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Work capacity assessments and efforts to achieve a job match for claimants in a social security setting: an international inventory

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ABSTRACT

Purpose: Many high-income countries are witnessing a shift of focus on eligibility for disability benefits towards promotion of work reintegration. However, little is known about how countries assess work capacity, and how a job match is then obtained. The current study aims to compare work capacity assessments and available efforts to achieve a job match in eight high-income OECD countries.

Methods: A survey was conducted among key stakeholders concerning organization of work capacity assessments in social security settings, and efforts made to obtain a job, across eight OECD countries: Australia, Denmark, Finland, Iceland, Sweden, the Netherlands, the United Kingdom and the United States.

Results: In most countries, work capacity is assessed at several time points, with variations in moments and in information used for job matching. In countries obtaining information on personal and work levels, the search to find a job match usually begins with the persons who have disabilities.

Conclusion: Although a shift towards a holistic focus in work capacity assessment has been recognized, medical factors still prevail. Limited emphasis is placed on the implications of functional limitations for the possibilities of work. A holistic approach to assessment needs to be coupled with holistic support measures through provision of coordinated and high quality job matching services.

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Disability; reintegration; multidimensional; environmental factors; biopsychosocial; work participation



► IMPLICATIONS FOR REHABILITATION

- Besides determining eligibility for benefits the outcome of the work capacity assessment can also be used for other purposes such as reintegration and should not result in a static description of work capacity but also deliver insight in support needs.
- Involving multiple institutions and disciplines in work capacity assessments may result in a broader overview of the claimants' capacities, however this places high demands on cooperation and data sharing of all those involved.
- Incorporating the claimants own perspective on work capacity and possibilities to work might improve the legitimacy of the process and reasonably also the achievement of a good and sustainable job match. This can be achieved by using self reported questionnaires and interviews in the assessments.

Introduction

Regarding social security policies, many high-income countries are witnessing a shift in focus from eligibility for disability benefits towards promotion of work reintegration by exploiting remaining work capacity [1]. Although work capacity assessments may have different scopes and aims, they generally reflect the underlying idea that being able to work is the key to regaining health, economic self-sufficiency and social standing [2]. In social security systems, generally two main aims of work capacity assessment can be distinguished. On the one hand assessments focus on decisions about eligibility for disability benefits, and on the other hand on what people are still able to do regarding work. Eligibility for a sickness or disability benefit usually starts with a

medically determined cause that limits or prevents a person's participation in work-related activities. However, when work capacity is assessed, other factors also become important. Along with the functional limitations themselves, the interaction of those limitations with the particular requirements and demands of the individual's work environment determine whether work is still possible [2,3]. Work capacity should therefore be defined as a dynamic, multidimensional phenomenon, based not only on individual aspects, but on an interplay among individual, psychosocial, behavioral and environmental conditions [4]. Work capacity assessments should encompass all factors used to determine an individuals' capacity to participate actively in the labor market. This multidimensional perspective calls for an integrative approach to assessment, going beyond the individual's physical

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and functional performance and limitations to include his/her interactions with environmental factors like the work environment [2,4]. For assessing work capacity the use of the holistic biopsychosocial framework provided by the International Classification of Functioning, Disability and Health (ICF) [5] is therefore often advocated [1,2,6]. Further, a distinction should be made between *specific* work capacity, related to a specified job (e.g., the current job of the person, which may require training), and *general* work capacity, related to any job in the labor market (without need for special training) [7]. Moreover, the availability in the labor market of other specific work (according to the Tengland definition) also depends on a person's background, education and experiences. Furthermore, differences exist across jurisdictions as to how and when they assess work capacity.

