

# Assessing ACE: The Probation Board's Use of Risk Assessment Tools to Reduce Reoffending

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**Summary:** This paper provides a summary of the recently commissioned independent review to examine the use of the ACE risk assessment tool in Northern Ireland carried out by RSM McClure Watters on behalf of the Department of Justice and the Probation Board for Northern Ireland (PBNI). It will set out the context of the Probation Board's work, its use of this assessment tool with the Best Practice Framework, and evidence as to the utility of the assessment tool, its efficacy in accuracy of predicting reoffending rates and suggestions for future practice.

**Keywords:** Risk assessment, probation, courts, evaluation, assessment tool, prediction of reoffending, reducing reoffending, fit for purpose.

## Introduction

The Probation Board for Northern Ireland (PBNI) seeks to reduce offending and make local communities safer by challenging and changing offenders' behaviour. The focus of the work undertaken by the PBNI is to reduce offending through effectively managing offenders who are subject to a court order or licence conditions. Risk and needs assessment by a Probation Officer is integral to the supervision process to ensure sentence compliance, measures are in place to reduce potential harm, and interventions are available to change attitudes and behaviours and ultimately to reduce the number of future victims of crime.

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The objective of risk assessment is not just to assess risk of recidivism. Risk and needs assessment by a professionally qualified Probation Officer through a standardised system helps build a positive motivational relationship with the offender to encourage positive behavioural change. This is set out in PBNI's 'Best Practice Framework Incorporating Northern Ireland Standards' (the Framework) as follows.

The quality of relationship between the offender and Probation can be positively set at the assessment stage and play an important role in helping motivate offenders towards change; as well as preparing them to engage positively with programmes and other interventions throughout their order/licence and/or sentence. (Section 3, p. 4)

The Framework recognises that assessment is central to the work of PBNI, underpinning all PBNI work with offenders from pre-sentence to sentence completion stage. According to Crisp *et al.* (2003, p. 3), assessment involves:

collecting and analysing information about people with the aim of understanding their situation and determining recommendations for any further professional intervention.

Therefore assessment is about not just *collecting* information but also the *analysis* of that information in order to identify risk and/or needs so that appropriate and informed decisions can be made on any action required. In the case of probation, this means identifying the actions required to manage and reduce identified risks posed by an offender to reduce the likelihood of their reoffending.

### **Assessment tools**

The complex nature of offending behaviour requires a rigorous, thorough and consistent assessment so as to continually evaluate the risk of recidivism. In PBNI, this is done on an individual basis between a Probation Officer and the offender, using a risk assessment tool in order to accurately assess and produce an appropriate approach to reduce the likelihood of reoffending. It should be noted that Probation Officers in Northern Ireland are all qualified social workers and registered with the regulatory body, the Northern Ireland Social Care Council.

Risk assessment tools have developed over a period of time and are in common use in probation services. As these tools have been empirically researched and evaluated they have developed into more sophisticated models to assess risks and determine treatment needs.

What is commonly referred to as the ‘first generation’ of assessments consisted of unstructured professional judgements of the probability of offending behaviour: a variation of this approach is now called ‘structured clinical judgement’.

Second-generation assessments were empirically based risk instruments, but theoretical and consisting mostly of static items.

Third-generation assessments were also empirically based but included a wider sampling of dynamic risk items, or criminogenic needs, and tended to be theoretically informed.

The fourth generation of assessments guides and follows service and supervision from intake through to case closure.

## **What is ACE?**

Since the year 2000, PBNI has utilised the Assessment, Case Management and Evaluation (ACE) generic risk assessment tool. ACE is a structured assessment tool used by Probation Officers to assess the likelihood of general offending within a two-year period. Included in the ACE assessment process is a Risk of Serious Harm to Others Filter (usually referred to as RA1), which triggers a Risk of Serious Harm assessment in cases where such a concern arises.

