Project Title:

Using Behavioural Insights to Improve the Uptake of Support for Services for Drug and Alcohol Misuse in Hartlepool

Project Team:

Dr Ellen Lynch, Institute of Health and Society, Newcastle University
Dr Hayley Alderson, Institute of Health and Society, Newcastle University
Prof. Jonathan Ling, Faculty of Health Sciences and Wellbeing, University of Sunderland
Dr Ruth McGovern, Institute of Health and Society, Newcastle University
Dr Stephanie Scott, School of Social Sciences, Humanities and Law, Teesside University
Liam Spencer, Institute of Health and Society, Newcastle University
Prof. Eileen Kaner, Institute of Health and Society, Newcastle University
Dr Esther Mireku, Hartlepool Borough Council
Sharon Robson, Hartlepool Borough Council
Karen Clark, Hartlepool Borough Council

Project Scope Summary:

Hartlepool has the second highest rate of deaths from drug misuse and the highest under 75 mortality rate from preventable liver disease in the North East region. No matter how successful a treatment programme could be, its effectiveness is limited to those individuals who can be engaged in treatment. Hartlepool Borough Council (HBC) have commissioned a drugs and alcohol recovery service in the community. This service has been shown to have one of the best treatment outcomes for service users in the region. However, the uptake rate of this service among those assessed and offered support is only 56.5%. Research conducted in other substance use treatment services has identified the initial approach and early interactions with service users as having a key role to play in treatment uptake and
continuation with 50% of clients failing to attend their second treatment session (Miller & Rollnick, 2002, White 2005).

This work will draw on existing health psychology and behaviour change theory as well as the Behavioural Insights approach. The behavioural insights approach seeks to make public services easier for people to use and thus enable them to make better choices for themselves. This can be achieved through application of the EAST framework which seeks to make services easy to use, attractive, social and timely. However, this framework cannot be employed without a full understanding of the purpose of the work and the context in which it will be conducted. Here, a four stage methodology including (1) definition of the outcome, (2) understanding the context, (3) design of the intervention and (4) testing, learning and adaptation of the intervention will be employed (Behavioural Insights Team, 2014).

One member of the research team will work from the drug and alcohol service site as an embedded researcher. This will allow them to become familiar with the context of the service through observation of the day to day running of the service, to share their knowledge of psychology, behaviour change and research methods with HBC staff as well as learning from the experiences of these same staff members. This researcher will work closely with HBC staff and the wider project team to conduct research which will inform and test a redesigned service offer. A mixed methods approach will be adopted. Quantitative data will be collected as part of a behavioural insights survey (n=50) while qualitative data will be collected via interviews (n=30) with service users between July and September 2018. Resultant data will then be combined and used to inform the redesign of the service offer. The service offer will be redesigned and implemented between October and November 2018. The impact of this redesign will be assessed via a quasi-experiment. Quasi-experiments have many similarities to true experiments with the key difference being that they do not involve random allocation to experimental conditions. Such methods are often used where it is not possible or reasonable to allocate participants to groups (e.g. where a treatment is available in one area but not another) or, as in this case, to assess newly implemented practices or interventions in comparison to previous practices. Here a pre-implementation, post-implementation quasi-experimental design will be employed to collect and compare data from patients assessed and offered treatment before and after the service offer redesign is implemented. We will therefore collect data regarding existing service uptake rates (collected between July and September 2018) and compare these to data regarding uptake rates following implementation of the redesigned service offer (data collected between December 2018 and February 2019). The quasi-experiment will aim to collect data from approximately 300 service users (150 pre-redesign, 150 post redesign) in order to ensure a high quality evaluation with data collected from as many service users as possible there will be room for flexibility to allow an extension of recruitment to May 2019. As such, following the proposed timeline the results of the work will be available in April 2019 and if the quasi-experiment is extended the results will be available in June 2019.

**Justification:**
Hartlepool has the second highest rate of deaths from drug misuse and the highest under 75 mortality rate from preventable liver disease in the North East region. Within the council, it
is identified that drug and alcohol misuse is a key risk factor for child neglect, adult safeguarding and children being placed in care. Based on estimates provided by Balance North East, the cost to social services in Hartlepool attributable to alcohol harm in 2015/16 was £6.0 million.