In many jurisdictions, the assessment of specific work capacity is carried out in a first phase, focused on return to work in the current job, while a later phase focuses on general work capacity, aiming for reintegration into the labor market through finding another job. This latter phase usually requires another form of assessment, relating the individual's capacity to a broader setting, such as the labor market at large [8]. With the overall focus on work participation, a challenge is to translate the outcomes of such broader work capacity assessments to the type of support needed for a person to use his/her remaining work capacity in another job [9]. This process of finding a matching job for persons with disabilities requires compatibility between an individual's capacities, characteristics and health-condition specific needs, and the demands and characteristics of his or her occupation, job and workplace [10,11]. Nützi et al. [11] describe three overarching matching domains or levels of job matching: (1) fit between rather stable attributes (such as vocational interest, values or abilities) and the corresponding characteristics of occupations; (2) fit between modifiable attributes (such as skill, knowledge, or work activities) and the corresponding demands of particular jobs; and (3) fit between a person's health condition-specific needs and the corresponding resources of the organization or the work environment. Nützi et al. advocate the use of an interdisciplinary approach to job matching, incorporating a biopsychosocial framework and considering the needs and limitations of persons with disabilities. Such a comprehensive approach will allow for indicating mismatches on several dimensions, thus facilitating the intervention planning of professionals [11]. A recent study showed that workers with disabilities who are mismatched have worse work-related outcomes than those with good job matches, especially in the case of lower educated workers [3]. To obtain job matches and better and more sustainable labor market outcomes for persons with disabilities, attention should be paid to the particular requirements and demands of the person's (anticipated) work environment and the required interventions, as well as psychosocial factors and individual priorities [11–14].

Although many countries have introduced social security legislations encouraging work participation by disability claimants with remaining work capacity, little is known about how countries assess this remaining work capacity (generic or specific) in the labor market reintegration phase, and how job match is subsequently obtained based on such assessments. Therefore, the current study aims to compare work capacity assessments and available efforts to achieve a job match in eight high-income OECD countries.

Methods

Design

A survey study was conducted, in three phases. First, an inventory was made of the organization of work capacity assessments in

social security settings across eight OECD countries. Second, an inventory was made of more in-depth information regarding efforts conducted to obtain a job. When needed, additional written materials were used to describe the setting (e.g., descriptions in reports, websites and publications). Third, a comparative analysis of the completed surveys was performed.

Included countries

The following eight countries were invited to participate: Australia, Denmark, Finland, Iceland, Sweden, the Netherlands, the United Kingdom and the United States. The countries were selected based on our knowledge of existing work capacity assessments in each country and contacts in the network of the authors. For each country, one key informant from the field of work and health research, experienced with social security issues, was approached to be a representative.

Procedure and measures

First, a survey was designed to provide a clear description of the concept of work capacity assessment, allowing for a comparison of data between the different countries. The survey contained questions about the context and content of the work capacity assessment of disability benefit claimants in a social security setting. This setting contains two distinguishable directions: one regarding the determination of rights to benefit, and one focused on resuming work. The concepts of work capacity, work capability and work ability are often used interchangeably, although slightly different definitions are used [4,7,9,15]. For this study, the term work capacity was chosen, and the term “work capacity assessments” used as an umbrella term to encompass all assessments used to determine an individual's capacity to take active part in the labor market. No distinction was made between a return to a persons' past work or taking on another job. The questions covered seven main topics: (1) the aim of the work capacity assessment; (2) the time points of assessment; (3) the actors included in the assessment; (4) the measures used for assessment; (5) the outcome of the assessment; (6) the information revealed; and (7) the reporting of outcomes. All questions had multiple choice answer options, including the possibility to explain the answers. The participating key informants were invited by mail with a letter of introduction and a link to the first web-based questionnaire. If necessary, a reminder mail was sent after 3 weeks. Additionally, informants were asked about their expertise and background, and encouraged to consult professionals from the social security institute or other researchers if this would facilitate answering the questions.

Second, a survey was designed to explore the efforts conducted to obtain job match. The same key informants were approached. When needed, additional information was obtained from other informants with expertise on this subject. The survey contained questions regarding strategies to achieve a match between a persons' capacity and actual work; these could be carried out by different governmental departments and/or types of organizations in the public or private domains. Questions were designed to cover the three levels of job matching described by Nützi et al. [11]: stable personal attributes and characteristics of occupations, modifiable personal attributes and demands of particular jobs, and a person's health condition-specific needs and the corresponding resources of the organization or work environment. Additionally included were questions regarding the used tools and interventions, and persons and organizations involved.

Both surveys were pilot-tested for readability and usability by three researchers in our network, of two of whom are also professionals working at the Dutch Social Security Institute: Institute for Employee Benefits Schemes (UWV).

As a final step following the two surveys, we approached an additional representative from each country to check the obtained results. Each representative received the country-specific information included in this article. When further clarification of the received information was needed, specific informants were contacted and written materials were used to describe the context. All participating informants received the manuscript for a final check, and any necessary adjustments were made.

