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Targeting Employment Services under the Workforce Investment Act

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The Workforce Investment Act (WIA) of 1998 changed the employment policy landscape in America. It reduced eligibility requirements for program participants, changed administrative relations among service delivery agencies, and refocused systems for performance accountability. Taken together, these features are expected to increase the volume of customers at local employment centers, require frontline service delivery staff to perform a multitude of new functions, and induce management to place an even greater emphasis on operational efficiency and program effectiveness. Since the resources of the workforce development system are limited, service referral must be judicious to achieve the greatest social return.

Under WIA, a premium is placed on serving customers effectively and efficiently. Consequently, frontline staff could benefit greatly from tools that help to quickly identify customers who would benefit the most from particular services. The administrative process by which individuals are selected to participate in programs may be referred to as “targeting.”

Targeting can be thought of as a selection and allocation process in which a limited number of participants are selected from a broader pool of eligible customers. This selection process takes place in an environment where receipt of services is not an entitlement, and where the number of potential program participants greatly exceeds the resource capacity. Employment services targeting can be done in either a formal

or an informal way. Targeting is either explicit or implicit. Whenever selection and allocation decisions are made, targeting is being done.

Traditionally, the process of selecting clients for program participation has been done informally; that is, without the aid of structured statistical models. Informal targeting can take many forms. Procedures followed at the local level depend on budget and administrative conditions, as well as on the information and assessment tools available to frontline workers in the workforce development system. The result may be a first come, first served approach. It may be done by purchasing blocks of services, and then finding customers to fill the available slots. It may also be done by an active outreach process, such as the use of rapid response teams that serve future dislocated workers before layoffs occur for large publicly known enterprises. In most cases, informal targeting is not systematic and uses little or no objective data to make program referral decisions. Informal targeting is frequently time-sensitive, seasonal, and driven by funding cycles.

Formal targeting involves having frontline staff in employment centers use targeting tools that are based on previously analyzed patterns of service receipt and reemployment success. Such statistics-based tools can provide frontline workers a guide to help make service referral decisions lead to better labor market outcomes. Targeting, using statistical profiling methods, has been recognized by the Organisation for Economic Co-operation and Development (OECD 1998) as an approach with broad application to the workforce development programs of industrial nations.

Evidence on the effectiveness of active labor market policies . . . suggests that they should be well targeted to the needs of individual job seekers and the labor market, and that treatment should start as early as possible in the unemployment spell. But offering individual treatment along with early intervention would be very costly. There is thus a premium on accurately identifying job seekers at risk.

The early identification of job seekers at risk of becoming long-term unemployed is a longstanding and basic endeavor of the public employment services (PES). Indeed, good judgment in this area forms part of the professional competence and work experience of PES staff. However, a few countries have gone further by introducing more formal methods of identifying at-risk job seek-

ers and laying out procedures on what to do with them. This is usually referred to as profiling and is used in this paper to cover the approach of i) the identification of individuals at risk of long-term unemployment; ii) the referral to various active labor market programs.

Such programs have been implemented on a nationwide basis in the United States and Australia and have received considerable developmental attention in Canada (Eberts and O'Leary 1997).

Under WIA, the need for targeting is greater than under its predecessor, the Job Training Partnership Act (JTPA). WIA service referral principles are summarized relative to those of JTPA in Table 1.1; specific citations from the acts are provided. WIA has established a hierarchy of services from core, to intensive, to training. Targeting could be useful to help determine which users of core services also may benefit from intensive services. A refined targeting tool could also help select which among the intensive services could most help the client, or whether training is appropriate.

Core services include eligibility determination, outreach, intake and orientation, initial assessment, job search assistance and placement assistance, and provision of information relating to labor market conditions, program performance, supportive and follow-up services, as well as the availability of unemployment insurance (UI) and welfare-to-work (WTW) programs. These services are available on a self-serve basis but frequently require staff assistance. Intensive reemployment services universally require staff assistance and include individual and group counseling, expanded job search workshops, service coordination assistance, and development of customer service plans. Training services may be either in occupational job skills, job search skills, remedial reading and mathematics, or on-the-job training.

When thinking about targeting under WIA, it is important to remember that current economic conditions do not remain stable forever. Although the United States experienced an unprecedented period of prosperity with low inflation in the 1990s, the business cycle has proven not to be dead. In periods of recession, statistical targeting methods are particularly useful.

While these methods are useful at all times for a selection process of choosing the right services for the right people, the resource allocation issue becomes more severe during recessions. As resources be-

Table 1.1 WIA Service Principles Relative to JTPA

Increased Reemployment Services Emphasis: The emphasis under WIA is promoting return to work. Relative to its predecessor, JTPA, the focus is less on training and more on searching for work first. Under JTPA, at least 50 percent of program funds had to be spent on training (JTPA, section 108(b)(4)(B)); WIA has no such requirement. The emphasis in WIA is using core services to get a job and moving to intensive services or training only if necessary to get a job.

Universal Access to Core Services: Section 134(d)(2) of WIA states that core services “shall be available to adults or dislocated workers, through the one-stop delivery system . . .” While there is universal access under WIA, eligibility was restricted under JTPA to participation of adults and dislocated workers found eligible under section 202(d)(1)(A) as economically disadvantaged adults or under section 301 as dislocated workers.

