Private sector vocational rehabilitation programs, which serve the vocational needs of industrially injured workers, have experienced tremendous growth since 1970. Legislative mandates, worker compensation insurance, as well as the ineffectiveness of state rehabilitation counselors to provide adequate job placements for disabled workers are all contributing factors to this growth. Surveys, however, have shown that despite the expectations for private sector rehabilitation, private agencies share the same difficulties as the public sector. This paper presents, in a five-step sequential model written for rehabilitation counselors, program administrators, and counselor educators, a rehabilitation program specifically designed for industrially injured workers. Each step is defined in terms of function, purposes, outcome criteria, and procedures. Step 1 focuses on the assessment of the client's vocational, economic, medical, psychological, and social needs, motivations, and abilities. Step 2 involves the identification of a specific vocational rehabilitation goal, while step 3 identifies barriers and facilitators to that goal. During step 4, intermediate behavioral objectives toward accomplishing the overall goal are generated. The fifth and final step evaluates the effectiveness of the process and outcome of the rehabilitation activities. (BL)
REHABILITATING THE INDUSTRIALLY DISABLED: RESEARCH RESULTS AND COUNSELING STRATEGIES

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Current trends reflect an increased private sector involvement in the vocational rehabilitation of injured workers. Research results identifying skill deficits and service problems among placement specialists in the public sector are discussed. In light of research findings, barriers to vocational rehabilitation and job placement of the injured worker are explored. The authors present a five-step model for the development, implementation, and evaluation of rehabilitation programming for industrially injured workers. The model reflects a comprehensive, developmental, and skill-based framework, with applications for private service providers and strong implications for counselor training and rehabilitation administration.
Rehabilitation counselors in the private sector are increasingly called upon to provide vocational counseling, assessment, job placement, and a variety of other professional services to injured workers. This trend reflects, in part, the failure among many state rehabilitation programs to respond to the needs of injured workers, as well as efforts to consolidate public and private services to assist handicapped individuals (Matkin, 1980). According to Sawyer (1976), state Divisions of Vocational Rehabilitation have not demonstrated any sustained interest in industrial cases nor any major degree of expertise in rehabilitating them. Moreover, neither injured workers nor insurance companies want to wade through the vagaries of bureaucratic procedure when each is looking for prompt, decisive action.

Prior to 1970, virtually all vocational rehabilitation counseling services were provided through public and non-profit agencies (Lewin, Ramseur, and Sink, 1979). However, private sector vocational rehabilitation services experienced tremendous growth during the 1970's. According to Deneen and Hesselund (1981), this was due to a combination of factors:

1. insurance carriers and private industry realized that vocational rehabilitation is, in fact, cost effective,
2. public agencies were mandated to give priority to individuals with limited vocational potential, i.e. the
severely disabled and institutionalized populations, (3) the inflexibility and time-consuming requirements of public agencies, and (4) the tendency of injured workers to resist the stigma of being associated with "Welfare Agencies" (vii).

These authors further maintained that the majority of private sector rehabilitation counselors were working without corporate structure, since there were relatively few large rehabilitation companies existing in the private sector.

Job placement research further illustrates many deficits in job placement practice among State Vocational Rehabilitation Offices. In his recent study, Shrey (1982) surveyed fifty-five "Job Placement Specialists" among New England Vocational Rehabilitation Offices, regarding their involvements in the job placement process. Consider the following results:

1. Only 12 of the 55 job placement specialists were trained in university rehabilitation counseling programs.
2. Only 6 of the 55 received any formal training in the area of job placement.
3. Less than 40% of these specialists work with physically disabled persons such as injured workers. In fact, very few work with worker compensation recipients.
4. Seventy-five percent of these "specialists" reported that they have contacted less than 5 employers in the past three months.
5. Only 15 of the 55 "specialists" (27%) had actually visited any companies in the past three months. Of these fifteen, most visited less than 5 companies over the three month period.

6. Ninety percent of the job placement specialists placed less than 2 clients each over a one year period.

7. Only 20% of the "specialists" reported that job leads were shared with other counselors through a coordinated and systematic approach. The most common method of sharing job leads was "Informally between counselors, and only occasionally."