Analyses

All data provided in the two surveys by the key informants, the feedback, personal communications, and information from written sources were summarized for each country. The results section was drafted, based on the answers provided by the participants. This resulted in an overview of work capacity assessments and efforts conducted to achieve good job match in the eight included countries.

Results

All eight invited key informants completed the first survey, and six completed the second. To complete the data for Iceland and Australia, two additional key informants were approached. Results are presented on country level, including aim, time points, actors, outcome, measures, and information about the job match procedure. Because for Australia and the United States legislations may differ across states, the results provided were based on the federal level.

Australia

Aim

The aim of the work capacity assessment is to determine a person's eligibility for benefits and/or to obtain information to achieve a job match on the labor market.

Time points

On federal and state levels in Australia, there are no specific time points to conduct the work capacity assessment. The federal or state government department decides when an assessment is necessary; this is usually when a person applies for income support benefits.

Actors

Many actors are involved during the process of work capacity assessment by the social security department. Besides the claimant, general practitioners and vocational rehabilitation providers are involved. In some cases occupational therapists, physiotherapists and psychologists are consulted. At the state level, employers also participate in various workers' compensation systems. They have an obligation to re-engage the worker with short-term work incapacity in the work role. In cases of longer periods of work incapacity, the employer is usually no longer involved, but a third party provider is appointed with the specific aim to support the worker in a return to his/her pre-injury job or, if possible, find a new job.

Outcome

In the work capacity assessments, the main focus is the persons' health and its impact on the ability to work, but the availability of suitable and meaningful work is also taken into consideration. The work capacity assessment typically results in a percentage rating, used both to determine eligibility for benefits and to guide provision of employment service. Multiple scales are available to assess the percentage of impairment, including the American Medical Association (AMA) guides to permanent impairment. These scales vary between the different systems of income support, and between federal, state and territory systems. Needs for clinical treatment, skills training, and work adjustments are also assessed.

Measures

Semi-structured interviews, functional capacity evaluations, clinical tests, self-report questionnaires, and medical reports are used to obtain data on a person's level of, e.g., skills, education, work experience and health-specific needs.

Job match

People must participate in vocational rehabilitation, training, and job search for 18 months before being eligible to apply for a federal government disability pension. When achieving a job match, several interventions are applied, based on the data obtained regarding a subject's personal level. A third-party provider is often appointed to use case management practices to support a person back to their pre-injury job or to find a new job. In these new jobs the provider can help to assess the fit of the work environment and job tasks to the person's abilities. Sometimes specific health care or retraining is provided.

Denmark

Aim

In addition to determining a person's eligibility for benefits, the work capacity assessment in Denmark has as its goal to guide opportunities, decisions and initiatives leading to the person's (gradual) return to work, and is used to determine work capacity and achieve potential job fit.

Time points

A first assessment is conducted after 8 weeks of sickness absence, and a second assessment after 22 weeks. A multidimensional approach is used, involving factors such as work environment, social environment and required work adjustments.

Actors

Work capacity assessments involve multiple actors: a general practitioner evaluates health-related functional limitations, treatment options and prognosis; a municipality case manager evaluates the social conditions and reduces potential barriers. If a client is nevertheless not able to return to work after 22 weeks, prospects are judged as insecure and legal extension of sickness benefits is no longer possible. Then the case will be sent to and discussed by the so-called "rehabilitation team," consisting of different experts from the municipality and departments of social-, work-, education- and health. Moreover, a doctor from the regional

social medicine department is part of the team, and will implement interventions to improve work capacity. As a result, if interventions on both the social and health domains, including rehabilitation, are necessary to improve work capacity, an up to 5 year long process can start. The team makes suggestions and the municipality makes the final decision. In Denmark the unions are also involved. Collective agreements between the social partners can be used by local unions and employer representatives to draft a “social chapter.” The latter describe opportunities for supporting gradual return to work, workplace accommodation for workers with reduced work capacity, or provision of employment for persons with reduced work capacity.

Outcome

When achieving a job match the abilities, skills, education, work experience, health specific needs and vocational interests of the person are used to enable a good job match. Information about specific job demands (e.g., physical, quantitative, cognitive, social, emotional, flexibility demands) and other work characteristics is obtained, including possibilities for job accommodations in current or future work.

