MONEY AND MENTAL HEALTH POLICY INSTITUTE

Discussion paper

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Financial transactions data, AI and mental health: The challenge

***"They know, they have all this data - give a little bit back, come on guys!?"* - Money and Mental Health focus group participant on banks' use of transactions data.**

Introduction

Experiencing a mental health problem can have a serious effect on your financial circumstances. Some people may find they need to take time off work, or reduce their hours, which can lead to a reduction in income.[1]

"I struggle to hold down long term, stable employment. Bouts of unemployment put a massive strain on my finances."

Even if a person's income stays the same, mental health problems can make managing money dramatically more difficult, by affecting our ability to process information or concentrate, impairing our memory so it's harder to remember when bills are due, increasing our impulsivity meaning we're more likely to spend, and undermining our energy and motivation to keep on top of a budget.[2]

"I had no notion of how to budget, and during my most depressed episodes I just didn't have the energy or concentration to track where the money was going."

These challenges mean that people experiencing mental health problems are three times more likely to be in problem debt.[3] And these financial difficulties, in turn, can cause shame, undermine self-esteem, result in intimidating debt collections activity and leave people going without essentials, in a way that aggravates mental health problems.

"My financial situation causes stress every day. It's like a black cloud hanging over me every day. It never goes away."

Fintech for mental health

Financial difficulties are always resolvable, and often preventable, if the right help is offered at the right time. Relatively simple tools, like notifications that help you keep track of spending and bills, the ability to ring-fence money for essentials, and systems to share financial information with trusted friends and family members, could help people experiencing mental health problems to stay financially well.[4]

In spring 2017, Money and Mental Health partnered with the Financial Conduct Authority (FCA), the UK's main regulator of financial services, on a 'TechSprint' - a two-day event, bringing financial services firms large and small together with technical experts to design practical tools and products which could help people experiencing mental health problems to manage their money. Increasingly, the types of tools discussed and developed over those two days - like the ability to block certain types of transactions on a debit card,[5] or ring-fence money for essentials[6] - are becoming available to consumers.

Our conversations with people with experience of mental health problems also suggest that there is significant demand for these products, tools and settings - for example 37% of the UK population, rising to nearly half (45%) of people with mental health problems, report that they would find it helpful to set a weekly spending limit with their credit or debit card.

"I tend not to check my bank balance regularly as it could make me feel negative thoughts, so alerts to notify me would be useful."

Getting help where it's needed

But, when you're experiencing a mental health problem, asking for help can feel impossible. Stigma and shame, together with thoughts that there is nothing anyone can do to help, can leave people feeling like they are completely stuck and alone. More than a third of people experiencing a common mental disorder at any given time (36%) will not have received a diagnosis and six in ten people (61%) with a common mental disorder will not be receiving treatment,[7] so might not realise that the financial difficulties they're experiencing are related to their mental health.

As mental health problems often fluctuate, even those with long-term conditions may be unable to tell in the moment that their condition is worsening in a way which could undermine their ability to manage their finances. This means that relying on people to self-identify as needing support with money management because of their mental health, and to find the tools they need in order to avoid or resolve financial difficulty, isn't going to solve the problem.

However, in an increasingly digital economy our growing trails of financial transactions data mean that we may be able to spot patterns and changes in behaviour that suggest a person is struggling to manage their spending, or keep up with bills. This would allow financial service providers to proactively reach out to offer help, in the same way that we already analyse transactions data to identify possible fraud and offer support to tackle it.

Concise, timely messages and signposting to support from financial services providers when things change could empower people experiencing mental health problems to take control of their financial management, or to seek medical help, and prevent more serious difficulties.

"If there was an alert, to notify me when my spending was becoming erratic, I would think twice about the purchase."

Many of the tools and products proposed by firms at our TechSprint hoped to draw on this wealth of transactions data, as well as other data streams such as social media usage or biometric data like heart rate. Progress on developing these tools and making them available, however, has been much slower despite the roll-out of Open Banking. A follow-up discussion with TechSprint participants in autumn 2017 suggested that this delay is largely due to ethical, legal and regulatory concerns.

The big questions

Financial services firms already have enough financial transactions data to use artificial intelligence (AI) tools to identify patterns indicative of impulsive spending and other changes in financial behaviour which may indicate a mental health problem. But the firms we have talked to over the past two years expressed reservations about doing this. The first big concern is whether we should be doing this analysis at all, and how we do so safely, while the second set of questions is around *how* this analysis should be undertaken.

1. Should we analyse transactions data with the aim of identifying and supporting customers experiencing mental health problems?

While the FCA's definition of vulnerability makes clear that firms have an obligation to protect not just those customers who disclose a vulnerability or who are 'readily' identifiable, but to pay attention to indicators of vulnerability, it isn't clear how far they are expected to go. Does this mean simply paying attention and reading between the lines when customers contact firms, or actively looking for signs that someone might be in trouble? What are the ethical questions raised by undertaking proactive analysis of transactions data to identify signs of vulnerability, which could mean a financial services provider knows something about a customer that the person remains unaware of? What sort of framework is needed to ensure that this sort of analysis is undertaken legally, transparently, and in a nondiscriminatory way?

To answer these questions, as well as seeking guidance from AI experts, ethicists and lawyers, we also need to ask people with lived experience of mental health problems how they would feel about this sort of data analysis - would it be helpful, or a source of concern, and what sort of tools, reassurances and controls might people need to be comfortable with this sort of work?

2. If this analysis is undertaken, how do we ensure it is in done so safely, fairly, effectively and in line with the customer's best interest and wishes?

We will also need to seek guidance from people about the second set of questions, which relate to the practicalities of undertaking transactions analysis for this purpose. Do firms need explicit consent from customers to undertake this sort of analysis under the new General Data Protection Regulation (GDPR)? Where AI is used for this analysis, how do we ensure it is properly supervised, accountable and unbiased?

Does identifying that a customer may be at risk place an ethical obligation on a firm to take action, even if the customer has not sought support and may not know they're unwell? If so, how should that communication be handled to minimise distress and maximise usefulness to the customer? What support could firms offer if they have reason to believe that a customer is at risk? If firms want to signpost customers towards tools, settings and products which could help, would that be considered marketing, requiring consent?

Finding Answers

These aren't questions that we can answer on our own - and, at the start of this conversation, the list of questions is likely to grow. So, we're delighted to be working with FCA's RegTech team to host a series of events over the next six months exploring these issues. The FCA will be helping us to bring together a wide range of experts from the financial services sector and beyond, while we'll also be seeking the input of our Research Community, a group of 5,000 people with experience of mental health problems. Together, we'll explore best practice around data analysis for customers experiencing mental health problems, and showcase our findings.

Footnotes

[1] Bond N and Braverman R. Too ill to work, too broke not to: the cost of sickness absence for people with mental health problems. Money and Mental Health Policy Institute. 2018.

[2] Holkar M. Seeing through the fog: How mental health problems affect financial capability. Money and Mental Health Policy Institute. 2017.

[3] Jenkins R et al. Debt, income and mental disorder in the general population. Psychological Medicine 2008; 38: 1485-1493.

[4] Evans K and Acton R. Fintech for good: How financial technology can support people experiencing mental health problems. Money and Mental Health Policy Institute. 2017.

[5] https://www.moneyandmentalhealth.org/barclays-spending-block/

[6] https://www.moneyandmentalhealth.org/financial-technology-see-money-clearly/

[7] Lubian K et al. Mental health treatment and service use. Adult Psychiatric Morbidity Survey 2014, Chapter 3. NHS Digital. 2016.