Jeremy Wright MP
Parliamentary Under-Secretary
Ministry of Justice
102 Petty France
London
SW1H 9AJ

Dear Mr. Wright,

7 February 2014

**Re: Assessment of the pilot of the Justice Data Lab**

This letter provides NPC's views on the pilot of the Justice Data Lab and recommendations on how it should be taken forward. We were instrumental in the setting up of the Justice Data Lab and are committed to its success. We continue to advise the Ministry of Justice on the operation of the lab and we advocate its use to charities and other organisations.

The Justice Data Lab is the type of initiative that NPC thinks government should support. It can bring major improvements to the efficiency and effectiveness to the charity sector, and in this case the public and private sectors as well, at a relatively low-cost. We are working with other parts of government to set up similar labs covering other areas of social policy.

Our seven recommendations below are based on our vision for the Justice Data Lab, the experience and views of organisations that have chosen to use it and not use it to date, and our desire to see the benefits of the Justice Data Lab maximised.

First we commend the Ministry of Justice for running a pilot of the Justice Data Lab. It is a ground-breaking service that makes data on both outcomes (the reoffending rate of a cohort of ex-offenders) and impact (ie, that reoffending rate compared to the reoffending rate of a comparison group of similar ex-offenders) that is held by the public sector easily available to charities, public sector organisations, and private sector organisations. We also commend the Ministry of Justice for being responsive to the questions and concerns made by charities in the implementation of the pilot. NPC has established a group comprised of representatives of various criminal justice charities to advise the MoJ on issues encountered during the pilot phase. MoJ representatives attend our group meetings and our interaction has been very positive.

On most counts the pilot has been very successful. It is too early to estimate the direct improvements to services that are designed to reduce reoffending. It may take years for such effects to become apparent. But in its short existence the lab has delivered what was planned; has been welcomed by the sector; has been operated efficiently; is a good manifestation of the government's commitment to open data; has not received any opposition that we are aware of; and has been well received by independent observers such as the Alliance for Useful Evidence. It has also had indirect benefits, such as highlighting where improvements in statutory data collection and quality need to be made.

While uptake of the Justice Data Lab has been good, it's use by the charity sector has not yet met the initial predictions. Of the 46 reports published to date, two-fifths have been for services provided by the charity sector. Below we describe the main reasons for this slower than anticipated uptake by the charity sector and how the MoJ should respond. This involves removing barriers to using the Justice Data Lab while encouraging its use.

Here are our seven recommendations. Support for each of these recommendations is provided in the attachment.

1. The Ministry of Justice should base its decision on how the Justice Data Lab is supported beyond the pilot phase on its potentially substantial medium and long-term benefits, not just on its use in the short-term.

2. The Ministry of Justice should continue to reduce the informational, technical, resource, and attitudinal barriers that charities face when they consider using the Justice Data Lab.

3. The Ministry of Justice should allow organisations to compare the aggregate reoffending rates of participants in a randomised control trial (RCT) in addition to a matched comparison group.

4. The Ministry of Justice should add effect size and p-values in the summary tables of the results to show the nuances of the results.

5. The Ministry of Justice should treat the results from the Justice Data Lab with caution in these early years as the service is still in its infancy.

6. If the Ministry of Justice decides to contract out the operation of the Justice Data Lab, it should allow sufficient time to allow viable competitive bids to develop.

7. The government should replicate the model of the Justice Data Lab in other departments that have large data sets that contain personalised data.

Finally, we recognise there are several groups of charities who may want use the Justice Data Lab but who have legitimate concerns about the results being potentially misinterpreted. We will continue to work with the Ministry of Justice to address these and any other concerns that arise.

We plan to publish this letter on our website in due course.

Sincerely,

Dan Corry

Chief Executive

cc.

Rebecca Endean, Director Analytical Services

Antonia Romeo, Director General of the Criminal Justice Group

# Support for Recommendations

**Recommendation 1: Ministers should base their decision on how the Justice Data Lab is supported beyond the pilot on its potentially substantial medium and long-term benefits, not just on its use in the short-term.** As with any innovation there are early adopters. Some charities are risk averse and have adopted a "wait and see" approach. We are confident the Justice Data Lab will produce significant benefits when such charities, public sector organisations and private sector organisations begin to routinely use it to assess their impact. Over time they will collectively build an evidence base of what is successful and what is not. This evidence base and the feedback loop provided by the lab will help increase the effectiveness of services and initiatives aimed at reducing reoffending.

In particular Ministers should compare the short-term costs of the Justice Data Lab with the potentially very large medium and long-term economic pay-off. The Justice Data Lab routinely produces results of quasi-experimental studies at a fraction of what the cost would be if they were commissioned separately. To pay for itself it only needs to prevent a handful of crimes. Reductions in crime will lead to a reduction in both the public and private costs of crime so leading to a positive net return from the relatively modest investment. The lab is an excellent example of how government can realise significant value out of its existing assets with relatively little investment.