Measures

Interviews, questionnaires, workplace visits and round-table meetings involving multiple actors, including current and or possible future employers, are used. The report is drafted and filed on an individual case basis by the social insurance case manager for the local municipalities, who administrates the work capacity assessment in the Danish social security system. The worker and case manager discuss the assessment based on a resource profile developed by the case manager to support the overall assessment, and on which the worker can comment. In complex cases the case manager can use other external resources or methods to advance the assessment and action plan.

Job match

As soon as the rehabilitation team takes over, several interventions can be applied to achieve a job match. Besides adjustments in work, including adjustments of working time, the interventions provide vocational rehabilitation, helping aids, or personal assistance where needed. The general idea is to let the claimant start early in a (new) job, and during the process what is needed for a sustainable reintegration will become clear. For this purpose (temporary) flex jobs may also be offered.

Finland

Aim

The general purpose of a work capacity assessment in Finland is to decide on eligibility for benefits and possibilities for retaining work or reintegration into work. These assessments are oriented primarily towards the existing job and return-to-work rather than on job matching or labor market reintegration.

Time points

Work capacity is assessed at four different points: (1) every physician is entitled/obligated to assess work capacity during each patient consultation and, if necessary, prescribe/continue sick leave or partial sick leave (which is possible after 10 days off work

for fewer than 120 compensated days); (2) remaining work capacity and possibilities of return-to-work are assessed before 90 compensated disability days, if disability persists; (3) upon application for medical or vocational rehabilitation; and (4) upon application for (permanent) work disability pension or (temporary) rehabilitation support, which takes place after 300 days of sickness absence.

Actors

Assessments are performed in rehabilitation centers or by a clinical specialist. Professionals involved are occupational physicians, rehabilitation specialists, and multidisciplinary teams in the occupational health service or in rehabilitation. At specialist care level this can be any clinical specialist, especially in rehabilitation, orthopedics, and psychiatry. In Finland, occupational health services are mandatory and integrated into the social security system, and employers are obligated to arrange access to every employee regardless of the length of the employment and number of working hours. Occupational health services can be arranged as in-house service (occupational health professionals are employees of the same company), or services can be provided by a private health service company or a public health center.

Outcome

After assessment, the employer receives a short notice on suitability (able/able with restrictions/not able) or work disability (including suggested time period off work); the social insurance agency receives a holistic report, including information on the functional restrictions and related work disability, to clarify remaining work capacity and possibilities for work adjustments. Assessments can also be used to determine needs for treatment, for vocational or medical rehabilitation, or for work adjustments.

Measures

Measures used are: anamnesis (both medical and work-related), clinical examination and tests, a semi-structured interview, ergonomic test(s); functional capacity evaluation (by an occupational health physiotherapist), if needed; work site visits to assess work demands and possibilities for adjustments; psychological test(s) (by an occupational health psychologist), if needed; self-report questionnaires (for e.g., work ability, depression, burnout, musculoskeletal pain); and others, such as joint negotiation between employer, employee and occupational health services, or with rehabilitation teams.

Job match

The profile of the employee’s functional ability and the profile of demands at work can be used to find a “match,” either with a new job or with adjustments in the old job. Such evaluation is not conducted along specific lines but is based on “logical reasoning.” If the present employer cannot make the necessary adjustments, the employee with disabilities may be entitled to vocational rehabilitation. Here the aim is to find a more suitable new job with additional training, if needed. This is the responsibility of pension insurance companies who not only arrange the vocational rehabilitation but also cover the expenses and disability benefits for the rehabilitee.

Iceland

Aim

The initial work capacity assessment is initiated by the employer and made to decide what kind of sickness the worker has. The work capacity assessment conducted by the rehabilitation organization aims to achieve a job match for workers with remaining work capacity.

Time points

Work capacity assessments are carried out at different time points, depending on who pays the benefit: an employer-financed phase (6–12 months, depending on the labor union the person belongs to), a sickness fund-financed phase (9–12 months; when rehabilitation is possible, the person continues into a rehabilitation benefit which can last for up to 36 months, but most commonly 18 months), and finally, a disability benefit phase that can last until the person reaches retirement age.

Actors

Assessments during the three phases are conducted by different organizations: the social security administration, insurance companies, vocational rehabilitation offices, or pension funds, and are carried out by GPs, insurance physicians, medical experts, and rehabilitation specialists. Different professionals (e.g., psychologist, physiotherapist, social worker) can be asked to examine the individual, depending on his/her functional restrictions, and no specific education is required. Information for achieving a job match is gathered by an employment specialist or a job coach.