Targeting of Intensive Services: Receipt of intensive services under WIA depends upon the flow of customers from core services, as well as decisions by one-stop operators. Intensive services are open to adults and dislocated workers who are either “unemployed and are unable to obtain employment through core services” and “determined . . . to be in need of more intensive services . . . to obtain employment” or employed but are “determined by a one-stop operator to be in need of such intensive services . . .” (See WIA section 134(d)(3)(i) and (ii).)

Targeting of Training: Training is more broadly available, subject to one-stop operator decision making, under WIA for both adults and dislocated workers (section 134(d)(4)) than under JTPA. This broad availability of training must be coupled with the priority issue raised in WIA section 134(d)(4)(E): “In the event that funds . . . for adult employment and training activities . . . are limited, priority shall be given to recipients of public assistance and other low-income individuals for intensive services and training . . .”

Core Performance Measures: Although the core standards in JTPA section 106 and WIA section 136(b)(2)(A) appear fairly similar, WIA section 136 is far more developed and sophisticated. For example, there is a distinction under section 136(d)(2) about additional information that a state must include, such as retention and earnings received in unsubsidized employment 12 months after entry into employment (section 136(d)(2)(D)) and entry into unsubsidized employment related to training received (section 136(d)(2)(A)).

come relatively more limited in recessions and choices must be made among a much larger pool of potential customers, these statistical tools can be adjusted in their application over the business cycle.

The chapters of this book review U.S. experience with targeting reemployment services and self-employment assistance to UI beneficiaries most likely to exhaust benefits, suggest other employment programs that might benefit from targeting, examine Canadian efforts toward targeting reemployment services, and consider prospects for a new Frontline Decision Support System (FDSS) for one-stop centers. The remainder of this introductory chapter considers each of these in a bit more detail.

WORKER PROFILING AND REEMPLOYMENT SERVICES

In November 1993, the U.S. Congress enacted legislation that included provisions requiring each state to implement its own permanent Worker Profiling and Reemployment Services (WPRS) system. These systems identify likely dislocated UI claimants using statistical models and provide them with job search assistance during the early weeks of their unemployment. By law, a WPRS system must identify which claimants are likely to exhaust their regular UI entitlement and will need job search assistance services to make a successful transition to new employment. WPRS was operational in all states by early 1995. There is now more than five full years of experience with the operation of a national program.

The WPRS initiative was based on a large body of experimental research conducted by the states and the federal government (U.S. Department of Labor 1995; Meyer 1995; Corson and Decker 1996). That research suggested WPRS systems could be an effective and efficient way to speed dislocated workers back to productive employment. The U.S. Department of Labor (DOL) worked with a number of states to conduct a nationwide evaluation of WPRS with the goal of suggesting ways to improve the system (Dickinson, Kreutzer, and Decker 1997).

Implementation of WPRS systems in every state represented a large effort by the U.S. workforce development community, especially the UI, Wagner-Peyser, and Economic Dislocation and Worker Adjust-

ment Assistance (EDWAA) programs.¹ Implementation has required the establishment of operational linkages between employment and training programs at the state and local levels of government. It also has required cooperation between local, state, and federal government entities. The WPRS initiative is making referrals to reemployment services at an annual rate of about 800,000 workers per year nationwide (Messenger, Schwartz, and Wandner 1999). This referral level represents about one-third of the more than two million workers who become dislocated each year.²

WPRS profiling is a two-step process to identify permanently separated workers with reemployment difficulty. First, permanently separated workers are identified by screening out two groups of workers: those subject to recall and/or those subject to union hiring hall agreements.³ These workers must also be UI-eligible as demonstrated by the requirement that they receive a UI first benefit payment. Second, the likelihood of UI benefit exhaustion is predicted using a statistical model (Wandner 1997, 1998).

For most states the profiling referral model was developed using logit regression analysis applied to historical data from various state administrative records. The dependent variable in the model is usually a binary variable (i.e., a zero or a 1, depicting whether or not the worker exhausted all entitlement to UI benefits).⁴ The profiling model estimates a probability of UI benefit exhaustion for individuals based on their individual characteristics and current labor market conditions. The variables in this model include education, job tenure, change in employment in previous industry, change in employment in previous occupation, and local unemployment rate.

Because of federal civil rights legislation, the states were prohibited from using certain variables as part of their profiling mechanisms, such as age, race/ethnic group, and gender. An analysis comparing results when including and omitting these variables indicated that the effect of this omission on the predictive power of the profiling model is generally very small.⁵

A few states profile based on characteristic screens alone. The process involves a small number of characteristics, each of which has a preset cutoff value or criterion. Individuals are selected if they meet the criteria for each screen used. A number of states that initially used characteristic screening have decided to convert to statistical models

because statistical models have proven to be a more flexible and accurate targeting device for making referrals to reemployment services.

For each local workforce development office, UI claimants are ranked by their exhaustion probabilities—from high to low—to form the basis for referral to reemployment service providers. Staff members from the service providers work with referred customers to develop an individual service plan. There is a wide variation among states regarding the extent of services and the degree of individualization of each plan.

The WPRS evaluation (Dickinson, Kreutzer, and Decker 1997; Hawkins et al. 1996) found that states were successful in implementing their statistical profiling models, and the models successfully identified those UI claimants most likely to exhaust their UI benefits. States appear to be successfully determining service capacity for providing reemployment services.

The Department of Labor (DOL) has recommended that the states provide a comprehensive and intensive set of reemployment services, although all participants do not need and probably should not receive the same set of services. Rather, the focus should be on the development of an individual service plan for each referred worker—to meet the needs of the individual customer and to avoid an approach that would be “one size fits all” (U.S. Department of Labor 1994a, Field Memorandum 35-94).