According to those surveyed, the following responses were offered as the most significant barriers to employment for their disabled clients:

1. Counselor misconceptions about disabilities.
2. Negative stereotypes among employers.
3. Lack of transportation alternatives for clients.
4. Economic disincentives.
5. Large client caseloads.
6. Slowness of the rehabilitation process.
7. Architectural barriers to employment.
8. High unemployment.
9. Little agency time for job development.
10. Agency paperwork.
11. Lack of agency support to do placement.
12. Difficulty matching clients to available jobs.
13. Client selection priorities in the State-Federal
Vocational Rehabilitation Program. For example, the most severely disabled are theoretically given first priority for services.

14. Little time to spend with employers.

15. Lack of coordination within the vocational rehabilitation agency.

Despite the above job placement deficits in the State-Federal Rehabilitation Program, there is little evidence at this time that private sector counselors offer better services to injured workers. For example, future research among private rehabilitation agencies may reflect similar results, including additional barriers to the job placement of injured workers. Furthermore, private sector rehabilitation counselors might list the following barriers to job placement for their disabled clients:

1. The injured worker's inability to adjust to his/her disability.

2. A lack of high paying jobs for unskilled and uneducated workers who previously received high wages.

3. The worker's anger and frustration, as projected toward the employer, the insurance carrier, the bureaucracy, and others.

4. The injured worker's inability to cope with or manage physical pain.

5. The compensation attorney's settlement interests versus the development of attainable vocational goals.
In light of these common difficulties, a model for the development, implementation, and evaluation of rehabilitation programming for the industrially injured worker is presented. The model is organized in a series of five sequential steps. For each step, information is presented that includes purposes, an overview of relevant outcome criteria, and a suggested sequence for satisfying outcome criteria. Examples are given, when relevant, to illustrate key points. This model reflects a comprehensive, developmental, and skill-based framework, within which private sector rehabilitation service providers are offered a structure for enhancing the job placement potential of injured workers.

Step 1: Assessing the Needs of Injured Workers

Assessment is the first step in developing vocational rehabilitation plans for injured workers and thus plays a critical role of being the initial activity in which the client experiences rehabilitation services. It is important that the evaluator and injured worker carefully review the objectives of the evaluation process and detail how evaluation activity will relate to and provide a framework for subsequent rehabilitation activity.

The evaluation process should include the identification of competencies, abilities, and limitations in relation to specific work functions and worker traits. Within this framework, the evaluator and injured worker are able to identify how abilities, skills, and knowledge areas may
transfer from one occupational cluster to another.

Evaluation activity with injured workers would fail, however, if the only emphasis was on identifying worker strengths and abilities that may relate to occupational clusters. While assessment activity is similar in many ways to the assessment of other disabled individuals, it may differ greatly in extent with injured workers. A more thorough assessment of medical information, work history, past training experiences, and transferable skills is often necessary. Worker motivation toward or away from re-employment must be evaluated and understood in relation to identified incentives and disincentives. The involvement of the insurance company, attorneys, state compensation regulators, and the reaction of family members to the disability are highly relevant forces in this complex process. The evaluator must actively assess how each factor or force impacts on the injured worker's overall attitude and work readiness throughout the evaluation process and subsequent rehabilitation planning activities.

**Purposes**

1. To assess the injured worker’s perspective on the evaluation and rehabilitation process.

2. To obtain a clear understanding of the factors influencing this process.

3. To identify the strengths and deficits of the individual in relation to the world of work.
4. To assess the motivation of the injured worker to become actively involved in the rehabilitation process.

5. To develop an empathic, caring relationship with the injured worker.

**Outcome Criteria for Step 1**

When assessing the needs of the injured worker it is important to consider:

1. **Information:** Has all relevant information regarding the injured worker been obtained, e.g. work history, educational background, family relationships, medical data, financial situation? Is there enough vocational and related information to substantiate a potential work goal? Have strengths as well as deficits been carefully explored?

