Improvement Fund End of Project Impact Report

We have designed this form to be flexible so that you can evaluate your project in a way that is meaningful to you but that covers our needs as a funder too. We have provided prompts for the information we are looking for, with a particular emphasis on improvement tools and methodology, the impact made, and the role the improvement fund played in you project.

Project Details	
Project Title	Mentoring frequent non-attenders with hepatitis in a deprived area
Date of Report	May 2019
Project Start Date	March 2018
Project End Date	March 2019
Lead Organisation	Dundee H&SCP
Partner Organisations	NHS Tayside

What was the challenge? Guideline word count: 150

The challenge was to successfully engage a hard to reach group of people who have hepatitis C and do not frequently attend health care appointments, this includes people who have been diagnosed with hepatitis C many years ago and those who have been more recently diagnosed. By utilising a specialised team which includes team members with a keen interest in assertive outreach true person centred care can be provided with the aim to increase attendance at clinics, this can provide a significant benefit to their overall life and ultimately help them become cured of hepatitis C which if untreated is a potentially fatal disease. These people have complex healthcare needs and frequently led chaotic lives, so mentoring may have profound effects on their future life skills, lifestyle and a significant impact wider in the community by acting like a positive role model. Treating and curing hepatitis C not only can potentially save the person's life but will also reduce the chance of forward transmission to others so has the opportunity to impact upon the health of the population.

This work fits in with the wider MCN BBV goal which is to eradicate hepatitis C in Tayside. Hepatitis C is an infectious, potentially fatal disease that left untreated can cause liver failure or liver cancer. Recent pharmaceutical innovations have produced a cure that is effective in >95% of patients. This cure requires numerous visits to secondary care clinics or community pharmacies over a period of several months where patients are assessed and receive their curative drug treatment. As the disease is spread by infection, if all patients are cured, it can be wiped out. It is the vision within Tayside to eliminate this deadly disease. Hepatitis C is spread most commonly through IV drug use, and its progress is greatly accelerated in those who drink alcohol. Unsurprisingly, as dangerous alcohol behaviours and IV drug abuse are both associated with deprivation, Hepatitis C is particularly common and particularly aggressive within deprived communities.

The chaotic lifestyles and mental health co-morbidities of those who have drug and alcohol problems makes it challenging to keep patients who have been identified as having Hepatitis C in treatment for the months of secondary care contact required for them to achieve a cure. This leaves an infected reservoir of patients who can spread Hepatitis C to others and who may go on to develop liver cancer or liver failure themselves.

What were your aims? Guideline word count: 200

The aim of this project was to specifically target a group of people who are known to have hepatitis C and have a history of not attending healthcare appointments. The intervention was to offer them individual person centred mentoring to assess if this is an effective intervention for the primary and secondary outcomes as below. The funding allowed a robust evaluation of the impact of providing mentoring to this hard to reach group of people.

Primary Outcome

- Was the referred person cured of hepatitis C 6 months after referral

Secondary Outcomes

- Impact on attendance rate before and after referral
- What is the impact on social work outcomes
- Time spent by mentor

This project fits well with Scottish Government's aim to reduce health inequalities and Health and Wellbeing Outcomes 1, 2, 3, 4, 5, 8 and 9 as follows:

Outcome 1: People are able to look after and improve their own health and wellbeing and live in good health for longer
The aim of effective mentorship is not just to treat a potentially fatal disease (allowing people to live longer); it is also anticipated that mentoring will provide benefits to participant's ongoing health and wellbeing by improving their organisational and planning abilities through supporting their regular attendance at secondary care, and through engaging them with other services able to address their other physical, social and mental health needs.
Outcome 2: People, including those with disabilities or long term conditions, or who are frail, are able to live, as far as reasonably practicable, independently and at home or in a homely setting in their community
People with hepatitis C have a long term condition. They frequently have co-morbid substance misuse / alcohol misuse as well as significant mental health illness. The target group for this project are people who are struggling to attend appointments and engage with healthcare services – by encouraging them to attend this has the ability to improve their long term health.
Outcome 3. People who use health and social care services have positive experiences of those services, and have their dignity respected
It is the aim of the NHS to always treat people will respect, by encouraging people to attend appointments who have previously not engaged it is envisaged that they will realise that attending clinics is a positive experience and that ultimately their health will improve. The programme is an active demonstration of how we value the health of a community who are used to being ignored and avoided.
Outcome 4. Health and social care services are centred on helping to maintain or improve the quality of life of people who use those services
This is absolutely core to this project – engaging with mentoring can provide people with a role model and guidance to improve the quality of their life – often these people have had troubled upbringings, lack of stable role models in their lives and this is a primary focus of this project.
Outcome 5. Health and social care services contribute to reducing health inequalities
This project is going to be targeting a Deep End general practice(s) which serve the most deprived communities in Scotland. The current divide in health care outcomes is unacceptable and by curing people who have hepatitis C – a potentially fatal disease this has the potential to narrow health inequalities.
Outcome 8. People who work in health and social care services feel engaged with the work they do and are supported to continuously improve the information, support, care and treatment they provide
This seeks to actively improve an established service by increasing links between health and social care,

