



Australian Government

**Department of Employment and
Workplace Relations**

Job Seeker Profiling

The Australian Experience

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Introduction

Australia has had considerable experience with the use of profiling tools as a basis for early intervention strategies dating back to 1994. The application of profiling tools has been modified as demanded by the considerable changes to the delivery of employment services over the last ten years. This paper describes the development of the profiling instrument and its current operation as part of the early intervention strategy for job seekers who are assessed to be greater risk of becoming long-term unemployed.

Following the implementation of the early intervention strategy in October 1994, the long term unemployed and those identified as being at greatest risk of becoming long-term unemployed were given preferential access to case management and labour market programmes. The Job Seeker Screening Instrument (JSI) was developed as the profiling tool. The introduction of the Job Network in 1998 saw the extensive use of the Job Seeker Classification Instrument (JSCI), based on the JSI, as a means of early identification of the need for more intensive assistance and also as a rationing tool for the various funding levels of assistance.

Since the introduction of the *Active Participation Model* in July 2003, the JSCI has been used primarily for the identification at registration of those with the greatest risk of long term unemployment. These job seekers are immediately eligible for assistance targeted to their individual needs. Under the new arrangements job seekers also become eligible for assistance targeted to their individual needs when they have been unemployed for 12 months or more.

There are a range of views on the ability of profiling instruments to accurately identify the risk to job seekers of long term unemployment (OECD 1998). Australia's experience with profiling tools has provided some insight into the effectiveness and practicality of these instruments. Evaluations, reviews and analysis of administrative data have been conducted at various times to investigate such things as data accuracy and collection methodology issues as well as re-estimation of the weightings for the factors included in the instruments. A summary of the main findings from these evaluations and reviews is provided.

With more comprehensive administrative data becoming available since the introduction of the Job Network, net impact studies have been conducted which provide a rich source of information on the type of assistance that works best for different categories of job seekers. Information on the types of interventions was limited, however, until the introduction of the *Active Participation Model*. Since then, Job Network members have had access to the Job Seeker Account which provides funds for the provision of assistance to job seekers and this information is recorded on the administrative system. This will allow the provision of information to service providers on the most cost effective interventions for individual job seekers.

The introduction of competitive tendering for the delivery of employment assistance has required better performance measures to be developed for the assessment of individual provider performance. The relative assessment of Job Network member performance during contract rounds, and as a key part of the tender assessment process for new contracts, has been achieved through the development of the Star Ratings (Access Economics 2000). The paper also explores how job seeker assessment could be better integrated with performance information and used to drive improvements in the performance of the Job Network and the achievement of key policy objectives.

Australia's Early Intervention Strategy

Rationale

Australia has a long history of recognising the needs of disadvantaged job seekers. Until the early 1990s, single characteristics such as Aboriginal and Torres Strait Islander status, migrant status, age, disability and single parent status were used to identify “at greatest risk” job seekers for early or preferential access to labour market assistance. This approach was easy to understand and administer but did not adequately discriminate between members of a target group according to their labour market disadvantage. This is because the members of any target group are not homogeneous in terms of the risk of becoming long term unemployed with other characteristics such as age, educational qualification, gender, location, motivation etc. also being important risk factors.

The need for this shift of emphasis to those at greatest risk of becoming long term unemployed became apparent from early in the 1980s as both unemployment and long-term unemployment increased with each economic downturn and recovered relatively slowly as labour market conditions improved. Hence, the main aim of the early intervention strategy was to prevent job seekers from becoming long-term unemployed before the barriers to employment caused by extended unemployment (eg. loss of skills, motivation and confidence or employer stigmatisation) became entrenched.

Evidence on the effectiveness of active labour market policies suggested that they should be well targeted to the individual needs of job seekers and the local labour market and that interventions should be made early in the unemployment spell to avoid the negative effects of continued unemployment. This clearly supported the use of a more sophisticated profiling tool.

The objectives of such a tool would be to:

- provide early identification of those most at risk of becoming long term unemployed thereby creating the potential to avoid the on-going costs of long term unemployment;
- ration the most expensive forms of assistance to the most disadvantaged job seekers; and
- minimise deadweight by better targeting employment assistance to the individual needs of job seeker and those who will benefit most.

Development and Operation of the Profiling Instrument

In the 1993-94 budget there was a shift from the target group approach to the use of “risk-based criteria” for identifying and assessing disadvantaged job seekers. This led to the implementation of a new early intervention strategy in October 1994 as part of the Working Nation initiatives which allowed for the assessment of the risk of becoming long-term unemployed. The Job Seeker Screening Instrument (JSI) and the Client Classification Level (CCL) process were developed to enable the streaming of job seekers to appropriate types of assistance.

In the 1996-97 budget the Government announced a new framework for the delivery of labour market assistance in response to criticisms of previous arrangements. These reforms involved:

- the creation of Centrelink, a single delivery point for accessing employment services; and
- the development of a contestable market for publicly-funded employment placement services, the Job Network.

The primary objectives of the reforms were a clear focus on employment outcomes, the targeting of assistance on a needs basis and capacity to benefit and more cost effective employment assistance. To help achieve these objectives the JSCI was developed as part of the changes to employment assistance arrangements and the introduction of the Job Network in 1998. Formal research and expert judgement and the involvement of the employment services industry were important features of the development of the JSCI.

- Formal research – an extensive survey of job seekers was undertaken by the department and, in conjunction with administrative data, analysed to identify the risk factors which are associated with prolonged unemployment. The analysis determined estimates of the average effect of the these factors;
- Expert judgement – a Classification Working Group was established to make recommendations on additional factors which could not be tested in the survey (such as homelessness and disclosed ex-offender status) but which also contribute to labour market disadvantage; and
- Wider consultations – major stakeholders, peak organisations and the employment services industry were also consulted.

The JSCI was initially used to stream job seekers to different Job Network services and to different funding levels for more intensive assistance based on level of disadvantage. Those not assessed as ‘at risk’ were referred to job search assistance¹. Those job seekers assessed ‘at risk’ either at registration or subsequently if they continued to remain unemployed for long periods, were referred to more intensive assistance². Initially there were three funding levels for more intensive assistance which was reduced to two levels in 2000.

Eighteen factors that are known to be associated with a job seeker’s chance of gaining employment to determine each job seeker’s chance of becoming long term unemployed are used to derive the JSCI score. Each factor is assigned a numerical weight, or ‘points’, indicative of the average contribution the factor makes to the difficulty of placing a job seeker into employment. The points for each job seeker are added to provide the job seeker’s score. The higher the score, the higher the level of predicted placement difficulty.

Extensive evaluation of the operation of the Job Network (DEWRSB 2000, DEWRSB 2001, DEWR 2002, Productivity Commission 2002) found that while the Job Network provided a useful and cost effective model for the delivery of employment services there were some areas of concern, particularly in relation to the provision of assistance to the long term unemployed. To address these concerns the *Active Participation Model* was introduced in July 2003 for the delivery of employment services through the Job Network.

Unlike the previous model, access to more intensive assistance is now not only based on an early intervention strategy but on duration of unemployment as well. In the past, duration of unemployment was a factor that contributed to the JSCI score but did not necessarily guarantee access to more intensive assistance for those who were unemployed for 12 months or more.

¹ Job search assistance included job placement services, referred to as Job Matching, or if the job seeker would benefit, Job Search Training which provided 15 consecutive working days of training, course based or practical assistance in job search skills and strategies and interview presentation skills.

² Intensive Assistance provided individually tailored assistance to address specific barriers to employment and help job seekers find a job. It could be provided for up to 2 years, depending on the classification level. A range of assistance could be provided, depending on job seeker requirements such as vocational training, work experience, wage subsidies, training in language, literacy and numeracy, workplace modifications, help in job search techniques or support after a job placement.

Under the *Active Participation Model* Centrelink refers job seekers to their preferred Job Network member who will work with them for as long as they remain unemployed. Those assessed by Centrelink at registration as being at high risk of long term unemployment have immediate access to Intensive Support customised assistance, assistance tailored to their individual needs and available for a 6 month period. Other eligible job seekers not referred to more intensive assistance at registration are referred to basic job search services and job placement services. Those job seekers who remain unemployed after 3 months will receive Intensive Support job search training and those who are still unemployed after 12 months will be eligible for Intensive Support customised assistance. Appendix A provides a detailed description of the Job Network services provided under the *Active Participation Model*.

Because of the substantial changes to the delivery of Job Network services as part of the *Active Participation Model* the JSCI was revised and subsequently implemented in April 2003. The main change to the JSCI was a reduction in the number of factors from eighteen to fourteen. In addition to duration of unemployment the factors omitted were transport, proximity to labour markets and small community dynamic. Re-weighting of the factors was also conducted. See Appendix B for details of the factors and weights.

As in the past, job seekers can be referred to other programmes which address their special needs. The JSCI Supplementary Assessment (JSA) is conducted when the JSCI identifies a job seeker as having particular severe or multiple barriers to employment or when the nature of the employment barrier requires professional and/or specialist advice or assistance. Job seekers identified with these barriers are referred to other programmes outside Job Network that deal with such things as substance abuse and more severe mental or physical disabilities. More information relating to the JSA is provided in Appendix C.

