Worksite Complementary and Alternative Medicine Group Programs Reduce Chronic Pain Henry Ford Medical Group, Detroit, Michigan

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Henry Ford Medical Group experts in complementary and alternative medicine (CAM) have provided worksite programs since 2006 using research-proven CAM therapies. In an effort to improve employee health outcomes, the innovative approach focuses on group treatment and teaching self-care techniques. CAM protocols include chiropractic methods, needling acupuncture, electrical stimulation of acupuncture points, St. John neuromuscular therapy, movement re-education, and mind-body therapy. The **Worksite Complimentary Alternative Medicine Programs** first focused on back pain, followed by any type of neuromuscular pain, and recently expanded to address stress-related illness. In 2009 the **"Stress- and Pain-Free Living"** programs offered to Chrysler and Henry Ford Health System employees showed elimination of chronic pain in 45% of participating employees and improvement in 49% with stress-related chronic illnesses with 9% totally resolved (with no need for medication) at program end.

Stress and Pain-Free Living Program at the Worksite http://henryford.com/body.cfm?id=53038

Aim

To improve employee health outcomes and decrease costs for self-insuring corporations in Michigan by delivering innovative, research-proven, onsite group wellness programs using complementary and alternative medicine (CAM) therapies. The Stress- and Pain-Free Living (SPFL) programs offered to employees of Chrysler and Henry Ford Health System in 2009 were designed to build on the successes of our previous award-winning group programs, "We've Got Your Back" program in 2007 for chronic back pain and "Pain Free in 2008" program for all chronic neuromuscular pain.

Measures

Participants reported their stress levels, as well as pain levels, on a 0-10 numeric rating scale before and after participating in the program. Other outcomes tracked included disability (Oswestry Disability Questionnaire), depression (PHQ-9), perceived stress (Perceived Stress Scale), and sleep quality (Pittsburgh Sleep Quality Index).

Changes

Group sessions (up to 84 per group) included education plus intervention for a total of 18-24 contact hours over a 6-7 month period:

• **Guided Relaxation for New Awareness:** Learning to relax, breathe properly, to recognize and intervene with stress as well as automatic habits and patterns that have been supporting the persistence of chronic pain.

- Somatic Movement Education for New Awareness: Simple movement routines to recognize and release over-contracted muscles, which is critical for reducing and eliminating pain.
- Home Health Activities: Participants take responsibility for improving their condition by listening to guided relaxation CDs and doing somatic movement routines at home and at work to alleviate pain.
- We expanded our partnerships to more Henry Ford Health System locations. This increased the number of employees served.

Results

A total of 421 Chrysler and Henry Ford Health System employees attended group sessions. These employees reported a total of 2,471 pain conditions at the start of the program. Back, shoulder, neck, knee, and hip were the 4 highest reported chronic pain areas.

- Stress Elimination: 14% of participants reported elimination of stress by program end. On average, stress levels were reduced from 4.82 at pre to 2.45 at post on the 0-10 scale.
- Pain Elimination: Research shows that once pain becomes chronic, it is resistant to intervention. In our previous programs at Chrysler and Henry Ford Health System ("Pain Free in 2008"), 35% of chronic pain conditions were eliminated. In the new Stress and Pain-Free Living programs, 45% of chronic pain conditions were eliminated. On average, pain levels were reduced from 3.73 at pre to 1.35 at post on the 0-10 scale.
- Quality of Life Outcomes: Significant reductions occurred in disability, depressive symptoms, and perceived stress, and significant improvement occurred in sleep quality. Of 645 stress-related chronic illnesses reported by participants, 49% were improved and 9% resolved (i.e., completely under control with no need for medication) at program end.
- **Program Satisfaction:** 92% of participants expressed satisfaction with the program and an interest in taking another workplace health program.
- **Time Involvement:** We tested and showed that 18 contact hours offered to Henry Ford Health System employees was as effective at producing significant beneficial results as the 24 contact hours offered to Chrysler employees.