the existing dedicated team will learn from the experience, share significant learning points and further improvements as they are found. In addition an objective analysis allows the staff to be proud of the work they do and raise the profile of their service.
Outcome 9. Resources are used effectively and efficiently in the provision of health and social care services
It is estimated that for every one person cured of hepatitis C six people are preventing from contracting this disease – targeting a hard to reach population is an effective strategy to improve the health of a population. This aims to make best use of existing resources and minimise healthcare wastage by reducing do not attend appointments.

What was your approach? Guideline word count: 500

The key people (other than the patient who was referred who is at the centre of this project) involved in this project were:

- Mentors from Integrated Substance Misuse Service
- Team Managers from Integrated Substance Misuse Service
- General Practitioners
- General Practice Teams

Collectively these people worked together to deliver this project by having regular meetings to monitor the number of referrals and discuss the progress of the project.

The key activities were as follows:

Mentors from Integrated Substance Misuse Service – provided mentoring. Made every effort to engage with people that were referred. Attempted to phone them firstly (if contact number was available) with view to setting up an appointment to meet them either in their house or in a suitable place in the community. Then performed numerous visits and contacts in an attempt to gain rapport and establish what are the current challenges in that person's life. It was the intention of the mentor to persuade the person that getting treated for hepatitis C should be a priority for the patient and that they would support them to engage with treatment.

Team Managers from Integrated Substance Misuse Service – received referrals and allocated them to mentor who seemed to be best fit for that individual based on referral details.

General Practitioners – recruited for this study. Secondary care had previously provided a list of registered people with hepatitis who had defaulted from secondary care clinics. These people were actively chased by the project lead GP who made efforts to contact them by writing letters (sending these to the person's home and attaching these to prescriptions) as well as by phoning them regularly (if phone numbers were available).

General Practice Teams – downloaded summary of clinical notes and sent email to ISMS team referring for mentoring

This process utilised was based on the principles associated with the Appreciative Inquiry, in which existing teams were working together to develop unique strategies that fits the goals of both teams - to improve the health and wellbeing of people who have hepatitis C who are not engaging with health care services.

