

An Evaluation of Passport to Health

Summary Report, June 2014

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The evaluation of Passport to Health (P2H) on which this report is based ran from May 2012 to May 2014. It was facilitated through a Knowledge Transfer Fellowship funded by the former B&NES PCT, B&NES Council, and the Higher Education Innovations Fund.

This report aims to provide insight into the content and performance of the service, and how it is experienced by those who use it. Sources of information incorporated into the evaluation include; annual monitoring data, interviews and surveys with patients and referrers, observations of patient consultations, and a formal efficacy trial involving the objective measurement of physical activity. **The key findings from each work-stream are highlighted in the shaded boxes for quick scan-reading.** More detailed information is also available for each section through the contact details at the end of the document.

1. Programme Reach:

The service reaches a wide range of the local eligible community, and recruits over 50% of patients from the two most socially deprived quintiles. Most patients are aged between 45 and 75, although the age of service users ranges from 16-80. Approximately 70% of patients are female, and 5% from ethnic minority groups (compared with 10% within B&NES overall). Over 800 referrals are made to P2H each year, of which 71% start on the programme and 54% complete the full 12-week course. Approximately three quarters are referred due to high cardiovascular risk, and the remainder for mild or moderate depression. While patients living with greater deprivation are less likely to attend a first appointment, they are equally likely to complete and benefit from the programme once enrolled.

Programme Reach:

- Passport to Health provides a service that is used and benefited from by all B&NES residents.
- Approximately 800 patients per year are referred to Passport to Health. Over 70% of referrals start the programme, and 54% successfully complete the 12-week course.
- As 50% of service users come from the two most socially deprived quintiles, P2H has the potential to contribute towards the reduction of health inequalities locally.

2. Patient experience:

A survey of all potential service users referred to P2H over one year was conducted (responses were received from 260; 25%), supplemented by 30 interviews.

Common reasons for failing to take up a referral included;

- Confusion as to what service patients were referred to (e.g., compared with Slimming on Referral).
- Lack of belief that the service would be useful (particularly for people with limiting health conditions), or involved more than reduced price access.
- Lack of information of the range of physical activity options available (i.e., patients believed they would have no option other than the gym).
- Delays/difficulties in getting hold of staff and starting the service.

The following quote was typical of patients' comments:

"Somebody rang me up and said to me that I could either have 12 weeks Slimming World or something or 12 weeks gym or something, or go and see the dietician at the hospital. So I didn't want the gym, and ... so I went off to Paulton Hospital and I saw the woman up there a couple of times"

Patients who did go on to use the service reported similar experiences of confusion with the referral process, but this had not inhibited them from taking part. **Once patients had started with P2H, their satisfaction with the service was generally very high.** 78% of those who started but did not complete the 12 week programme and 91% of those who completed the programme were satisfied with their experience overall. 60% - 70% of patients considered that they had met, or partially met, their goals for joining P2H.

In terms of what they had found most useful from the service in facilitating this, **patients emphasised the importance of having supportive personal relationships with their P2H advisors, and flexibility in when and where they could exercise.** For many patients, attending facilities through P2H provided an introduction to an unfamiliar environment, and after an initial induction they felt sufficiently confident to use the facilities on their own.

"Having [my advisor], the trainer, there, monitoring me at that point made the gym feel like a lot more of a friendly place. And now I'm still going to the same gym, and she's still there and she says hello and she sees me..... So it's just kind of made me realise that it's important to me and that the gym is a friendly place and could be sociable"

However, others with existing health conditions were less willing to attend the gym outside supervised sessions, which they felt limited their attendance.

In terms of the factors that patients found motivated to them to be more active, the most commonly reported facilitators were setting goals, keeping a diary, exercising with friends, and enjoying their new activities. However, many reported that they were concerned at what would happen at the end of their 12-week programme, and would value continued support in some form.

Patient experience:

- Some patients were discouraged from accessing Passport to Health as a result of delays and confusion in the referral process. The council has already acted on this information and is in the process of developing an information pack to provide patients with clearer information on referral. The implementation of System 1 should help to streamline the referral process too.
- Service users are largely satisfied with the service provided, and find the support provided by P2H advisors crucial in helping them to feel comfortable using exercise facilities and to set and achieve their goals.
- The flexibility of services is valued by patients, although not all are fully aware of the range of facilities and opportunities available locally.

3. Content of P2H consultations:

To establish (i) what forms of behavioural support is being provided to patients, (ii) whether and how the support provided varies between patients, and (iii) how it compares to best practice identified through behavioural science research, we audio-recorded and analysed the content of a sample of 22 initial patient consultations.

