TARGETING SERVICES IN THE INDIVIDUAL CUSTOMER STRATEGY: THE ROLE OF PROFILING. A REVIEW OF RESEARCH EVIDENCE

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Introduction

As part of the process of devising an Individual Customer Strategy, Jobcentre Plus commissioned the Institute for Employment Research to review the available evidence relating to the targeting of employment services for job seekers. The review addressed three research questions:

- is there any evidence that individual allocation to employment services achieves preferable outcomes compared to broad group allocation?
- is there any evidence to indicate which method for individual allocation (e.g. advisor discretion, analytics, advisors plus automated tools, etc) provides the most effective method of targeting employment services?
- if evidence does not currently exist to support an individual customer strategy, how might such evidence be generated?

Main findings

The main findings of the review were as follows:

- Most public employment services sought to target provision, usually on those facing the greatest difficulty in obtaining jobs (equity) but sometimes to maximise the impact of provision (efficiency). The most common methods of targeting are administrative rules (broad eligibility criteria) and adviser discretion (the subjective judgement of advisers).

- The effectiveness of eligibility rules and adviser discretion has been challenged by recent evidence. Broad eligibility rules may fail to differentiate sufficiently between individuals, while adviser discretion may be inconsistent, inaccurate or not be used in client’s best interests. Some evidence suggests that matching clients and provision by means of advisers was no more efficient than a random assignment of services to clients.

- Statistical profiling is a different method of allocating employment services to clients in which a systematic process based upon client characteristics is used to identify the most appropriate provision for any particular client. Profiling is mainstream practice in the USA and Australia and has been experimented with in a number of other countries.

- Until recently, the evidence relating to statistical profiling has not provided support for its use in the UK. This is now changing. There is persuasive new evidence from the UK, and mounting evidence from the USA and Australia demonstrating the feasibility of constructing statistical profiling instruments that produce predictions to an acceptable standard of accuracy and create gains in terms of employment outcomes.

- Profiling instruments work best when they make full use of available information while ensuring that they are used as intended by frontline staff and are quality assured over time. While profiling can identify those in greatest need of additional support, evidence shows that such support is likely to be most effective if profiling is used to take account of associations between identified need and the impact of provision.

- In the light of recent evidence, further investigation of the scope for gains from profiling in the UK context is justified. Two projects are proposed. First a ‘simulation’ project to identify potential efficiency gains from a profiling system had it operated in the UK in the past. Second, a profiling field experiment that would test whether it would be possible to realise any potential gains from profiling in practice.
EXECUTIVE SUMMARY

Introduction

Jobcentre Plus Strategy, Planning and Performance Division (Business Strategy Directorate) is now in the process of devising an Individual Customer Strategy intended to provide a more targeted focus on individual customer need. As part of this process they commissioned Warwick Institute for Employment Research to review available evidence relating to the targeting of employment services for job seekers. The findings of this review, presented here, will help inform the development of the Individual Customer Strategy.

Aim of the literature review

The aim of the review was to address the following research questions:

- is there any evidence that individual allocation to services achieves preferable outcomes compared to broad group allocation?
- is there any evidence to indicate which method for individual allocation (e.g. advisor discretion, analytics, advisors plus automated tools, etc) provides the most effective method of targeting services?
- if evidence does not currently exist to support an individual customer strategy, how might such evidence be generated?

The central task of the review was to collate and synthesise the considerable body of evidence relating to employment service delivery and, specifically, to client profiling and targeting. The review did not collect any primary data or undertake analysis of secondary datasets. The methods used to collect evidence included:

- a web-search for relevant literature;
- a search of central government reports on delivery of employment services;
- a search of key journal articles and other published material.

The report begins by considering some basic issues relating to the role of a public employment service and its need to allocate resources across clients. This is followed by an examination of profiling as a means of matching clients and provision, both in principle and in practice, and a review of evidence relating to profiling in the UK and elsewhere. Finally, the report presents the main findings of the review and sets out some further steps for enhancing knowledge of the potential benefits of profiling in the UK. An annex provides a brief account of the technical aspects of selected profiling models.