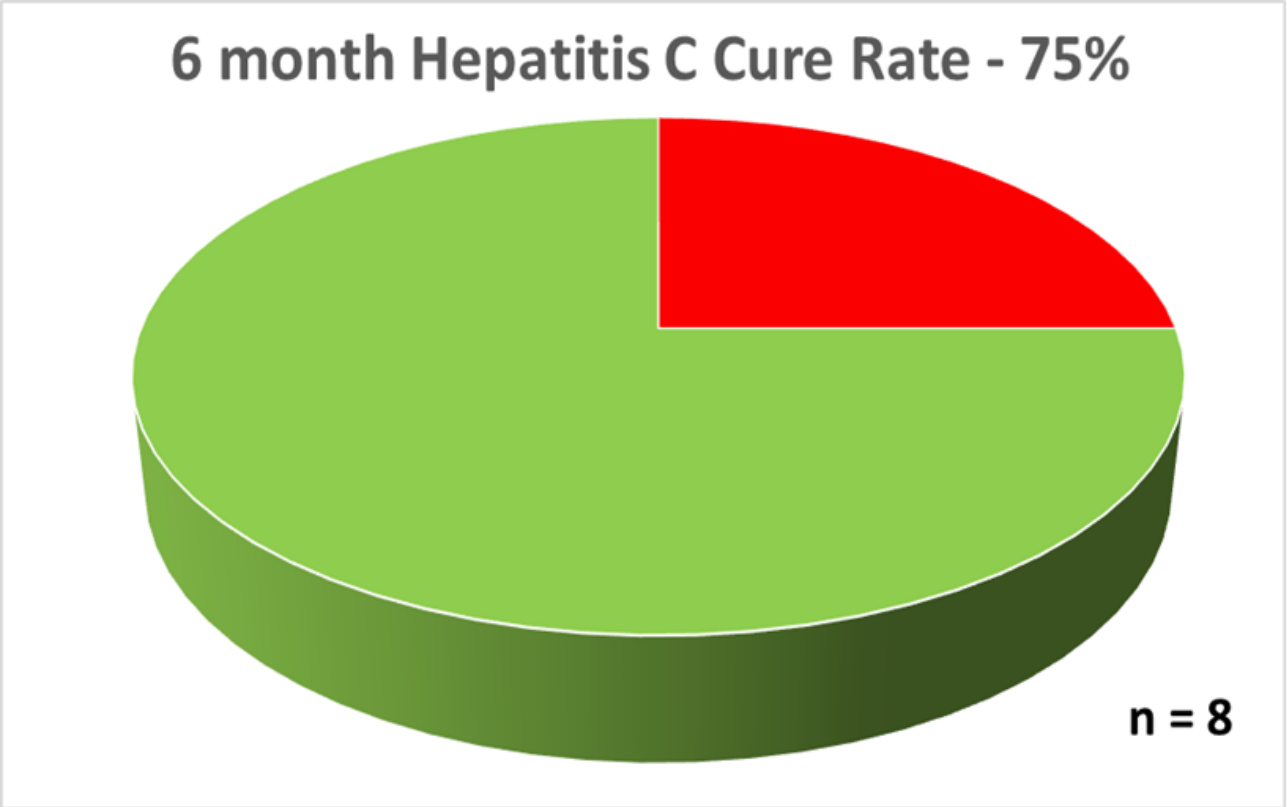
Methods used to test the change and monitor progress included regular interdisciplinary team meetings in

which referral numbers were monitored and informal discussions occurred to establish how people referred were engaging with the mentoring. Regular meetings also allowed discussions to occur about if this intervention should be rolled out to involve a different practice as well.

Activities were monitored by utilising routinely collected healthcare data. Primary care notes occurred as usual and these were retrospectively analysed. Routine social care notes were taken and retrospectively analysed to objectively establish time taken and the impact mentoring input has had on the person.

What was the impact? Guideline word count: 800

Primary Outcome – Was the referred person cured of hepatitis C 6 months after referral



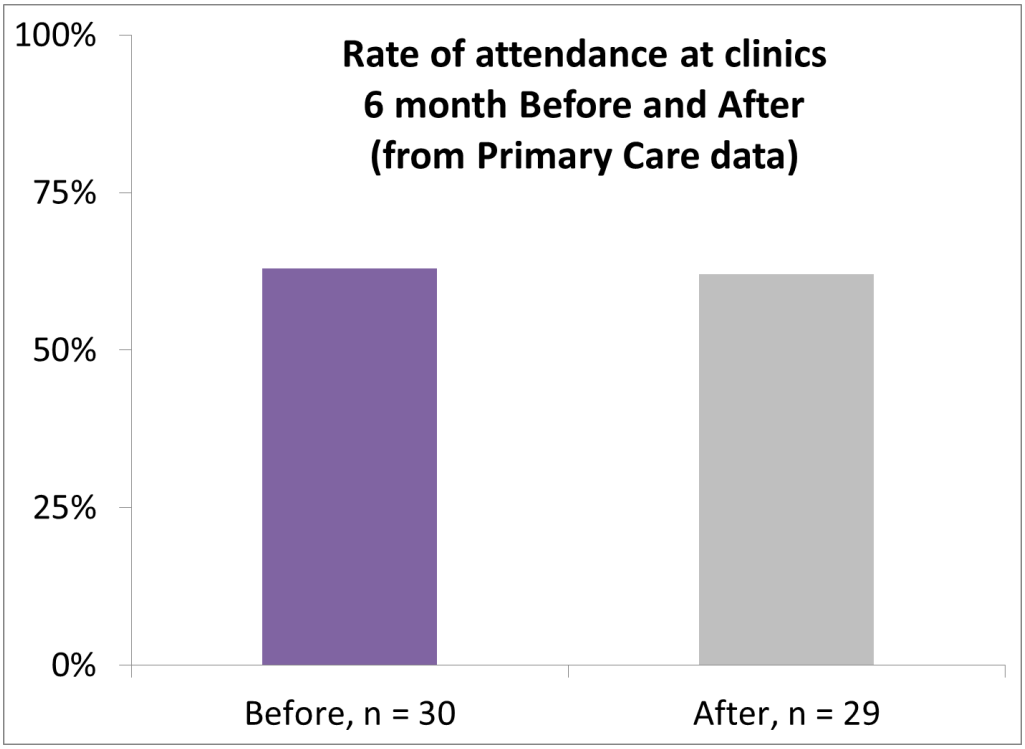
Two people verbally stated to the mentor that they were only cured of hepatitis C due to the mentoring process. Of note it must be acknowledged that those people who have been cured can't be solely related to the mentoring intervention – locally there are robust services (and trials comparing pharmacy led treatment for hepatitis C with nurse led outreach clinics). If being reproduced elsewhere the capacity of the hepatitis clinics should firstly be assessed to make certain they have capacity (in this study local BBV MCN colleagues had been involved initially and had agreed that they would support this project).