What is provided: Advisors were most consistent in providing information about the logistics of the P2H offer, discussing reasons for referral, and assessing patients' current lifestyles. Most patients also set outcome goals with their advisor's help, and all advisors were able to discuss the consequences of physical inactivity to patients even if this was not covered in all sessions.

Variation: Adherence to the P2H protocol averaged 63%, ranging from 0-100% across consultations. The content analysis showed that advisors are tailoring the support that they deliver fairly extensively to match client characteristics (and other contextual factors), such that there did not appear to be a single 'standard practice'. Variation in what is delivered to different patients may be a positive finding if it reflects a flexible patient-centred service, but there needs to be a balance between tailoring services and ensuring that the essential core components are provided to all patients. The P2H protocol has since been refined to emphasise the essential core components to boost consistency.

Comparison with best practice: Comparison with evidence-based behaviour change techniques led to suggestions for a refinement of the protocol and training to enhance the support offered. This included;

- greater focus using a patient-centred counselling style (e.g., seeking patients' views and opinions, discussing expectations, acknowledging challenges etc.),
- maintaining a focus on physical activity rather than weight loss goals (as these are more measurable and controllable),
- including additional behaviour change techniques identified as beneficial in recent meta-analyses, including; self-monitoring, setting process goals (in this case, short-term physical activity goals), setting coping plans for potential difficult situations and helping patients to identify sources of social support.

Behavioural support provided:

- P2H advisors tailor the service they deliver to each patient; while this provides flexibility, not all patients receive the same level or type of behavioural support.
- The protocol may benefit from adaptation to bring it closer in line with evidence from behavioural science;
 - Adopting a more patient-centred approach (information and training now included on advisors' team away days)
 - Addition of key evidence-based behaviour change strategies (since agreed and added to an updated protocol launched in June 2014).