Reemployment services can be provided by a number of different organizations, but the usual provider in most states is the Wagner-Peyser agency, the employment service. This choice is related to the history of workforce development programs. The employment service and UI were created as two interdependent programs in the 1930s and have been closely associated at state and local levels ever since. Nine out of 10 workforce development local offices around the country house both Wagner-Peyser and UI units.

In early 1998, DOL established a WPRS policy workgroup consisting of state and federal representatives. Based on the first three years of WPRS operation, the workgroup made seven recommendations in its final report (Messenger, Schwartz, and Wandner 1999).

- 1) states should update their profiling models regularly,
- 2) states should profile all claimants who file an initial claim,

- 3) states should accelerate their profiling and referral process to ensure early intervention,
- 4) states should improve reemployment services provided to profiled and referred claimants,
- 5) program linkages should be improved between Wagner-Peyser Act, JTPA Title III, and UI programs,
- 6) adequate funding should be devoted to providing more and better reemployment services through state WPRS systems, and
- 7) WPRS feedback and reporting systems should be improved.

An important consideration is that the state and federal governments need to devote more resources to reemployment services, because profiling, no matter how well implemented and targeted, cannot be effective unless substantial and effective reemployment services are provided to WPRS participants. The federal government responded in FY 1999 by providing \$5.2 million in funding for innovative approaches to providing reemployment services to dislocated workers collecting UI and served by the WPRS system. More recently, Congress provided \$35 million in both the FY 2001 and FY 2002 budgets to provide reemployment services to workers identified as in need by WPRS.

Part I of the book presents two chapters and a panel discussion that examine the WPRS system in some detail. Chapter 2, by Rob Olson, Marisa Kelso, Paul Decker, and Daniel Klepinger, considers the statistical modeling challenge of predicting who among UI recipients is most likely to exhaust their benefits. Chapter 3, by Katherine Dickinson, Paul Decker, and Suzanne Kreutzer, summarizes an evaluation of WPRS effects in a select group of states. Chapter 4 reports the panel discussion involving Pete Fleming, Al Jaloviar, Helen Parker, and Marc Perrett on the experience of federal and state policymakers with WPRS.

APPLICATIONS OF TARGETING METHODS

Part II of the book examines employment policy applications of targeting in the United States beyond the WPRS system. These include experience with targeting self-employment assistance, the possibility of targeting reemployment bonuses, optimal training choices for dis-

placed workers, targeting welfare to work services, and possibilities for targeting job retention services for welfare recipients who have gained employment. Some background on these chapters follows.

Self-Employment

Outside of the WPRS system, targeting participants with a formal statistical model is now being done for only one other U.S. employment program: self-employment assistance (SEA). Indeed, states that have implemented SEA use exactly the same logit-based targeting model as is used for WPRS.

From 1990 to 1993, DOL ran SEA experiments in two states, Massachusetts and Washington. The experiment conducted in Massachusetts used a form of profiling to target participation. The profiling model for the experiment was different from the WPRS model, but it used similar variables to predict likely exhaustion of UI benefits. Profiling was also intended to assuage employer concerns that workers who were not permanently laid off by employers might otherwise be eligible for SEA.

Based on preliminary impact analysis results from the two SEA experiments available in mid 1993, a provision allowing states to establish SEA programs as part of their UI programs was enacted into federal law as part of Title V (transitional adjustment assistance) of the North American Free Trade Agreement (NAFTA) implementation act (Public Law 103-182, U.S. Department of Labor 1994b). Signed into law December 8, 1993, this provision allowed states the option of offering self-employment assistance to profiled UI claimants as an additional means of helping assist dislocated workers obtain new employment. However, SEA authorization was temporary and set to expire in December 1998 (Orr et al. 1994). The legislation was enacted because profiling was believed to target the program to appropriate participants, and because it was expected to have a neutral impact on the federal budget. Cost neutrality resulted from targeting offers to individuals who likely would have exhausted their UI benefit entitlements in the absence of the program.

After the temporary authorization for SEA under NAFTA, the final evaluation report on the SEA experiments in Massachusetts and Wash-

ington was completed and published by DOL in June 1995. Based on a three-year follow-up, offers in the Massachusetts SEA experiment increased participants' total time employed by nearly 1.9 months and increased net annual earnings by \$5,940 over the three-year follow-up period. As a result, the final evaluation report recommended that "... SEA should be permanently incorporated into the U.S. employment security and economic development system" (Benus et al. 1995).

In accordance with the 1993 legislation, DOL conducted a review of the SEA program through 1996. All state programs used a WPRS model to target participation offers. Just as in the Massachusetts experiment, SEA is administered through UI and amounts to a work search waiver so that weekly UI payments continue while self-employment activity begins. Slightly more than 2,600 individuals participated in SEA programs during 1996 in the five states that had operational programs at that time (New York, Maine, Oregon, Delaware, and New Jersey). In addition, based on annual program outcome data submitted by New York, Oregon, Maine, and Delaware, over two-thirds of SEA program participants started their own businesses, and between 18 percent and 50 percent also worked in wage and salary employment (Vroman 1998).

The states with SEA programs wished to continue them beyond the sunset date in December 1998. New York, with the oldest and largest program, led the effort together with Pennsylvania, which had the newest program. Congress authorized a permanent SEA program in September 1998, and the bill was signed into law on October 28, 1998.