The department has determined a JSCI score above which a job seeker is classified as 'highly disadvantaged'. Initially it was anticipated that approximately 10 per cent of registrations nationally would be identified through their JSCI score as highly disadvantaged job seekers for immediate access to Intensive Support customised assistance. This was subsequently raised slightly and since July 2003 around 13.9% of job seekers have been identified as highly disadvantaged at registration.

The ability of Job Network members to update a job seeker's details if there is a change in circumstances is now available under the *Active Participation Model*. If job seekers circumstances change sufficiently before they reach 12 months duration on unemployment allowance they will immediately have access to customised assistance.

Effectiveness

There has been much debate about the ability of profiling instruments to accurately predict a job seeker's chance of becoming long term unemployed. Poor targeting of assistance will lead to some job seekers being denied assistance appropriate to their needs and others being provided with unnecessary assistance thus increasing deadweight costs. Australia's experience with profiling instruments has provided considerable opportunity to assess their effectiveness.

The effectiveness of any profiling instrument will depend on:

- the accuracy of the information recorded in the administrative system relating to job seekers' characteristics and circumstances that are used to construct the factors in the profiling instrument; and
- the predictive power of the factors that make up the instrument.

Accuracy of information

The accuracy of information used for the JSCI will depend on the willingness of job seekers to reveal sensitive personal information, the ability of Centrelink officers and Job Network members to elicit such information and the accuracy of recording such information. Several studies have been conducted which seek to determine the accuracy of the JSCI factors including studies (Access Economics 2000, ANAO 2000, DEWRSB 2000, DEWRSB 2001, DEWR 2002a, OECD 2001) which compared the factors and JSCI scores derived from telephone interviews with those obtained from face to face interviews by Centrelink at registration. The main findings from these studies include:

- the need to develop better techniques for identifying relative disadvantage in literacy and language. Centrelink staff were found to rate job seekers much more highly on their ability to speak, read and write English than job seekers self-reporting in the telephone interview where they tended to report lower levels of English speaking abilities;
- job seekers were more inclined to disclose sensitive personal information in the telephone interview than in the Centrelink interview, especially on disabilities/ medical conditions and criminal convictions;
- the telephone interview also found significantly higher levels of the lowest educational qualification, completed primary school, than the Centrelink interview;
- the need to continually update temporal factors such as recency of work, homelessness, etc. because changes to job seeker circumstances can have a significant effect on the JSCI score;
- recency of work experience, educational attainment, instability of residence, formal qualifications, English literacy and disability were found to either involve a degree of ambiguity or present difficulties for job seekers to answer accurately; and
- job seekers who had been in and out of the workforce and who had different types of employment had difficulty assessing their 'main activity' over a five-year period - tending to place greater weight on more recent experiences.

Departmental research suggests that job seekers are less likely to reveal sensitive information in the Centrelink interview than in telephone interviews because they are concerned about the potential ramifications on their eligibility for income support (a function performed by Centrelink) and employment prospects. The telephone methodology assured job seekers that any information revealed would not be made available to Centrelink or Job Network members in an attempt to encourage job seekers to reveal more information. In practice this would not be possible and the advantage of the telephone interview may be lost to some extent. It is clear, however, that collecting personal information is sometimes difficult if it is not possible to maintain anonymity.

Centrelink staff or Job Network providers must be encouraged to be diligent when applying or updating the JSCI and careful to gain the job seeker's confidence so that all details relating to disadvantage are revealed.

The conduct of the interview by Centrelink staff also has a bearing on the accuracy of the information collected for the JSCI. Research in 2002 for the Department's quality assurance programme recommended:

- implementing a consistent verbatim approach, through training, to the administration of the JSCI by Centrelink to encourage increased consistency and accuracy in collection of job seeker data; and
- improving the JSCI tool to reduce question ambiguity, improving the structure and flow of the JSCI interview, removing unnecessary questions and improving the ease of understanding questions for job seekers and Centrelink staff.

In response to these recommendations the revised JSCI comprises fewer interview questions, down from a maximum of 60 questions to 30 questions, and the flow of the questions has been improved. The revised JSCI questions and supporting IT were tested extensively in usability laboratory trials. The overall results of the testing indicated that the new questions, question flow and the IT tool are a significant improvement on the previous version that should ensure a more efficient and effective interview process.

A study conducted in May 2004 examined the accuracy of the JSCI factors as recorded by Centrelink. By following up a sample of those with a JSCI score, in depth interviews were used to check the accuracy of the JSCI score. Centrelink's application of the JSCI was found to be 90.3% accurate in identifying the appropriate funding level. This represents a significant improvement over the 82.6% accuracy found when a similar exercise was conducted in 2002 prior to the latest changes to the Centrelink interview.

The views of both Job Network providers and Centrelink staff can also provide some indication of the perceived accuracy of JSCI scores. As reported in the Job Network evaluation stage 3 report a survey of providers in 2001 found that there was concern among some providers about the accuracy of the JSCI. Around 21% of Job Search Training providers and 4% of Intensive Assistance providers thought that over half the job seekers referred to them were inappropriately classified. This result needs to be put into perspective as the survey also showed that nearly three quarters of Intensive Assistance providers thought that less than 20% of job seekers were inappropriately classified. For Job Search Training providers, nearly half thought that less than 20% of job seekers were inappropriately classified.

In qualitative research some providers indicated that many of the job seekers referred to them should have been referred to either a more intensive service or to services outside Job Network. Providers who believed job seekers were misclassified attributed this mainly to Centrelink's administration of the instrument. It is important, however, to put the views of providers on the level of misclassification into context. Some of their concern may result from a desire to increase the proportion of job seekers classified at a higher level, thus increasing funding, and unrealistic expectations about what the application of the JSCI can realistically achieve.

Predictive Power

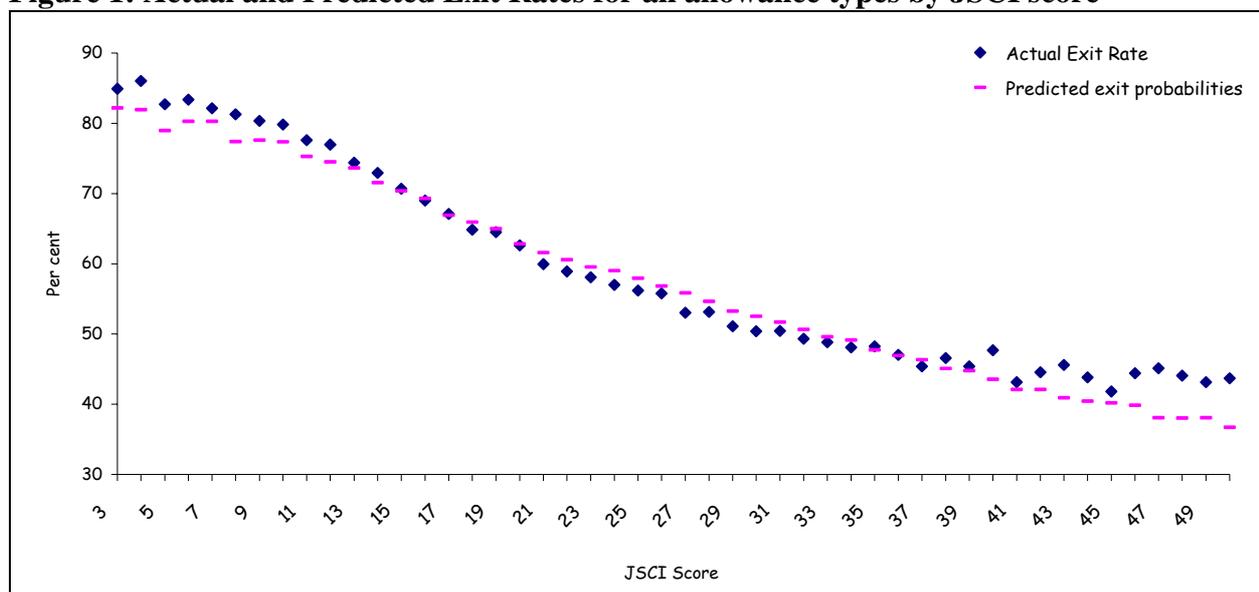
The predictive power of the profiling instrument will not only be dependent on the accuracy of the information but also on the statistical assessment of the significance of each factor on the chance of becoming long term unemployed. Updating the factors included in the instrument and the associated weights based on the latest available data will ensure the predictive power of the instrument is maximised.

A re-estimation of the instrument's weights was conducted in 2001 with the most significant change being an increase in the weights for long term unemployment and age. This is line with evaluation findings by the department and also by the Productivity Commission that many long term beneficiaries were not getting access to Intensive Assistance.

The revision of the JSCI as part of the introduction of the *Active Participation Model* included the removal of four of the factors under the original JSCI. Unemployment duration has been omitted as this factor now determines access to assistance for those who remain unemployed for 12 months or more. Statistical analysis showed that the 'access to transport' factor did not significantly assist the identification of the most disadvantaged job seekers. The 'proximity to labour market' factor is now accounted for under the geographic factor, and the 'small community' factor has been replaced by the geographic factor with an increased range of points for Indigenous job seekers.

