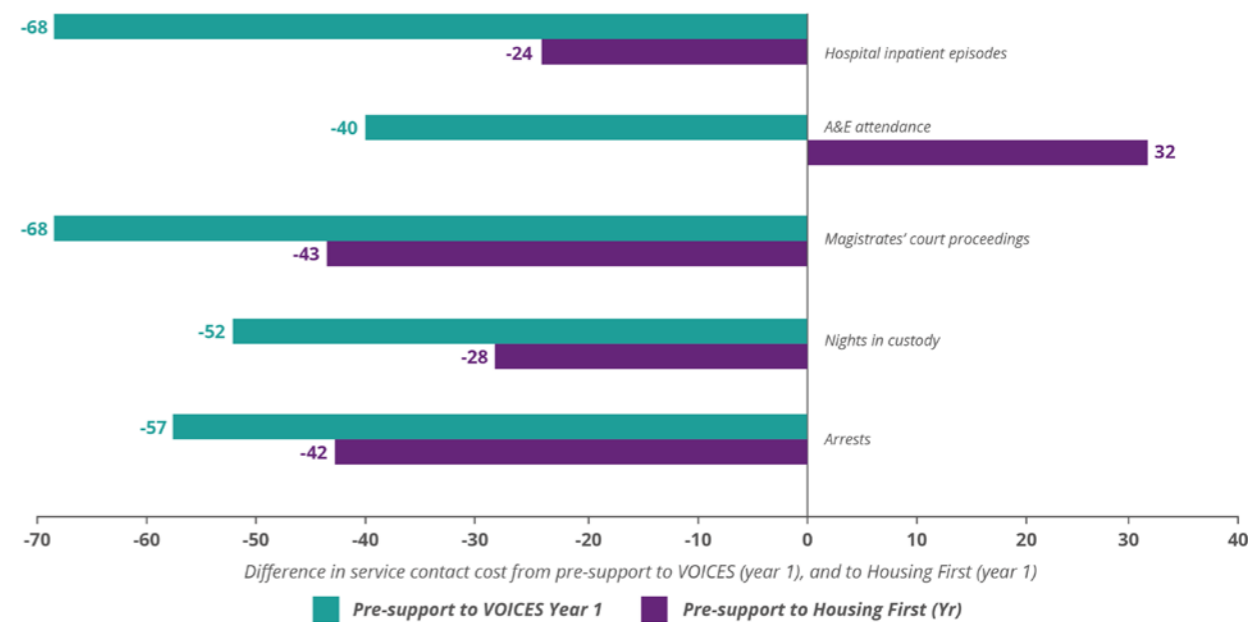


Figure 9. Changes in service use from 12 months before any support (pre-support), to the first 12 months of VOICES, to the first 12 months of Housing First for all 18 Housing First customers

5.5 Housing First

A key part of the VOICES systems change legacy is the introduction of Housing First, a housing-led approach that offers unconditional tenancies and support to people experiencing homelessness for as long as they want it. Earlier Hard Edges reports examined service use and costs among VOICES customers who were referred to the former 'proto-Housing First' approach. This model drew on Housing First principles but deviated in areas such as use of self-contained supported housing (rather than independent tenancy) and possible withdrawal of support following progress (rather than ongoing availability of support).

In 2018, VOICES funded a three-year Housing First programme (then extended funding for another 12 months),

which is managed by Brighter Futures, and is truer to the principles outlined by Housing First England. The Centre for Health and Development (CHAD) recently completed an independent evaluation of the post-2018 Housing First Stoke-on-Trent. The report can be accessed for more details¹⁰.

Here, we summarise data on changes in service use and associated costs for the 18 individuals in the VOICES CRM who received at least 12 months of VOICES support prior to their Housing First referral, 11 of whom were housed.