2. **Injured Worker Readiness for Services:** When was the injured worker first contacted? Has the injured worker been encouraged to participate actively in the rehabilitation process? Are there any expressed problems from the injured worker related to the timing of the initial contact, subsequent meetings, and the perceptions of the rehabilitation process? Will the injured worker be an active participant in his/her vocational rehabilitation? If not, why not?

3. **Identification of Strengths and Limitations:** Has there been a written evaluation plan to demonstrate the extent to which the evaluation process will include the use of evaluation instruments to systematically and developmentally
evaluate strengths and competencies? Has the individual been involved in the selection and interpretation of vocational evaluation tests and activities such as work samples, performance tests, or simulated work activities? Is there a description of worker traits and functions that demonstrates how the individual is able/unable to perform in various occupational clusters? Are the identified occupational groups related to intrinsic and extrinsic work values, regional employment outlook, available training services? Is assessment planned to be ongoing and systematic? Does the evaluation include job seeking skills necessary to find a job; job maintenance skills necessary to perform well on a job; and post-employment skills necessary to sustain successful and ongoing job performance?

4. Motivation Toward Work: Is the injured worker motivated towards or away from returning to work? What are the positive and negative forces toward returning to work? How strong are these forces? Can the counselor increase the injured worker's motivation toward work? What are the specific assets and limitations that could affect the injured worker's obtaining a meaningful work goal?

5. Therapeutic Relationship: Does the counselor focus on the injured worker's feelings and perceptions of his/her situation as well as on the content or information discussed? Does the injured worker look forward to meetings with the counselor? Is the counselor perceived as a warm, empathic and caring person? Are these qualities communicated well?
How Step 1 is Accomplished

1. Meet with the injured worker at the earliest possible time to discuss and present rehabilitation services. Remember that a major initial goal is the development of a trusting, empathic relationship, in addition to information sharing. Thus, focus on the injured worker's feelings as well as issues related to rehabilitation planning and job placement.

2. Identify relevant information from medical, vocational, educational, and social background to detail transferable skills and worker traits, and residual functional capacities.

3. If necessary, involve the injured worker in the selection and interpretation of vocational evaluation tests and activities, in order to identify additional work skills, aptitudes, values, interests, and residual functional capacities.

4. Explore with the injured worker all primary and secondary drives towards and away from selected vocational goals.

5. Share the information with the injured worker and discuss the implications as they relate to rehabilitation and job placement goals.

6. Explore with the injured worker any work-related goals he or she may have. If nothing is definite, explore the injured worker's feelings about returning to work. If a realistic goal is stated, explore what resources would be needed to facilitate vocational planning activity.
7. Evaluate the adequacy of the step just completed.

Step 2: Identifying a Specific Rehabilitation Goal

The identification of a specific rehabilitation goal is a process that originates from assessment activity. It demonstrates several important characteristics of the rehabilitation process to the injured worker. First, the rehabilitation process is goal-oriented. Rehabilitation planning is also future-oriented and directed toward a specific well-defined outcome. Secondly, the rehabilitation process is vocationally-oriented. The primary emphasis of rehabilitation efforts is based on increasing vocationally relevant work behaviors and is predicated on realistic vocational options available in the local job market.

Step 2 provides guidelines for helping the injured worker to identify specific vocational goals. This step emphasizes active client involvement in a structured, realistic, goal-oriented process.

Purposes

1. To involve the injured worker in his or her vocational decision-making process.
2. To focus the major activity of the rehabilitation process toward mutually agreed upon vocational rehabilitation and job placement goals.
3. To identify specific vocational rehabilitation and job placement goals.
Outcome Criteria for Step 2

1. Feasibility: Is there evidence that the injured worker's vocational goals are realistic, i.e. considering the disability, handicap, age, education, prior work record, personal needs, and related information?

2. Observable Outcome: Is the vocational goal stated in such a way that the accomplishment of the goal can be observed and measured?

3. Training: Does the stated objective imply a specific training/educational program? Is a program available that is consistent with the desired goal? Can the injured worker cope with the program regimen? Does the injured worker have the basic academic skills necessary to participate in the program? Is funding available for training?

4. Time Frames: Has agreement been reached concerning a realistic time frame to meet the vocational goal?

5. Data Collection Implications: Does the vocational goal, as stated, imply how success will be measured?

How Step 2 is Accomplished

1. Explore with the injured worker any present vocational goal he or she may have. Be sure to explore alternatives and related goals.

