

Disability prevention

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INTRODUCTION — Although it can be frustrating for the busy clinician when the sole purpose of a patient's visit is to obtain a "sick note," this simple but sometimes annoying request can disguise more complicated issues. Regardless of whether medical attention or only a sick note is required, important disability issues can be identified and favorably affected by the astute physician.

Prolonged absence from normal roles, including work, is detrimental to physical, mental, and social well-being [1]. The total lost income for the United States work force in 1994 during the first six months of disability was \$81.1 billion. A disproportionate amount was from non-occupational conditions, with \$55.2 billion in lost wages, \$36.2 billion of which was not recoverable from wage protection programs [2].

With the current economy, shrinking labor force, and passage of the Americans with Disabilities Act, employers are increasingly familiar with the nuances of work-site accommodations and are showing enthusiasm for extending these to general medical as well as work-related injuries or illnesses. These trends require physicians to be more aware of the impact of a health condition on functional and social status. We are challenged to address the interaction between the disabled individual, the workplace, and society, and link medical interventions with strategies to reduce disability at home and at work [3].

Unfortunately, most physicians have not received sufficient training regarding disability prevention practices as a method of secondary prevention, or the therapeutic benefit of optimal activity, including early return to work when appropriate [4]. Although unnecessary disability can be generated by inappropriate prescriptions for bed rest and inactivity [5], the medical reimbursement structure does not currently recognize the importance of, or adequately reimburse, disability prevention practices.

An overview of disability prevention principles is provided here. More specific details about handling disability requests is found separately. (See "Overview of disability").

IMPAIRMENT VERSUS DISABILITY — Impairment must be distinguished from disability in order to appreciate disability prevention principles:

- Physical examination and ancillary testing establish impairment, an objective anatomic or physiologic deficit.
- Disability is an impairment-associated curtailment of activities.

Impairment alone does not determine the disability. Other factors such as age, general health, education, motivation, satisfaction with job or supervisor, and social support are important effect modifiers [6,7]. Individuals with the same objective impairment can have disparate disability outcomes. Disability has a subjective component, determined by the patient's testimony and demonstration, as well as the observations of family, friends, coworkers, and employers.

Sick leave (temporary disability) is not limited to medical impairment, but may also relate to other factors such as job stress, burnout, or the care of a sick child [8,9]. Sick leave is frequently a patient-generated phenomenon with the individual seeking documentation for his/her disability experience from the attending physician [10].

Rates of sick leave vary widely among societies. In Poland, the 1994 rate of sick absences averaged 25.1 days for female employees [11], compared with 7.9 days for Minnesota State employees [12]. A small segment of the population accounts for a disproportionate amount of the total disability. As an example, 10

percent of the work force in an Israeli study was found to be on non-accident sick leave for more than 20 days [13]. This group averaged 11 episodes of sick leave per employee, with a mean of 4.9 days per episode, and an average of 54 days per individual per year. Such marked variations suggest that disability may be a social, not a medical phenomenon [5].

DISABILITY PREVENTION PRACTICE

Early return to activity — Although prolonged absence may create a "point of no return" to usual function, with less than one-half of the disabled workers in some situations expected to return to work after an absence of only eight weeks [14], early efforts to help the patient regain function appear to be effective. As an example, the risk of developing chronic pain in first time sufferers with an acute musculoskeletal condition was eight times lower for an early activation group compared with usual care [15]. Early return to activity helps patients avoid illness reinforcers such as disability income, family/community sympathy, reduced responsibility, and assumption of disability as a method to resolve conflicts [16-18].

Biopsychosocial paradigm — Another important component of disability prevention practice is the acceptance of the biopsychosocial paradigm [19]. Biological health has long been a recognized domain for physicians. Over the past 30 years, there has been increasing attention to the importance of physician attention to mental health issues. Similarly, we are becoming increasingly aware of the impact of lifestyle, and social factors such as employment, on health status [20]. Within this model, we can appreciate the potential for unfavorable interaction between biological deconditioning, psychological depression, social isolation, and lost opportunity that result from a prolonged separation from usual activities, including occupation [19].

Similarly, personal factors such as, fear, anxiety or depression can be important effect modifiers in the expression of disability for a given impairment. Physicians may reduce the risk for prolonged morbidity or disability by identifying and addressing these issues. Disability prevention is therefore predicated on the fact that disability is a variable expression of any given biological impairment influenced by psychological, social, and cultural factors. As such it can be favorably influenced by effective physician intervention.

Physician-patient relationship — The effective implementation of disability prevention practices relies on successful physician-patient relationships. These practices include [21]:

- Providing suggestions on how to overcome activity limitations
- Encouraging return to usual activities
- Explaining what to expect regarding a specific condition

Effective implementation of these strategies depends upon specific provider communication strategies, including listening carefully to the patient, showing concern, providing needed support, and establishing a trusting relationship [21].

It is essential to make a positive connection and demonstrate a sincere interest by listening closely to the patient's concerns about the affect their condition has on their daily activities and obligations. Discussing the condition in light of its natural history and prognosis with appropriate treatment can alleviate anxiety and leads naturally to a discussion about its impact on the patient's lifestyle and activity. An activity prescription or plan can help the patient remember the details and anticipate changes in activity level. For some patients, an integrated team approach, utilizing other professionals such as an occupational therapist and/or social worker, may be beneficial.