Outcome

Assessments may lead to identification of a need for clinical treatment or behavioral therapy, function as an argument to obligate the person to participate in vocational rehabilitation, or indicate the need for work adjustments and reintegration into work. Conclusions are shared with the social security administration. The work capacity assessment conducted by the rehabilitation organization focuses more on remaining abilities and may therefore differ from eligibility assessments, which may show that the person is fully disabled even though the work capacity assessment indicates abilities that could be developed through rehabilitation measures.

Measures

Methods for assessment include semi-structured interviews, functional capacity evaluation, psychological tests, and self-report questionnaires. These are used to obtain information on person level (e.g., vocational interest, skills, education, work experience, health specific needs). Labor market opportunities are not specifically considered.

Job match

When trying to achieve a job match, Iceland uses a multidimensional approach, including work environment, social environment, and required work adjustments. They also include the vocational interests of the person to facilitate, as much as possible, a match with the needs and interests of the person. On the work level, information about specific job demands and other work

characteristics is obtained. Rehabilitation is supported by a specific rehabilitation fund, which may involve assessing the person's work capacity, although not with the purpose of determining eligibility for benefits. Several interventions are applied to achieve a job match, including placement in a job where work ability can be tested in practice. Instruments like Individual Placement and Support (IPS), time limited job placement, and graded return to work with increase of time and number of tasks, are deployed.

Sweden

Aim

The main purpose of the work capacity assessment is to decide on eligibility for sickness benefits, or disability pension if the person is considered unable to return to work.

Time points

Assessments for sickness benefits vary, and are made at different time points. The first type is made upon first application for sick leave benefits, at 15 days sickness absence; this includes a medical certificate from a physician (typically a GP, but OPs can assess if employers pay for it) and a self-report through an online application system. After 90 days, work capacity is assessed in relation to any job tasks offered by the employer, and after 180 days assessment is made in relation to any job normally available on the labor market.

Actors

Insurance officials make the formal decisions, and if necessary may consult insurance physicians for advice. Insurance physicians do not meet or assess the client. Reintegration into another job is the focus of the employment services, which operates as a separate authority under different policies.

Outcome

The assessment is made to determine eligibility for financial benefits (partial or full-time). In order to be eligible, the person must have a diagnosis indicating a limitation in function and activity that affects work capacity in relation to the job he/she is employed to do.

Measures

First required is a medical certificate from a physician. After 180 days of sickness absence, the social insurance official may order an extended assessment (AFU) [16], which includes a self-report questionnaire, an assessment by a physician (who is not the treating physician), and (depending on whether considered necessary) assessments by a physiotherapist, an occupational therapist and/or a psychologist. These assessments are performed at specific rehabilitation centers by personnel trained in the assessment procedure. Results may be related to a source of reference where typical job demands (including physical, quantitative, social, cognitive, emotional, and flexibility demands) are described for 40 common occupations; however, this step is not mandatory and should not affect decisions about benefits. Any of the assessment methods described above can be used for assessing sickness benefits and/or disability pension. Assessments for disability pension are always related to any job normally available on the labor market, and may or may not include an AFU.

Job match

In the social security setting, reintegration into work is not a primary goal of assessments after the 180-day point, although it may be framed as an element to support such a process in communications with the client [17]. While the social insurance agency has no rehabilitation professionals, the employment service can offer several interventions to achieve a job match, and can provide occupational therapists, psychologists and other rehabilitation professionals. To be eligible for such services, the client needs to be considered disabled and in need of such support. In such cases, the assessment can include information about vocational interests, abilities, skills, education, work experience, health specific needs, social skills, and any impairments. Assessments by the social insurance agency, such as the AFU, may also be used by the employment service, but this is not required. For those with very little work capacity, for the long-term unemployed, or for those with recognized disabilities, possibilities exist for job training, supported employment programs, or wage subsidies. Although such services are not always aimed at direct employment, they can also be used to identify what is needed for a future job match. The employment services may also look at the persons' needs, abilities, capacities, and motivation in order to find a suitable job. Other actors may become involved in job matching, such as private job coaches contracted by the public employment services, or through services provided via collective agreements, if the person is eligible.