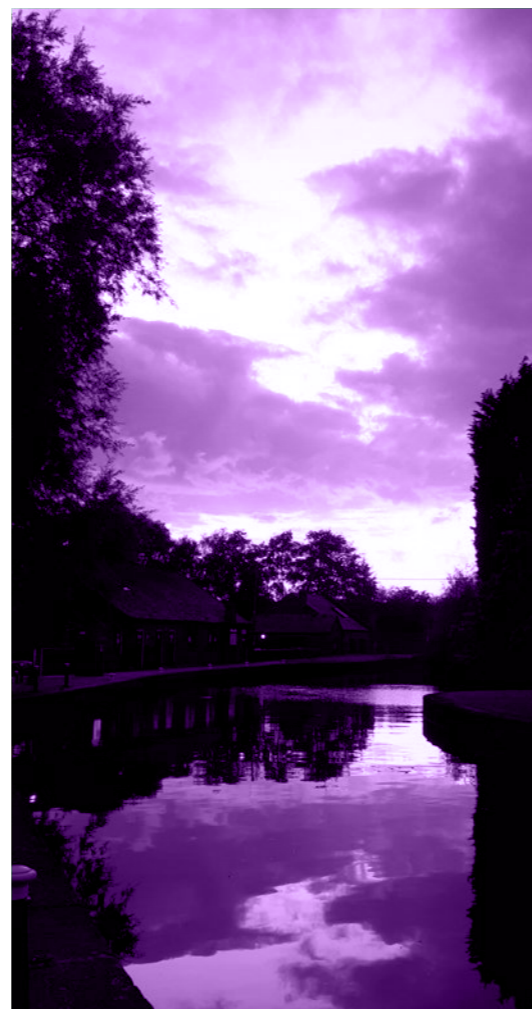


Figure 9 illustrates the large reductions in service use from pre-support to the first 12 months of VOICES among those referred to Housing First, followed by increases in service use during the first 12 months in Housing First. This pattern was similar for most outcomes, but most marked for A&E attendances, which rose during the period of Housing First support to higher levels than those recorded prior to support. However, as above, some of these 18 customers did not get a tenancy within this period.

To better understand the impact on service use of receiving a Housing First tenancy, it is more useful to examine changes in service use in the 11 customers who were housed. Table 5 and Figure 10 illustrate that for criminal justice system outcomes, the reduction from pre-support to VOICES was sustained to Housing First, and actually reduced further for criminal justice system use. Again, patterns were less clear for health service use outcomes: A&E episodes increased during VOICES support, then reduced during Housing First to pre-

support levels; hospital inpatient episodes increased from pre-VOICES to Year 1 of VOICES support, then increased during Year 1 of Housing First tenancy. The latter could reflect those housed through Housing First were taking better planned care of their health (with concurrent reduction in A&E attendance). Both patterns could also indicate that VOICES customers referred to Housing First were particularly complex, with greater health needs that were better met once in Housing First.

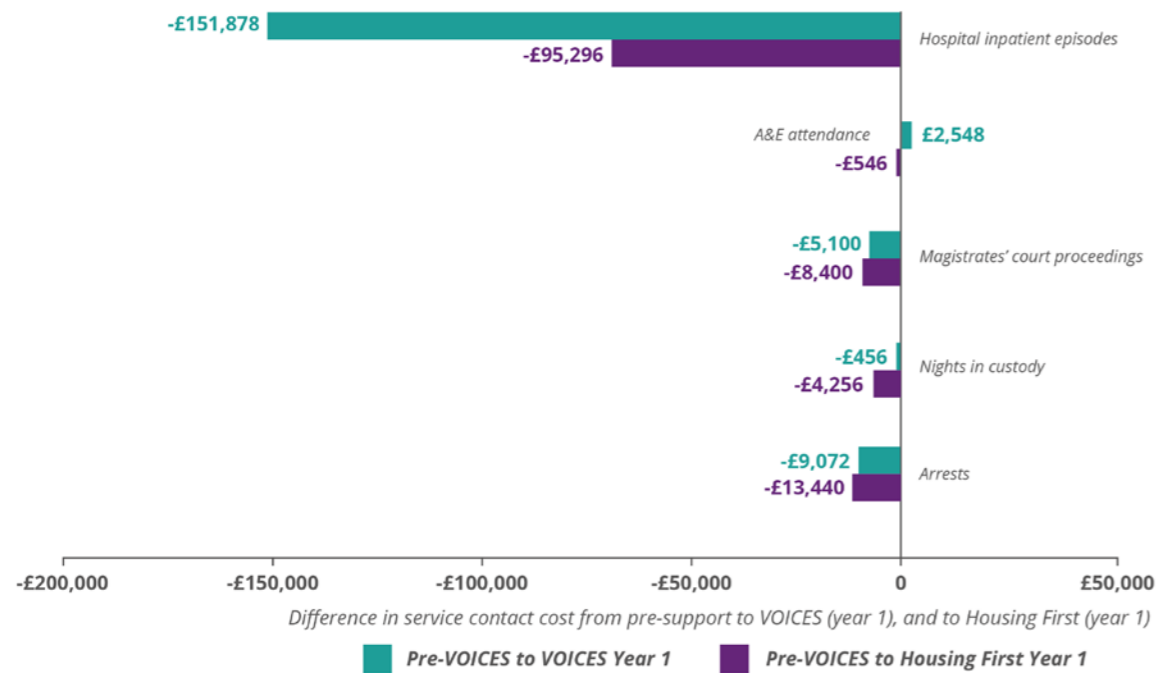


Figure 10. Changes in service use from 12 months before any support (pre-support), to the first 12 months of VOICES, to the first 12 months of Housing First for 11 Housing First customers who were housed

In terms of costs, this reduced service contact in the 11 housed Housing First customers equated to a per customer cost reduction of £11,085, more than twice the reduction in per customer service costs than the £5,207 observed in the wider cohort of VOICES customers (Table 2).