2. Help the injured worker expand, if desirable, specific vocational goals.

3. Involve the injured worker in identifying the most realistic vocational goal toward which he or she is willing to work. Remember that the burden of proof is
on the injured worker to substantiate reasons for choosing specific goals.

4. Facilitate the injured worker's involvement with goal-oriented activity by encouraging him or her to explore additional information with respect to selected goals. Use resources such as family, friends, library material, and former employers.

5. Review the feasibility of selected goals.

6. Determine and agree upon a realistic time frame to reach the selected goal(s).

7. Evaluate the adequacy of goal-setting activity just completed.

Step 2: Identifying Barriers and Facilitators

Factors that take the form of people, places, and/or things may pose barriers or may serve as facilitators toward accomplishing selected goals for an injured worker.

During this step, it is necessary for the rehabilitation professional to investigate the forces within the environment such as attorney involvement, pending litigation, medical management services, employer attitudes, transportation, and access to work. Concurrently, forces specific to the injured worker, such as mobility, education, transferable skills, and job-seeking skills must be identified. It is also important to explore the relationship among person-environmental forces, as they relate to the potential employment of the injured worker.
According to Clowers and Fraser (1977), the data-based employment interview research (1969-1976) reflected a broad range of factors relevant to the employment of the injured worker. Included were appearance (neatness, grooming, dress, personal cleanliness, and attractiveness), sex, motivation (to work), motivation (career-upward mobility), evidence of creativity, work experience, marital status, amount of information regarding specific job skills, military service, and other experience-based factors. Zadny and James (1977) reported that the need for travel for various services, as arranged by counselors, seemed to relate to a greater number of successful rehabilitations and more successful closures of severely disabled clients.

Factors related to rehabilitation professionals and their respective agencies often account for success or failure when providing services to injured workers. Fraser (1978) noted that agency policies and procedures could conceivably have a critical influence on placement outcome. For example, policies related to counselors spending a specific amount of time in field work seemed to be positively associated with successful client rehabilitation (Zadny and James, 1977). Therefore, it seems that counselors working with injured workers could demonstrate dramatic increases in job placements by devoting more of their time and energy to developing relationships with employers.

Staff attitudes often result in goal-related priorities which may be markedly different from those of persons having
industrial injuries. Negative attitudes among staff, as well as employers and injured workers, result in a psychological climate that generates physical, emotional, and perceptual barriers to employment for injured workers (Marinelli and Dell Orto, 1977).

A major factor among employers that seems to relate to attitudes toward hiring injured workers is the past experience of the employer. According to Pati and Adkins (1981), negative forces that tend to restrict employment, as cited by employers not familiar with disability issues, were lack of mobility and transferable skills, architectural barriers, stereotyped attributes of the disabled, and reactions of others to the disability.

An injured worker's interpersonal environment can have a detrimental effect on adjustment to disability and subsequent job placement. Friends and acquaintances find it either difficult to interact with disabled persons, or they actually avoid or abandon them. When employment issues emerge, studies show that the support of the family, if it does not escalate into over-support, facilitates employment success (Power and Dell Orto, 1980).

Despite these and other barriers, resources do exist that can be used to influence rehabilitation programming in a positive fashion. The identification of barriers as well as facilitators can enhance the development of strategies that lead to goal attainment.
Purposes

1. To identify resources within family, social, and community systems which facilitate rehabilitation planning.

2. To identify barriers within family, social, and community systems which impede rehabilitation planning.

3. To integrate facilitators into vocational rehabilitation activity.

4. To develop and implement programming activities that will reduce or eliminate barriers and enhance vocational rehabilitation progress.

Outcome Criteria for Step 2

1. Facilitators: (a) List resource people, places, and things within the family, social, and community environments which can facilitate vocational planning activity; (b) Describe which aspects of the network are actively involved in vocational rehabilitation programming; (c) Identify strengths and assets of the injured worker, with respect to transferable skills, past work experience, and relevant education and training; (d) Describe the skills, knowledge, attitudes, and extent of involvement in vocational rehabilitation planning.