4. Objective evaluation of P2H efficacy:

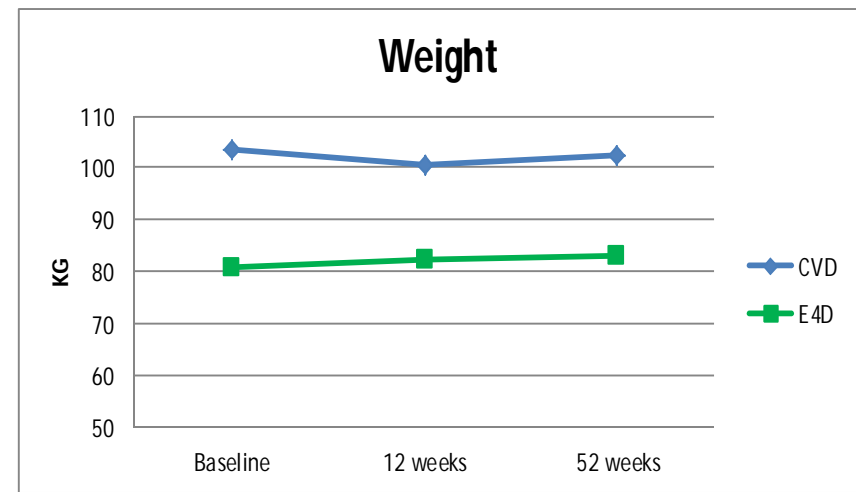
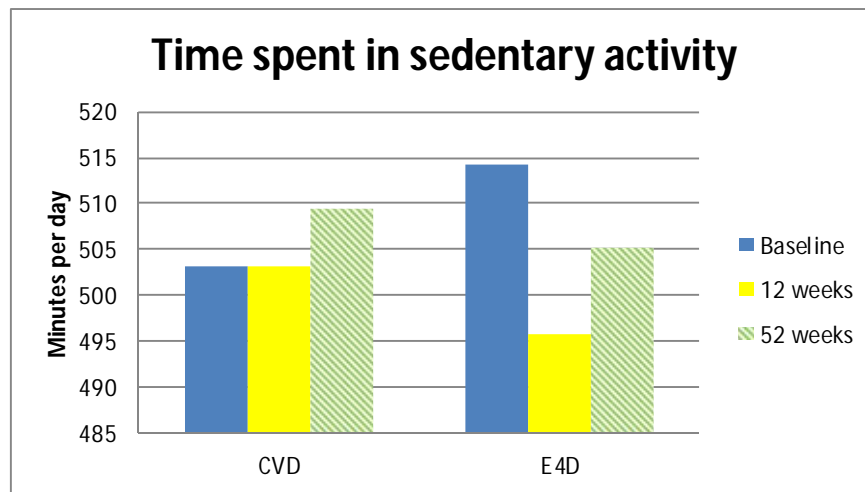
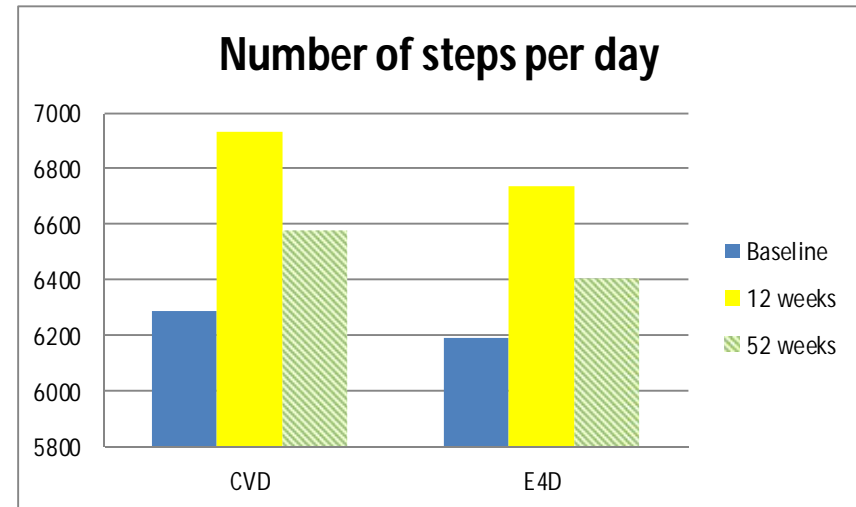
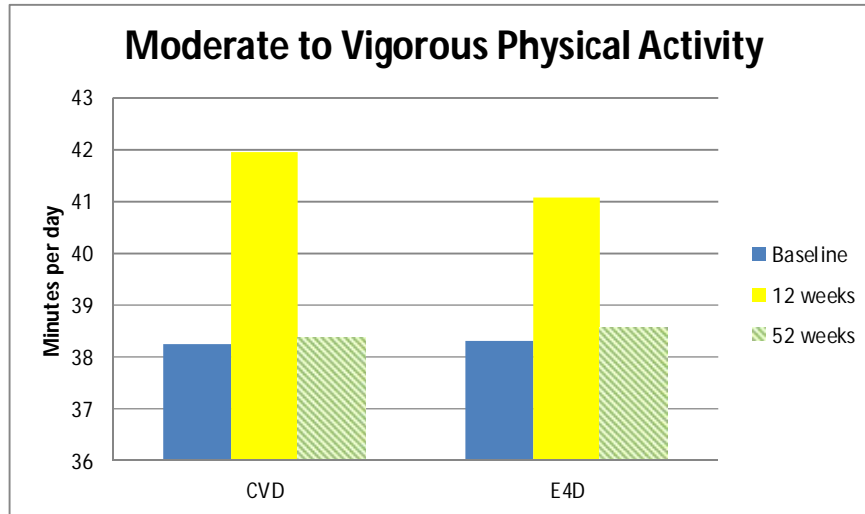
A full evaluation of the efficacy of P2H was conducted with 117 patients enrolled from September 2012 to April 2013. Participants were largely representative of all P2H users in comparison with monitoring data (Table 1). The primary outcome was objectively measured moderate to vigorous physical activity assessed using accelerometers.

Table 1: Baseline health risk profiles of patients enrolling on Passport to Health

	CVD referrals (N=87)		E4D referrals (N=30)	
	Range	Mean (SD)	Range	Mean (SD)
Age	19-80	50 (14)	17-65	42 (12) ^a
Weight (kg)	49-188	100.5 (24)	47-121.2	83.9 (20) **
BMI	20-56	36 (7)	18-48	30 (7) **
Systolic BP	97-208	144 (19)	108-167	129 (13) **
Diastolic BP	66-130	94 (14)	68-106	89 (10) ^a
Units alcohol/week	1-105	23 (29)	0-64	20 (22)
Non Smoker; N (%)		36 (41)		7 (23) **
MVPA mins/day	0.5-129	38 (30)	3-96	38 (24)
Sedentary hours/day	5.7-11.9	8.4 (1.2)	5.5-10.4	8.6 (1.2)
Steps/day	1072-18,237	6287(3223)	2030-12423	6186 (2765)
Quality of Life ^b	1-5	2.8 (0.8)	2-5	3.2 (0.7) **