By 2001, eight states had developed and implemented SEA programs: New York, Maine, Oregon, Delaware, New Jersey, California, Maryland, and Pennsylvania (in order of program implementation). Most SEA programs remain small. Less than 1 percent of all UI recipients participate. All states require demonstration of the interest and ability to start and run a small business before granting SEA participation. The SEA programs have removed a barrier to self-employment in the UI law, and instead have actively supported eligible workers in making the transition from unemployment to self-employment.

Under the new legislation, DOL issued amended federal guidelines to inform the participating states that they may continue their existing programs and encourage other states to consider implementing their

own programs. SEA remains the same program it was during the five-year trial period, retaining the requirement that states select participants using a profiling mechanism. Profiling relating to potential exhaustion of UI benefits continues to be a requirement under the new program, but states are no longer required to submit SEA program plans to DOL in advance of implementing their programs.⁶

Chapter 5, by Jon Messenger, Carolyn Peterson-Vaccaro, and Wayne Vroman, reports on the experience with targeting self-employment assistance. This is the only other currently operating statistical targeting application in U.S. employment policy. The remaining chapters of Part II suggest further opportunities for formal targeting of employment services.

Reemployment Bonuses

Between 1984 and 1989, reemployment bonus experiments were conducted in the states of Illinois, New Jersey, Pennsylvania, and Washington. Each experiment involved random assignment of UI claimants to treatment and control groups. The experiments each offered different levels of lump sum payments to workers who took new, full-time jobs within 6 to 12 weeks and stayed employed for at least three to four months. These experiments were conducted to learn more about the behavioral response of UI recipients to UI program parameters. In particular they were tested as a positive incentive for speedy return to work. The idea of reemployment bonuses originated in Japan, where unemployed workers can receive a cash bonus for accepting a new job. In Japan, unemployed workers can receive a bonus once every three years.

UI claimants would improve their economic situation if they went back to work sooner at similar or better paying jobs than they would have taken in the absence of bonus offer. The government sector would be better off if the cost of the bonus were offset by a decrease in UI payments to unemployed workers and by an increase in tax receipts during their longer period of employment. The Reemployment Act of 1994 proposed to permit states to provide reemployment bonus programs, but the legislation was not enacted.

All four reemployment bonus experiments had similar eligibility requirements for inclusion in treatment or control groups. The re-

quirements were set to assure that workers filed for or drew UI benefits, to simplify administrative details, and to select workers who had experienced some degree of work displacement. Program designs set the bonus amount, the time period during which workers could qualify for the bonus, and the conditions under which they could receive the bonus.

A number of lessons have been learned from the bonus experiments. As predicted by job search theory, cash bonuses have a significant impact on job search behavior and lead to reduction in the average duration of unemployment, resulting in a desirable expedition of reemployment. Larger bonuses also had the largest impact on unemployment durations. As expected from the empirical literature on UI work disincentives, the bonuses had no effect on wages, indicating no decline in the quality of jobs taken in response to the offer of reemployment bonuses. There is also no evidence that the bonuses had any effect on worker attachment to their previous employer, as they had no effect on workers subject to recall (Woodbury and Spiegelman 1987; Decker and O'Leary 1995).

On the other hand, because unemployment durations did not directly relate to the dollar level of the bonus offer, there was not a continuously increasing response. The initial findings left uncertainty about the design of an optimum bonus offer. None of the options tested were found to be cost-effective for either the general UI claimant population, or for claimants similar to dislocated workers.

O'Leary, Decker, and Wandner (1997) reexamined evidence from the bonus experiments to determine whether a reemployment bonus targeted to those UI claimants most likely to exhaust benefits would be more cost-effective. They found that profiling models similar to those used by states as part of their WPRS system can be effectively used in this targeting. Using these models can increase the cost-effectiveness of bonus offers by generating larger average reductions in UI benefit payments than a nontargeted bonus offer.

The single treatment design that emerged as the best candidate for a targeted reemployment bonus is a low bonus amount, with a long qualification period, targeted to the half of claimants most likely to exhaust their UI benefit entitlement. Such a targeted bonus offer emerged as a realistic prospect for a cost-effective early intervention strategy to promote reemployment. It was estimated to yield appreciable net ben-

efits to the UI trust fund if implemented as a permanent national program.

Chapter 6, by Christopher O'Leary, Paul Decker, and Stephen Wandner, summarizes the authors' research on targeting reemployment bonuses offered to UI beneficiaries in the states of Pennsylvania and Washington using WPRS models.

Choice of Training

Improved targeting of training could be a powerful tool to guide dislocated workers to the type of training proven to be most cost-effective. Based on their labor market and personal characteristics, dislocated workers could be referred to different types of training such that their employment and earnings outcomes could be improved over a simple random assignment process.

Jacobson, LaLonde, and Sullivan (1999) studied the training decisions of displaced workers in the state of Washington during the early 1990s, examining the community college courses taken by these workers. Data on dislocated workers enrolled in 25 Washington community colleges included the types of courses they took, their grades, and the period of time in which they were enrolled. Dislocated worker status and reemployment earnings history were identified using UI wage records.

The study divided training into nine categories. It found that, averaging across all kinds of training, displaced workers who received training through community colleges experienced small earnings gains. However, these overall mean effects masked the fact that high earning gains accrued to those taking quantitative or technical courses; specifically, courses in three categories: health services, technical skills, and science and mathematics. The study also examined how the labor market and personal characteristics of dislocated workers affected their enrollment and participation in community college. Rates of enrollment, training, and training completion were found to be related to educational level, industry, prior wages, urbanization, job tenure, age at separation, gender, and minority status.

