

Protocol for new research on improving risk assessment in prisoners

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Background

Repeat offending rates are high, with many high income countries reporting 2-year recidivism of between a third and a half.¹ In order to identify those at highest risk of reoffending and most in need of interventions to reduce future criminality, criminal justice agencies have used actuarial and clinically-informed decision aids. Furthermore, efforts at decarcerating prisons, particularly in the US, require such decision-making tools to help identify low risk persons who could be released. There are now more than 300 of these risk assessment tools, but they are limited by low to moderate accuracy,² financial and non-financial conflicts of interests in the supporting research evidence,³ and inconsistent definitions of what 'high' risk means.⁴ Many of them are expensive to use and require training to administer. As a consequence, with a multidisciplinary team of researchers, we have developed a free, scalable, and web-based tool that requires little to no training to use, and builds on the strengths of previous research. It draws on important developments in the rest of science and medicine, where 'risk prediction scores' are widely used to predict heart disease, diabetes risk, stroke, and cancer. The best known example of this is the Framingham risk score (<http://cvdrisk.nhlbi.nih.gov/>), which assists in identifying individuals at high risk of cardiovascular disease, and is a web-based tool that allows healthcare professionals and interested persons in the

general population to anchor their views about risk in evidence. It does not replace professional judgement, but acts an adjunct to it.

The tool

The recidivism tool was developed using a cohort of all Swedish prisoners who were followed up in the community for up to 9 years. The study population was around 47,000 released prisoners. The main outcome was violent reoffending at 1 and 2 years, and we validated the tool on a population of prisoners also in Sweden. The reason for using Swedish data to develop the tool is that it has arguably the best quality national registers in the world that enable linkage across health and crime. In addition, the characteristics of Swedish prisoners are similar to what we know about prisoners in other high income countries. For example, the proportion with mental health and substance misuse problems, average sentence lengths, and proportion who have been sentenced for a violent offence are similar. On the basis of examining independent risk factors in this sample of released prisoners, we have created a web calculator called OxRec (Oxford Risk of Recidivism tool), which is free to use and takes a few minutes to complete. It mostly uses information that is routinely collected, and for some items where this information may not be known, it allows you not to score, and provides a range of risk scores. The web calculator

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provides both a risk classification (low [<5% in 1 year], medium, high [>20% in 1 year]) and a probability of violent reoffending in 1 and 2 years of prison release. A version can be found: <http://oxrisk.com/oxrec>, and its validation was published in 2016.⁵

New work

New research looking at whether this simple, scalable and valid tool works in prison populations is required. One approach is to populate the 14 items from the tool using existing databases (from the prison service) on those individuals released from prison over a set period, and then to look at who has repeat offended. An alternative is to compare the tool with existing approaches to see how they compare, and possibly complement each other. Many existing approaches will be more needs-based, and thus a tool like OxRec could identify those individuals who need more detailed needs-based assessments going forward. Furthermore, as OxRec includes mental health factors, it can act as a way of identifying persons who need close liaison with community mental health and substance misuse services, and decarcerating low risk prisoners.

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