The Netherlands**Aim**

The first aim of the work capacity assessment after two years of sickness absence is to decide on a person's eligibility for long-term disability benefits. However, if there is remaining work capacity after two years of sick leave the second aim is to obtain information for achieving a job match on the labor market.

Time points

During the first two years of sickness absence the employer is responsible for sickness guidance and wage replacement. Within 6 weeks of sickness absence an occupational physician (either from a private occupational health service or employed by the company) must provide a problem analysis, including a description of the employee's (dis)abilities. Within eight weeks a reintegration plan must be formulated jointly by the employer, the employee and the occupational physician with the aim to return to work in or outside the company. If there is no successful reintegration after 1 year, jobs in other organizations have to be considered. If after 87 weeks re-integration remains unsuccessful, the employee can apply at the social security institute for long-term disability benefits. The application form must be completed along with the rehabilitation plan, with an explanation as to why the plan did not lead to full reemployment.

Actors

In most cases private occupational health services are contracted by employers to provide guidance during the first two years of sickness absence. In the long-term disability claim assessment (after 2 years of sick leave), the insurance physician decides what a claimant is capable of in a general medical sense, and the labor expert decides what kind of work the claimant is capable of,

considering his/her training, work experience and skills [18,19]. If some work capacity remains, the second goal is to obtain information for achieving a job match on the labor market. This is undertaken by the employment services, who also support claimants in obtaining a job. If there is remaining work capacity, but no benefit is granted, this task is taken on by the municipalities and not the social security agency.

Outcome

To make a decision on a claimant's eligibility for disability benefits, the insurance physician and the labor expert determine the level of work he/she is theoretically capable of performing on the labor market, and the loss of wage-earning capacity for this work. If the loss of earnings is above 35% benefits are granted. To promote the improvement of work capacity the physician can indicate the need for clinical treatment or behavioral therapy. If any work capacity remains, reintegration into work is pursued.

Measures

A semi-structured interview with combined physical and psychological examination and, if desired by the insurance physician, an external psychological test are used to obtain information on person level (e.g., vocational interest, education, and health-specific needs).

Job match

After the decision on eligibility for benefits, and if remaining work capacity has been determined, professionals working at the employment services as part of the social security institute (e.g., labor experts or case managers) support claimants to find a job. When needed, additional information is obtained about specific job demands and other work characteristics. Several interventions are applied to achieve a job match, such as web-based training, seminars and support to work. In the Netherlands, an "employer service point" at the employment service connects job seekers with employers. When needed, special private reintegration agencies are contracted for this purpose.

United Kingdom**Aim**

The aim of the work capacity assessment is to decide on eligibility for work disability benefits, called the Employment and Support Allowance (ESA). The information collected is not used to achieve a job fit on the labor market.

Time point

Assessment takes place within 13 weeks of the claim, and the medical expert can plan a re-assessment whenever it is deemed useful. No specific time points are set.

Actors

A healthcare professional from a private contractor conducts the assessments.

Outcome

The assessment consists primarily of a checklist of specific functions and impairments. Besides the limitations in activities or restrictions in participation, it also determines whether a substantial risk to the person's health exists if they are found fit for work. The outcome is a decision on eligibility for the work disability benefit, ESA.

Measures

Semi-structured interviews and self-reported questionnaires are used, and occasionally functional tests are performed. The assessment is limited to individual factors, and does not consider social aspects that might influence a person's ability to find or function in a job [20].

Job match

If a person is found fit to work, reintegration into work is pursued. Services are delivered by specifically designated providers. One of these services is the Work and Health Programme [21] (since 2015), which covers both unemployment benefits and disability benefits, and is designed to offer personalized support to achieve job matching and provide training, or manage health problems. The information obtained during work capacity assessments conducted for benefit eligibility is not extensively used in the job matching services.

United States of America**Aim**

The work capacity assessment, or residual functional capacity assessment (RFC), is used to decide both on eligibility for disability benefit and ability to work. The information collected is not used to achieve a job match on the labor market.

Time point

There is no specific time point; assessment begins when a claimant files an application. From there the starting point of the assessment varies, beginning with the receipt of sufficient medical evidence and other information to address the impairments alleged by the claimant.

Actors

The claimant provides administrative data and medical information on impairment severity, and on meeting the criteria on medical listings [22]. The non-medical eligibility requirements are verified by administrators at field offices, and the medical requirements by an adjudicator at state agencies, called disability determination services. If the data provided by the claimant are insufficient, the adjudicator can arrange an examination with a medical consultant.

