What is the value of social prescribing?

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#### Abstract

General practice is in crisis. Across the UK different models of social prescribing have evolved to meet the growth in patient attendance. Although there is growing evidence of their efficacy there is little evidence of their value. Analysing one holistic social prescribing intervention this research adopts a social return on investment approach. Using an impact questionnaire, including validated items impact of the programme was assessed on 128 new patients over 12 months. This was followed up with semi-structured interviews with 40 patients; analysis of GP attendance data and the recording of other social outcomes. Data collected show statistically significant improvement in: Public Health Questionnaire 9 (p=<0.001), Generalized Anxiety Disorder 7 (p=<0.001), the Friendship Scale scores for social isolation (p=<0.001); the Office National Statistics' Wellbeing measures (item range p=<0.05 to p=<0.001) and the International Physical Activity Questionnaire item for moderate exercise. There was a social return on investment of £2.90 for every £1 invested. Getting a broader perspective on value is vital to developing the business case to encourage commissioners to invest in social prescribing. Understanding and monetising broader social impact is vital to describing the full value of social prescribing.

# Key Words

Social Prescribing, General Practice, Community Health, Social Value, Health Economics

### Background

There is a growing crisis in primary care in the UK. Former chair of the Royal College of General Practitioners, argues that general practice needs extra investment to provide at least 10,000 more GPs by 2022 to meet ever growing and increasingly complex health needs [1]. Adult patient attendance at surgeries has increased from 3.9x/person/year in 1995 to 5.5x/person/year [2]. With increasing strain on GPs there are calls for the development of alternative approaches to meet local health needs and this includes more investment in preventative interventions to address health needs according to recent Kings Fund research [3].

Until the arrival of social prescribing GPs had limited tools to address social issues presented in surgeries [4]; this is despite calls for GPs to make patient engagements more of a social encounter than a brief encounter [5]. At a general level social prescribing has emerged as a mechanism for linking patients using primary care with support in their local community [6]. They are frequently innovative and are seen by local practitioners to be a catalyst for enabling health providers to think holistically about addressing wide-ranging health and social care needs often within a non-stigmatising and more empowering approach [7].

Nationally social prescribing interventions vary in their aims, referral routes, partnerships and methodology. For example GPs may refer to the voluntary and community sector who then triage patients to a plethora of third sector organizations [8], GPs may directly refer to a local arts on prescription programme [9] or again, GPs may target a particular need like isolation in older people [10]. But what is clear from a review of the literature is that there is no single, agreed, understanding of what constitutes social prescribing. Nevertheless a recent review has outlined four different models of social prescribing dependent on the degree of engagement with the patient [11].

There is already mounting evidence to suggest that social prescribing interventions have a positive impact on patients. They address psychological problems and low levels of wellbeing among frequent attenders in general practice which helps to reduce GP attendance [12]. The Rotherham social prescribing intervention is helping to reduce in-patient referral and attendance at A and E [8]. Others have shown improvement in patient wellbeing [10] [13], a reduction in presentation of social problems in primary care [14], improved self-motivation and reduced social isolation [9] etc. But, very few evaluations have actually looked at the value of social prescribing. There is only one randomised control trial undertaken to assess its cost effectiveness. Its conclusion was that beneficiaries of social prescribing were less depressed and less anxious, but their care was more costly compared with routine care and their contact with primary care was not reduced [15]. However this study failed to account for long term savings made beyond a year and did not compare the costs of what would have happened if patients had been referred to a specialist or even secondary care [16].

In this paper we look at the value of one holistic social prescribing project: the Wellbeing Programme at the Wellspring Healthy Living Centre, Bristol, UK. It has delivered for four years at an annual cost of £83,144. The initiative has been funded by various sources but predominantly via charitable trusts. The programme aimed to support adults who live in the Barton Hill area of Bristol, UK. One of the most deprived in Bristol and ranked 336th (out of 32,486) most deprived ward in England. It is in the lowest 1% on income and employment indices and in the lowest 7% on health indices. The social prescribing project has two elements: Branching Out; where a

male and a female worker work on a 1 to 1 co-production basis with referred patients from five local GP surgeries. They use a key-worker model and aim to develop a strong, trusting and functioning relationship. Patient and key worker identify and set realistic goals to deal with (eg): anxiety, smoking, improved diet, addiction or anger management issues. The 128 beneficiaries who participated in the programme and were part of this evaluation attended 945 times making the average attendance 7.32. After support patients can also access local community activities that include things like kitchen on prescription, a Somali Health and Wellbeing group, a men's group etc.