The findings are limited by the small number of customers, and we recommend that the full Housing First evaluation report is accessed for more detail.

11 customers

 equated to a per customer cost reduction of **£11,085**

Table 5. Change in service contact and cost in Housing First customers from 12 months pre-VOICES (period A) to 12 months of VOICES support (Period B)

	Service Use						Cost of Service Use		
	Pre Support	VOICES	Housing First	Pre-VOICES to VOICES Y1	Pre-VOICES to Housing First Y1	VOICES Y1 Housing First Y1	Cost per event / Episode £	Pre-VOICES to VOICES Y1	Pre-VOICES to Housing First Y1
Arrests	47	20	7	-27	-40	-13	£336	-£9,072	-£13,440
Nights in custody	34	31	6	-3	-28	-25	£152	-£456	-£4,256
Magistrates	61	27	5	-34	-56	-22	£150	-£5,100	-£8,400
A&E attendance	35	49	32	14	-3	-17	£182	£2,548	-£546
Inpatient episodes	65	14	33	-51	-32	19	£2,978	-£151,878	-£95,296
Total change	242	141	83	-101	-159	-58		-£163,958	-£121,938
Change per customer								-£14,905	-£11,085

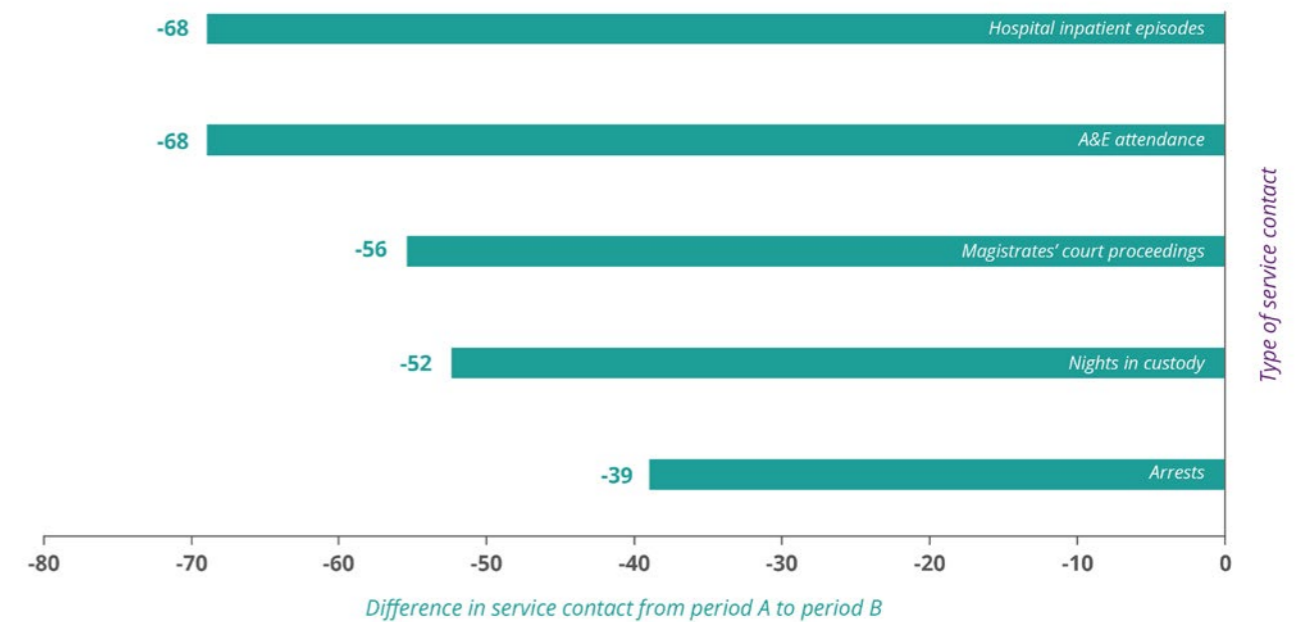


Figure 11. Change in service contact in Housing First customers from 12 months pre-VOICES (period A) to 12 months of VOICES support (Period B)



5.6 Case Studies

Name: Bobby



Table 6. Change in service contact and cost in Housing First customers from 12 months pre-VOICES (period A) to 12 months of VOICES support (Period B)

	Period A	Period B	Difference between A and B	Cost per event/episode £	Overall cost change
Arrests	82	26	-56	£336	-£18,816
Nights in custody	69	17	-52	£152	-£7,904
Magistrates' court proceedings	87	19	-68	£150	-£10,200
A&E attendance	60	21	-39	£182	-£7,098
Hospital Inpatient Episodes	80	12	-68	£2,978	-£202,504
Total	378				-£246,522
Per Customer					-£14,501