The impact of participation by dislocated workers in community college training on earnings was an increase in quarterly earnings of about \$6 for each credit earned. The distribution of earnings gains var-

ied by minority status, age, tenure at displacement, industry, region of the state, and prior education. The highest return to community college schooling accrued to workers with high tenure, more prior schooling, and those in the state's largest labor market (Seattle). The study concluded that training for dislocated workers was most cost-effective when provided in three (health services, technical skills, and math and science) of nine types of training studied, and that the effectiveness of providing this training can be increased by targeting to those workers who can achieve the greatest earnings gains from this training.

Chapter 7, by Louis Jacobson, Robert Lalonde, and Daniel Sullivan, summarizes the authors' research on returns to different types of community college training in Washington for dislocated workers.

Welfare-to-Work

In August 1996, federal welfare reform legislation was enacted in the form of the Personal Responsibility and Work Opportunities Reconciliation Act. The new program, called Temporary Assistance to Needy Families (TANF), replaced Aid to Families with Dependent Children (AFDC). In August 1997, to support the employment emphasis of TANF, the DOL-administered welfare-to-work (WTW) program was enacted. It provided \$3 billion to states and localities to assist welfare recipients in obtaining and retaining employment. Under welfare reform, the WTW program provides employment assistance to welfare recipients using a "work first" approach, such that recipients receive assistance in finding jobs first before being referred, as needed, for additional services, such as education and training. They can receive training as well as other postemployment services, such as child care and transportation assistance, but generally only after they become employed.

States have both TANF and WTW federal funding to assist welfare recipients in their employment efforts. TANF provides for block grant funding to states, with funding fixed at the 1994 level. Welfare rolls have fallen sharply, however, leaving a substantial budget for assisting TANF recipients in achieving initial employment, as well as helping former welfare recipients retain their jobs and advance their careers.

WTW and similar programs initiated by the states are particularly amenable to targeting. Welfare recipients vary a great deal in their prior labor force attachments, which makes their abilities to become employed very different. Welfare recipients with strong work histories need relatively less assistance, while those with no work experience have very great needs. Further, while many welfare recipients can get a job, other barriers to steady employment and career growth exist, including having reliable child care and transportation.

Similar to dislocated workers who provide data used for statistical targeting when they file for UI benefits, welfare applicants provide welfare and work-first agencies similar data that could be used to benefit their career development choices.

Welfare targeting can be used by the WTW agency whether it is the local workforce development agency or the local welfare agency. Regardless of the location, service to clients can be improved by making use of client data to more effectively target employment services. The existence of targeting mechanisms may also make it easier to encourage cooperation between the workforce development and welfare agencies when the functions are separated.

The Department of Labor is interested in helping local WTW agencies make more informed choices about the provision of employment services to welfare recipients. To that end, DOL decided to test whether a statistical targeting mechanism could be developed to determine which welfare recipients should receive particular types of WTW services. DOL funded the W.E. Upjohn Institute for Employment Research to develop and test the use of WTW profiling to help welfare recipients find their initial jobs. The model was developed during 1997. During 1998 and 1999, the Upjohn Institute tested this model in Michigan in the Kalamazoo-St. Joseph county service delivery area. The WTW service targeting model reversed the concept of WPRS profiling to instead estimate the probability of becoming employed. The variables used to explain the propensity for employment reflect labor market experience and characteristics of the welfare population (Eberts 1997). They are

- 1) age at time of enrollment,
- 2) parental status,
- 3) educational attainment,

- 4) AFDC/TANF history,
- 5) target group (long-term welfare recipient, older children, little or no work experience or education),
- 6) prior employment, and
- 7) compliance history in previous WTW enrollment.

Chapter 8, by Randall Eberts, reports on a field experiment for targeting WTW services, which was done in Kalamazoo and St. Joseph counties in Michigan. WTW profiling models were also developed by Broward County, Florida, with a number of other states interested in trying the approach.

Job Retention and Advancement by Former Welfare Recipients

As more welfare recipients become employed, it has become clear that finding a job is just the first step toward becoming a stable working member of the labor force. In recognition of this reality, states have been spending increasing portions of their TANF and WTW funds on job retention and advancement. As part of this effort, the U.S. Department of Health and Human Services (HHS) has sponsored a number of research projects dealing with job retention. Included in these projects is an analysis of what postemployment services are needed and how to target these services to those most in need of them. HHS was interested to see if such analysis would allow the design of programs that encourage job retention and advancement or, in the case of job loss, rapid reemployment.

Rangarajan, Schochet, and Chu (1998) examined the feasibility of targeting welfare recipients who initially find jobs for job retention services based on their personal and labor market characteristics. As with dislocated worker profiling, the goal of the study was to try to improve the efficiency of resource use, targeting postemployment services to clients most in need, as measured by those welfare recipients who are most likely to have long periods without employment.

Using the National Longitudinal Survey of Youth data, the study constructed a nationally representative sample of welfare recipients who found jobs during the panel period and analyzed their employment experiences over the five-year period after they entered the labor force. Similar to other profiling methods, Rangarajan, Schochet, and Chu de-

veloped regression models for predicting which sample members might have negative employment outcomes, using individual and labor market characteristics available in welfare administrative data. They were able to determine the weighted effect of each factor on employment. Their models were sufficient to target job retention services by identifying individuals who initially find jobs but have the greatest risk of subsequent periods without employment.