### Methods

The social value of this project was measured through a Social Return On Investment (SROI) approach. This an effective way of recording value for third sector organizations [17]. Impact data was collected using a pre and post questionnaire which was developed to include validated items that would be recognised by commissioners as suitable evidence of impact. A pragmatic approach was taken to develop a questionnaire that would not be too burdensome on the vulnerable beneficiaries referred to the programme. Impact was then assessed on 128 new patients over 12 months. This included completion of questionnaire at baseline and three months later. Additionally 1 to 1, in-depth, semi-structured interviews with either a male or female researcher were conducted with 40 patients (31% of the cohort). GP attendance data and other outcomes were recorded at twelve months. Ethical approval was given by the University of the West of England's Health and Life Sciences Faculty Research Ethics Sub-Committee in October 2011 (P36E356R).

From the project's database anonymised information on the demographic profile of patients referred were obtained. The median age of beneficiaries was between 36-40 years of age. 12.5% (n=16) patients were aged over 55 and most were of working age. 51.2% (n=66) were male. 83% (n=103) defined themselves as white. 11.3% (n=14) were black or black British. 3.2% (n=4) were Asian or Asian British and 2.4% (n=3) mixed. 33.6% (n=43) were in receipt of some disability benefit. 91% (n=115) said their first language was English. Other first languages included: French, Polish, Somali, Arabic and Mandinka. In terms of their accommodation 37.7% (n=43) lived in either council owned or housing association property; 32.5% (n=37) private rented accommodation and 23.7% (n=27) owned their own home. 6.1% (n=7) described themselves as either homeless or living with friends. The majority lived alone (37.9%, n=44). Very few lived in traditional familial households which would include a partner and children (22.4%, n=26). 12.9%, (n=15) lived as a single parent and 14.7% (n=17) lived solely with a partner. 41.6% (n=47) said they were in full time work. 40% (n=45) were looking for work. The rest were either long-term sick, retired or in full time-education or training.

# Results

Impact data has been drawn from 128 patients who participated on the Wellbeing Programme from May 2012 to April 2013. 128 completed the pre and post questionnaire at baseline and 70 at follow-up; at least three months later. It was impossible to capture all at follow-up because the programme was rolling and fieldwork was curtailed to meet funding restrictions around reporting. Table 1 below shows that there were significant

reductions in: depression, anxiety and social isolation; improvements on the four Office for National Statistics' wellbeing indicators and there was evidence for improvement on the International Physical Activity Questionnaire item for moderate exercise (significant p = <0.004).

Item	Base Mean (Standard Deviation)	Follow-up Mean (Standard Deviation)	t value (n value)	p value and eta value
PHQ 9	M=18.38 (6.42)	M=8.43 (6.33)	t (69) = 11.39	p= < 0.001 eta = 0.65 (large effect)
GAD 7	M=15.39 (4.67)	M=7.21 (5.34)	t (69) = 12.83	p= < 0.001. eta = 0.7 (large effect)
Friendship Scale	M=8.63 (6.01)	M=13.17 (4.28)	t (69) = 5.62	p=<0.001 eta = 0.4 (large effect)
ONS Wellbeing (Life satisfied)	M=2.63	M=5.58	t (69) = -7.880	p= <0.001 eta = 0.6 (large effect)
ONS Wellbeing (Happy)	M=3.26	M=6.06	t (69) = -8.630	p= <0.001 eta = 0.65 (large effect)
ONS Wellbeing (Anxiety)	M=6.0	M=3.56	t (69) = 6.757	p= <0.001 eta = 0.58 (large effect)
ONS Wellbeing (Life worthwhile)	M=3.8	M=6.02	t (69) = -4.822	p= <0.05 eta = 0.38 (large effect)

Table 1: Base-line and three month follow-up on wellbeing indicators

Analysis of GP contact times also suggest that for 60% of beneficiaries there was a reduction in their GP attendance rates in the 12 months post intervention compared to the 12 months period prior to referral. For 26% of beneficiaries it stayed the same and for 14% it actually increased.

Validation of impact was supported by evidence from the follow-up interviews at three months. Patients vary but an extreme case was a male in his thirties, with a criminal record who refused to leave his bedroom in his mother's house for three months, who was prescribed anti-depressants, had a history of violence towards his girlfriend; was an unemployed, absent father who had no friends and was reliant on alcohol. (Beneficiary, N18)

I don't want to remember the past...it's not that I don't want to remember it....it's like I got rid of it..... I was in my house.... I was on a tag everyday.... My Mum was an alcoholic, she was suicidal, my sister was in and out of psychiatric wards....but that's all gone now. But what is the value of social prescribing? Current policy guidance and recommendations suggests that it is important to assess future cost savings [18]. In doing this it is important to take into account the long-term benefits to the community and the reduced burden on all support services [19]. Social prescribing practitioners argue that outcomes are often slow to materialise when working with isolated and often poorly motivated clients [20]. This is because those referred frequently require a considerable amount of time to enable the worker to address their multi-faceted needs. If patients' needs are not addressed and a person reaches a crisis point, it then becomes much more difficult and costly to restore their health, employment and social status [21]. Thus, these long term benefits need to be considered when assessing cost-effectiveness.