The diagnostic statistics for the logistic regression model that underpins the JSCI tend to indicate that the model has low to moderate predictive power. One point to consider is that logistic regressions performed on cross-sectional unit-record data usually have low predictive power according to diagnostic tests and in this context, the JSCI model is not unique. However, when one considers the fact that some factors have been moderated, in terms of points allocated, and also that there are simply some determinants that are unable (or at least very difficult) to be quantified, the JSCI is quite effective at predicting the exit rates from allowance across all allowees. This can be seen from Figure 1 below. Currently, further analysis is being undertaken to determine the effectiveness of the JSCI in predicting exit probabilities for specific classes of allowance recipients/pensioners, such as Disability Support Pensioners, Parenting Payment Recipients and Youth Allowance Recipients. This research, along with increased attention to model diagnostics will most likely improve the performance of the JSCI in the future.

Figure 1: Actual and Predicted Exit Rates for all allowance types by JSCI score



Measures of effectiveness

The effectiveness of the JSCI will be demonstrated by its ability to achieve its main objective, that is, identifying at registration those most at risk of becoming long term unemployed. While it is possible to gain some measure of the effectiveness of the JSCI in terms of achieving its objective this needs to be placed in the context of what would happen if profiling was not used. In the absence of profiling other approaches to targeting assistance would include:

- the ‘no profiling option’ which assumes all job seekers have the same chance of reaching long term unemployment when they become unemployed; and
- targeting assistance based on membership of client group such as Indigenous, those with disabilities, sole parents, youth etc.

The ‘no profiling’ simply refers all job seekers to services for the less disadvantaged at registration with those who remain unemployed for long periods accessing more intensive assistance. The evidence is quite clear, however, that significant numbers of those who become unemployed will consequently reach long term unemployment. The question then is can these job seekers be identified at registration with the aim of providing more intensive assistance to prevent long term unemployment. In a sense, the ‘no profiling’ option is the lazy approach which makes no attempt to use the extensive information available on job seeker characteristics which are known to have an effect on employment prospects. This approach fails to address the objective of targeting more expensive assistance to the most disadvantaged and could lead to higher levels of long term unemployment because of the failure to intervene early in the unemployment spell.

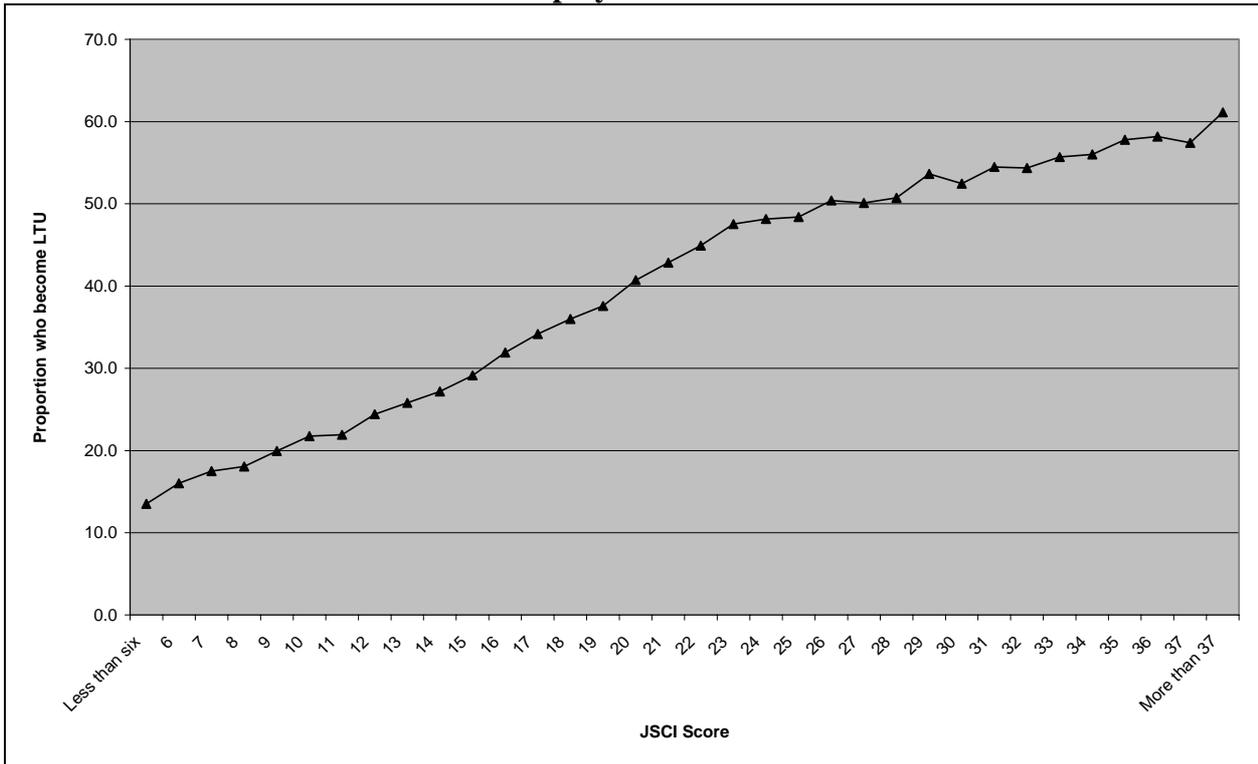
The alternative approach based on membership of a client group is an administratively simple way of targeting assistance. This approach, however, assumes that all those in a particular group have similar levels of disadvantage. The members of these groups will have very different characteristics and situations such as work history, educational qualifications, skill levels, family and living arrangements etc, that will impact on their chances of finding employment. To successfully target assistance, these other factors should also be taken into account.

While the JSCI is designed to overcome the deficiencies in the alternative approaches, to be effective it must be able to successfully predict the chance of becoming long term unemployed. We have seen in Figure 1 that the JSCI is a very good predictor of the exit rate. It is also possible to use administrative data to obtain for each JSCI score the proportion of job seekers who are still unemployed 12 months after registration (see Figure 2). It can be seen that the proportion who reach long term unemployment increases as the JSCI score increases suggesting that the JSCI score is a relatively good predictor of the chance of becoming long term unemployed and should be preferred to the ‘no profiling’ option.

Of course, job seekers receive different types of employment assistance depending on their JSCI score and are subject to Mutual Obligation³ requirements before they become long term unemployed. These interventions are associated with positive net impacts which will have the effect of lowering the curve in Figure 2. To assess the effectiveness of the JSCI without the impact of interventions would involve conducting the JSCI for a sample of job seekers then denying these job seekers any assistance and exempting them from Mutual Obligation requirements for a period of 12 months. This type of experiment is not possible in the Australian context.

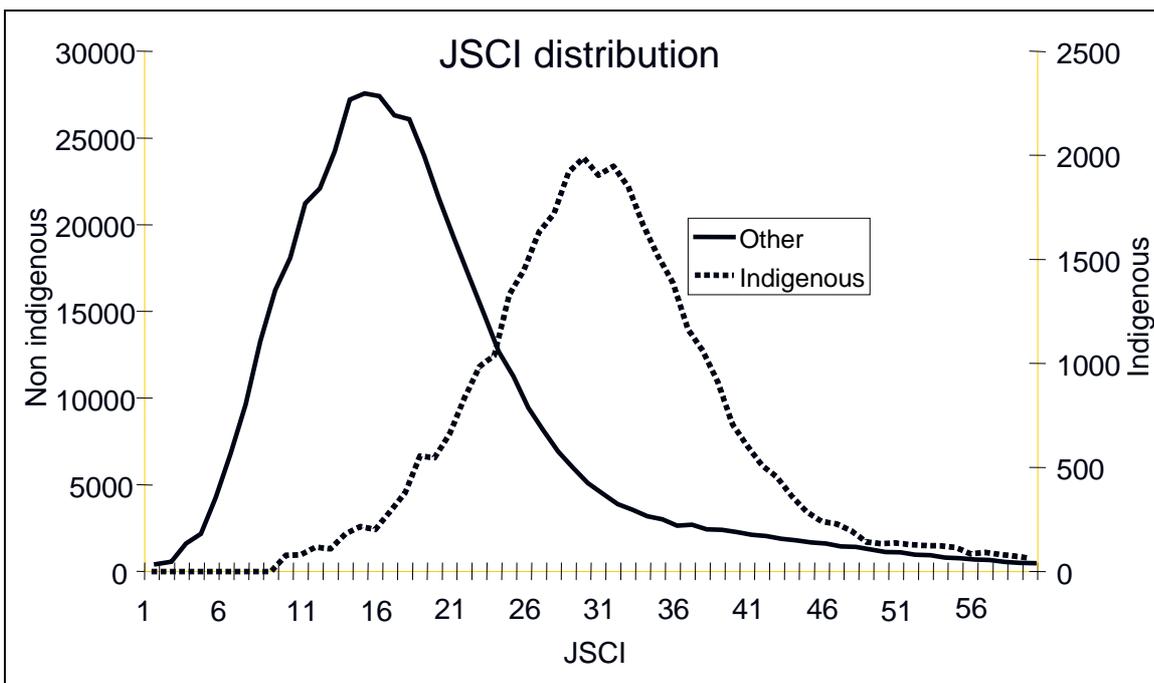
³ Mutual Obligations is based on the principle that unemployed people aged 18 to 49 years have an obligation to enhance their job prospects in the labour market or contribute to the community which supports them in return for unemployment payments. Job seekers can meet their mutual obligations requirements through a range of activities including Work for the Dole and Community Work.

