

Social Impact Bond Payment by Results Pilot at HMP Peterborough

Background

In 2010, the world's first Social Impact Bond (SIB) Payment by Results (PbR) pilot was launched at Peterborough prison. It was used to fund an intervention – 'The One Service' – aimed at reducing reconvictions among prisoners released from Peterborough prison after serving a sentence of up to one year. Support from the One Service was available to prisoners up to 12 months post-release, and engagement was on a voluntary basis.

Under the SIB, investors are paid according to how successful the One Service is in reducing reconvictions for cohorts of prisoners released from Peterborough prison. Specifically, if there is a reduction in reoffending of 7.5% across the whole pilot against a national comparison group. There is an opportunity for an early payment to investors if the number of reconviction events in the 12 months following discharge is reduced by 10% in any single cohort of prisoners.

If early payment is not achieved, a 7.5% reduction for the 'final' cohort (combining the cohorts) also triggers payment. A Propensity Score Matching¹ (PSM) approach was used to estimate the impact of the pilot and an Independent Assessor was appointed to calculate the outcome.

Cohort 1 Results

The results for the first cohort were published in August 2014² and showed that the pilot achieved an 8.4% reduction in reconviction events. This was insufficient to trigger an early payment for the first cohort as it did not reach the 10% threshold but it did mean that the pilot was on track to reach the combined cohort target.

Methodological Review

Following the publication of the cohort 1 results in 2014, the Ministry of Justice announced it would commission an independent methodological review of the PSM approach used to estimate the impact of the pilot before evaluating and determining the outcomes of the second cohort³. This was prompted in part by the desire to understand the reasons behind the historical differences in reconviction events between prisoners discharged from HMP Peterborough and prisoners discharged from other prisons.

The methodological review explored various amendments to the PSM methodology, but found that none of these resulted in any clear improvement of the performance

¹ The PSM approach is described in Cave et al. (2012). Essentially PSM was used to develop a Comparison Group of prisoners discharged from other prisons during the same time period as the Peterborough cohort. This enabled the pilot to understand and measure the differences in levels of reconvictions between those who received One Service support (the treatment group) and those who did not (the comparator group)

² www.gov.uk/government/uploads/system/uploads/attachment_data/file/341684/peterborough-social-impact-bond-report.pdf

³ www.gov.uk/government/uploads/system/uploads/attachment_data/file/341682/pbr-pilots-cohort-1-results.pdf (Annex B)

of the model used to determine the outcome of the pilot. Therefore, it concluded that the PSM methodology used for cohort 1 be maintained.

The review did, however, recommend a change to the sample definition for cohort 2. In cohort 1, prisoners leaving HMP Peterborough at any point during the cohort period were regarded as being in the treatment group. Individuals who would have potentially been in the comparison group were instead included in the treatment group if they had a subsequent short sentence at HMP Peterborough. These individuals tend to have higher reconviction rates and since the treatment group is much smaller than the comparison group, its mean number of reconvictions is more likely to be impacted by their inclusion. In view of this, a different sample definition was used for cohort 2. Cohort 2 includes all those whose first discharge in the cohort 2 period was from HMP Peterborough. The comparison group for cohort 2 includes all those whose first discharge in the cohort 2 period was from a non-Peterborough prison.

The methodological review did not recommended retrospectively changing this for cohort 1 and recommended that the published cohort 1 result should be used (in combination with the cohort 2 result) to calculate the result for the final cohort. The recommendation was accepted and was used as the basis to calculate cohort 2. The methodological review can be found here:

<https://www.gov.uk/government/publications/final-results-for-cohort-2-of-the-social-impact-bond-payment-by-results-pilot-at-hmp-peterborough>

Variation to cohort 3 in light of Transforming Rehabilitation

The SIB pilot was originally intended to operate until 2017. While the pilot operated on a PbR basis under the SIB model for the first two cohorts of released prisoners, the third cohort – which ran from July 2014 to July 2015 – received One Service support under a Fee For Service (FFS) arrangement. This was due to the roll-out of the Transforming Rehabilitation reforms to probation, which introduced mandatory statutory supervision for short-sentenced offenders – the target group for the Peterborough pilot – and also included a PbR funding mechanism to incentivise providers to reduce reconvictions. The alternative FFS funding arrangement for the third cohort enabled the pilot to continue operating until the new Community Rehabilitation Companies started delivering through the gate services and avoided duplication of services. The cohorts and the terms they operated under are outlined in table 1 below:

Table 1 SIB pilot cohorts and terms of operation

| Cohort | PbR or FFS |
|---------------------------------|-------------------|
| Cohort 1 | PbR |
| Cohort 2 | PbR |
| Cohort 3 | FFS |
| Final Cohort (cohorts 1 & 2) | PbR |

Cohort 2 Results

The pilot achieved a 9.74% reduction in reconviction events for cohort 2 which was insufficient to trigger early payment for the second cohort as it did not reach the 10% threshold.

Final Cohort Results

The target for the SIB was a 7.5% reduction in reconviction events across all cohorts compared to a national comparison group. To calculate the overall impact, the weighted mean of both cohorts was established for the “final” cohort. The reduction achieved across both cohorts was 9.0%. This is above the minimum threshold and is sufficient to trigger payment. The results for the second and final cohorts can be found here: <https://www.gov.uk/government/publications/final-results-for-cohort-2-of-the-social-impact-bond-payment-by-results-pilot-at-hmp-peterborough> and a summary of the results is provided in table 2 below:

Table 2 SIB pilot results summary

| Cohort | PbR or FFS | Outcome |
|--------------------------------|------------|---------|
| Cohort 1 | PbR | 8.4% |
| Cohort 2 | PbR | 9.7% |
| Cohort 3 | FFS | N/A |
| Final Cohort (cohorts 1 &2) | PbR | 9.0% |

Learning Exercise

In order to maximise the learning from the pilot and the approach used to calculate the impact and outcomes, an additional analysis was carried out that assessed the impact of changing the definition of the sample. The results of this sensitivity analysis are presented in the report which can be found here:

<https://www.gov.uk/government/publications/final-results-for-cohort-2-of-the-social-impact-bond-payment-by-results-pilot-at-hmp-peterborough>. The main finding is that changing the sample definition has a varying but not significant impact. It is important to note that none of the results presented in the report are directly comparable with the main evaluation results and the published cohort 1 result is not affected by any of the analysis in the report.