ACE is one of a number of fourth-generation assessment tools, and is used with other assessment tools as deemed relevant to assess an individual’s risk of recidivism. ACE completion is combined with other assessments such as the RA1 assessment, and will be discussed within multi-agency risk management meetings (RMMs) and Local Area Public Protection Panels (LAPPPs) depending on the nature of the offence committed.

ACE is an integral part of PBNI’s Best Practice Framework, with the frequency of reviews determined by the presenting level of risk. It consists of three domains, all of which are scored on a scale of 0–3, to aid in predicting, as well as possible, whether the offender has a low, medium or high likelihood of reoffending. The three domains of ACE are Social, Personal, and Offending.

The Social Domain covers aspects of an individual's circumstances such as accommodation, community, employment, education and training, finances, and family and personal relationships.

The Personal Domain includes an assessment of substance misuse and addictions (including habits and obsessive behaviours), health and wellbeing, personal skills (including literacy and social skills), and individual characteristics (including self-esteem, control and risk-taking behaviour).

The Offending Domain covers lifestyle and associates, attitudes and attitude to being supervised.

Each factor is scored by a Probation Officer in relation to the 'problem' prevalence, and also how it relates to an individual's offending behaviour ('Offending Related Score').

### **How valid is ACE?**

In recent years PBNI has operated in an environment of developing legislation, expanded responsibilities and new methods of reducing the risk of recidivism. In light of these developments PBNI commissioned an independent review of the ACE risk assessment tool in 2012 to assess its predictive validity with regard to reoffending and its relevance to the ever-developing role of the Probation Officer.

This review took the format of a literature review, interviews with Probation Officers, consultation with stakeholders and benchmarking ACE against other assessment tools, and consideration of the prediction accuracy analysis, which this paper considers in more depth.

Some findings from the review were as follows.

- The literature review of the evaluation report noted that there are advantages and disadvantages in implementing any system for risk assessment, and that sources indicated that the benefits outweigh the costs. Essentially, it is better to have a risk assessment system than not. The predictive validity of general offending predictors such as ACE for reoffending is better than random, but not perfect.
- All general offending predictors (including ACE, Revised Offender Group Reconviction Scale (OGRS), Level of Service Inventory-Revised (LSI-R) and Offender Assessment System (OASys)) seem to be less reliable when used to predict rarer events such as dangerous violent or sexual offending and, where triggered, additional assessments are recommended.

- The impact of risk assessment depends on the context. Risk assessment can help where criminal justice policy/practice emphasises rehabilitation, though where the context is punitive there may be adverse effects.
- Having the right assessment system is not enough on its own; it must be used appropriately and accurately.
- Unless risk assessment systems have the confidence of practitioners, such as Probation Officers, they will not be used appropriately.

### **Interviews with Probation Officers**

In conducting primary research with Probation Officers, the evaluators sought to assess the ‘buy-in’, which was identified in their literature review as an essential part of the desired functioning of the risk assessment system.

The researchers concluded that ACE is core to the delivery of the Framework and that PBNI staff have bought into the ACE system with the recognition that other tools are required, specifically with regard to women, sex offenders and domestic violence cases. Probation Officers provided a positive response with a number of areas for improvement. The general feeling was that ACE was user-friendly and provided a good structure for interviewing clients. Most Probation Officers felt that the offender self-assessment process of ACE was not particularly useful at producing accurate information. It was felt that it did help involve the offender and assist rapport. It was also felt that it was useful for first-time offenders to adjust to the structure. Some also felt that ACE was neither gender nor ethnically friendly, as there were other issues that ACE had no way of incorporating.

It was found that PBNI staff working in prisons felt that while it is useful to have an assessment tool that can be used across the criminal justice system, it would be useful to develop it in some way to work within a prison setting.

The consultation process also found that an area of development was quality assurance by managers of ACE assessments, to ensure that Probation Officers complete their reports in a consistent manner regarding the level of detail and that there is continual development of staff in this regard.