Figure 2 JSCI score at registration by the proportion who reach 12 months duration on unemployment allowance



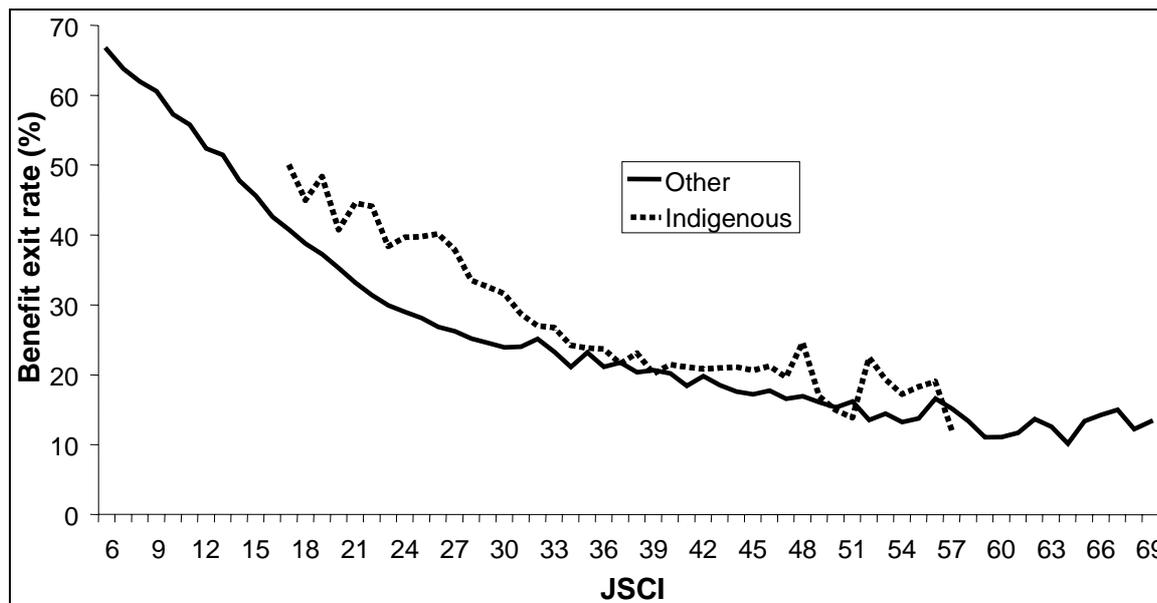
The advantage of the JSCI over the target group approach can be seen in Figure 3 which shows the distribution of JSCI scores for Indigenous job seekers and other job seekers. The higher levels of disadvantage amongst Indigenous job seekers is reflected in the much higher JSCI scores compared to other job seekers. It is also apparent, however, that many Indigenous job seekers have lower levels of disadvantage and are not likely to reach long term unemployment and so would not require more intensive assistance.

Figure 3 JSCI scores for Indigenous and other job seekers



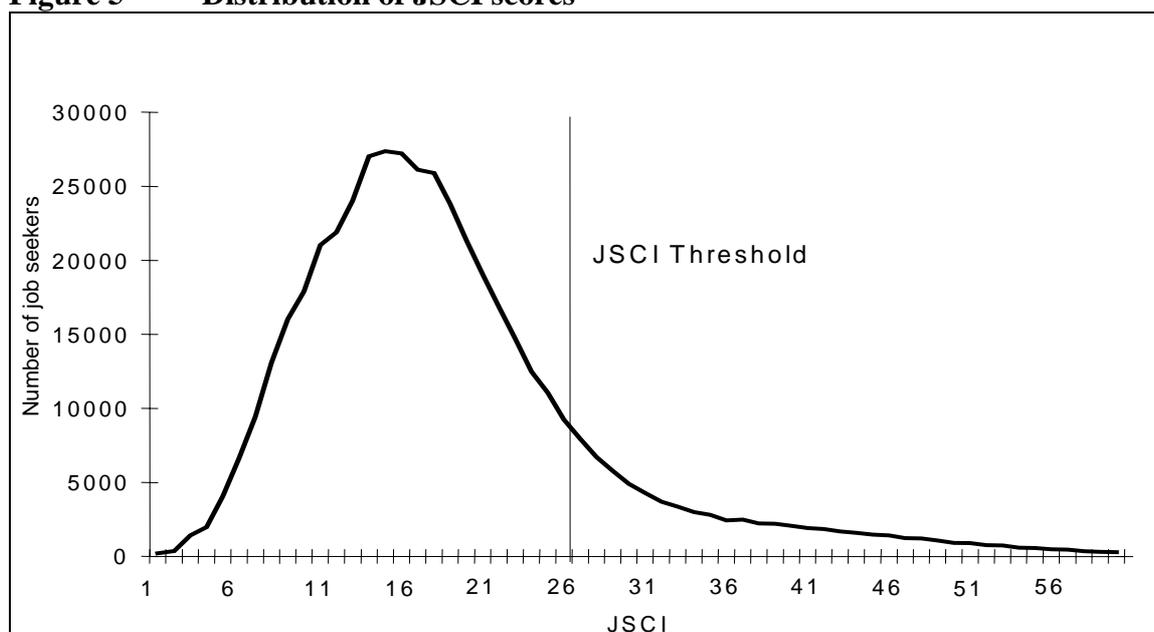
It is also possible to obtain a measure of the predictive power of the JSCI by comparing benefit exit rates by the JSCI score. Figure 4 shows the exit rates for both Indigenous and other job seekers by JSCI score. It can be seen that those with high JSCI scores have the lowest exit rates which suggests that the JSCI score is able to predict with some accuracy the chances of becoming long term unemployed. It is also encouraging that the exit rate of Indigenous job seekers is similar to that of other job seekers with the same JSCI score suggesting that the JSCI is achieving its objective of identifying those ‘at risk’ in disadvantaged client groups. Again, it should be remembered that these exit rates will be influenced by programme interventions or Mutual Obligation requirements.

Figure 4 Benefit exit rate by JSCI score for Indigenous and other seekers



To ration limited resources to the most disadvantaged a threshold JSCI score must be set whereby job seekers with a JSCI score equal to or higher than the threshold are referred to more intensive (and therefore more expensive) services. In setting the threshold it needs to be remembered that raising the threshold will reduce the number who are referred to more intensive assistance but should not have been (false positives) but at the same time will increase the number not referred to more intensive assistance who should have been (false negatives). The threshold needs to be set, therefore, to achieve a balance between ‘false positives’ and ‘false negatives’.

It can also be seen from Figure 5, which shows the distribution of JSCI scores, that as the threshold score is lowered thus minimising ‘false negatives’, significant numbers of job seekers will have access to more intensive assistance at a considerably higher cost. Hence, setting the JSCI threshold needs to be balanced by the available resources for more intensive assistance. In Australia, the threshold JSCI score has been changed on several occasions to ensure that sufficient resources are available for the provision of assistance to those most ‘at risk’.

Figure 5 Distribution of JSCI scores

There have been other studies which investigated the success of the JSCI in streaming job seekers to different types of assistance. The Job Network Evaluations (DEWRSB 2000, DEWRSB 2001, DEWR 2002a, DEWR 2002-2003) looked at the proportion of job seekers with different characteristics eligible for a particular service and their share of commencements for that service.

Participation rates for most groups early in the Job Network were found to be close to expectation although some groups such as Indigenous job seekers, youth, sole parents and job seekers on non-activity tested income support were either well below or above their predicted rates. It was found that, in general, those who were more disadvantaged had higher levels of representation in Intensive Assistance and the less disadvantaged had higher representation in Job Search Training, as would be expected. Data reported in the Labour Market Assistance Outcome reports suggests that this has not changed significantly over time.

Inappropriate referrals

Inappropriate referrals to various forms of employment assistance in terms of the proportion who actually commence has been an issue for the Job Network and could be seen as an indication of poor targeting of assistance. Referring job seekers to programmes inappropriately places a burden on providers who are required to deal with these job seekers and on job seekers who need to respond to the referral or risk breach action.

Prior to the introduction of the *Active Participation Model*, referrals to Job Search Training and Intensive Assistance were achieved via an automated referral process using eligibility (including the JSCI score) and job seeker availability information from administrative data. Under these arrangements the proportion of referrals that commenced was around 30% for Job Search Training and around 60% for Intensive Assistance.

Changes have been made to the referral process under the *Active Participation Model*. Centrelink now refers job seekers to Job Network Providers at registration. Job seekers then stay with their Job Network provider while they remain on unemployment allowance. Job Network members now trigger referrals to assistance. Job seekers will be referred to job search training around 3 months after registration and to customised assistance if the JSCI score is high enough at registration or

otherwise around 12 months after registration. Job Network members will not attempt a referral if they know the job seeker is not available for commencement.