The variables used to predict long periods without employment are

- 1) age younger than 20 years when first applied for welfare,
- 2) employed less than half the time in year prior to job start,
- 3) no high school diploma/GED,
- 4) presence of preschool child,
- 5) wage less than \$8.00 per hour,
- 6) no fringe benefits,
- 7) no valid driver's license, and
- 8) has health limitations.

The study found that the characteristics most strongly related to spells without employment were working without fringe benefits and having a health limitation. The result of this analysis again shows that a series of personal and labor market characteristics can be used to identify who could benefit most by referral to services—in this case, postemployment services.

Chapter 9, by Anu Rangarajan, Peter Schochet, and Dexter Chu, reviews possibilities for targeting job retention services for welfare recipients who have gained employment.

CANADIAN APPROACHES FOR TARGETING EMPLOYMENT SERVICES

Part III of the book presents two chapters that report on the Canadian perspective for targeting employment services. Chapter 10, by Terry Colpitts, discusses the Service and Outcome Measurement System (SOMS) developed by Human Resources Development Canada to be a tool for promoting employment. SOMS was intended to help frontline

staff in local public employment service offices counsel job seekers about the best strategies for gaining employment and to assist analysts and managers in determining the best employment and/or training strategies for specific client groups. A microcomputer-based prototype of SOMS was built in 1994.

SOMS has not been adopted in Canada; however, many useful lessons were learned in the course of its development and pilot testing. Chapter 10 describes the most important lessons and tells the story of SOMS. The policy context, technical structure, and intended use of SOMS by frontline staff and management are all discussed. The chapter concludes by reviewing some recent events in SOMS development and reflecting on SOMS prospects for the future.

To date, Canada has not developed a policy for targeting services to the long-term unemployed. It has not been a pressing concern, because until recently the incidence of long-term unemployment in Canada has been low. Public concern about long-term unemployment surfaced in the 1990s as the ratio of unemployment compensation beneficiaries to all unemployed (B/U) fell dramatically from 0.83 in 1989 to 0.42 in 1997. Research revealed that about half of this drop was due to tightening of the unemployment compensation system, but the other half was due to changes in the nature of the labor market. In particular, B/U dropped because the share of unemployed Canadians who have not worked for the last 12 months has nearly doubled, from 20.8 percent in 1989 to 38.4 percent in 1997.⁷

Chapter 11, by Ging Wong, Harold Henson, and Arun Roy, documents the rise in Canadian long-term unemployment and the related trends in exhaustion of unemployment compensation entitlement. The chapter then reports on an empirical exercise using Canadian data, which attempts early identification of individuals who are at risk of remaining jobless for 52 weeks or more. Such a model, however, is useful only if linked to effective employment measures. Consequently, the chapter then reports which services are most likely to promote reemployment for those at risk of long-term joblessness. For Canadian unemployment compensation recipients, estimates are provided on how net benefits of interventions vary depending upon the timing of the intervention. Summary and concluding remarks are also provided.

NEW DIRECTIONS FOR TARGETING EMPLOYMENT SERVICES

The Department of Labor is working with the Upjohn Institute to pilot test a frontline decision support system (FDSS) for workforce development staff in one-stop centers. The goal of FDSS is to assist staff in quickly assessing and properly targeting services to customers. FDSS tools are being tested in new WIA operating systems in Georgia and Washington.

Chapter 12, by Randall Eberts, and Christopher O'Leary, and Kelly DeRango, reports on efforts to develop an FDSS for targeting reemployment services in a one-stop environment. FDSS is comprised of two main modules: systematic job search and service referral.

The systematic job search module is a means for structured searching of vacancy listings. The module informs job seekers about their prospects for returning to a job like their prior one, provides a realistic assessment of likely reemployment earnings, and identifies occupations related to the prior one. The first component is called the industry transition component. It provides an estimate of the likelihood that a customer can find a job in his or her prior industry. The second component provides a realistic assessment of likely reemployment compensation levels. This feature relies on an earnings algorithm which is a statistical model based on personal characteristics, work history, prior earnings, and educational attainment to predict earnings upon reemployment. The third component is the related-occupations algorithm. The algorithm offers individuals who have exhausted job prospects within their prior occupation a list of other occupations that are similar to their prior occupation.

The second module of FDSS is the service referral component. The primary purpose is to identify the sequence of activities that most often lead to successful employment. The service referral module uses information about the characteristics and outcomes of individuals who have recently participated in and completed core, intensive, and training services. This information is used to estimate the statistical relationships between personal attributes and outcomes. This algorithm has two basic components. The first is an estimate of a person's em-

ployability, or likelihood of finding a job. The second component is a delineation of the paths, or sequential combinations of services, that lead to successful outcomes. By conditioning these paths on the employability of a specific customer, the algorithm can offer estimates of the effectiveness of various programs for individuals with specific measurable characteristics.

An FDSS pilot is in process in Georgia. The data requirements and system design of FDSS have been completed, and it is expected to be implemented in the Athens and Cobb-Cherokee career centers in mid 2002. A decision will then be made whether to implement the system statewide. Based on input from Georgia users, a second, revised system will then be completed. Pilot implementation efforts in Washington are expected to start after the Washington one-stop computer system is operational. Operational system documentation and a technical assistance guide will be developed for use in other states. Training will then be provided for implementation in other states.