It is also of note that of those referred 4 people engaged with the mentor and 4 people did not engage with the mentor; both these subgroups had the same rate of cure for hepatitis. However the fact that there was initial contact via the GP (in which they verbally consented for the referral) may have encouraged the person referred to obtain treatment for hepatitis C, therefore the overall figure is displayed as a percentage of cured with the denominator being the total number referred.

Secondary Outcome – impact on attendance rates

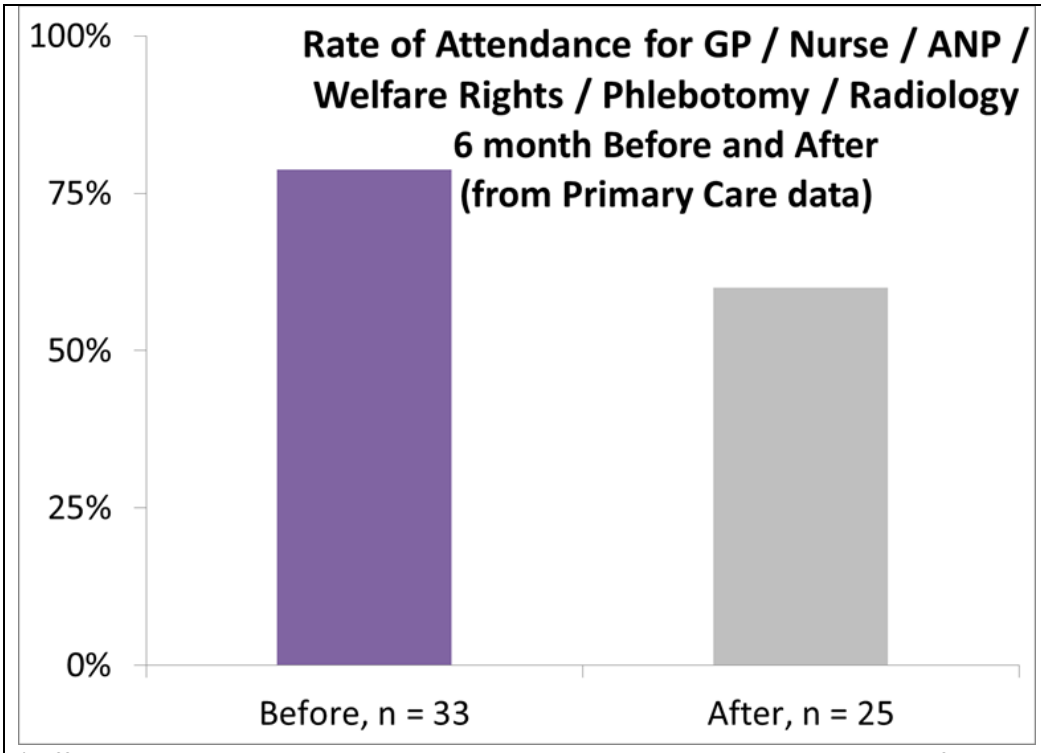
The patient's general practice record was reviewed retrospectively and data extracted to Microsoft Excel. Each individual had data extracted relating to all their encounters six months before and six months after referral to the mentor was sent. Note these graphs were generated from data of all 8 people referred (rather than solely those that engaged with the mentor)

From reviewing records it is clear that people are very much presenting with different episodes of care; at times with a complication that involves frequent follow up that may then resolve; encounter data is skewed and when interpreting these graphs one should bear this in mind.