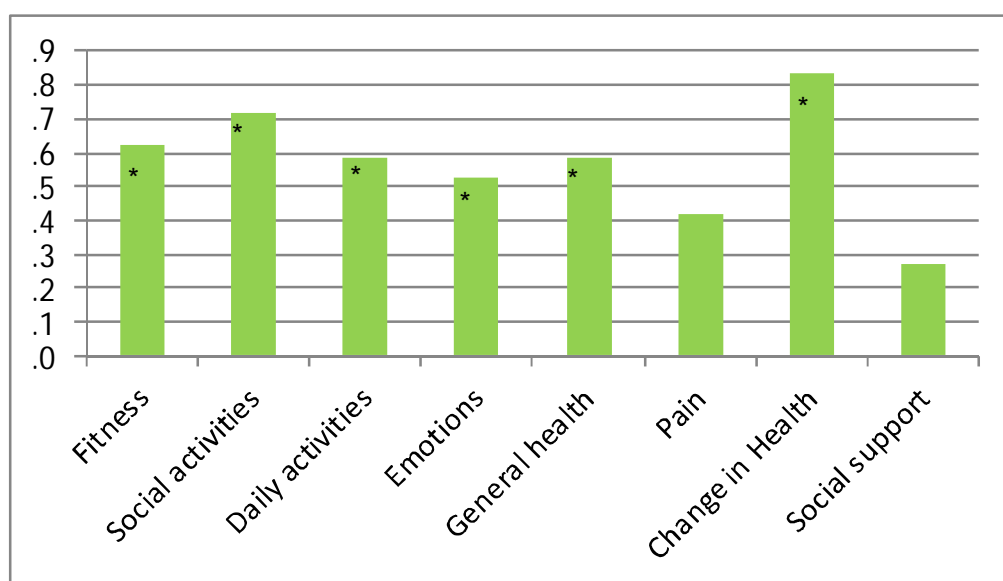
Notes: CVD – referred due to high cardiovascular risk, E4D – referred due to mild or moderate depression; significant differences between CVD vs E4D patients are indicated by; * $p < 0.05$, ** $p < .01$, *** $p < .001$; ^a neared significance, $p < = 0.1$. ^b a low score indicates better QoL, MVPA= moderate to vigorous physical activity, SD = standard deviation.

Figure 1: Changes in physical activity and weight outcomes pre and post P2H



There was a significant improvement in time spent in moderate to vigorous physical activity of 25 minutes/week, or 1292 steps/day after the 12-week programme (Figure 1). Health-related quality of life (Figure 2) and motivation to exercise also improved. Some improvements in diet were also observed, which were not prompted by P2H consultants, but reflected participants' concurrent weight loss goals. One year after referral, these changes had decreased; however, step count, quality of life and the number of GP visits made were all still significantly improved above baseline.

Figure 2: Change in Health Related Quality of life scores following P2H



Notes: response scale ranges from 1-5, * = changes are statistically significant

There was no difference in physical activity outcomes for patients referred due to high cardiovascular risk (CVD) and those referred for depression (E4D). CVD patients lost more weight at 12 weeks, and E4D referrals reported greater gains in motivation and self-efficacy at 1 year. Other predictors of changes in physical activity were also explored, but only the following outcomes differentiated between outcomes:

- (i) higher increases in moderate physical activity were predicted by being older and having less functional limitation.
- (ii) men showed significantly greater improvements in step count and quality of life than women.
- (iii) people with lower levels of education were less likely to decrease their sedentary time (but no less likely to increase their moderate physical activity levels).

Efficacy of P2H:

- Significant improvements in weight and physical activity were reported after the 12 week programme, and although these decreased over time, gains in daily step count and waist circumference were sustained at 1 year.
- After 1 year;
 - 68% of patients spent less time in sedentary activity than they had at referral
 - 37% had increased their daily step count since baseline
 - 36% had increased their time spent in moderate to vigorous physical activity
- P2H had a significant positive impact on quality of life that persisted over 1 year.
- Despite increasing their activity levels, patients reported only limited improvements in motivation and self-efficacy. The changes to the protocol and additional advisor training already implemented may help to improve these outcomes, as motivation and self-efficacy are powerful predictors of long-term behaviour change.

5. The perspective of referrers

The majority (89%) of service users are referred from GP practices. The number of referrals per practice varies from 1 to 64 per year. There were also considerable variations in the rates of referral uptake (range 50-100%) and completion rates (range 25%-100%) between practices.