Outcome

Based on the information collected, the adjudicator with the help of the medical consultant, determines whether the claimant is able to perform his/her past relevant work, and if not, whether he/she is able to do other work, considering his RFC, age,

education, and work experience. If no work is possible, the claimant is found eligible for disability benefits.

Measures

Besides the administrative assessment, as mentioned before, examination by a medical consultant can be arranged. This examination varies depending on the impairments alleged by the claimant. Additional psychological tests and clinical tests can also be conducted.

Job match

There are a variety of services that are diffuse and distributed across many federal, state, and local organizations to support workers back into productive employment; vocational rehabilitation services may also be provided by different private contractors [23].

Discussion

This study shows that in various countries work capacity is assessed at several time points, varying greatly regarding moment of assessment. Denmark, the Netherlands and Sweden assess at specific points, while in Australia, Finland, Iceland, UK and USA this depends on the stage in the process or the setting in which the assessment is conducted. In all of the included countries the outcome of the assessment is used to determine eligibility for disability benefits, although all representatives stated that the assessment can also be used for other purposes, such as reintegration. Information used for job matching is often obtained on both person level and work level, in line with the stated relevance of including a multilevel approach in job-matching [11]. On person level, information can include the person's abilities and skills, based on objective criteria like education level, work experience, and health-specific needs. On work level it can be related to physical, quantitative and social, cognitive, emotional, and flexibility demands, but also to possibilities for job accommodations in current or future work. In the countries that obtain information on both personal and work levels, the starting point for finding a job match is usually the person with the disabilities. However, depending on the situation, the work context can also be the starting point. This might lead to different interventions, such as vocational rehabilitation, job accommodation, individual placement and support, or retraining. Across countries it appears that environmental factors outside the workplace are seldom included in assessments and job matching, even though research has shown these factors to be important [24–26].

In different countries job matching takes place in different organizations, related to the design of their respective social security systems. While some countries rely more heavily on public services, such as employment services via state authorities, others primarily use private companies, often contracted by the state. In the US and Australia, for instance, certain basic income security and job search services are provided at a federal level, while most of the additional support structures are state-based, with private actors often responsible for actual service provision [19]. The Netherlands is an example of a hybrid system, in which private actors have considerable responsibilities for providing services [19]. Also systems with a historic emphasis on public services may involve the use of private contractors, such as Sweden, which uses private job coaches to help the unemployed to find a new job. In such systems we can see a fragmentation and

diversification of employment services, where job matching can occur in different ways for different groups. Hence, it is complicated to provide an overview of job matching practices and methodologies. Moreover, the use of work capacity assessments in such practices will differ, with some systems providing assessments to determine eligibility for benefits, but also to be used by employment services in achieving a match for another job. Our data indicate that such assessments are not usually required for this purpose, but in several countries it is a possibility.

The job matching process involves many actors, such as professionals at the social security institute, professionals at the employment agency, employers, job coaches, and employees of municipalities. The involvement of multiple disciplines can result in a broader overview of the claimant's capacities, characteristics and health-specific needs, which can then be matched with the characteristics demanded by the job and workplace [3,11]. However, the inclusion of many actors and institutions places, on all involved professionals and institutions, high demands regarding cooperation and data sharing. Moreover, in addition to the involvement of the medical specialist and other actors, the claimant's own perspective on work capacity and possibilities to work is important for the actual achievement of a good and sustainable job match [16,27].

Large differences have been observed between the different countries regarding the types of measures used to assess work capacity and efforts to achieve job match. All countries (except the Netherlands) include self-report questionnaires and semi-structured interviews, with the option to complement these with more objective data obtained through tests and functional capacity evaluations. Comprehensive assessment methods using multiple sources and combining more subjective with more objective measures are advocated for assessment of complex constructs [28]. Using validated comprehensive measures can improve decision-making in work capacity assessments, and finding of a good job match. Recently, initiatives have been taken to develop comprehensive tools to aid professionals in achieving job matches for workers with remaining work capacity [29].

