

XI. Low Back Pain

Chronic Low Back Pain Attitude Survey

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Sponsor: National Institute of Handicapped Research

This project is being conducted as a complement to the regular clinic services provided by the Pain Management Clinic, and is proceeding on schedule. ■

Low Back Pain Prevention, Treatment, and High-Risk Inventory Development

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Of special interest in this project is the application of experimental programs to the University Hospital Employees. The nurses were identified as the group with the most time lost from work owing to back pain, and a comprehensive program designed to reduce the incidence of low back problems has begun. The program also has been extended to hospital employees in other types of work. ■

Low Back Pain Studies

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Sponsor: National Institute of Handicapped Research

Mission—The overall mission of the Vermont Rehabilitation Engineering Center is to improve our understanding of low back pain (LBP) diagnosis and to rehabilitate LBP sufferers, through the collaborative efforts of clients, engineers, clinicians, and multiple health care providers in rehabilitation research. Successful diagnosis and rehabilitation of LBP sufferers requires precise, reproducible, and quantitative meth-

odologies. Because of the extraordinarily high prevalence of low back complaints, even small gains can have a very large impact in terms of the numbers of individuals affected by LBP and the degrees to which they are disabled by it.

Objectives—Specific objectives of current research projects at the center are:

1. To develop an objective, reliable, and generalizable data base for the assessment of LBP sufferers, which also may be applied to all socioeconomic groups, including minorities and traditionally under-represented groups.
2. To develop an objective, reliable method for the assessment of rehabilitation effectiveness in LBP disease, including measures of cost, which is applicable to the same general population.
3. To develop methods and devices to quantify LBP and the potential for rehabilitation by such means as biomechanical measurements, psychophysical methods of LBP quantification, intracompartmental pressure, intra-abdominal pressure, and EMG.
4. To define and further understand new or ill-defined causes of LBP (for example, segmental instability, or compartment syndrome).
5. To design new orthotic systems applicable to the rehabilitation of LBP sufferers, such as electrical stimulation (to increase strength and/or to control pain), braces, corsets, and combined brace-stimulation systems, and to test the effectiveness of these systems in the rehabilitation of LBP sufferers.
6. To develop optimal seating systems for both static and vibrational environments to reduce the risk of developing LBP, as well as part of the strategy for preventing recurrent episodes of LBP.
7. To evaluate promising exercise programs applied to specific subgroups of LBP sufferers.
8. To develop a methodology for the evaluation of the worker and the workplace as a means of occupational rehabilitation of LBP sufferers.
9. To develop local, regional, and national LBP educational programs for the public-at-large, including traditionally under-represented socioeconomic and minority groups as well as health care professionals and engineers. ■