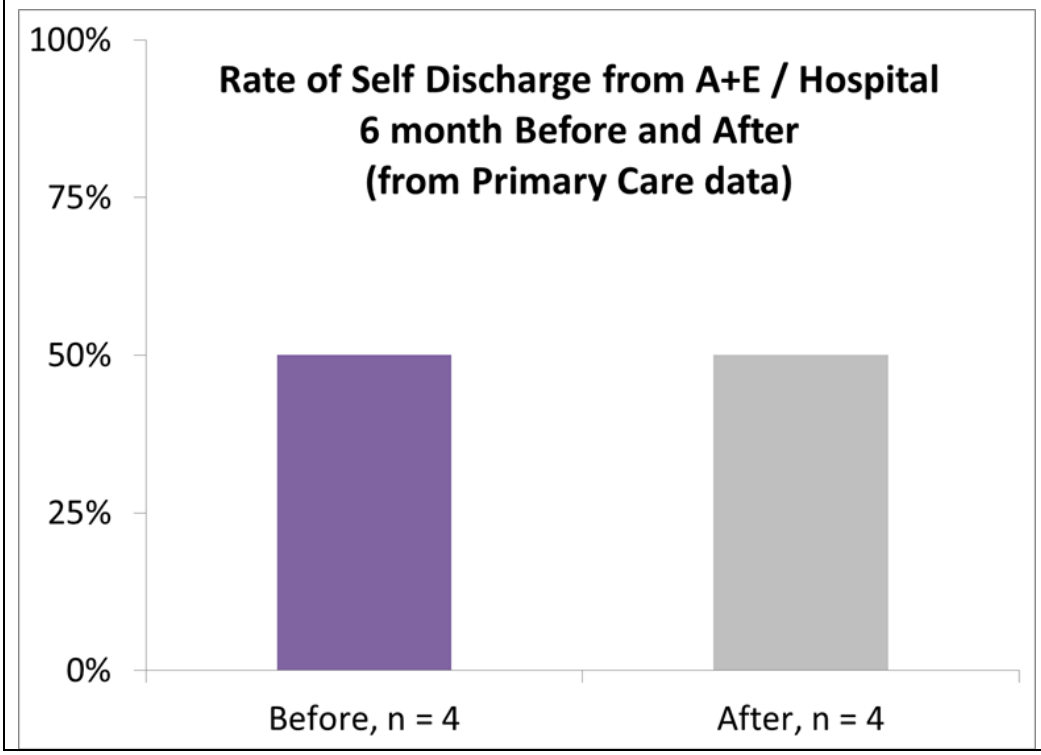
(Difference 1%, 95% CI: -22.5% to +24.4%, Chi-squared 0.006, P = 0.937, performed by MedCalc Software, Comparison of proportions)

The above shows that there was no meaningful change in attendance rates after person was referred to the mentor. To clarify this was generated by utilising primary care records and letters sent from secondary care clinics which reported attendance or not.



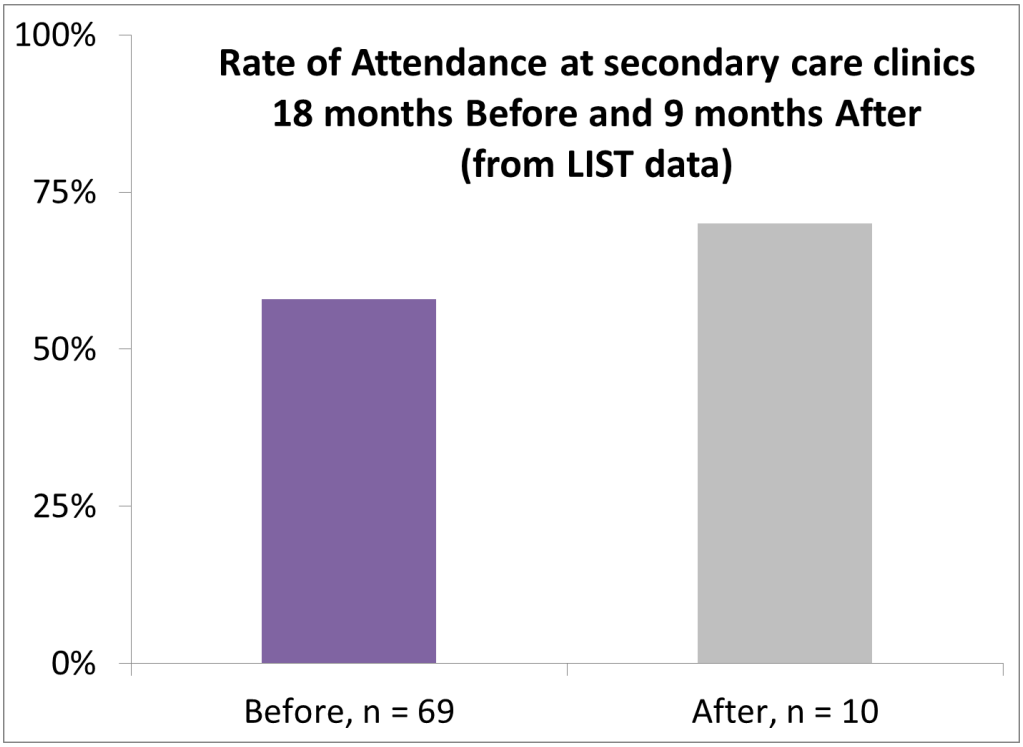
(Difference 19%, 95% CI: -4.42% to +40.9%, Chi-squared 2.441, P = 0.118, performed by MedCalc Software, Comparison of proportions)