Main findings

The review of the research literature relating to the targeting of employment services noted that there was great diversity amongst people seeking employment. They differed greatly in terms of their personal characteristics, human capital, the context within which they are seeking work and the level and forms of barriers to obtaining work. Correspondingly, not all job seekers needed the same type or level of support to obtain work nor would they benefit equally from referral to any particular service provision or programme. For this reason most public employment services, such as Jobcentre Plus sought to target their provision. In the main they sought to provide most support for those in greatest need (in terms of facing the greatest difficulties in obtaining employment). Equally important, resources should be targeted in order to maximise the impact of such provision. By referring those who most benefit from a particular service, and not referring those for whom the service has no impact, an increase in the overall impact of programmes can be achieved. These two goals — equity and efficiency — may involve trade-offs depending upon the social goals of the employment service.
Methods of targeting clients

A variety of methods have been used to allocate clients across employment services and programmes. The most commonly used methods have been administrative rules (using a small number of eligibility criteria) and adviser discretion (using the subjective judgement of advisers). The effectiveness of both methods has been called into question by recent evaluation evidence. Broad administrative rules can fail to differentiate sufficiently between individuals, with the result that some who require additional support do not receive it, while others who do not need such support are required to participate. Adviser discretion, on the other hand, while offering the prospects of more customised provision for individuals, can be open to challenge on the ground of its subjective and unsystematic nature leading to possible inconsistency, inaccuracy and potential for use to achieve ends other than those in the client’s best interests. Indeed, there is a growing body of evidence to suggest that the matching of clients and provision achieved by advisers or caseworkers has been no more efficient than could have been achieved by randomly assigning clients to services.

Profiling

Statistical profiling represents a different method of allocating employment services to clients. Profiling is a systematic process that uses client characteristics to identify the most appropriate provision for any particular client. Profiling represents a position somewhere between broad administrative rules and the individualistic approach of advice. While profiling has not been used to any great extent in the UK, it is part of the mainstream operation of employment services in the USA and Australia and has been experimented with in a number of other countries. The only operational example of profiling in the UK has been the Client Progress Kit (CPK) introduced in 2000 for use on New Deal programmes. Statistical modelling of the risk of long-term unemployment has been attempted in the UK but such studies have generally concluded it was not possible to accurately predict which clients were at risk. A recent study of DWP clients has reopened the debate by demonstrating the feasibility of identifying clients at risk of long duration benefit claims with an acceptable level of accuracy. This improvement was the result of using better quality data than in previous studies, as well as a differentiation of client groups (with separate models for JSA clients, the disabled and lone mothers).

Evidence relating to profiling

To date, the evidence relating to statistical profiling in the UK has not provided support for the introduction of such systems of decision-making in practice. This situation is now changing. Not only is there persuasive new evidence from the UK, but there is also mounting evidence of the benefits of profiling systems from other countries, particularly the USA and Australia. The continuing commitment of these countries to develop and improve their profiling systems is implicit testament to a belief in the effectiveness of profiling. The research evidence demonstrates that it has been possible to construct statistical profiling instruments that produce predictions to an acceptable standard of accuracy and create gains in terms of outcomes. These profiling instruments work best when they make full use of available information (quality data with all the key variables represented in the predictive model). Practical experience with profiling in the USA has also shown that it is important to ensure that such systems are actually operated as intended by frontline staff and quality assured over time to maintain the relevance and effectiveness of the predictive models. While the evidence indicates that profiling can identify those in greatest need of additional support, such support is likely to be most effective if profiling is used to take account of associations between identified need and the impact of provision.
The need for a stronger UK evidence base

Empirical evidence from the USA and elsewhere relates to different social and political contexts. Nonetheless, the evidence does suggest that there may be gains from some form of profiling system in the UK and it would be unwise to reject such a development out of hand. Further investigation of the scope for such gains in the UK context is required. To this end, two projects are proposed that would contribute additional knowledge of profiling in a UK context. Two projects might be considered and these are:

- a ‘simulation’ project to identify the extent to which there would have been efficiency gains from a profiling system had it operated in the UK in the past. If gains of this type can be demonstrated, then there would be a better case for thinking that the future performance of Jobcentre Plus could be improved by adopting profiling methods in the future. If the evidence were persuasive enough, there could be a case for embarking on a feasibility, or design, study and, eventually, to testing profiling by means of a pilot or prototype system.

- a profiling field experiment. This would require the selection of a Jobcentre plus programme and involve the use of different allocation mechanisms in a controlled experiment. The objective of the experiment would be to identify whether it was possible to realise any potential gains from profiling in practice, given the importance of issues relating to implementation highlighted in the research literature.