

WORKSHOP SUBMISSION FOR 'WHAT WORKS - REDEFINING CRIMINAL JUSTICE' CONFERENCE MANCHESTER UK 1998

Workshop Title

Risk Assessment 'On-line', - the application of technology in improving risk prediction and offender supervision

Workshop Presenters:

David Daley, General Manager, Community Based Services, Offender Management Division Ministry of Justice, Western Australia.

Risk Assessment is an issue of international priority concern. This workshop would permit the introduction of a new approach to risk assessment which is believed to be without parallel elsewhere in the world.

Project initiative

In common with other Correctional Services, Community Corrections in Western Australia has been faced with the challenge of continuing to provide effective offender supervision in an economic climate of scarce resources, together with increasing expectations to produce 'value for money' in offender management. Consistent with Risk Assessment devices introduced in other parts of the world, the better identification and selective targeting of higher risk offenders has become a critical tool towards ensuring the most cost effective allocation of resources, with the best hope of a positive impact on reduced rates of reoffending.

Western Australia presently operates a Risk /Needs assessment device based on one originally developed in Wisconsin, North America, and modified for the Australian environment. It lacks specific validation for local conditions, but was tested against a sample of local offender files. The adapted Wisconsin model has fulfilled a transitional need during the development of a purpose-designed Western Australian model using a number of refinements not known to have been thus far replicated anywhere else in the world.

The new project is an initiative, in conjunction with the Crime Research Centre of the University of Western Australia, to develop an actuarially based, computer-driven offender assessment system to predict the risk of recidivism. The innovation in this project is the creation and refinement of an 'on-line' actuarial assessment device, drawing from data on arrest, conviction and custody records in Western Australia to compute a highly accurate predictor of recidivism. This provides a cross-jurisdictional data base of somewhat more than 200,000 Police, Court, Prison, and Community Corrections offender records. This, coupled with a new offender classification and case management system which gives a much clearer rationale for casework intervention methods and aims, and moves away from a more administrative, 'compliance monitoring' style of supervision, has enabled more effective use of resources in targeting the reduction of recidivism.

Project History

The project commenced three years ago, with a contract between the Crime Research Centre at the University of Western Australia to develop the actuarial assessment device. At that stage a rudimentary form of offender supervision system known as O.S.S (Offender Supervision System) had been in place since 1989. This system relied almost exclusively on the most recent offence(s) as the sole criterion for determining intensity of the offender management regime. The case management component specified an expected frequency of offender contact, but did not stipulate the purpose, content or quality of supervision. Nor did it provide a satisfactorily structured review process, by which decisions about reducing the

supervision regime can be made in conjunction with the completion of the requirements imposed by the order or negotiated under a supervision contract.

Following a preliminary phase involving the normal research processes of literature search etc, the data from police, juvenile, custodial and community corrections sources were gained and after data cleansing, were processed by the CRC so that an individual by virtue of certain known characteristics could be matched to a cohort of others within the database. This ability to examine an individual with a cohort of like others forms the basis of the actuarial assessment instrument.

Some risk assessment devices use up to 50-60 offender characteristics as indices to be weighted in developing a risk inventory. The WA model has sought to identify 8-10 key characteristics which would reliably predict reoffending risk to at least 95% of accuracy. Some other models become extremely cumbersome to administer with a large number of risk variables to weight, and taken individually some of these variables only have the most marginal impact on the total scoring profile. Refinements are still being made to the WA instrument to improve its accuracy and predictive ability.

Anti - discriminatory practice

One of the challenges faced in the development of the actuarial model was in the decision to retain in the computations, a classification of race, (or more specifically differentiation between aboriginal and nonaboriginal people). This description was found to be significant in predicting recidivism. Whilst retention of this in the assessment device may be perceived by some as discriminating against aboriginal people, it should be recalled that the objective of the assessment was to prioritise intervention; it was not prescriptive as to the nature of the intervention. It is intended that the project will investigate the outcomes of supervision for discriminatory practices at a later stage.

Project aims objectives and target groups

The project's aims are to accurately identify those offenders considered to be at high risk of recidivism in order that resources can be directed in the process of offender supervision to where they would have the greatest effect. Access to the assessment instrument was linked with the database used for offender management, and consequently dispensed with the need for paper based systems in assessing risk. Concurrent with this is the recording of the criminogenic needs for each offender in the database. The assessments were integrated with the case review mechanism also incorporated in the database, thus allowing direct access to the computations when conducting any case reviews. This has the potential, still being developed, of the basis of a Management Information System.

One of the shortcomings of many risk assessment devices is their static nature; their reliability and validity declines over time because of changes in offender population demographics. The actuarial model is able to maintain accurate risk predictions by comparing the key characteristics of any given individual against all

other matching cells in the data base. Over time, the data base itself changes as details of each new offender are added to the system. This means that the basis for risk prediction scoring shifts incrementally over time, thereby protecting against obsolescence. It is possible to remove from the computation data of a certain age.

Project evaluation

The assessment instrument predicting risk was developed from historical data sets, stretching back as far as 1984. The predictive ability of the instrument is being evaluated against more recent data. Its predictive ability continues to be refined through longitudinal studies,

assessing the significance of other offender attributes including demographics, marital status and employment.

Early in the project's development Professor Todd Clear, a leading US authority on Risk Assessment was invited to Perth to examine the project and offer feedback. His assessment at that time was that conceptually, the Actuarial Risk Assessment model was potentially a significant breakthrough which could introduce a new generation of more sophisticated analysis. Given that the model will not be in full operational use for possibly another two years, how well this prediction will be realised in practice is as yet unknown.

Project Evolution

An accurate predictor of recidivism has considerable potential in the provision of advice to sentencing and releasing authorities. This facet will be discussed further in the workshop although the main focus of this submission is to share experiences of changes that have been undertaken in the supervision system.

At present, field trials of the system have commenced at three branches. After field trial results this year have been evaluated and adjustments made, a final implementation model will be introduced, probably by the end of 1999.

A longer term by-product of the model is likely to be much more objective measures of performance by Community Corrections. It would become possible to compare all pre-sentence predictions made using the model to actual offender recidivism outcomes, over whatever time period one chooses. One could then correlate initial risk predictions, case management regimes, and outcomes, in such a way as to make some powerful conclusions about the efficacy of community based supervision versus other methods of management.