2. Barriers: (a) Knowledge (What do employers know about injured workers and their work performance?); (b) Skill (Determine the skill of vocational counselors in job development, placement, and related services. What are the decision-making skills of insurance company representatives and other rehabilitation professionals who
are involved in the planning activities?); (c) Attitudes (What are the employer's attitudes and expectations regarding standards of work performance and types of work suitable for the injured worker?); (d) Environment (What barriers exist with respect to transportation, access, architecture, etc.?); (e) Is there a plan or program to reduce barriers and facilitate achievement of vocational rehabilitation goals?

How Step 2 is Accomplished

1. Assess the knowledge, skills, and attitudes of the family, social, and vocational systems through discussion and exploration.

2. Integrate skilled individuals into the vocational rehabilitation process.

3. Brainstorm what environmental resources are available and explore the extent of knowledge, skills, and attitudes needed for participation in the vocational rehabilitation process.

4. Determine significant barriers that may exist in such areas as family, attorney involvement, industry and business, and vocational rehabilitation agencies.

5. Evaluate the adequacy of the step just completed.

Step 4: Generating Intermediate Objectives

Intermediate objectives are steps that lead to goals. They can be described as observable, behavioral descriptions of what the injured worker must do to reach the specific
rehabilitation goal. Intermediate objectives specify the component behaviors or performances which, when collectively demonstrated, enable the injured worker to perform the task (Phelps and Lutz, 1977). Figure 1 provides an example of a rehabilitation goal and the objectives specified to reach that goal.

Purposes
1. Identify important steps toward the goal(s) and related criteria that the injured worker must achieve in order to implement the rehabilitation plan.
2. Sequence the identified steps from easy to progressively more difficult.

Outcome Criteria for Step 4
1. What needs to be done: What motivational forces need to be increased or decreased? What incentives, disincentives, forces, and factors need to be supported or diminished? Have specific steps been identified in writing (e.g., develop list of past employers; identify transferable skills; apply for high school equivalency examination).
2. Behaviors: Is the objective stated in such a way that it can be observed and measured to determine when it has been reached (e.g., be punctual for job interviews; perform five-step tasks accurately 100% of the time; acquire a driver's license).
3. Time frames: Can the time frames necessary to reach each intermediate objective be identified? Are they reasonable? Specific?
4. Injured worker responsibility: What responsibilities for
obtaining the rehabilitation objectives have been agreed upon by the injured worker? Is the injured worker capable of achieving the objective, or are specific services or additional skills required?

5. **Sequential Steps**: Can the objective be reached? Are each of the identified steps within the injured worker's capability?

6. **Resource barriers and facilitators**: Are the identified resource barriers and facilitators included in the intermediate objectives? Can barriers be reduced and facilitators increased to enhance goal accomplishment?

**How Step 4 is Accomplished**

1. Brainstorm and operationalize intermediate objectives necessary to reach rehabilitation goals.

2. Determine the first step and then each subsequent step necessary to reach each intermediate objective.

3. Explore and identify strategies necessary to increase or decrease motivational incentives, disincentives, forces, or factors.

4. **Anticipate** barriers to achieving rehabilitation objectives and develop action programs to implement rehabilitation plans in light of existing barriers.

5. Develop time frames for each objective.

6. Determine the objective(s) to be reached and give the injured worker the responsibility for completing the initial objective(s). Help the injured worker identify resource people, places, or things that could facilitate reaching the objective(s).
7. Evaluate the adequacy of the step just completed.

**Step 5: Measuring Effectiveness of the Program**

The objective of this final step is to evaluate the process and outcome of the rehabilitation programming activity. Evaluation efforts should monitor not only the final results, but also the continuing effort to provide the highest level of service in the most efficient manner. Matkin (1982) maintained that the demonstration of effective and efficient services by private sector rehabilitation counselors increases the likelihood that these services will be utilized by referring agents and others. Step five also provides an opportunity to examine the many facets of programming and additional resources available that may enhance future efforts to meet the vocational needs of injured workers.