## **Benchmarking ACE with other assessment tools**

The review benchmarked ACE against a number of other assessment systems such as LSI-R, OASys, Level of Service – Case Management Inventory (LS-CMI), OGRS, Risk Matrix 2000 (RM2000), ASSET, Static-99, and Stable and Acute 2007.

A particularly useful output was the comparison of the different risk assessment systems in use internationally and the controversies related to each. It found that some systems, such as OASys, could be very good in predicting recidivism but they could be complicated, inflexible and time-consuming. Others, such as OGRS, used as part of a bigger system (in this case OGRS is part of OASys) had weaknesses in identifying areas for intervention. There were also more specific risk assessment tools such as ASSET, which is used with offenders up to the age of 18 years, or Static-99, which is used to predict the probability of sexual and violent recidivism among male offenders already convicted of a sexual offence against a child or a non-consenting adult.

PBNI uses not only ACE and the RA1 screening tool but also the Risk Matrix 2000 system, which is a statistically derived risk assessment for use with sex offenders. Other supplementary assessment tools are used, depending on the type of offence committed or the type of individual under assessment.

ACE is used primarily to predict the likelihood of reoffending by identifying and assessing the social, behavioural and environmental context of the individual offender by highlighting the risks posed and the offender's needs. It is used to assess progress of the offender during their time of supervision under the PBNI.

A few factors must be taken into account when assessing and benchmarking ACE. While ACE is an objective risk assessment system, it will be people that will be making judgements within the system on the particular scoring in each area. When benchmarking with other systems within the UK and elsewhere, certain environmental factors can be overlooked when assessing purely the system itself. In Northern Ireland, Probation Officers must be social work trained and registered with the Northern Ireland Social Care Council. This is not a stipulation elsewhere in the UK. There is also the fact that Probation Officers in Northern Ireland still carry out home visits: again this has stopped elsewhere in the UK. Comparing and contrasting of systems could therefore be slightly skewed due to different approaches to risk and need assessment.

## Considering the prediction accuracy analysis

The review closely examined and analysed the statistical veracity of the prediction matrix used within ACE by using a sample of 1,000 offenders (reflective of the entire PBNI caseload characteristics of gender, age, offence, court order, probation length, additional requirements such as specific programmes for offenders, and risk profile). The analysis provided the percentage of individuals whose offending was accurately predicted in the sample, whether identified needs had an impact on reconviction, the relationship of the initial ACE score and risk group with the number of proven offences committed since initial assessment, and the differences between the initial ACE risk group and the number of different proven offences since the initial ACE assessment.

The research provided an overall prediction accuracy analysis in terms of the one-year and two-year reconviction rates. The review would use a representative sample which was established by using the top ACE scores equal to the percentage of reconvictions and adding the number who had not been reconvicted to the remaining percentage. The figures would then, once divided by 10, show the percentage accuracy for each category.

For the one-year reconviction rate predictive quality, the top 410 ACE scores and the bottom 590 scores were used and analysed. According to Copas (1992), the proportion of correct predictions of recidivism cannot normally exceed 75% if the actual reconviction rate is 50%. The reconviction rate in the one-year sample was established as 41%, close to the 50% reconviction rate discussed by Copas. Through analysis, the researchers found that the percentage of accurately predicted recidivism via ACE was 61.4%. This is at the higher end of accuracy in light of the Copas proposition.

The same analysis was conducted in relation to two-year reconviction rates using the top 524 ACE scores and the bottom 476 ACE scores with an actual reconviction rate of 52.4%. Again the actual reconviction rate was very close to the Copas argument that prediction accuracy cannot normally exceed 75% where the actual reconviction rate is 50%. Again a high quality of prediction accuracy (61.4%) was found.

The research used the Mann-Whitney test to assess needs identified through ACE and the differential between those who were and were not reconvicted. It found that a number of factors scored in the ACE risk assessment tool areas were not significant in their correlation in predicting offending; these included gambling, reasoning, stress management and

literacy. Significant areas related to an individual's propensity to reoffend included accommodation, alcohol, drugs and other addictions, learning disability, family and self-esteem.