Our findings indicate a shift towards more holistic work capacity assessments. All countries involve medical expertise in the work capacity assessment to determine entitlement for long-term disability benefits, and with the exception of the UK and USA, all countries are moving towards a more multidimensional assessment, which includes contextual aspects and assessment of the need for work accommodation. This tendency is broadly in line with a shift from a compensation policy approach, where assessment is used primarily to define eligibility for disability benefits, towards an activation or reintegration approach, where the outcome of the assessment is aimed at a return-to-work or a match with another job. The main focus of the latter approach is the interaction between the limitations of the individual and his/her particular requirements and the demands of the work environment. However, such approaches do not always take into account the availability of accommodated work, and assessments may be used as tools for withdrawing benefits if the results indicate that the person has remaining abilities which can be used in another occupation. In such cases, the person may be referred to employment services, the quality of which will determine whether the person actually finds another job; the assessment may then in practice implicate that the person is deemed fit for unemployment rather than fit for work [20]. Other approaches may involve creation of jobs specifically for persons with disabilities, and finding persons for such jobs. Organizations involved in this movement are known as "inclusive organizations" [30]. For the

inclusion and (re)integration of people with a work disability and/or inadequate qualifications, work must be (re)designed and organized differently. The work must be adapted to the possibilities and ambitions of these employees and job seekers, and their limitations and vulnerabilities must be taken into account.

Strengths and limitations

A strength of this study is that we included methods and procedures from multiple countries across the world, providing information about the state of the art regarding work capacity assessments and the efforts conducted to obtain job matches. To obtain our information we used multiple sources, including key informants and written documents. To overcome possible information bias, as key informants may have missed relevant information, we asked them to ask other experts in their country to check the results. Their findings were compared with written sources by the researchers. Caution must be exercised when comparing countries and systems, as social security legislations vary greatly in terms of their structure and access to entitlements. The availability of many different benefits within the different social security systems made it difficult to ensure that all aspects were covered in the answers. Consequently, our findings can rarely be directly applied to other countries and systems [31,32]. Nevertheless, our study offers an informative overview of common elements in currently used methods and procedures, useful for facilitating comparisons with countries using new and different approaches. Yet, as in our study we focused on assessments in the social security setting, and efforts to achieve a job match, this may limit the generalizability of our findings to other assessment types and moments. Moreover, this study presents the current state of art in a dynamic world, and may be outpaced by continuous reforms in social security policies.

Implications and conclusions

Comparisons of work capacity assessments between countries is a challenge, considering the different disability policies and great differences in legislation. Although medical factors still prevail in both work capacity assessments and job matching, a common shift towards a holistic approach is recognizable, and the findings of this study could provide some stepping stones in the development of an assessment aimed to utilize the remaining work capacity of individuals and provide adequate support for reintegration into work. A first step is the recognition that work capacity is influenced by many factors. This goes beyond the medical approach, and implies the need to involve in the assessment not only the medical expert but also professionals from multiple disciplines. Second, it is important to involve the opinion of the individual himself in the assessment of his remaining work capacity. This will improve the legitimacy of the process, and possibly also the outcome of the assessment. Involvement of the individual could be achieved by including self-reported questionnaires and interviews in the conduct of the assessments and the pursuit of a job match. Third, the outcome should not be a static description of work capacity but should also deliver insight into needs for support or for adjustments in the work and non-work environments, as these may contain barriers to or facilitators of work participation. Fourth, many countries apply a holistic focus in their work capacity assessments, but whether this is also applied in job matching practices remains unclear. Recently a promising example of a comprehensive tool was developed for a group with a specific health condition, incorporating multiple

levels and resulting in job matching profiles [29]. Using comprehensive tools that include the work context will help professionals to systematically inventory relevant aspects for finding good job matches. Fifth, work capacity is often assessed in a theoretical setting, but should also be tested in practice. This asks for a flexible and cooperative attitude on the part of the parties involved, as seen, for example, in individual placement and support employment [33].

This study provides an outline on different ways of conducting work capacity assessments, both specific and generic, and gives an overview of different approaches to obtain job-matching. It shows the different methods developed in specific contexts for specific purposes. Because of their variety, it is hard to develop a one-size-fits-all method, but our findings may help to guide countries to learn from each other. In conclusion, however, we might note that although we can trace a shift towards a more holistic focus in work capacity assessment, we can also conclude that medical factors continue to prevail. Assessment of work capacity still places limited emphasis on the implications of functional limitations for the possibilities of work. In order for work capacity assessment not to result in unemployment, a holistic assessment approach needs to be coupled with equally holistic support measures, by providing coordinated and high quality job matching services.

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