CASE STUDY

Bobby talks about being “institutionalised”, with a history of repeated (non-violent) offending to fund his substance use, and time in prison. However, he has been out of prison for two years – the longest he has “stayed out of trouble” – and after a recent fallout with a family member, Bobby had nowhere to stay. On license with Probation, they put him in touch with VOICES. At the time of interview, Bobby had been with VOICES for 3-4 months. He explains that he had previously never been out of prison long enough to meaningfully engage with services, other than Probation (and he does talk about his IOM worker helping him).

As Bobby was new to VOICES, we were unable to include service data for him here. Regardless of the short time though, he stressed how important their help has been:

“I haven’t been on here a long time, but from working with VOICES, I think they have done a lot for me in a short amount of time. I wouldn’t survive, yes.”

Bobby talks about receiving help from VOICES on a range of matters, including help to find accommodation, budget to furnish the

property, and purchase essentials as well as materials/supplies “to keep his mind occupied” and support his mental health. They also started a memory board to help him remember his appointments. Bobby talked about a range of physical health issues for which he was currently undergoing investigations and tests. He explained how he struggled with keeping and being on time for appointments, and how the memory board helped. His service co-ordinator was also arranging some counselling for Bobby to talk about some past experiences. He explained,

“They have been there for me, you know, if I pick up the phone, they are there so it’s good to know.”

Clearly, having a place in accommodation was key for Bobby, and allowed him to build upon what he had already achieved himself: “I have stayed out of trouble myself these last two years, but it could have gone either way really, if I had nowhere to stay”. He went on to describe how he “felt myself slipping just before all of this”. However, since being involved with VOICES, he explained, “Now I feel settled I can find my feet

and get everything sorted now” and went on to say that “without [service co-ordinator] I would have been lost”. He thinks that, without the help from VOICES, his physical and mental health would be worse, and he would probably be back in prison or on the streets.

Throughout his interview, Bobby emphasised the positive difference VOICES and his service co-ordinator have made for him. He describes them as “invaluable”. As he summed it up:

“I was struggling before (VOICES) but right now, you know, I’m happy I have got somewhere, and I am doing it. I have had a lot of help, but I needed direction, motivation, and help, and that’s what I got through VOICES.”

The only challenge, he felt, had been COVID. He believed that future services could learn a lot from VOICES about how to engage more with people, find out what their interests are and what would help to motivate them and keep them busy





CASE STUDY

Nick joined VOICES at the beginning of 2019, after being referred through his Probation Officer. He described life before VOICES as tangled up in trouble with the Police, prison and using drugs for just over 20 years:

“It was all about taking drugs, that’s all I cared about for so many years.”

He explained that he has been homeless twice, but that this was the first time he had accepted support. Before that, the only support he received was through Probation. He remembered the first time he met his service co-ordinator, when they came to one of his appointments with his Probation Officer. Nick highlighted that being introduced in this way was helpful because he finds meeting new people difficult.

Nick was very positive about VOICES and spoke about his service co-ordinator with a great deal of warmth and appreciation: “I don’t think [service co-ordinator] will even realise how much [they] actually helped me, I owe [them] a lot, I really do”. He described receiving a wide range of help, including finding somewhere to live, funding to furnish the property, form-filling, attending appointments, making phone calls, going

shopping and setting up a bank account (which he had not had for over 10 years because of previous debt). Without VOICES, Nick did not think he would have been able to move into a property. He was pleased, and proud, that his tenancy was now secure, having recently passed the 12-month probation period. He shared that this was his first official address since leaving prison several years ago.

Nick experiences anxiety and paranoia which can make going to places such as waiting rooms and supermarkets very daunting. Because of this, before VOICES, he would often miss appointments because he “did not want to be there alone”. In contrast, he found having his service co-ordinator there with him very beneficial in terms of both making it to the appointments and the outcome:

“I could be more open with the psychiatrist, which helped me, because it got me on the right medications.”

Nick also has some physical health issues that affect his movement. He described previously using drugs to help with the pain. He expanded,

“It probably told me there were people out there did actually care. That helped. And it was just like, it helped me to get things moving.”

Here, he talked about having various hospital and doctors’ appointments and how he finds it difficult to speak on the phone. He placed great value on the help his service co-ordinated provided around that. Crucially, he described that he had learnt to get better at making phone calls himself, which he linked to VOICES giving him the confidence to do things that he previously felt unable to do. Nick was disappointed about VOICES coming to an end, because he thinks many others would have benefitted from the same type of support that he has received.