**Purposes**

1. To evaluate outcome criteria as they relate to the injured worker's needs.

2. To assess the effectiveness and efficiency of the vocational rehabilitation and job placement process.

3. To improve the quality of services to injured workers.

4. To enhance communication between the injured worker, referring agent, attorney, family, and community resources.

**Outcome Criteria for Step 5**

1. **Outcome criteria**: Have the objectives and goals been achieved as developed, revised, and agreed upon?

2. **Time frames**: Have reasonable time frames been established, revised, and successfully met?
3. **Assessment and planning**: What is the quality of the injured worker's assessments? Have results and recommendations been used in developing subsequent programs?

4. **Written reports**: What is the quality of reports with respect to comprehensiveness, clarity, and timeliness?

5. **Coordination of services**: Is there a full and appropriate range of involvement by rehabilitation nurses, vocational evaluators, other rehabilitation professionals, and the injured worker's family? Is there a demonstrated integration of each service with another? Who is designated as the primary service coordinator?

6. **Use of community services**: Have all existing services, people, places, and things in the community been explored?

7. **Quality of communication**: Has there been an active effort to directly contact and discuss the injured worker's progress, share information, alter goals, objectives, or time frames?

8. **Use of skills**: Have all resource opportunities been used for the maximum benefit of the injured worker? Does each resource use creative and effective approaches in the vocational rehabilitation and job placement process?

9. **Feedback information**: Is there an active, open channel for exchange of effective counseling, job development, and job placement approaches among staff? Is there feedback or exchange of ideas regarding the adequacy of objectives, effectiveness of assessment information, and integration of planning efforts? Is the feedback
information process facilitative, client-centered, and effective?

How Step 5 is Accomplished

1. Examine the individualized rehabilitation program or similarly developed programs to determine an observable and measurable statement of the vocational planning objective.

2. Evaluate current progress in relation to time frames initially stated.

3. Evaluate whether assessment information was used in planning and programming. (Are assessment recommendations reflected in subsequent planning efforts?)

4. Determine which community and rehabilitation services were used and how these services were integrated and coordinated.

5. Monitor the coordination of programming efforts through review of written reports and periodic personal contact with others involved in the planning process.

6. Monitor the quality of coordinated services through written reports and stated time-frame controls.

7. Review innovative and effective approaches of each service provider (e.g., reasonable accommodations made by receptive employers; residual functional capacities evaluations of physicians) and generate other approaches to increase vocational rehabilitation advances.

8. Evaluate process and outcome of vocational rehabilitation and job placement program.
Summary

Over recent years, private sector rehabilitation services have developed as a distinct and important force in the rehabilitation of injured workers. Providing quality vocational rehabilitation and job placement services poses unique challenges.

The rehabilitation programming model presented here combines practical usefulness and flexibility with a firm conceptual base. It describes a step-by-step process to identify, define, and achieve goals. It can be used by rehabilitation administrators in the supervision of private sector counselors, or by trainers who can easily expand and elaborate on many of the concepts included in the model. Most importantly, it can be used by the rehabilitation professional in developing quality planning activities for injured workers.

Finally, the model incorporates an evaluation component to assess both process and outcome variables throughout the vocational rehabilitation and job placement process. In this way, private sector rehabilitation can become more dynamic, responsive, and accountable to the needs of injured workers.
Operationalized
Intermediate
Objectives
1. Outline residual functional capacities
   a. List daily activities
   b. Discuss physical capacities with physical therapist and physician
   c. Obtain recent medical update from physician

2. Identify work-related skills
   a. List skills used in previous jobs
   b. Specify knowledge of machinery, processes, and equipment related to previous work
   c. Review accomplishments and achievements related to use of knowledge and skills

3. Identify light or sedentary jobs requiring use of transferable skills
   a. Talk to past employers about related jobs requiring less physical activity

Time
Sept. 15
Sept. 28
Oct. 9
Oct. 12
Oct. 12
Oct. 12
Oct. 12
Oct. 26
b. Review job descriptions with vocational counselor to determine relevant demands

c. Identify additional skills and reasonable accommodations needed to perform adjusted work

Figure 1. Developing a Rehabilitation Goal and Intermediate Objectives