Other factors for not returning to work — It is also important to recognize that a patient may be physically, psychologically, or socially unable to return to work. Most patients with febrile pneumonia or acute loss of a family member, for example, will do better away from vocational activities for a limited time. Prescriptions for bed rest should only be used with recognition of the risks, including muscle atrophy, cardiopulmonary deconditioning, bone mineral loss, risk of thromboembolism, maladaptive perception of severe illness, and the economic consequences of time away from work. A scheduled return visit in the near future allows for follow-up of the patient's condition and continuation of the discussion of appropriate activity following the period of incapacitation.

CAPACITY FOR ACTIVITY — In the absence of complete disability, the next consideration is the capacity of the patient for activity. Some activities, such as firefighting with a broken arm, would be unadvisable. However, the same individual could do desk work. Reduced endurance and effort arising from a medical condition can also be accommodated. Occasionally, the employer will not have modified work available, preventing the patient from returning until completely able to perform usual tasks.

The return to work process ideally relies upon patient and employer negotiation. The physician can furnish recommendations regarding appropriate activity if accommodations are required, once permission has been obtained from the patient.

Natural history of the disease — The discussion of appropriate activity relies heavily on the physician's understanding of the biological impact and natural history of the disease. As an example, most patients with mild to moderate ankle sprain can expect some difficulty weight bearing for 7 to 10 days, but significant improvement after 10 to 14 days. Avoidance of excessive weight bearing for the first week, with gradual increase of activity thereafter would be a reasonable level of disability for the impairment. This advice, with a request for follow-up if the anticipated course of recovery is not realized, would be appropriate

recommendations based on the known pathology and natural history of most ankle sprains.

A similar approach is applicable to low back pain. Although low back pain may be associated with significant disability, its natural history is well established [22]. Approximately 30 percent of patients with nonspecific low back pain recover after one week, and 70 to 90 percent experience recovery after 7 weeks [23,24]. When requested, clinicians may choose to offer specific activity instructions for patients with acute limitations. The patient's age, general health, and perceptions of safe limits of sitting, standing, walking, or lifting noted from initial history, can help provide reasonable starting points for activity recommendations. (See "Treatment of low back pain: Initial approach").

General guidelines may be used as a reference during discussions with patients. As an example, the guidelines from the Agency of Health Care Policy and Research (AHCPR) advise limiting prolonged sitting to 20 minutes for severe or moderate symptoms, and to 50 minutes for mild symptoms appears reasonable [25]. Unassisted lifting may be limited to 20 pounds for severe and moderate symptoms for both men and women, then advanced to 60 pounds for men, and 35 pounds for women, as symptoms become milder [26]. A rapid return to usual activities is then encouraged. The clinician should make clear to patients and employers that even moderately heavy unassisted lifting may aggravate back symptoms, and that any restrictions are intended to allow for spontaneous recovery or time to build activity tolerance through exercise.

Since low back pain can be associated with significant discomfort, it is also important to establish a therapeutic relationship using the strategies outlined above. Appropriate treatment also includes discussion of not only the diagnosis, but also the usually favorable prognosis, and strategies to minimize disability such as early return to usual activities. Continued vigilance for signs and symptoms that would suggest an alternative diagnosis is also important.

Factors that may delay recovery should also be considered. As an example, an obese patient with type 1 diabetes mellitus may benefit from an early referral to physical therapy to help with early mobilization to avoid other complications such as thrombophlebitis. Similarly, a patient with a history of significant past disability can be evaluated early for economic, legal, psychological, or other factors which may need to be addressed in order to avoid a repeat episode.

PROLONGED DISABILITY — Physical limitations out of proportion to the diagnosis could signal misdiagnosis or complicating psychosocial factors. A related problem is determining appropriate recovery periods. Even allowing for individual variability, physicians have a wealth of information about the usual natural history of most of conditions. Just as unexpected types of limitations should be measured against pathophysiology, so should prolonged recovery periods be compared with the typical prognosis. Prolonged disability should

prompt diagnostic review and a search for unrecognized psychological or social factors. Attention to the course of recovery of activity has the advantage of being a patient-centered clinical pursuit based the patient's best interests.

If risk factors for delayed recovery are recognized early (~~show table 1~~), intervention strategies, including appropriate referrals, can be formulated. Discussion of these concerns with the patient can also lead to insight with regard to specific issues and may diffuse potential problems. This approach enables physicians to determine appropriate activity and assess patient reports in respect to their biological, psychological, and social significance.

If the diagnosis is correct, perpetuation of physical limitations past the time of biological necessity produces iatrogenic harm through deconditioning, provides no treatment to psychological or social factors, and can contribute to an undesirable outcome. Enabling prolonged disability risks iatrogenic injury to an already maladaptive process.

Principles outlining an optimal physician interaction with the patient and employer when dealing with return to work issues have been articulated by the Canadian Medical Association (~~show table 2~~) [1]. Application of these principals can assist with effective disability prevention practices.

SUMMARY — Ultimately, the physician's role is to treat the condition, fulfill the appropriate role of patient advocate, facilitate health including resumption of activity, offer proactive advice based on prognosis, be familiar with the patient's social obligations and resources, and provide education on the therapeutic benefit of returning to optimal function with the knowledge that such factual, medical-based opinions present an effective preventative strategy. Referral to other professionals, such as physical therapists, mental health professionals, and social workers, can also provide invaluable help in specific situations.

It is essential, however, that in order to implement these strategies effectively, physicians recognize that the most effective tools must be compassion and understanding combined with firm therapeutic goals [27].

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Keywords

Disability;Major topics

Hot Text

show table 2,ShowPictures ("MD_role_in_return_to_work")
show table 1,ShowPictures ("Risk_delay_disability_recovery")