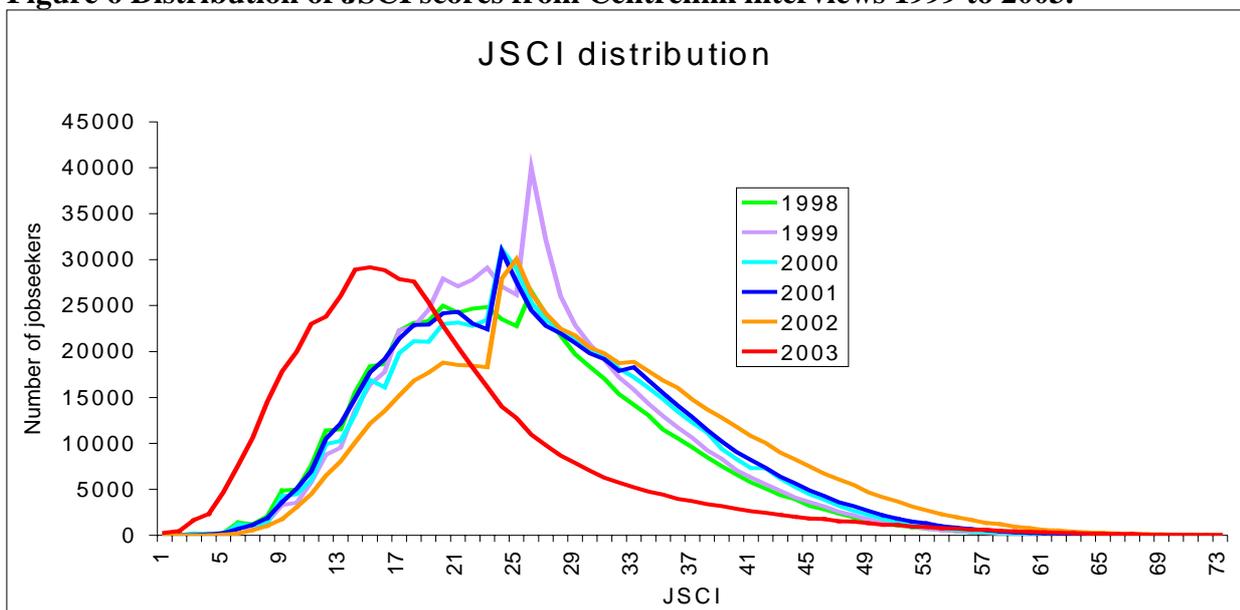
The proportion of referrals that subsequently commence is now around 36% for job search training and 60% for customised assistance. While some improvement has been achieved for job search training many who are referred are still not commencing. The likely reason is that recent changes to the job seeker's circumstances are simply not known by the Job Network member at the time of referral.

The department has conducted surveys of job seekers who were referred to a service but did not commence seeking their reasons for not commencing. It was found that 56% of those referred to Job Search Training who did not commence had found a job or already had a job, 10% were studying 7% were suffering ill health and another 5% had caring responsibilities. The corresponding proportions for those referred to Intensive Assistance were 34% had found employment, 19% were suffering ill-health, 9% had caring responsibilities and 10% reported that they had been told they were no longer eligible for assistance.

A key issue in relation to the accuracy of the instrument is the ability of Centrelink staff and Job Network members to update the JSCI and the consequent effect of this on streaming job seekers to appropriate forms of assistance. Internal research by the department into the application of the JSCI using both the Centrelink face to face interview and a telephone interview found that Centrelink staff had a tendency to 'push' job seekers over the threshold for more intensive forms of assistance. It was not always clear how this was done but it was obvious that the accuracy of profiling information was compromised to some extent. This tendency was an issue when profiling instruments were introduced in the mid 1990s and was also reported in the Job Network evaluations.

Figure 6 shows the distribution of JSCI scores for each of the last 5 years. It can be seen that in all years up to 2003 a spike in the distribution occurs at the threshold score for entry to Intensive Assistance. This was not observed for the trial using telephone interviews to collect JSCI information because telephone interviewers simply asked the JSCI questions without any knowledge of the points score system. The distribution of JSCI scores in 2003, however, does not have a spike. This suggests that the incentive for Centrelink staff to increase job seekers JSCI scores has disappeared under the *Active Participation Model*.

Figure 6 Distribution of JSCI scores from Centrelink interviews 1999 to 2003.



Policy Challenges

Australia's experience with profiling tools has primarily been to stream job seekers to different forms of assistance or different levels of funding for intensive assistance. This has been relatively successful at rationing more intensive assistance to the most disadvantaged job seekers and will continue to be used as part of the early intervention strategy. The challenge now is to make better use of the extensive profiling and performance information collected about job seekers in administrative data to better inform Job Network providers about the most cost effective interventions for job seekers in their case loads. By using more sophisticated econometric models it is possible to determine the probability of success of a range of interventions for any particular job seeker. These types of approaches have been developed in the USA and Canada (Eberts & O'Leary 2002, Eberts & O'Leary 2003). Switzerland is also developing such a system (Frolich et al 2003)

In recent times in Australia, targeting assistance involved referring job seekers with relatively short durations on unemployment allowance to job search training with other job seekers referred to more intensive types of assistance when their level of disadvantage is high as measured by the JSCI. Evidence of the effectiveness of these interventions for job seekers with different characteristics has been provided by the net impact studies of Job Search Training and Intensive Assistance under the model for delivery of employment services prior to the introduction of the *Active Participation Model* (DEWR 2003c)

Net impact studies

The net impact studies conducted by the department compare the employment outcomes of programme participants with those of similar job seekers who had not been referred to or participated in the programmes in the previous 6 months. The latest studies, conducted in May, August and November 2002 prior to the introduction of the *Active Participation Model*, included job seekers referred to or commencing assistance 16 months earlier. Logistic regression was used to control for variations in a range of variables including age, gender, duration on unemployment allowance, disability, cultural backgrounds, Indigenous status, educational attainment and local economic conditions.

Table 4 shows the employment net impacts for Intensive Assistance and Job Search Training by job seeker characteristics and labour market conditions. This provides an indication of job seekers with particular characteristics who benefit most from being required to participate (referral effect) or from actual participation (programme effect) in these services.

It can be seen that not all referrals are well targeted. For example, the net impact results suggest that those aged 15 to 24 years should be referred to Job Search Training early in their unemployment spell because the referral and the programme effects are both strongly positive as opposed to the strongly negative effects for Intensive Assistance. Changes have now been made to the delivery of employment services for those aged 15 to 24 years who are now required to participate in job search training courses immediately upon registration.

While these net impact results are useful for programme and policy development they are of little use to providers who had limited or no control over which job seekers are referred to particular services.

Table 1 Net impact by job seeker characteristics¹

	Referral effect ²		Programme effect ³	
	IA	JST	IA	JST
<i>Age</i>				
15-24	-5.7	8.0	-4.0	3.6
25-44	4.8	11.9	5.1	9.4
45+	8.2	12.1	11.8	12.4
<i>Gender</i>				
Female	5.6	7.5	7.0	9.3
Male	3.5	12.4	5.5	7.7
<i>Duration on benefits</i>				
0-11 months	1.4	10.9	7.0	8.6
12-23 months	2.3	4.2	na	na
24+ months	7.1	na	6.4	na
<i>Educational attainment</i>				
Less than year 10	3.2	na	5.9	na
Year 10	5.8	13.0	6.8	9.8
Year 11 or 12	2.8	8.4	3.8	7.6
TAFE	3.2	10.2	8.1	5.9
Degree	2.9	11.4	na	9.1
<i>Labour market conditions</i>				
Weak	2.5	11.5	6.2	9.4
Medium	5.0	12.3	4.6	9.4
Strong	5.0	9.3	7.0	6.7
<i>Equity groups</i>				
CALD (non-English speaking background)	8.2	15.7	12.3	9.8
Persons with a Disability	8.1	14.2	14.2	na
Indigenous	5.6	na	5.7	na
Total	4.1	10.8	6.0	8.2

1. These figures represent the weighted average from the May, August and November 2002 studies.

2. Net impact measured from referral to the service.

3. Net impact measured from commencement in the service.

Na not available due to small sample size for this cell.

Opportunities for enhanced performance information

While information on the effectiveness of Job Search Training and Intensive Assistance is available for job seekers with different characteristics and circumstances, information on the types of interventions has been limited because of the 'black box' nature of Intensive Assistance. Intensive Assistance case managers were given the freedom to determine the types of interventions that would satisfy the individual needs of the job seeker with access to a range of interventions such as training courses, employer incentives, motivational courses, equipment or fares etc. As there was no requirement to do so, this information, however, was either not recorded at all or recorded in a manner that could not be easily quantified.

This lack of information about the types of interventions provided to job seekers in the past has largely been overcome under the *Active Participation Model*. Job Network members now have

access to the Job Seeker Account⁴ which provides funds for the provision of a range of interventions. The types and cost of the vast majority of these interventions are recorded on the administrative system. This includes assistance such as work equipment, employer incentives, on and off the job training, post placement support etc. Along with profiling information, these data can be used to determine the most cost effective interventions for job seekers with different profiles.

One area of concern that affects the predictability of profiling tools is the inability to include all factors that impact on a job seeker employment prospects. At present, the JSCI relies largely on observable information that can be readily collected. One perceived shortcoming has been a lack of information on job seeker motivation to find work. Indications from employers are that job seeker attitudes are likely to have a major influence on their employment prospects (DEWR 2001). In the past it has been difficult to include this type of information because it was difficult to quantify. There is no doubt, however, that case managers will make an assessment of a job seeker's motivation before deciding the most appropriate interventions for them.

Over the last 3 or 4 years the department has been involved in a project which seeks to measure the job seeker attitudes to job search, work and welfare dependency. Job seekers were provided with a series of 21 statements designed to differentiate the level of motivation and openness in relation to job search and asked to rate their level of agreement using a 10 point scale. A segmentation model has been developed that allows the classification of job seekers into 8 segments representing different levels of motivation and openness.