The service data records show Nick’s involvement with VOICES ended in the Autumn of 2020, and he talks about how his service co-ordinator worked with him to gradually move him over to another service. VOICES service data also indicate that for the 12 months before joining and the first 12 months with VOICES, Nick did not use any of the blue light services.



CASE STUDY

Joe started with VOICES in the Summer of 2019. After a spell in hospital, a social worker put him in touch with VOICES. Before this experience, Joe described not being known to services, moving around a bit, and finding it difficult to access help because of that. Joe talked about using drugs in the past to “get me through the day”. Joe had been rough sleeping the Autumn before and the cold, wet weather had caused painful physical health problems. He was unable to find accommodation on a particular night, which he describes “broke me that did, emotionally”. Over the next week or so, he was unable to move around much and continued rough sleeping. One morning, he could not be woken, and an Ambulance was called. He has no recollection, but people have told him how close he was to dying; he had developed very serious infections and spent weeks in hospital. This experience clearly had a profound impact on Joe.:

“The realisation of what had happened was a little bit hard to accept that my world had just basically ended as I knew it and I had got to basically restart again, revamp, you know approach obviously differently.”

The hospital explained that they could not discharge him to the street, and that seemed to kickstart involvement in other services, getting scripted, and access to accommodation options. About three months later, Joe’s social worker introduced him to a service co-ordinator from VOICES. VOICES service data shows that, in the 12 months prior to joining VOICES, Joe had two arrests, one presentation at A&E and 84 episodes recorded with hospital inpatient services. In contrast, during his first 12 months with VOICES, Joe had not used any of the health care services (A&E, hospital inpatient, hospital outpatient services). He had three contacts with criminal justice services once (i.e., one arrest, a stay in police custody and one magistrates’ court appearance). Joe was still engaged with VOICES (at the end of December 2020),

Joe was extremely positive about VOICES and how the service co-ordinators had helped him to move forwards. One of the first things they did was take him to get his benefits sorted, which he described as key. He was very positive about how the staff worked with him and explained things, helping him to navigate “the powers that be”. Joe described the service co-ordinators as “the missing link between the people that say yes or no and the people that want the help”.

He felt they cared about him and treated him with respect. Joe referred to his service co-ordinator as “a rock... how they kept me together”, including whilst he experienced a range of challenges in his accommodation at the time (including triggers for drug use). This culminated in VOICES putting him forward for another placement, which was approved because of his health and the backing of VOICES and another organisation. VOICES helped him to furnish the property and arranged for Joe to speak to someone to try and come to terms with how his life had changed and how anxious, vulnerable, and insecure it made him feel. He likened finding VOICES to having the winning Lottery ticket.

“I had just got to a point where I had given up on trying to even get some kind of security and confidence in myself to be able to have anything else. OK. VOICES helped me see past that and have confidence in the co-ordinators that I have been fortunate to have. So having respect for them and for what they were doing for me, helped me build on my own insecurities in mysehe realisation of what had happened was a little bit hard to accept that my world had just basically ended as I knew it and I had got to basically restart again, revamp, you know approach obviously differently.”

6 Strengths and Limitations

There are several strengths to this work.

- Outcomes reported to replicate previous Hard Edges reports for VOICES and were in line with the Fulfilling Lives national evaluation. Using CRM data collated from the Police and NHS datasets provided an objective measure of contact with certain types of criminal justice and healthcare services.
- Applying unit cost estimates provided a useful and objective indicator of the financial impact on providers of certain health and criminal justice services as a result of reducing contact among this small group of individuals with multiple and complex needs.
- Presenting data from customer case studies adds depth and richness, helping to understand patterns observed in the quantitative data, offering some thematic clues around outcomes that are important to customers, their quality of life and satisfaction with VOICES support, but which are not captured by objective service use data.

We also recognise the limitations.

- Outcomes do not reflect all areas of service use that might be affected (as recognised in previous Hard Edges reports), such as: 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, behaviour that could be regarded as antisocial, e.g., begging and street drinkings.
- The dataset was not complete. Exclusions for lack of consent and missing data meant that the total cohort of 116 was far smaller than the total VOICES cohort of 252. The analysed cohort was similar to the overall customer base but with under-representation of women and over-representation of older adults.
- The case studies, while providing detailed insight into the experiences and impact of VOICES on customers lives, were limited to men and reports of positive experiences. A larger stratified qualitative sample might offer alternative experiences that were not represented in this report.
- The relatively small sample of Housing First customers means that caution is required when trying to understand patterns and draw inferences.



7 Summary and conclusions

Building on the earlier reports in 2016 and 2018, Hard Edges Stoke-on-Trent 2021 supports the financial case for coordinating services to better support the multiple and complex needs of people experiencing some of the greatest disadvantage in society, albeit with a somewhat more complex picture after the first year of support.