Chapter 13 concludes the book, with a panel discussion involving Rich Hobbie, Jim Finch, Chuck Middlebrooks, and Jack Weidenbach on the experience with and future plans of the states for targeting employment services.

ADDITIONAL OPTIONS FOR TARGETING

Statistical targeting methods can be applied to a wide number of workforce development programs. The only requirement is that they have an appropriate set of historical administrative data that can be applied to developing accurate statistical targeting methods. Below are some examples of possible additional applications that are not discussed elsewhere in this book but could be developed.

Training Targeting for Welfare Recipients and Low-Wage Workers

An extension of the training targeting approach for dislocated workers (as in Jacobson, LaLonde, and Sullivan 1999) might be an application to other adult workers, particularly low-wage workers and

current and former welfare recipients. Such models would be valuable in determining whom to train among a large number of low-wage workers who may be coming to one-stop centers. Developing such models for former welfare recipients would need to take into consideration the work-first environment of welfare reform.

Underemployed Workers (Skills Mismatch)

Under WIA, many more employed workers are likely to visit/access the one-stop centers in search of career advancement, labor market information, and education and training opportunities. One group of employed workers for whom mediated services may be particularly effective is underemployed workers, especially those with skills that greatly exceed the skill set needed for their current jobs. A particularly cost-effective approach may be to target, identify, and assist these workers in finding jobs that better match their skills. The result should be a substantial increase in earnings for workers and productivity for society.

Targeting UI Non-Filers among Dislocated Workers

About two-thirds of all dislocated workers apply for UI, and a much larger portion of those dislocated workers who remain unemployed for five or more weeks claim UI. However, a significant minority of dislocated workers never apply for UI. The one-stop centers can provide information about UI benefits that may result in increased application rates for the program. These workers will be able to apply for UI benefits in the center, either in person or by telephone. In addition, the availability of wage data as part of FDSS could be used to calculate the monetary eligibility for UI benefits. Supplying such information also could increase filing for UI benefits, and the net effect of the one-stop center may be to increase reciprocity rates for UI benefits.

For those dislocated workers who choose not to apply for UI, however, profiling would be useful—using the state WPRS model—to make a determination of the need for reemployment services similar to that done under the WPRS system. It should be noted, however, that profiling within the one-stop center and the resulting identification of

workers in need of services and their referral to services would not result in mandatory participation in those services.

Job Corps Selection and Retention

Another possible application of targeting to a national DOL program would be as a guide for selection of Job Corps participants. Using data on past participants, individuals could be profiled to assist in the selection of participants based on whether they have characteristics similar to successful Job Corps graduates.

For newly enrolled Job Corps participants, profiling could also be used to determine which individuals are most likely to drop out of the Job Corps prior to graduation. This information could be used to target the provision of remedial assistance that could increase the Job Corps retention rate.

The effect of targeting efforts, combined with improved selection processes and provision of remedial assistance, could increase the cost-effectiveness of the Job Corps by reducing the program's drop-out rate. Dynarski and Gleason (forthcoming) conducted an analysis for predicting which students are most likely to drop out of school, indicating that the development of such methods could yield positive results.

Notes

1. The EDWAA program was the principal JTPA dislocated worker program in the United States. It traditionally recruited participants through either 1) early outreach ("rapid response") to workers experiencing mass layoffs or plant shutdowns, or 2) walk-ins to their local intake centers. The employment service serves all employed and unemployed workers, including dislocated workers. Both programs have supplemented recruitment of program participants with WPRS referral and been active participants in the overall WPRS system. For the EDWAA program, most but not necessarily all WPRS-referred workers are eligible for EDWAA services.
2. The term *dislocated worker* refers to workers who are permanently laid off from long-tenured jobs. These workers tend to suffer extended periods of joblessness and earn lower incomes when they become reemployed. For the EDWAA program, section 301(a) of Title III of JTPA in part, defined *eligible dislocated workers* as "individuals who: 1) have been terminated or laid off or who have received a notice of termination or layoff from employment, are eligible for or have exhausted their entitlement to unemployment compensation, and are unlikely to re-

turn to their previous industry or occupation, and 2) have been terminated or have received a notice of termination of employment, as a result of any permanent or any substantial layoff at a plant, facility or enterprise . . .” The Bureau of Labor Statistics (BLS), on the other hand, collects data about displaced workers in its biennial survey. It defines *displaced workers* as workers who permanently lost their jobs because their plant or company closed or moved, there was insufficient work for them to do, or their positions or shifts were abolished. BLS distinguishes between long-tenured workers who lost jobs they had held for three years or more, and displaced workers regardless of tenure. This chapter does not distinguish between the terms “dislocated” and “displaced” workers; it uses the former term in all cases.

3. The WPRS system is designed to provide reemployment services to permanently separated workers who are likely to be unemployed for long periods in their search for new jobs. Workers who find their jobs exclusively through union hiring halls, e.g., longshoremen, are considered to be job attached and not searching for new jobs; they are waiting to return to their old jobs. They are not eligible to participate in WPRS reemployment services.
4. Benefit exhaustion takes place when claimants draw their potential duration of regular benefits. Potential duration usually depends on prior earnings. The maximum potential duration is 26 weeks in all states except Massachusetts and Washington, where it is 30 weeks.
5. Prohibited variables and the effect of their omission are discussed in U.S. Department of Labor (1994a), pp. 63 and 151–152.
6. UI Program Letter 11-98, Permanent Authorization of the Self-Employment Assistance Program, issued on December 17, 1998.
7. See OECD (1998, pp. 41 and 43). Note that the number used in the analysis is not the long-term unemployed, but those not employed for a year, which includes both unemployed and out of the labor force.