Early findings from this work suggest that job seeker attitudes can be measured and are associated with employment outcomes. These questions could be administered at regular intervals by Job Network members as part of the profiling exercise. The job seeker profile could then include the motivational segment.

Driving Performance

The introduction of competitive tendering for the delivery of employment assistance has required better performance measures to be developed for the assessment of individual provider performance. The relative assessment of Job Network member performance during contract rounds and as a key part of the tender assessment process for new contracts has been achieved through the development of the Star Ratings (Access Economics 2002). Regression analysis is used in the production of Star Ratings to control for other factors that have an impact on job seeker outcomes such as job seeker characteristics, all of which are factors in the JSCI, and local labour market conditions.

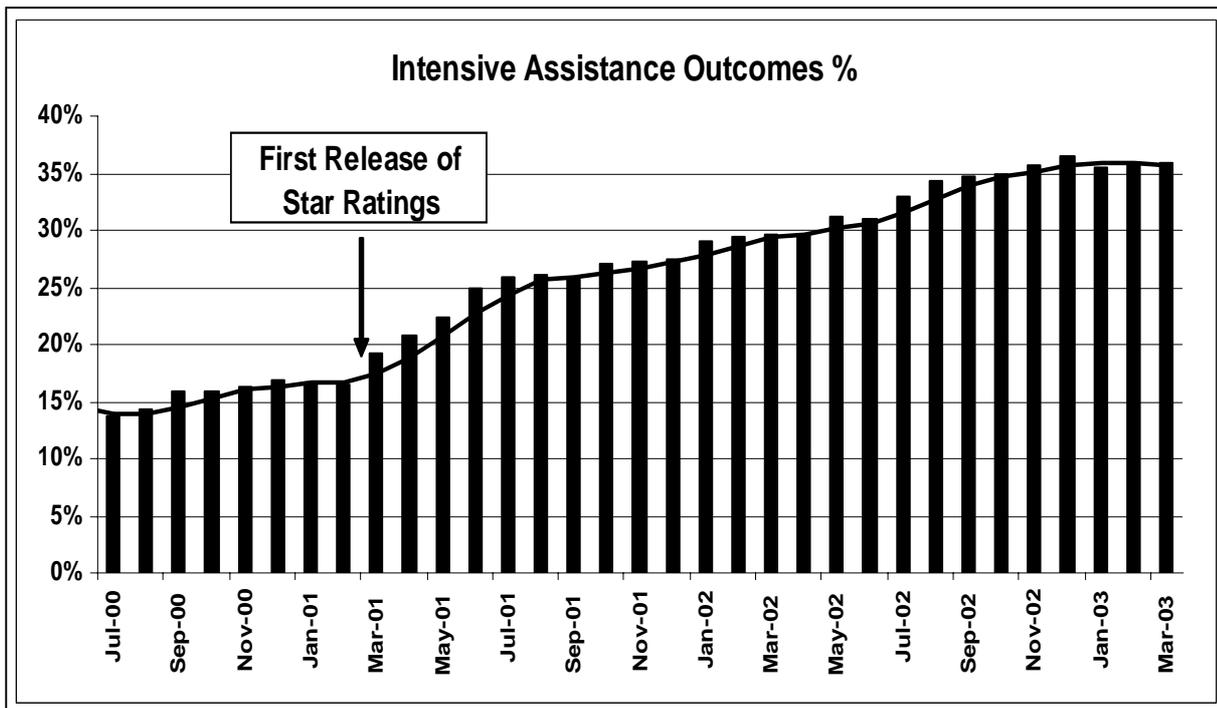
The Star Ratings provide an assessment of the relative performance of Job Network providers in terms of the proportion of paid employment outcomes they achieve. Paid employment outcomes are an important part of the funding and incentive structure of the Job Network. Payment is made where job seekers remain employed for 13 weeks (interim outcomes) and 26 weeks (final

⁴ The Job Seeker Account (JSKA) is a quarantined pool of funds that can be used by a Job Network member (JNM) to help individual Fully Job Network eligible job seekers get a job. A JNM can draw funds from the JSKA to purchase services and products for job seekers who have commenced Intensive Support. The JSKA is designed to provide the greatest help to the most disadvantaged job seekers and ensures that Job Network members will have funds available to assist all eligible job seekers. Even if a job seeker does not bring credits to a Job Network member's Notional Bank, a Job Network member may still spend money on that job seeker. JNMs will be reimbursed from the JSKA for services, activities, facilities and products they may purchase to help a job seeker return to work. A JNM cannot keep any unused funds from the JSKA as profit. Eligible job seekers in Job Search Support may also access the JSKA to pay for interpreter services, as well as fares and petrol assistance to attend job interviews arranged by Job Placement Organisations.

outcomes). Paid employment outcomes provide a comprehensive and verifiable source of outcomes data for all job seekers assisted by the Job Network.

The release at periodic intervals of Star Ratings has been associated with a significant improvement in the performance of the Job Network members in terms of paid employment outcomes (see Table 5). If the department were to provide Job Network members with information that showed the most effective interventions for individual job seekers then this should be in terms of paid employment outcomes to help drive performance.

Figure 6 Paid employment outcomes for Intensive Assistance.



Under the *Active Participation Model* job seekers are required to commence with a Job Network member and remain with them during their unemployment spell. Job seekers will be required to participate in various programmes and services and to satisfy Mutual Obligation requirements while they remain with their Job Network member. At various times during the job seeker's unemployment spell case managers, in close consultation with the job seeker, will need to decide what other interventions (such as that provided by the use of the job seeker account) would have the best chance of improving the job seekers employment prospects. As an additional service to Job Network members, the best available objective information on the effectiveness of different interventions for individual job seekers could be provided to case managers to better inform their decision making process. This could be achieved as follows.

Participation in any one of the different types of interventions available for any job seeker would have an expected outcome. Expected outcomes for all services or interventions could be estimated for any individual. Hence, for any individual job seeker, a range of interventions with an associated expected outcome could be made available to providers.

To relate as closely as possible to the key performance indicators for Job Network providers the outcome measure would be paid employment outcomes. It would also be possible to use cost per paid outcome to provide a cost effectiveness outcome measure. Those factors included in the JSCI plus motivation could make up the job seeker profile. The range of interventions could include, for example, standard services as well as interventions paid for by the Job Seeker Account. Variables

such as local labour market conditions and individual provider performance could also be included in the model as part of the job seeker profile.

This model would have the following key advantages:

- it is directly related to the key performance measures for the Job Network and so would help drive provider performance which in turn would help achieve key policy objectives such as increased outcomes for long term unemployed job seekers;
- all data are readily available from administrative systems rather than from surveys of job seekers which are expensive, suffer from non-response bias and have time delays associated with the collection of the data; and
- the information could be updated on the latest performance information every 6 months at around the time of the release of the Star Ratings.

Another possibility would be the use of profiling information to set the outcomes fee. This was done in the past by using the JSCI score as not only an indicator of the level of disadvantage but also of the commencement and outcome fee for particular job seekers. A more sophisticated method of setting commencement and outcomes fees would be to set the fee for each job seeker based on their profile and the expected outcomes rate. This would overcome problems identified by the Productivity Commission with the outcomes fee structure which did not take into account differences in labour markets. This meant that Job Network members in regional and rural areas performing at the same level as providers in metropolitan areas would receive lower incomes because they operated in areas with lower outcome levels.

Conclusion

Over the last decade Australia has placed considerable emphasis on an early intervention strategy as part of the provision of employment assistance. This experience has led to the development of the current profiling instrument, the JSCI, which in conjunction with the JSA, streams job seekers to various forms of assistance depending on their level of disadvantage and capacity to benefit.

There has been much debate about whether profiling information can be used to accurately target assistance to job seekers given the perceived difficulty in collecting and recording the information and the difficulty in explaining all the factors that affect job seekers' employment prospects in any profiling model. Extensive evaluations and reviews of the profiling instrument have led to refinements in the Centrelink interview to collect the JSCI information which has led to improved accuracy. Re-weighting exercises have also helped to provide more accurate profiling of job seekers.

While by no means a perfect instrument, the JSCI has been shown to be a relatively good predictor of the chance of a job seeker becoming long term unemployed and a better approach than targeting services to job seekers without regard to their profiling information. The main success of the JSCI to date has been to stream job seekers to appropriate forms of assistance and levels of funding depending on the level of disadvantage. This in turn has helped to reduce deadweight costs but also to provide assistance to 'at risk' job seekers early in their unemployment spell before their barriers to employment become entrenched.

Extensive use has been made of the administrative data for evaluation and performance monitoring purposes. This has included evaluations of the effectiveness of Job Network services and the production of the Star Ratings. These evaluations have relied heavily on job seeker data collected as part of the profiling process using the JSCI. The challenge in Australia is to extend the use of the performance information to provide case managers with information on the best and most cost effective interventions for individual job seekers in their case loads.