Data collated from the Police and NHS for 116 VOICES customers indicated substantial reductions in service use and associated costs during their first year with VOICES, with the largest reductions in Magistrates' court appearances and A&E episodes.

Evidence of further and greater reductions in service use after the first year of VOICES support reported in Hard Edges 2018 (n=13), were not observed here. For VOICES customers receiving at least two years of support (n=60), year 2 saw further, modest reductions (magistrates court appearances, arrests), a stabilising of reduced levels (nights in custody, A&E episodes) or increases (in-patient episodes) in service use. For the 27 customers who

were supported for a third year, in year 3, contact with the criminal justice system remained stable, but health service use increased (both planned and emergency). Increases in hospital in-patient episodes for VOICES customers who were supported for two or more years could reflect greater control over health among customers who remain supported for longer, as illustrated by the case studies. However, increased A&E episodes do not support this.

Overall, patterns of reduced and sustained contact with the criminal justice system were more consistent than patterns of health service use, which are perhaps complicated as the indicators reflect emergency and planned care and, increases in the latter could show a beneficial change. Despite the aforementioned reductions in overall health service contact in year 1, a higher proportion of customers increased (rather than decreased) health services contact in every year of support (1, 2 and 3). This suggests that year 1 involved effective intervention in VOICES customers who were the most frequent attenders, leading to overall reductions in

service contact, despite more customers increasing, rather than decreasing health service contact. Subsequently, use among these customers remained lower (than pre-VOICES), the impact of supporting the remainder of the customer base was less marked and some overall increases were observed. These data confirm the need identified in Hard Edges 2018, to further explore changes over time in the extent of customer needs, particularly around health, and how best to manage or extend the caseload to increase the number of the most frequent attenders in which successful intervention can have a marked impact.

This service coordination approach for a cohort of people facing multiple needs is likely to confer financial benefit overall, but as noted previously, does not guarantee success for individuals. A substantial proportion of customers' contact with health services increased. Whether this reflects progress through accessing necessary healthcare, an increase in need through age-related health deterioration, or that service coordination is ineffective for some customers, needs more detailed exploration.

116
VOICES
customers
indicated substantial
reductions in service use



Evidence of further and greater reductions in service use after the first year of VOICES support reported in Hard Edges 2018 (n=13), were not observed here.

Data also confirm the need to further explore the different needs and support required by women. We observed substantially smaller reductions in service contact and costs in women compared with men, but largely because of a small increase (vs. large decrease) in planned hospital care. Therefore, what appeared to be a costly lack of a reduction in hospital care in women, could show a marked benefit in terms of better access to planned care in female vs. male VOICES customers, which requires further investigation.

In those referred to Housing First who held a tenancy for at least 12 months, criminal justice system contact continued to reduce (after the initial reduction from pre-support to VOICES). Patterns were less clear for health service use outcomes and warrant further exploration, ideally with a larger cohort.

As noted under the limitations, the quantitative data do not consider the wider benefits for customers' quality of life and life chances through less tangible, but important changes such as: feeling that someone cares; regaining confidence and skills; increased personal agency and ability to interact with services; and improved safety and stability. The case studies serve to illustrate such benefits and highlight the ongoing challenges and complexities that might increase the need for services observed in CRM data.

Overall, from the data presented, we can surmise that the VOICES service coordination model has benefits for customers (e.g., improving health and life chances), the state (e.g., through initial reductions in engagement