Initial ACE scores and the number of proven offences found a correlation of the increasing levels of risk with the number of proven offences committed since the initial ACE assessment. This showed that ACE appeared to be accurate in predicting the level of risk at the initial stage.

The Kruskal-Wallis test was used to assess the differentiation between the initial ACE risk group and the number of proven offences committed since the initial ACE assessment. This found that the higher the risk group, the higher was the probability of a greater number of offences by the offender. The same test was used to assess the differentiation of changes in ACE Risk Group and offences committed since the initial ACE assessment. Overall the RSM McClure Watters report found that ACE had a reasonably high prediction rate of the risk of potential offences committed.

The percentages of accurately predicted offences by age, offences and risk group were examined, and ACE was found to be particularly accurate for the age groups 10–16, 17, and 18–24. Accuracy drops below 50% from the 45-year-old point onwards. Overall, ACE was consistently less accurate at predicting recidivism in the low-risk group, with higher predictions of recidivism than actually happened. In the high-risk group the number of accurate predictions ranged from 50% up to 100% depending on offence, the only exception being a sexual offence, which had a 33% accuracy.

The accuracy and needs analysis of ACE and its supporting assessment tools help to predict the level of risk of reoffending and to identify the environmental factors that increase the likelihood of reoffending. This allows the Probation Board and other agencies to assess the offender's needs and put in place resources that will provide the offender with the opportunity to change their offending behaviour.

### **Consultation with stakeholders**

Part of the qualitative work included consultations with Probation Board management and staff, Prison Service management, Youth Justice Agency and Parole Commissioners. This was to ascertain the usability of ACE and how the users of the information found the system. While all consultees

found that the ACE risk assessment tool was central to the delivery of the Framework, there were a number of specific pieces of feedback.

For example, the Youth Justice Agency felt that ACE was not appropriate for assessing risk of offending in young people; however, it adapted ACE, through partnering with Oxford University, to meet the needs of young people. This means that while it is not necessarily ACE it is a version specifically adapted for young offenders, and so has a consistent risk assessment framework.

The Parole Commissioners had particularly praised ACE for the quality of final reports produced, especially when compared with reports produced in England.

The Prison Service welcomed the consistency of having an assessment tool used across the justice system, although it felt that ACE was less applicable to a custody environment. It recognised that while the Probation Officers using ACE were social work qualified, prison staff using ACE were not. It was suggested that this could be improved by having Probation Officers involved in the induction of new staff and highlighting the issues around ACE.

## **Conclusion**

As there are a number of assessment tools in use within Europe, and even within the UK, it is always difficult to produce a consistent review across the regions to identify strengths or failings where a wider spectrum of diverse types of offenders and their backgrounds could be observed. However, each region has its own reason for a particular assessment tool. An oft-quoted saying in Northern Ireland is ‘Local solutions to local problems’, and in this respect any review is not just about the validity of the assessment tool but also the fitness for purpose, in this case its appropriateness for Northern Ireland.

The report states in its conclusion that ‘PBNI should continue to use ACE as the core risk assessment tool’. This endorses the continued usage of ACE in Northern Ireland as it is user-friendly and contributes positively to identifying offending factors that, when addressed, help reduce the likelihood of reoffending.

What should also be kept in mind is that ACE is integral to the Framework, which in turn is integral to the organisational development of PBNI (Probation Board for Northern Ireland, 2011a, 2011b). Continual development and refining of the ACE system adds to the

continual development of the organisation and can also contribute to the continuous personal development of its staff.

What can be taken from the whole exercise is the need for a fit-for-purpose assessment tool, highly skilled staff to implement the assessment tool appropriately, and a consistent organisation-wide approach to risk assessments. Even with a perfect combination of all three approaches there will always be a certain level of unpredictability, but it is still worth pursuing as the combination helps to reduce reoffending by assisting the directing of resources to those who need them most. This comes through continual validation and development of the assessment tool, Probation Officers and organisational objectives.

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