Appendix A

Active Participation Model - Job Network services

Job Search Support services are available to all job seekers except overseas visitors on working holiday visas, people prohibited by law from working in Australia, people already working 15 or more hours per week or those studying full-time. Services include:

- ◆ explaining job placement services, Job Network services and touchscreen kiosks;
- ◆ developing the job seekers' vocational profiles and providing the resulting vocational profile résumés;
- ◆ lodging the vocational profile onto Australian JobSearch to enable daily automated matching against the Job Search vacancy database;
- ◆ establishing a job seeker password to access the job seeker's personal page and job matches on JobSearch;
- ◆ identifying additional methods of notification about job matches such as e-mail, SMS or telephone message bank service;
- ◆ providing ongoing access to Touchscreen Kiosks; and
- ◆ providing advice to job seekers about the best ways to look for and find work.

Job Placement services refer suitable job seekers to vacancies and canvass and list job vacancies on the Australian Job Search database. DEWR licensed recruitment agencies, Job Placement Organisation (JPOs), are in a position to provide Job Placement service to eligible job seekers. Job Network members are licensed as JPOs.

Intensive Support services are available to eligible job seekers who remain unemployed for more than three months or who are assessed as eligible for immediate entry to Intensive Support customised assistance through the JSCI. Intensive Support services provide a range of services with automatic progression as duration of unemployment increases. Components of Intensive Support include:

- ◆ Intensive Support job search training (ISjst). This involves 100 hours of job search training activities. This training will improve the job seekers job search skills, motivates them to look for work and expands their job search networks. Job seekers who have undertaken job search training in the previous 12 months undertake a 30 hour refresher course. From 1 July 2004, youth aged up to 24 years, who are subject to the activity test, undertake job search training as soon as they register with their Job Network member. Indigenous and mature-age job seekers and non-activity tested youth aged 15-20 years may also volunteer for job search training prior to commencing Intensive Support;
- ◆ After six months unemployment, job seekers subject to the activity test undertake their chosen mutual obligation activity, referred to as Intensive Support mutual obligations (ISmo). Job Network members refer those job seekers who have chosen Work the Dole or Community Work as their mutual obligation activity to a Community Work Coordinator. Under the *Active Participation Model*, job seekers participate in their selected mutual obligation activities for six months in each 12 months of unemployment.

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- ◆ Intensive Support customised assistance (ISca) for a period of 6 months for all job seekers after 12 months of unemployment. Job seekers who are most disadvantaged (as determined by their JSCI score) receive immediate access to ISca. Other job seekers will be eligible to receive ISca assistance after 12 months of unemployment. ISca is intensive, substantial and tailored to the needs of individual job seekers and to available job opportunities. There are two periods of ISca available to job seekers, the first after 12 months of unemployment, and the second period, after the job seeker has been unemployed for two years.

 - ◆ Job Search contacts - Job seekers participate in a prescribed regular schedule of job seeker contacts for the duration of their unemployment. At these contacts Job Network members advise on job search approaches, refine their vocational profile, ensure that agreed activities in their Job Search Plan are undertaken, update their personal details for the JSCI assessment and consider job seekers for referral to complementary programmes. Job Network members continue to meet with job seekers every two months after the second period of customised assistance to encourage job seekers' job search and active participation in employment focused activities. Job seekers continue to have access to Job Search Support. Job Network members can also refer job seekers to complementary programmes at any stage during Intensive Support and maintain contact with job seekers while participating in the programme.

Appendix B

Current JSCI Factors

Fourteen factors were found to have a significant relationship with a newly registered job seeker's likelihood of becoming long-term unemployed. These are listed in Table 1 below. Also shown are those factors which trigger further assessment using the JSA.

Table 1 : JSCI Factors

Factor	JSA Trigger
Age and Gender	
Language and Literacy	<i>JSA trigger</i>
Disability/Medical Condition	<i>JSA trigger</i>
Recency of Work Experience	<i>JSA trigger</i>
Stability of Residence	<i>JSA trigger</i>
Educational Attainment	<i>JSA trigger</i>
Disclosed Ex-offender	<i>JSA trigger</i>
Personal Characteristics Requiring Professional or Specialist Judgement	<i>JSA trigger</i>
Indigenous/Aust. Born South Sea Islander Status	
Country of Birth	
Geographic Location	
Vocational Qualifications	
Family Status/Living Arrangements	
Contactability	

The Job Seeker Classification Instrument (JSCI) Factors

Listed below is a description of the factors that make up the JSCI. Also included are the points that are allocated for each factor.

Age and Gender

This factor recognises the labour market's perception of age and gender as an employment barrier e.g. a job seeker aged 50 years or more may encounter reluctance or bias from some prospective employers concerning health issues. Points are assigned for age in conjunction with gender.

Generally older job seekers attract more points than younger job seekers for this factor. Data modelling undertaken by DEWR has also shown that female teenagers are found to face higher relative labour market disadvantage than male teenagers. There are some barriers faced by young people that are recognised and assigned points in other factors. These include:

- Educational Attainment;
- Vocational Qualifications; and
- Recency of Work Experience.

Age and Gender	Points	Age and Gender	Points
Male		Females	
15-19	0	15-19	4
20-24	0	20-24	0
25-29	1	25-29	1
30-34	2	30-34	3
35-39	3	35-39	4
40-44	4	40-44	6
45-49	5	45-49	6
50-54	8	50-54	7
55+	8	55+	7

Language and Literacy

This factor recognises the relative disadvantage that job seekers with low levels of language and literacy endure. Research undertaken by the Australian Bureau of Statistics has shown a clear relationship between low levels of English literacy and numeracy and being unemployed. Job seekers who disclose low levels of English language or literacy skills may be referred to the Language, Literacy and Numeracy programme or an Adult Migrant English Programme for additional assistance.

Language and literacy	Points
Good speaking, writing and reading skills	0
Poor speaking, writing and reading skills	4
Combination of levels	1

Disability or Medical Condition

This factor recognises the relative labour market disadvantage of job seekers who have a disability, medical condition or addiction. Job seekers with a disability may experience or encounter discrimination from employers and have higher rates of unemployment and lower employment participation rates than non-disabled people in Australia.

Points are allocated for this factor according to the average impact of one or multiple disabilities on a job seeker's employability/probability of becoming long-term unemployed. In addition, where a JSA – Disability is indicated as required, Centrelink will determine whether a job seeker has a need for ongoing support in employment and/or the need for vocational rehabilitation. If these needs are identified the job seeker will be referred to FaCS funded Disability Employment Assistance or Vocational Rehabilitation.

Disability/Medical Condition	Points
No disabilities	0
One disability	3
Multiple disability	5
Declined to answer	0

Recency of Work Experience

This issue of inadequate recent work experience is generally seen as representing a disadvantage in seeking employment. This factor recognises that prospective employers may be reluctant to employ job seekers who are under-skilled or without appropriate experience. This is a particular issue for women because they are more likely to have left the workforce for some time to accommodate family responsibilities (or for other reasons). Inadequate work experience is also a barrier for ex-prisoners and school leavers who have not had an opportunity to demonstrate work habits or develop employer networks/contacts.

The answer to this question relates to how the job seeker spent his or her time, regardless of location or country, in the last two years. This factor recognises;

- The impact of long periods of absence from the workforce; and
- The lack of employer network/contacts and loss of labour market attachment.

This question asks the job seeker to identify their main activity over the last 2 years.

Recency of Work Experience	Points
Full-time work	0
Part-time work (8-35 hrs)	2
Part-time work (less than 8 hrs)	5
Seasonal or irregular casual work	1
Unpaid work	6
Not in the labour force	5
Unemployed	6

Stability of Residence

This factor seeks to identify job seekers who are homeless or living in short term or emergency accommodation. These terms are used to describe accommodation which does not provide the job seeker with the same amenities as 'stable' accommodation. A job seeker who has moved more than 3 times in the past year is also regarded as living in unstable accommodation.

Stability of Residence	Points
Not homeless or insecure accommodation	0
Homeless or insecure accommodation	6

Educational Attainment

This factor recognises the job seeker's highest level of education completed in Australia or overseas. Research undertaken by DEWR has shown that relative labour market disadvantage increases for lower levels of educational attainment.

The level of educational attainment is established through two questions relating to:

- *Schooling*, referring to primary and secondary school; and
- *Further education*, referring to accredited certificates, diplomas, degrees and postgraduate study.

Educational Attainment	Points
Special school	6
Primary school, Year 7, 8 or 9	6
Year 10 completed	4
Year 11 completed	4
Year 12 completed	3
Trade/TAFE	3
Associate diploma	3
Degree	0
Post graduate	0
Attended special unit in mainstream school	6
Did not go to school 6	6

Disclosed Ex-Offender

A criminal conviction can be considered to be a substantial barrier to employment. A primary reason is the reluctance of employers to employ ex-offenders because of a criminal record. Another important reason is that skills and work habits that the job seeker may have previously possessed can deteriorate during a period in custody through a lack of opportunity to use these skills.

Job seekers who have served a custodial period of one month or longer are regarded as more disadvantaged than job seekers with a conviction who did not serve a custodial sentence.

Disclosed Ex-offender status	Points
Not ex-offender	0
Yes – sentence \leq 1 month	3
Yes – sentence $>$ 1 month	8
Yes – no sentence	2
Declined to answer	0

Personal Characteristics Requiring Professional or Specialist Judgement

The purpose of this factor is to identify personal characteristics that may need professional or specialist judgement to determine their impact on a job seeker's ability to gain and maintain work. Where a Centrelink Psychologist or Disability Officer determines that there is an impact of these personal characteristics, additional JSCI points will be assigned. No points will be allocated for this factor during the *Change of Circumstances* interview, the potential allocation of points follows the completion of the JSA – Personal Factors by a Centrelink specialist officer.