Using SROI methodology third sector providers and commissioners are given an opportunity to see the broader value that third sector organizations can bring to society. In essence SROI approaches compare the monetary benefits of a program or intervention with the program costs [22]. In this sense SROI represents a development from traditional cost-benefit analysis as practiced by Grant et al (2000) when they first assessed the cost-effectiveness of social prescribing using a Randomised Control Trial methodology. Arguably this cost-effectiveness technique actually varies little from traditional cost-benefit analysis; in that the difference between the two approaches are largely in style, rather than the true substance [23]. Like cost-benefit analysis there will always be an issue with finding suitable proxies, however social prescribing research can benefit from the pioneering work undertaken by [24] in developing robust costings in the area of mental health.

SROI developed in the late 1990's. It fully valorises all social impacts [25]; including the social, environmental and economic impacts generated by all the activities of an organisation or intervention [26]. Using monetary values to represent impacts it enables researchers to establish a ratio of benefits to costs [27]. This is important because recent advice from NIHCE [28] suggest that the biggest benefits and savings resulting from the implementation of interventions like psychological therapies are likely to accrue outside the health service. Evidence for this emerged in a NHS review of the economic costs involved in mental health prevention [29]. Thus improving access to services and providing choice and continuity of service, (such as in holistic social prescribing) is likely to result in people successfully completing treatment and allowing them to retain or regain employment; the effect of which is to deliver savings in the form of additional tax receipts and reduced welfare benefits payments [30]. Such an approach is important to social prescribing practitioners because they often perceive their intervention is not simply about achieving positive outcomes like: improved well-being, a return to work or training etc; but instead it is about addressing embedded and unaddressed/undiagnosed issues like: agoraphobia brought on by abusive neighbours, relationship breakdown, addiction etc. which (if left unaddressed) could see patients spiral down to worse scenarios causing greater costs to different sectors in society [31].

So what were the impacts identified and valued in this social prescribing intervention? They included: harnessing volunteers, patients returning to employment and training and resuming child care responsibilities, suicide attempts averted and community capacity enhanced. Savings were also made through beneficiaries being

guided into appropriate services and supported to address a variety of problems which were not always manifest to the GP. These include addiction problems, debt management issues, anger management etc.

A key impact was getting people back into work. At the time of fieldwork the government's Work Programme's showed that 19% of their participants had spent 26 continuous weeks off benefit [32]. Some of the Wellbeing Programme's added value came from actually getting people back into work. 17% (n=9) of beneficiaries who at baseline described themselves as looking for work, long term sick, in education or training or on bail, actually found employment while on the intervention suggesting that the adoption of holistic social prescribing approaches are performing a return to work service as effective as the Work Programme. Looking at non-fatal suicide events it is estimated that costs can be are averted to £66,797 per year/person of working age [33]. On the project we were aware of three patients of those interviewed 1 to 1 (n=40) who said they were suicidal or had attempted suicide prior to referral. We costed one non-fatal suicide event into the analysis.

Having established the social impact of the Wellbeing Programme and valued impacts the SROI was calculated to be £2.90:£1. This means that for every pound of investment in the intervention, £2.90 of social value is created. This is a very parsimonious reflection of the actual value created because as health economists like Knapp et al (2011) argue these impacts should be calculated across all life years, whereas this was the return represented in just one year of value. These costings were informed from official valuations from the NHS and other official sources e.g. DWP. A full list of all impacts and their valuations and other financial proxies used; together with calculations for attribution, drop-off, displacement and deadweight can be found in the full report [34].

#### Conclusions

The crisis in primary care grows while the demands of patients, families and carers grow. The Nuffield Trust has recommended that NHS England should work with Clinical Commissioning Groups, GPs, patient groups and professional bodies to create a national framework for primary care. This framework should include outcomes and an overall vision for primary care, both in relation to service provision and the wider role of primary care in the health and social care system. They recommend that this needs to be worked out locally with extensive public and patient engagement [35]. In reality there is now a patchwork of social prescribing initiatives emerging at grassroots. The recently formed UK and Ireland Social Prescribing Network seeks to assess their efficacy and develop quality standards. They represent strong, local, partnership developments often involving patients and third sector organizations in their delivery. These projects are tapping into the harsh challenges faced by hard pushed front line staff and the rising demand stemming from patients presenting with complex needs in GP surgeries. Research cited by the British Academy suggests that as little as 20% of the influence on health are to attributable to clinical care and quality of care. Instead health behaviours account for 30% of influences and the physical environment 10%. But by far the most important influence on wellbeing comes from socioeconomic factors: 40% [36]. This is important. Social prescribing projects, many working in our most deprived communities are facing the toughest challenges posed by deprivation, unemployment,

inequality and the co-existence of diverse cultures and in themselves are demonstrating evidence of efficacy and delivering value which needs to be seen as broadly social and of value for many sectors across society.

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