The above graph shows that there appears to be a reduction in rate of attendance at GP clinics. Although this reduction is statistically not significant (P = 0.118) the reduction may relate to the pathologies that the person presented with. When opportunistically recruited the person appeared at the general practice usually due to a patient driven reason; follow on maybe less patient driven. Nonetheless this graph suggests that the mentoring process did not help improve the attendance rates.



(Difference 0%, 95% CI: -49.5% to +49.5%, Chi-squared 0.000, P = 1.0, performed by MedCalc Software, Comparison of proportions)

Collectively analysing rate of hospital self discharge and self discharge from A+E shows no different before and after mentoring occurred. It is of note that this rate remains high at 50%.



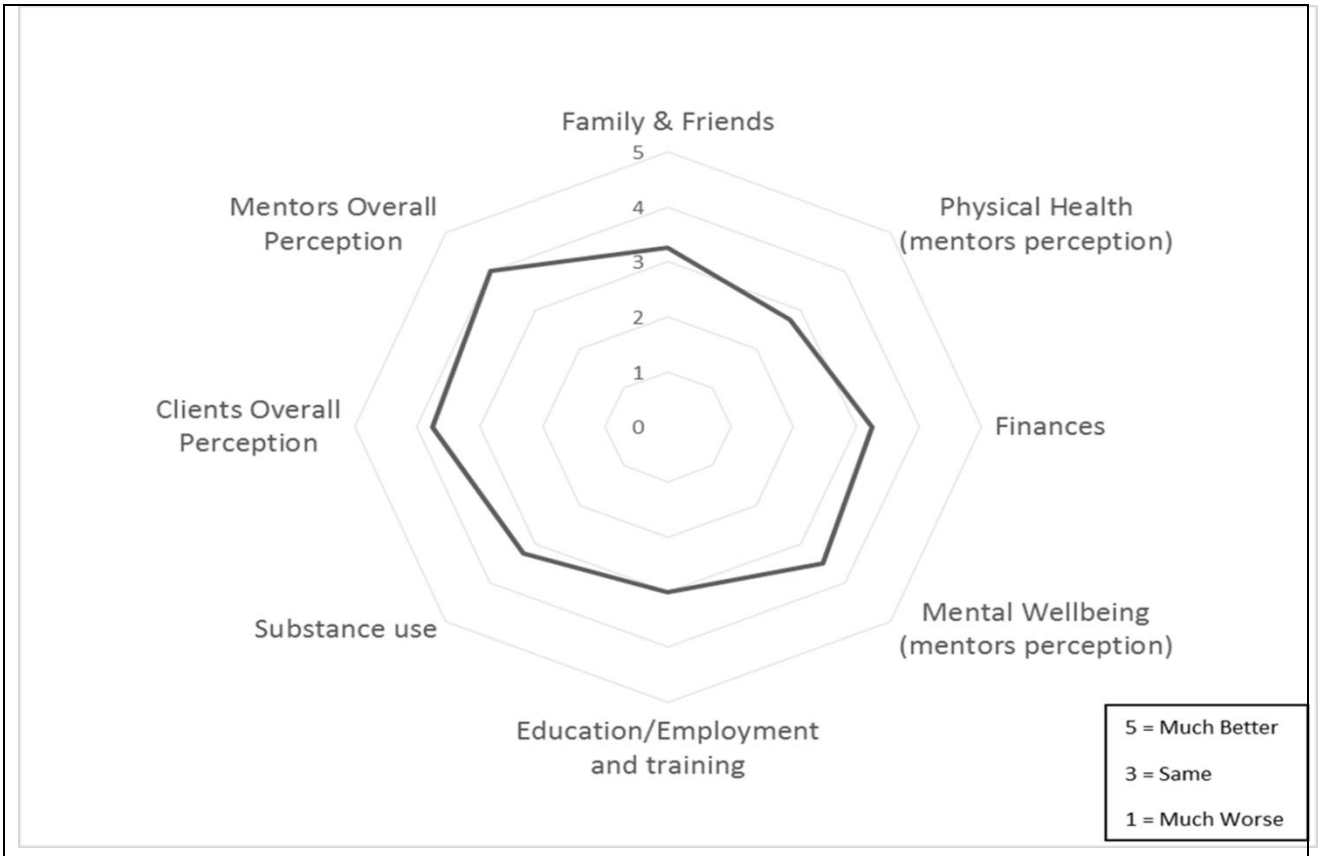
(Difference 12%, 95% CI: -20.3% to +34.5%, Chi-squared 0.515, P = 0.473, performed by MedCalc Software, Comparison of proportions)