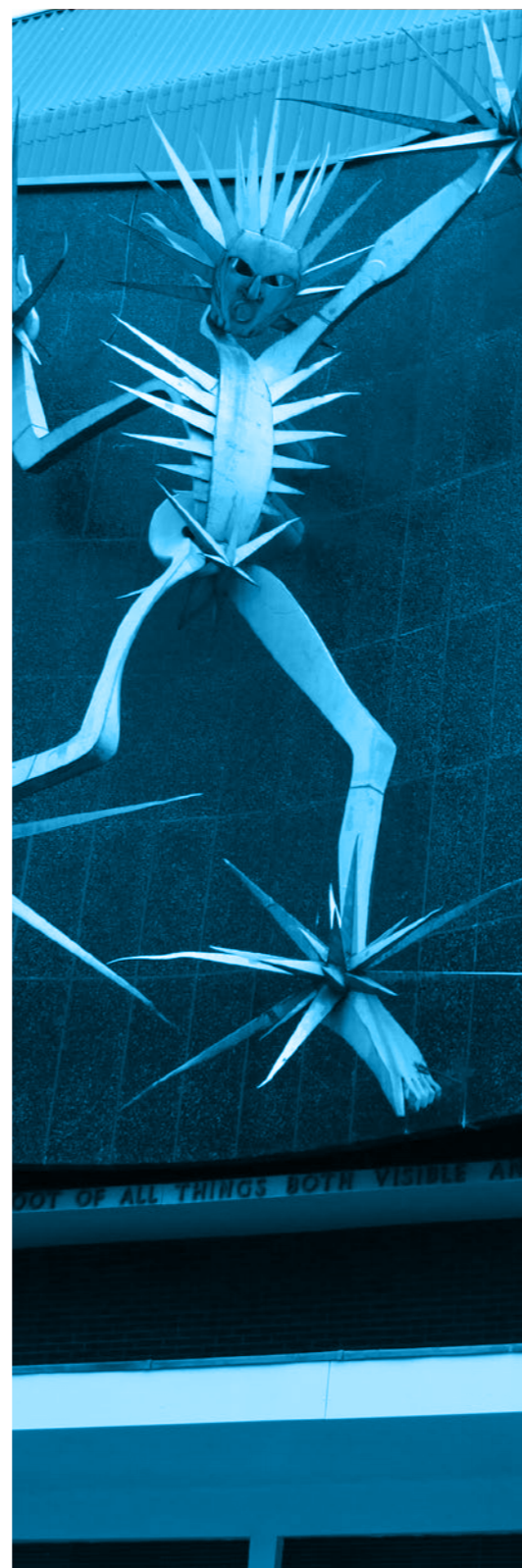
with health and criminal justice systems), and society (e.g., fewer victims from the reduced level of crime perpetrated by the cohort).

Important learning from this evaluation, includes:

- Marked differences can be made in the first 12 months of support for people with multiple needs, particularly those with highest level of service use. This makes the case to explore proportional allocation of support and greater resources based on need; for example, ensuring those with the highest levels of need and service demand are well-supported at the outset (to realise the substantial improvements in the first 12 months), but also monitoring over time and responding to changes in need beyond year 1.
- Case studies illustrate that some customers benefit from a holistic and profound impact on their lives that cannot be captured through changes in service use outcomes alone.
- Maintaining small caseloads is important to allow Service Coordinators to accommodate the range and complexity of customer needs and provide the type and level of support that can have real impact on customers lives (as case studies illustrate).
- Provision of support to improve the lives of people experiencing multiple and severe disadvantage is non-linear. Persistent and fluctuating need and level of stability despite consistency of support, must be recognised. Our data indicate a need for long-term availability of support that will need to vary over time in response to customer circumstance, whilst recognising that the greatest impacts are likely to be realised

in the first 12 months when people transition from having little/no support to having service coordination.

- This evaluation adds further weight to the argument for multi-agency approach to support those with high interactions with costly services; for example, agencies working together to set aside usual access criteria to address a problem.



The end of VOICES in Stoke-on-Trent (March 2022) will not be the end of endeavours for systems change approaches to supporting people with multiple and severe disadvantage in the city. In July 2021, Stoke-on-Trent was one of 15 areas in England awarded funding under the Changing Futures programme, a three-year, £64 million national programme to improve outcomes for adults experiencing multiple disadvantage. The Changing Futures model proposed in Stoke-on-Trent represents a logical progression from VOICES that responds to issues highlighted above. In line with our evidence that VOICES customers' needs vary over time and do not follow a linear trajectory of improvement, Changing Futures introduces the idea of an escalation and de-escalation system (Appendix 2). This involves a multi-agency panel and an attached service coordination function to manage cases that are prominent in the system