Public Health in Hartlepool Council has commissioned a drugs and alcohol recovery service in the community. This service has been shown to have one of the best treatment outcomes in the region. However, the effectiveness of this programme is being limited by an uptake rate of 56.5% among those assessed and offered support. Increased uptake of recovery services has the potential to lead to fewer people misusing drugs and alcohol. This in turn should mean fewer individuals progress to safeguarding, the impact on children is minimised and could lead to reductions in the number of children being moved into care.

Optimising the uptake of treatment and treatment effectiveness is important, however the prevention of substance use also has a role to play in reducing the number of people requiring treatment and support. As such reducing substance use uptake and the perpetuation of substance use behaviours has the potential to have a wide reaching positive effect both at individual and societal level. In order to reduce substance use among children and young people it is first important to establish when and why substance use emerges. These findings can then be used to inform the design and targeting of future intervention techniques to ensure maximum effectiveness.

Objectives:
This work aims to:
1. The ultimate aim of the project is to increase the uptake of services for Drug and Alcohol Misuse in Hartlepool
2. Use a combination of a behavioural insights survey and qualitative interviews with service users to establish factors affecting treatment uptake.
3. Redesign the service offer and approach drawing on evidence from the behavioural insights survey, qualitative interviews as well as behaviour change theory.
4. Conduct a quasi-experiment to evaluate the redesigned service offer.
5. Explore reasons for substance use among children and young people through qualitative interviews.

Methods:
A mixed methods approach will be adopted. A combination of quantitative survey data and qualitative interview data will be used to inform the redesign of the service offer. The effectiveness of the service redesign will then be assessed through a quasi-experiment.

The pragmatic behavioural insights framework will be employed to inform the redesign of the service offer with the aim of making treatment uptake easy, attractive, timely and social (Hallsworth et al., 2016). In line with recommendations from the behavioural insights team (Behavioural Insights Team, 2014) a four stage methodology will be applied:
1. Define the Outcomes
2. Understand the Context
3. Design the Intervention
4. Test, Learn, Adapt

1. Define the Outcomes:
The research team will work with Hartlepool Borough Council staff to define the primary outcome (increased treatment uptake) and establish a method of measuring this outcome, through the council’s data sets.

2. Understand the Context:
In order to understand how behavioural insights as set out in the EAST framework can be employed to improve service uptake it is important to understand the context including the experiences of service users and providers. Three research strands will be employed to ensure full understanding. Firstly, the embedded researcher will familiarise themselves with the service, with a specific focus on the service offer, by working from the HBC site at least one day a week. This will be complemented with the exploration of factors affecting treatment uptake through a behavioural insights survey and qualitative interviews with service users.

Behavioural Insights Survey
All service users currently receiving treatment or referred to the service between July 2018 and September 2018 will be invited to complete the behavioural insights survey either online or in hard copy with the aim of gaining responses from 50 service users. Questionnaire responses will be in the form of Likert scale ratings. Questions will assess the perceived costs and benefits of treatment uptake and the service offer with specific reference to:

- Individuals’ perceptions of the costs and benefits of treatment uptake.
- Whether the service offer and available treatment options fit with an individuals’ perceptions of self and/or aspirations of who they want to be.
- Favourable and unfavourable social comparisons with treatment receivers and/or awareness of others who take up treatment.
- An individual’s confidence in their ability to change.
- What are the barriers to accessing treatment?

In addition, a free response section will be included to allow participants to identify any factors that they felt influenced their decision to take up or refuse the treatment offer.

Between group analysis will be utilised to assess any differences between those who opt to take up the treatment offer and those who refuse of fail to attend treatment. Assessment of mean scores for each potential cost and benefit will identify areas to be addressed in the service offer redesign. Content analysis of free responses will be employed to identify additional factors which may be contributing to the decision to take up treatment.
Qualitative interviews

Semi-structured qualitative interviews will seek to recruit adults (n=20) and children and young people (CYP) (n=10) who have either taken up treatment or have been referred to the service but declined treatment.

Interviews will explore reasons for service uptake/decline and recommendations for service offers as well as individual’s perceived treatment needs. Interviews with children and young people will also utilise a narrative approach to explore the interviewee’s individual substance use history, triggers for, and barriers to, substance use as well as additional risk and protective factors.

All interview sessions will be audio recorded and transcribed verbatim. Interview transcripts will be anonymised before being subject to thematic analysis. Each transcript will be independently coded by two researchers who will then meet to discuss codes and resolve any inconsistencies. Codes and analysis will be discussed with the project team and HBC staff. The primary analysis will draw on transcripts from interviews with both adult and CYP participants. This analysis will be guided by the research question:

What factors influence the decision to take up or decline treatment offer?