References

- Benus, J.M., T.R. Johnson, M. Wood, N. Grover, and T. Shen. 1995. *Self-Employment Programs: A New Reemployment Strategy, Final Report on the UI Self-Employment Demonstration*. UI Occasional Paper 95-4, Washington D.C.: U.S. Department of Labor.
- Corson, Walter, and Paul T. Decker. 1996. “Using the UI System to Target Services to Dislocated Workers.” In *Background Papers*, Volume III, Advisory Council on Unemployment Compensation. Washington, D.C.: U.S. Department of Labor.
- Decker, Paul T., and Christopher J. O’Leary. 1995. “Evaluating Pooled Evidence from the Reemployment Bonus Experiments.” *Journal of Human Resources* 30(3): 534–550.

- Dickinson, Katherine P., Suzanne D. Kreutzer, and Paul T. Decker. 1997. *Evaluation of Worker Profiling and Reemployment Services Systems: Report to Congress*. Washington, D.C.: U.S. Department of Labor, Employment and Training Administration, Office of Policy Research.
- Dynarski, Mark, and Philip Gleason. Forthcoming. "Do We Know Whom to Serve? Issues in Using Risk Factors to Identify Dropouts." *Journal of Education for Students Placed at Risk*.
- Eberts, Randall W. 1997. "The Use of Profiling to Target Services in State Welfare-to-Work Programs: An Example of Process and Implementation." Staff working paper no. 98-52, W.E. Upjohn Institute for Employment Research, Kalamazoo, Michigan.
- Eberts, Randall W., and Christopher J. O'Leary. 1997. "Profiling and Referral to Services of the Long-Term Unemployed: Experiences and Lessons from Several Countries." *Employment Observatory: Policies (inforMISEP)*, 60 (Winter): 32–39.
- Hawkins, Evelyn K., Suzanne D. Kreutzer, Katherine P. Dickinson, Paul T. Decker, and Walter S. Corson. 1996. *Evaluation of Worker Profiling and Reemployment Services Systems*. UI Occasional Paper no. 96-1, Washington, D.C.: U.S. Department of Labor,
- Jacobson, Louis, Robert LaLonde, and Daniel Sullivan. 1999. "Participation in the Effects of Community College Schooling for Displaced Workers: A Study of Displaced Workers from Washington State." Report to the U.S. Department of Labor.
- Messenger, Jon, Suzanne Schwartz, and Stephen A. Wandner. 1999. *The Worker Profiling and Reemployment Services Policy Workgroup: Policy Analysis and Recommendations*. Washington, D.C.: U.S. Department of Labor, Office of Policy and Research.
- Meyer, Bruce D. 1995. "Lessons from the U.S. Unemployment Insurance Experiments." *Journal of Economic Literature* 33(1): 91–131.
- O'Leary, Christopher J., Paul T. Decker, and Stephen A. Wandner. 1997. "Reemployment Bonuses and Profiling." Staff working paper no. 98-51, W.E. Upjohn Institute for Employment Research, Kalamazoo, Michigan.
- OECD. 1998. *Early Identification of Jobseekers at Risk of Long-Term Unemployment: The Role of Profiling*. Paris: Organisation for Economic Co-operation and Development.
- Orr, Larry, Stephen A. Wandner, David Lah, and Jacob M. Benus. 1994. "The Use of Evaluation Results in Employment and Training Policy: Two Case Studies." Paper presented at the annual research conference of the Association for Public Policy Analysis and Management, held in Chicago, Illinois, October 26–29.
- Rangarajan, Anu, Peter Z. Schochet, and Dexter Chu. 1998. *Employment Ex-*

- periences of Welfare Recipients Who Find Jobs: Is Targeting Possible?* Princeton, New Jersey: Mathematica Policy Research.
- U.S. Department of Labor. 1994a. *The Worker Profiling and Reemployment Services System: Legislation, Implementation and Research Findings*. Washington, D.C.: U.S. Department of Labor, UI Occasional Paper no. 94-4.
- . 1994b. *Self-Employment as a Reemployment Option: Demonstration Results and National Legislation*. Washington, D.C.: U.S. Department of Labor, UI Occasional Paper no. 94-3.
- . 1995. *What's Working (and What's Not): A Summary of Research on the Economic Impacts of Employment and Training Programs*. Washington, D.C.: U.S. Department of Labor, Office of the Chief Economist.
- Vroman, Wayne. 1998. "Self-Employment Assistance (SEA) Program: Report to Congress." Unpublished paper, Department of Labor, Washington, D.C.
- Wandner, Stephen A. 1997. "Early Reemployment for Dislocated Workers in the United States." *International Social Security Review* 50(4): 95–112.
- . 1998. "Worker Profiling and Reemployment Services in the United States." In *Early Identification of Jobseekers at Risk of Long-Term Unemployment: The Role of Profiling*. Paris: Organisation for Economic Co-operation and Development, pp. 99–117.
- Woodbury, Stephen A., and Robert G. Spiegelman. 1987. "Bonuses to Workers and Employers to Reduce Unemployment: Randomized Trials in Illinois." *American Economic Review* 77(4): 513–530.