The views of GPs, practice nurses and health care assistants involved in the identification and referral of patients to P2H were obtained through a survey (N=34, GPs only) or invitation to attend an interview (N=6). Overall, referrers reported uncertainty as to what P2H is (particularly in relation to other healthy lifestyles services), and how effective it is. Respondents believed they would refer more often if there was greater clarity of what was on offer and who would benefit. Practice nurses and GPs felt it would be useful to have data on referral rates for each practice for comparison (e.g., league tables), and to have literature that they can provide to patients to explain what the service is. Referrers also suggested that the council extend the range of professionals who can refer into the service for less complex cases. Many comments made by referrers echoed those of the patients themselves; referrers were concerned about the clarity of information provided during the referral process, and believed that an improvement in information provision and streamlining the process could increase both referral and uptake.

Views of GPs and nurses referring in to P2H:

- Referrers into P2H report uncertainty as to what the service offers and who is eligible. Better information would encourage them to refer more.
- Referrers would value updates in patients' progress, and believed that such feedback would encourage continuation of referrals.

6. Economic Evaluation of Passport to Health

An independent economic evaluation was conducted to assess the cost per patient of the P2H service, in comparison with other health improvement services and NICE guidance.

The cost of the service for those attending the full 12 weeks is estimated at approximately £100 per patient for the facility route (84% of patients), and £240 for those referred to the one-to-one Community Activator service (16% of patients).

Based on objective MVPA outcomes at 12 weeks, the cost per quality of life year (QALY) gained was £11,892 for all patients, and £7,107 for patients referred due to CVD risk. This is likely to be an overestimate of cost-efficacy given that physical activity declines over the following year, but is well within the NICE threshold of £20-30,000 per QALY for NHS services. A recent review of exercise referral schemes in 2011 estimated the cost effectiveness of exercise referral interventions on average at £20,876 per QALY, and a more recent study of exercise referral schemes in Wales at £12,111. P2H compares favourably with both of these comparators.

Cost efficacy:

- The cost of Passport for Health is £11,892 per quality of life year gained (QALY).
- This is well below the NICE threshold for services (£20-£30,000), and is similar to, or lower than estimates calculated for exercise referral schemes elsewhere.

7. Development of an Evaluation Toolkit:

Drawing on the experience of conducting the studies that contributed to the evaluation of Passport to Health, an evaluation toolkit has been developed. The toolkit is devised to be used by service providers who do not have existing expertise in evaluation methods to benefit other health and wellbeing services. Six key elements were identified, and brief guidance in the form of an A4 leaflet has been developed and made available from the council's website:

- 1) Monitoring Service Performance
- 2) Measuring Client Satisfaction
- 3) Evaluating a New Intervention
- 4) Choosing Research Methods
- 5) Conducting Focus Groups and Interviews
- 6) Conducting Data Analysis

<http://www.bathnes.gov.uk/services/sport-leisure-and-parks/health-and-fitness/passport-health/evaluation-tool-kit>

8. Impact and Outcomes

The outcomes of this evaluation have already had considerable impact on the P2H service, as set out below. The work undertaken so far has led to recommendations for further service development, some aspects of which have led to the preparation of collaborative grant-applications between the university, and B&NES Public Health and Healthy Lifestyles teams to extend its impact and reach. The following impacts have already been achieved:

1. An updated service delivery protocol has been agreed with exercise referral advisors, to include additional behaviour change techniques, and standardise core provision.
2. Exercise referral advisors have been engaged in discussion and training to highlight the importance of the inclusion of certain forms of behaviour support, and adopting a patient centred approach. The impact of this on the service that patients receive will be assessed during summer 2014.
3. Additional information for patients at the point of referral has been designed, answering patient and health practitioner calls. B&NES council has invested additional funding to bring this into practice.
4. Service monitoring has been improved through the introduction of a client satisfaction survey for all potential patients who do, or do not attend, and introduction of standard monitoring measures for physical activity and quality of life. This will facilitate the ongoing monitoring of the service, and evaluation of the impact of changes made.
5. Self-referral (on the advice of community workers) has been introduced for patients with low health risk, streamlining entry to the service without the need for a GP appointment.
6. The project has resulted in four conference presentations (both academic and practitioner), the preparation of four academic manuscripts, and has hosted five Masters' placement students providing content for their dissertations. One of the students, Mira Koseva, won a national prize for the best Health Psychology Masters dissertation by the British Psychological Society.

We are continuing to collaborate on further applications for research funding to explore how we can promote the maintenance of initial improvements in physical activity over the longer term.

For further information about any aspect of this report please contact:

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