Secondary analysis of transcripts from interviews with CYP only will be guided by the research question:

What are the risk and protective factors for the initiation and perpetuation of substance use among children and young people in Hartlepool?

3. Design the Intervention

In this case the ‘intervention’ is the redesign of the service offer. This will involve three stages: an initial redesign; co-development of the redesign and an implementation period.

Initial Redesign

The initial redesign will be developed by drawing on health psychology and behaviour change theory as well as findings from the behavioural insights survey and qualitative interviews.

Factors influencing the decision to take up or decline the treatment offer or fail to attend treatment, and recommendations to improve the treatment offer, identified in qualitative interviews will be compared and contrasted to the barriers and facilitators to treatment uptake identified in the Behavioural Insights Survey (low scores will indicate areas to be addressed) to produce an account of existing facilitators to be maintained and barriers to be addressed in the service redesign.

The Behaviour Change Wheel and Behaviour Change Technique Taxonomy will then be employed to identify methods of addressing barriers to treatment uptake.

Co-development
The redesign will be co-developed with HBC staff, including the whole Alcohol and Drugs team, via a staff workshop. The staff workshop will begin with a summary of findings from the behavioural insights survey, qualitative interviews and research assistant observations followed by the presentation of the proposed redesign including demonstrations of any social interactions or skills required for delivery of this redesigned service offer. Staff will contribute to the design process by offering comments, suggestions or changes throughout these two stages of the workshop. The final part of the workshop will be a coping-planning exercise during which the research assistant will lead staff members in exploring any potential barriers to the implementation of the redesign and identifying techniques which can help to overcome these barriers.

Implementation

This will be followed by a 2 month implementation period. This implementation period will allow staff to learn, become familiar with and practice any new process or behaviours required for delivery of the redesigned service offer before evaluation data is collected. During this period the research assistant will be available to observe and provide feedback on the new processes and to offer any additional input or support required to ensure that the redesigned service offer is being implemented as planned and address any issues identified.

4. Test, Learn, Adapt:

The final step in the four stage methodology is to test the intervention, understand its impact and if necessary optimise it through adaptation.

The redesigned service offer will be evaluated through a quasi-experiment with data regarding service uptake being collected before and after implementation of the redesigned service offer.

A quasi-experimental method rather than a controlled trial has been selected for two key reasons:

1. The fact that the evaluation is to be conducted at a single site could present a high risk for cross contamination between experimental conditions in a controlled trial. This risk is removed through adoption of a quasi-experimental process as data on existing treatment uptake rates will be collected before the service offer has been redesigned.

2. Due to the relatively small number of service users seen by HART and the short timescale for the work a trial is likely to be too underpowered to provide reliable results regarding the benefit of a redesigned service offer. A quasi-experimental method collecting data pre- and post-redesign will maximise the data collection period, increasing the pool of potential participants and thus providing a more reliable evaluation of the effectiveness of the redesigned service offer.
Baseline data relating to current rates of service uptake will be collected over a three month period of July 2018 and September 2018. Comparison data of service uptake rates following implementation of the redesigned service offer will be collected over a three month period from December 2018- February 2019. The aim is to collect data from approximately 300 service users (150 pre-redesign, 150 post-redesign)

**Milestones:**

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<tr>
<th>Milestone</th>
<th>Time</th>
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<tbody>
<tr>
<td>Research Scoping Document Provided to LGA</td>
<td>March 30 2018</td>
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<tr>
<td>Ethical Approval gained</td>
<td>July 2018 (this could be earlier depending on timescales)</td>
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<tr>
<td>Behavioural Insights data collection survey</td>
<td>July - September 30 2018</td>
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<tr>
<td>Baseline service uptake rate data collection</td>
<td>July - September 30 2018</td>
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<tr>
<td>Design the intervention</td>
<td>October – November 2018</td>
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<tr>
<td>Evaluation of redesigned service (data collection)</td>
<td>December 2018 – February 2019 (with the option to extend until May 2019)</td>
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<tr>
<td>Final Evaluation Report</td>
<td>March 31 2019 (option to extend until June 2019 if the evaluation extends also)</td>
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**References:**


**Council Officer contact**

Sharon Robson

E: Sharon.Robson@hartlepool.gov.uk