Name of Tool	Oxford Risk of Recidivism Tool (OxRec)
Category	General Risk Assessment (Awaiting Validation)
Author / Publisher	Fazel, Change, Fanshawe, Långström, Lichtenstein, Larsson and Mallett
Year	2016

Description

- This tool is designed to predict violent reoffending in individuals being released from prison after 1 or 2 years (Fazel et al., 2016).
- Fourteen variables are included in the tool: gender, age, immigrant status, length of incarceration, violent index offence, previous violent offence (before index offence), neighbourhood deprivation, income level, mental disorders, civil status, highest education, employment, disposable income, neighbour deprivation scale, alcohol abuse, drug abuse, any mental disorder, any severe mental disorder (Fazel et al., 2016).
- Violent offences within this tool refer to homicide, assault, robbery, arson, any sexual offence (rape, sexual coercion, child molestation, indecent exposure or sexual harassment), illegal threats or intimidation (Fazel et al., 2016).
- Socioeconomic deprivation is defined via a standardised, normalised score, including rates of welfare recipiency, unemployment, poor education, crime rates and median income in an individual's residential area (Fazel et al., 2016).
- The tool categorises individuals into three level of risk: low, <10% risk; medium, 10-50% risk; high, >50%. If one or more of the variables are set to 'unknown,' then a range of risk levels are displayed (Fazel et al., 2016).

Age Appropriateness

16+

Assessor Qualifications

Although no specific training or qualifications are required to use the tool, appropriate application and scoring of cases requires the judgment of criminal justice or healthcare professionals.

Tool Development

- The variables considered for inclusion were drawn from the existing evidence of criminal history and sociodemographic and clinical factors (Chang et al., 2015; Fazel et al., 2012).
- A fourteen item tool was derived using Swedish population registers (sample size=37,100) and externally validated on a sample of 10,226 individuals. Risk of violent reoffending at the 1 year time point indicated a sensitivity of 76% and a specificity of 61%. At 2 years, the sensitivity and specificity were 67% and 70% respectively. The external validation model displayed good discrimination for violent reoffending within 1 year (AUC=0.75) and 2 years (AUC=0.76) after prison release. Good

calibration was also evident for violent reoffending at 1 and 2 years after prison release, with Brier scores of 0.095 and 0.108 respectively (Fazel et al., 2016).

• OxRec has recently been validated in a national sample of individuals who have offended in the Netherlands; although the model required recalibration prior to use. This showed moderate discrimination with an AUC of 0.68 for 2 year violent reoffending and 0.69 for any reoffending in the prison cohort. Adequate calibration scores were also shown (Fazel et al., 2019).

General Notes

• OxRec takes around 10 to 15 minutes to complete, relies on mostly routinely collected information, is freely available and does not require any formal training (Fazel et al., 2019).
• The authors indicate that criminal justice, forensic and healthcare professionals might take different approaches to using such a tool. Prison healthcare may use it to treat prisoners before their release or by probation services or case workers to plan sentencing and release arrangements (Fazel et al., 2016).
• In terms of timing, OxRec could be used towards the end of prison sentences to assist with post-release management of risk, including linkage with community addition and mental health services (Fazel et al., 2016).
• Some items of the OxRec are not easily generalizable to other countries and may require modification (e.g. neighbourhood deprivation score) (Fazel et al., 2019).
• This tool has only been validated in Sweden and the Netherlands thus far (Fazel et al., 2016; Fazel et al., 2019). Other validations are in progress.
• OxRec is available in English, Swedish, Greek, French and Chinese versions.
• The tool is freely available online: https://oxrisk.com/oxrec/