**Recommendation 2: The Ministry of Justice should continue to reduce the informational, technical, resource, and attitudinal barriers that charities face when they consider using the Data Lab.** In particular we suggest the MoJ:

1. Combines substance misuse data and complex mental health data with offending data in selecting the comparison group. Until these data sets are included, charities that work with high-risk offenders will legitimately be worried about receiving negatively biased results.

2. Includes measures of the severity of offending, not just whether someone has reoffended.

3. Is clearer on the reasons for the high level of attrition in the number of ex-offenders who can be matched in creating the comparison group. The lack of understanding causes some charities to question the usefulness of the Justice Data Lab.

4. Recommends that projects that receive MoJ or NOMS funding use the Justice Data Lab. The more organisations and interventions that use the Justice Data Lab, the more improvements there will be.

5. Asks organisations that seek MoJ or NOMS funding from grant applications to provide their Justice Data Lab results in their applications, together with any other evidence they have. This will provide an incentive to use the service.

6. Encourages public sector and private sector organisations to use the Justice Data Lab. This will help promote a level playing field when it comes to comparing the effectiveness of different organisations.

**Recommendation 3: The Ministry of Justice should allow organisations to compare the aggregate reoffending rates of participants in a randomised control trial (RCT) in addition to a matched comparison group.** Currently the Justice Data Lab creates a comparison group by matching ex-offenders who participate in the charity's services to similar ex-offenders who do not. While this is a robust method, the matching process cannot control for all differences between participating and non-participating ex-offenders. In particular the process cannot control for differences in how motivated the two groups are. In some cases a service may receive a positive result simply because those who participate in its service are more motivated than non-participants. With little modification the Justice Data Lab could support charity-run RCTs. This would remove the selection bias that can occur by randomly allocating people to an intervention and would create even more robust evidence.

**Recommendation 4: The Ministry of Justice should add effect size and p-values in the summary tables of the results to show the nuances of the results.** The tables in the summary reports note whether or not the differences in the reoffending rates of the intervention and control group are statistically significant, not the size of the difference. This convention of branding services either statistically significant or not statistically significant

based on 95% confidence limits is potentially misleading. Two charities that have a very similar level of confidence but which straddle the 95% cut off would be described very differently. One would be described as having statistically significant results, while the other would be described as having non-statistically significant results. Providing p-values in the summary tables will reduce the risk of users misinterpreting the results.

**Recommendation 5: The Ministry of Justice should treat the individual results from the Justice Data Lab with caution in these early years as the service is still in its infancy.** Results from the Justice Data Lab should not be used as the sole source of decisions about any grant funding. This would give too much weight to a service that is still in its infancy. Moreover, if the Ministry of Justice cuts funding from the pioneering users of the Justice Data Lab based only on the results, it will discourage further uptake of the service.

**Recommendation 6: If the Ministry of Justice decides to contract out the operation of the Justice Data Lab, it should allow sufficient time to allow viable competitive bids to develop.** Without sufficient lead time the only organisations that would be ready to bid would be a few private sector companies.

**Recommendation 7: The government should replicate the model of the Justice Data Lab in other departments that have large data sets that contain personalised data.** Establishing data labs in other policy areas, such as education, health, employment, benefits, and substance misuse, will spread the benefits of better evidence.

In addition to these recommendations, we also suggest that the MoJ keeps open the option of making the use of the matched comparison group an optional rather than a mandatory feature of the Justice Data Lab. The inclusion of the matched comparison group is a very valuable feature of the Justice Data Lab for reasons given above. But making it a *mandatory* feature provides a disincentive for the following groups of effective charities who would otherwise want use the Justice Data Lab:

1.  Charities that work with high-risk and unmotivated offenders are likely to find the Justice Data Lab will produce impact results that are negatively biased against them. This is because the matching process that MoJ uses to identify a control group cannot account for important risk factors, most notably the misuse of drugs, the presence of complex mental health problems, and low levels of motivation. The Justice Data Lab will underestimate the impact of charities that work with offenders with these characteristics.

2.  Charities that have made substantial improvements to a service may worry that the results of the Justice Data Lab may be misinterpreted as a measure of the impact of their <u>current</u> service, rather than their <u>historical</u> service.

3.  Small charities may be concerned that the Justice Data Lab will not show a statistically significant result because they cannot generate a large sample. The "cliff edge" convention of 95% confidence limits makes it difficult for a small charity to show a statistically significant result, even if it is very effective. This acts as a disincentive to use the Justice Data Lab.

4.  Charities for whom a reduction in reoffending is only one, and not the major, objective, may be concerned that their service may be unfairly judged if they are not able to supplement the Justice Data Lab results with similar analyses of other outcomes and using other data.

5.  Charities that work with a mix of offenders and non-offenders who are interested in finding out the medium and long-term outcomes of their work.

Making the matched comparison group an optional feature would reduce or remove the disincentives that charities in these groups face and thereby increase uptake. This may be helpful in increasing short-term uptake of the Justice Data Lab thereby accelerating the cultural shift towards a greater focus on impact and results. NPC will continue to monitor use of the Justice Data Lab and make this or other suggestions as we consider appropriate to increase its use and the benefits it can bring.