Data was provided by LIST which had a longer time frame; this included 18 months before referral and 9 months after referral. As it was the rate that was compared it was appropriate to utilise longer time frame to attempt to capture more data. Given the relatively low numbers of patients and the episodic nature of healthcare caution must be used when interpreting this graph, despite the small increase in attendance rate (which is not statistically significant, P = 0.473). In addition it is worth noting that the person may attend an outpatient clinic regarding one reason multiple times but then not attend a different outpatient clinic for a completely different pathology at all.

LIST data also provided information about the specialities that people had been referred to. This is represented in the above word cloud, with a larger words representing more frequent clinic appointments. It is of note how prominent psychiatry is; however in part this relates to the type of clinic set up (with frequent clinics, rather than a clinic leading up to an operation). The above chart does provide an indication of how complex these patients from the specialities involved in their care over recent years.

Secondary Outcome - Impact on social work outcomes

Detailed retrospective review of social care case notes occurred jointly with a GP and a ISMS team manager and agreement was made about how the situation has changed (if at all) six months after being referred for mentoring. This is displayed as the following:



This does not provide evidence about a meaningful improvement in social care outcomes. It is of interest to note that despite 75% of these people being cured of hepatitis C retrospective objective assessment of these people's physical health (collectively) was that this was reduced. This is due to the complexity of these patients and fact that hepatitis C is only one of many physical health problems that these people face.

Secondary Outcome - Time Spent by Mentor

Mentors spent time attempting to get people to engage; this cohort was known to be hard to reach so proactive efforts to contact them, including repeated home visits were performed to attempt to engage them. We estimated it takes 10 minutes for a phone call, 90 minutes (including travel time there and back) for a home visit and 150 minutes when supporting the individual attend appointments / agencies. Utilising this, the following time was spent:

- Four individuals that engaged with the mentor took the mentor an average of 28 hours.
- Four individuals that did not engage with the mentor took the mentor an average of 13 hours.

What went were the pros and cons? Guideline word count: 300

The project went well as it had 'buy in' from all relevant teams. The Gantt chart was very helpful in allowing momentum to be sustained and allowing progress to be tracked compared to how had been planned.

A barrier was that the social work intervention was not evaluated as planned. It was intended to obtain more robust data – with the person receiving the mentoring to score themselves allowing before and after

data to be obtained. This had been mentioned from the start although didn't occur. This was a disappointment – although overcame by retrospectively reviewing the social work notes (by team leader and a GP) and obtaining agreement about how things have changed (if at all). Am uncertain how this could have been performed better in future – perhaps demonstrating the use, providing with an example and explaining the potential value of reasons why this data was being collected could facilitate data collection in future. Although with this hard to reach group of people whilst attempting to engage them and establish rapport completing another form may be a hard obstacle to overcome.

A challenge this project faced was that during the year the project was underway the Drugs & Alcohol Blood Bourne Virus service transformed and became the Integrated Substance Misuse team. This meant that there was more change in this particular organisation than anticipated when applying for this funding. Another barrier was that to scale up this project as the support worker's role has amended meaning that they no longer are involved in the first assessments as they previously were.