Job seekers may be identified as requiring Professional or Specialist judgement when the following characteristics are observed or disclosed:

- low motivation/self confidence/self esteem;
- personal presentation which may adversely affect their ability to secure employment;
- psychological problems (eg aggressive behaviour, depression, anxiety, grief, family/relationship difficulties);
- substance abuse problems; or
- experience of torture or trauma.

The factor does not intend to include issues such as lack of access to child care or transport difficulties, but rather to facilitate the disclosure of personal characteristics that may not have been reflected elsewhere in the JSCI.

Personal Factors	Points
No impact	0
Low impact	4
Medium impact	9
High impact	12

Indigenous/Australian born South Sea Islander status

The high relative employment disadvantage faced by Aboriginal and Torres Strait Islander people can be related to a number of factors including access to employment opportunities, standards of health, cultural requirements, income support history and educational attainment. Some of these issues are addressed by other JSCI factors.

Aboriginal and Torres Strait Islander people

The high relative employment disadvantage faced by Aboriginal and Torres Strait Islander people can be related to a number of factors including access to employment opportunities, standards of health, cultural requirements, income support history and educational attainment. Some of these issues are addressed by other JSCI factors. The disadvantage identified by this factor (and not accounted for in other factors) is that Aboriginal and Torres Strait Islander people can be 'shut out' of networks and labour markets, and often have insufficient contacts and knowledge to access jobs.

Disadvantages faced are related to:

- standards of health: Aboriginal and Torres Strait Islander people have a considerably lower standard of general health compared with other Australians;
- cultural requirements: This includes elements such as observance of cultural occasions and practices and the need for absences from employment to attend culturally significant occasions. These requirements can vary depending on lifestyle and may be more significant to Aboriginal and Torres Strait Islander people living traditional or semi-traditional lifestyles and those in recognised Aboriginal and Torres Strait Islander communities;
- cross cultural norms: This concerns the way Aboriginal and Torres Strait Islander people relate to the broader community and vice versa. It includes issues such as self importance, self esteem and motivation;
- socioeconomic factors: The factors which could contribute to unemployment include incarceration, high levels of homelessness, and a lack of housing or substandard housing such as lack of running water, electricity and waste disposal;
- income support history: The history of income support provides a measure of the difficulty of securing and maintaining work;
- living a traditional, semi traditional or camp lifestyle: The barrier that might arise from not being in close contact with the regular labour market is especially prominent for this group;
- small community social dynamic: where anonymity is not possible, and most residents know much about other residents can be a disadvantage; and
- access to employment opportunities: Aboriginal and Torres Strait Islander people are generally the most disadvantaged in the labour market.

Australian-born South Sea Islanders

Australian born South Sea Islanders are also one of the most disadvantaged groups in Australia. They face similar labour market barriers to Aboriginal and Torres Strait Islander Australians, but are a distinctly different racial and cultural group. The unemployment rates amongst this group are unacceptably high and those employed are generally employed in less skilled occupations. These people are a small group concentrated mainly in the sugar cane growing areas of Queensland and northern New South Wales. Mainstream employment programs can be tailored to meet their needs.

For the purpose of the JSCI, an Australian-born South Sea Islander is:

- Australian-born, and
- a descendant of South Sea Islanders brought forcibly into Australia in the 19th century to work in the Queensland and New South Wales sugar industries.

This category is not meant to include other job seekers who may identify as Australian-born South Sea Islanders. For example, children of Tongan, Fijian or New Zealand parents, born in Australia were not intended to be included in this group.

Indigenous status	Points
Aboriginal and/or Torres Strait Islander	11
Australian born South Sea Islander	9
Non-indigenous	0
Declined to answer	0

Country of Birth

People coming to Australia may face any number of difficulties entering the job market, including:

- lack of knowledge about, and attachment to, the Australian labour market;
- lack of networks and/or contacts within the Australian labour market; and
- cultural differences between their country of origin and Australia.

Country of birth weightings are divided into several categories to reflect the employment experience of migrants within the Australian labour market.

Country of Birth	Points
Australia	0
Central America	1
Eastern Europe	2
North America	0
North East Asia	1
North West Africa	3
North West Europe	0
Oceania	0
Other	3
South America	0
South Asia	2
Southern Europe	0
South East Africa	1
South East Asia1	2
South East Asia2	0
South East Europe	2
United Kingdom and Ireland	0
West Asia	4

Geographic Location

The scores allocated for this factor reflect the labour market disadvantage associated with living in a particular geographic location. The condition of the local economy is a key influence in the probability of finding employment or becoming long term unemployed. Points for this factor are allocated based on where the job seeker lives and they generally reflect the employment growth and unemployment rates of these areas.

All job seekers live in one of the 137 Employment Service Areas (ESAs) across Australia. To maintain sensitivity to local conditions, the points allocated for each ESA are expected to be re-estimated periodically to reflect changes to local labour market conditions.

Geographic Location	Points
Very low disadvantage	0
Low disadvantage	2
Low to moderate disadvantage	3
Moderate disadvantage	4
Moderate to high disadvantage	5
High disadvantage	7
Very high disadvantage	8
Extremely high disadvantage	9

Vocational Qualifications

The Vocational Qualification factor relates to the job seeker's work-related qualifications and whether those qualifications can be used in the labour market. It also relates to qualifications which allow a person to work in a specific occupation. There is a significant difference in employability between those with work qualifications and those without.

The purpose of this factor is to identify recognised qualifications which offer an advantage to the job seeker in their obtaining employment, including:

- the added value of educational qualifications which have a vocational orientation (e.g. a nursing or architecture degree compared to a general arts degree in philosophy);
- trade qualifications required for particular occupations (e.g. plumbing and electrical trade certificates); and
- other non-educational qualifications required for particular occupations (e.g. special licences (bus, truck, fork-lift etc.), tickets (e.g. seaman's ticket) and other technical qualifications).

Short courses are only considered as vocational or occupational if they are formally accredited or generally recognised by employers and they constitute the basic prerequisites for entry to a particular occupation. This factor also acknowledges the circumstances of job seekers who may have a vocational qualification that is no longer useful to them.

Vocational Qualifications	Points
Yes	0
Yes, but not useful	1
No	2

Family Status and Living Arrangements

The Australian Bureau of Statistics has examined the impact of family status on a person's likelihood of long term unemployment. They found a significant relationship between family status/living arrangements and long term unemployment.

This study suggested that people with responsibility for others (financial or otherwise), and who gain personal support from others, are more likely to maintain job search efforts and find work. DEWR's data analysis has found that job seekers who live alone and those who are lone parents are more likely to become long term unemployed.

Family status	Points
Sole parent	4
Husband/wife/de facto	0
Lives with other family	0
Lives with non-family	0
Lives alone	1

Contactability

This factor relates to a job seeker's access to the telephone. Statistical analysis by DEWR has shown that a job seeker's chances of finding employment are directly related to his or her ability to access the labour market. This means being able to make contact, and be contacted by, both potential employers and Job Network members. Job seekers are considered 'contactable by phone' where they have either:

- a home telephone in their own or someone else's name at their place of residence (including a telephone with a silent or unlisted number); or
- a mobile telephone.

Contactability	Points
Contactable by phone	0
Not contactable by phone	2

Appendix C

JSCI Supplementary Assessment (JSA)

There are four types of JSA: the JSA – Disability, JSA – Personal Factors, JSA – Special Needs and the further JSA.

JSA – Disability determines the most appropriate employment assistance based on the Disability Employment Indicators (DEI), which identify a job seeker's need for either on-going support in employment, or vocational rehabilitation. The type of servicing a job seeker receives as a result of a DEI assessment is decided by a Centrelink Specialist Officer. The Centrelink officer uses information from the job seeker themselves (about their condition) and a professional who is familiar with, or has treated the job seeker, to make their decision. The DEI replaced the Work Ability Tables (WAT) tables in April 2003 and was developed in consultation with disability peak organisations, Job Network members and disability employment providers.

The Department, in cooperation with FaCS and Centrelink, is planning to undertake a Post Implementation Review of the Disability Employment Indicators (DEI) in early 2005 which focuses on assessing the efficiency and effectiveness of operational policy and procedures.

JSA – Personal Factors is conducted to clarify the JSCI score and when appropriate assign additional JSCI points to reflect the disadvantages of the job seeker.

JSA – Special Needs is conducted when a job seeker has disclosed multiple personal and/or vocational barriers to employment. The assessment determines whether the job seeker has the capacity to benefit from Job Network or whether they would be better assisted through the Personal Support Program funded the Department of Family and Community Services and is conducted by a Centrelink specialist officer.

The *Further JSA* provides for a more complex three hour assessment conducted by a Centrelink Psychologist or Social Worker. It is conducted in a small number of cases when the Centrelink officer is unable to make a decision during the initial JSA- Special Needs interview.

In summary, the JSA:

- Assessment and referral of job seekers is conducted using a nationally consistent practice and methodology;
- Is conducted by a Centrelink specialist officer (psychologists, social workers and disability officers) and assesses the most appropriate employment assistance for a job seeker to assist them to return to work; and
- Refers job seekers based on the outcome of the JSA to Job Network, Personal Support Programme or Disability Employment Assistance.

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