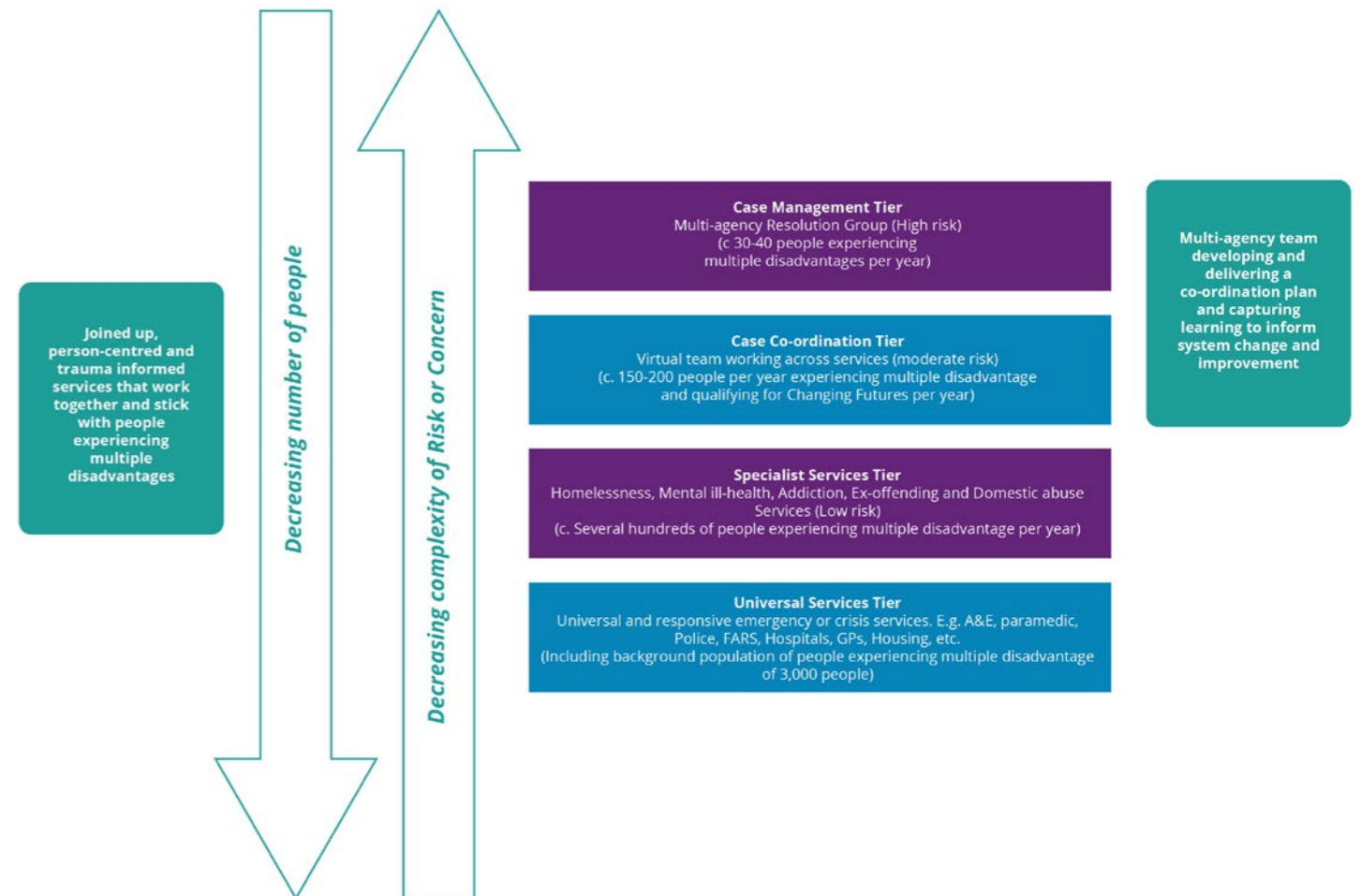
and visible to key stakeholders in terms of perceptions of risk (either in terms of preventative interventions, safeguarding, community safety, or cost). The model also includes female-specific support roles, which could help to understand and address the gender discrepancies in support needs, particularly from health services. This model not only aligns with evidence presented in this report but has synergy with Marmot's concept of Proportionate Universalism; i.e., providing support that is 'universal, but with a scale and intensity that is proportionate to the level of disadvantage' (p16). In the case of the target group for VOICES and Changing Futures, the varying levels of need between individuals and within individuals over time (as their circumstances change), should be met with a level of support proportionate to that need, within a system of universal support. It is commendable that the VOICES programme leaves a legacy of work and evidence that

has helped to inform the future systems for supporting people experiencing multiple and severe disadvantage in the Stoke-on-Trent. This opportunity should be used for ongoing monitoring and evaluation that facilitates ongoing learning and improvements to the systems that support those with the greatest need.

Appendix 1. Sources of financial data for unit cost of service contacts

Service	Unit Cost	Source	Notes
A&E	£182	NHS 'Combined costs collection' 2019/20 figures https://www.england.nhs.uk/national-cost-collection/	Assumes no admission (because this will be captured by inpatient stays)
Hospital inpatient	£2,978	NHS 'Combined costs collection' 2019/20 figures https://www.england.nhs.uk/national-cost-collection/	An average of the following types of stay is used: elective inpatient, non-elective inpatient (long stay) and non-elective inpatient (short stay)
Arrest	£336	Cabinet Office cost calculator – accessed January 2016	Assumes caution and no arrest (unchanged from Hard Edges 2)
Nights in Custody	£152	The Dorset Echo – Freedom of Information request July 2015, accessed February 2016	Accommodation, food and staff-ing costs for Dorset Constabulary FOI request (unchanged from Hard Edges 2)
Magistrates' court proceeding	£150	Crown Prosecution Service. Fees Bulletin 1 of 2020 (January 2020): Magistrates' court fees	Cost of half-day

Appendix 2. Changing Futures: As a tiered multi-agency approach to multiple disadvantage





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