The main strength of this project is that there was an objective strong primary outcome - 6 of the 8 people referred for mentoring were cured of hepatitis C six months after referral (although it is hard to tell how much of this success is attributable to the mentor's involvement). Mentoring involvement clearly was aimed to facilitate cure – but also locally we benefit from well established hepatitis service. It is of interest that even when not engaging with the mentor some of these patients went on to engage with the hepatitis clinic or spontaneously cleared hepatitis C and one person was on treatment at the time of referral for a mentor (although not engaging with other appointments).

The main weakness is the relatively low numbers of patients meaning that in-depth statistical analysis is not possible. It is of note that by taking the time to evaluate the impact of mentoring it is possible to deduce that with this small study there is no evidence to suggest that mentoring helps attendance rates or social outcomes.

What learning will you share? Guideline word count: 500

Key learning points:

1. In primary care a GP (or other healthcare professional based in the practice) lead is required for each individual project to sustain momentum & raise awareness
2. Regular meetings are required when a new referral process is occurring – this is to identify and iron out any potential creases that can occur
3. Although not an intended consequence the support workers involved became more skilled at assertive outreach in relation to curing hepatitis C – as a direct consequence patients from other practices (outwith this project) were supported to undertake treatment for hepatitis C.

Outputs:

Oral Presentation Access All Areas – Hepatitis Scotland National Conference run by Scottish Drugs Forum on 28th March 2019

Poster has been produced (enclosed with report) – will be displayed locally at relevant events

What would you do differently and why:

I would apply for more funding so that a post can be funded dedicated to providing mentoring. Having the

ability to do this as well as usual standard of care across a few practices would allow for a larger evaluation to occur.

I would not have amended wording when submitting poster abstract to NHS Scotland. Had an abstract accepted by NHS Tayside (which I thought meant was accepted to NHS Scotland conference) but this was then rejected when submitted to national conference. I had changed the abstract to highlight the results and limitations (i.e. low numbers), which I believe if I had not done may have been accepted.

What learning has been shared so far and why:

Locally in the Dundee H&SCP we have discussed the project – although excellent in terms of getting people treated for hepatitis C it did not have the desired effect on people's social work outcomes or attendance rates. These discussion have occurred locally on an informal basis in the context of wider service redesign which is ongoing.

The general practice team have had the results presented to them in June 2019.

Ways to share the project going forward:

The report will be submitted to a peer review journal – most likely International Journal of Drug Policy. I can control submitting but in honesty uncertain it will get published – this is because it is a granular study with very few numbers. If not successful for that journal will look to others, it maybe the ultimate output would be a letter in a peer reviewed journal.

Advice for others:

Try. Find something that you are passionate about and take action; the passion and reason you are doing this will assist you getting through the project when no doubt conflicting priorities arise. Although this project didn't work out as well as I would have wanted (would have liked greater numbers and more of an impact on social work / attendance rates) it was a small project that by taking action has explored if this should be rolled out further. It is wise to seek help and discuss challenges with others – the iHub team were excellent at supporting this project.

What are the next steps? Guideline word count: 200

The project didn't deliver evidence for improved attendance or an objective improvements to participants lifestyles overall. Although this is not a reflection of a failure of a project, an option moving forward would be a similar intervention would be tested at larger scale across multiple practices. Locally we will decide an alternative approach to support this hard to reach group of people.

It is the author's beliefs that this project could be replicated elsewhere in other general practices. Due to the nature of general practice this would be best implemented into their own systems in a way which works for that particular team.

What did the Improvement Fund support you with? Guideline word count: 200

The funding was used to enable meetings to discuss the progress of meetings and have dedicated quality improvement time devoted to devising outcomes, extracting data and interpreting this.

The funding team were helpful by pointing me in the direction of LIST who assisted in obtaining some data from secondary care referrals.

One of the challenges this project faced when presenting the results was the low numbers – it is hard to release data due to the risk of it being patient identifiable. Ultimately the project was discussed with a Caldicott Guardian from NSS – conversations like these would be much harder to have without the improvement team's involvement.

The Improvement Team were extremely helpful and supportive when discussing the project's progress and ways of presenting the evaluation.

Other Guideline word count: 200

- Is there anything else you would like to add not covered in the other sections?

No, thanks again for this opportunity. If you require any clarification about this report please get in touch.

Please attach any supporting information as an appendix.

If you have any questions contact hcis.improvementfund@nhs.net