Next Steps/Lessons Learned

- Online surveys to determine clinical eligibility for program participation and to facilitate collection of pre-program, interim program, and post-program data make future program development simple and efficient.
- Communication and advertising methods enable us to reach a wide group of potential program applicants and participants in a short time period; worksite recruitment is ideal and fast.
- Word of mouth advertising is continuing to fuel new programs. We filled 9% of this year's Henry Ford Health System programs through referrals from previous participants.

Pain-Free in 2008: Worksite Complementary Alternative Medicine Programs http://www.henryford.com/body.cfm?id=52277

Aim

In 2007, the "We've Got Your Back" program offered to groups of Chrysler employees experiencing chronic back pain resulted in elimination of back pain in 55% of the reporting participants at the end of the program. That workplace-based program used a hands-off group intervention involving complementary and alternative medicine (CAM) therapies. For 2008, we aimed to expand the number of chronic pain conditions addressed. The goal was to reduce or eliminate chronic pain in the back, hip, neck, shoulder, other limb joints, and headache, together in the same group of employees, many of whom had more than one pain

condition to address. The new programs, offered under the umbrella name of Pain Free in 2008, employed a similar hands-off group approach using CAM intervention; the programs were available to Chrysler employees and expanded to be available to Henry Ford Health System employees.

Measures

- Self-reporting pain areas before and after program interventions.
- Outcomes measures for disability (Oswestry Disability Questionnaire), depression (PHQ-9), perceived stress (Perceived Stress Scale), and sleep quality (Pittsburg Sleep Quality Index).
- Patient satisfaction.

Changes

- The Pain Free in 2008 program participants experienced a total of 24 contact hours over a 7-month period. Sessions included:
- Guided Relaxation for New Awareness (a language-based mind-body connection technique) and Somatic Movement Education for New Awareness (a non-language-based mind-body connection technique).
- Assignment of home "wellness activities" included listening to Guided Relaxation CDs and performing somatic movement education routines. Participants tracked and reported their compliance daily.
- Group feedback from the homework assignments given at each session.
- A lecture/educational component.
- We transitioned to online surveys for program eligibility, and pre-, mid- and postprogram health outcomes data collection. We modified the program time based on feedback from the two organizations, which wanted shorter sessions; original 2-hour group classes totaling 12 sessions were redesigned to 1.5-hour group classes totaling 16 sessions.

Results

- A total of 176 Chrysler and Henry Ford Health System employees attended the workplace group sessions (up to 60 per group). A total of 375 pain conditions were reported by the participating employees at the start of the program. Back, neck, hip, and shoulder were the four highest reported chronic pain areas.
- Pain Elimination or Reduction: 35% of pain conditions were eliminated by the end of the programs. Additionally, in over 76% of pain conditions, the pain levels were reduced by at least 20%. These results contradict research reports that once pain becomes chronic, it is resistant to intervention.
- Quality of Life Outcomes: Significant reductions occurred in disability, depressive symptoms, and perceived stress, and sleep quality significantly improved.
- Patient Satisfaction: 82% of participants expressed satisfaction with the program and an interest in taking another workplace health program.

Next Steps/Lessons Learned

- The flexibility and effectiveness of this innovative model has the potential to reach many other southeast Michigan workforces and beyond. Specific tools allowed this program model to be easily implemented, tailored, and adapted:
- Online surveys to determine clinical eligibility for program participation and to facilitate collection of pre-program, interim program and post-program data.
- Workplace communication and advertising methods to reach a wide group of potential program applicants and participants in a short-time period; worksite recruitment was ideal and fast.
- Design of a structural pain program that will reach an even broader range of pain sufferers (beyond back pain).

- Effective measurements of program results were critical to this project's success. Results were reported to the organizations' leadership on a regular basis which enabled timely resolution of any program issues and provided a high level of program support.
- Team Approach: This program was a joint effort between the Henry Ford Medical Group's Center for Integrative Wellness (CIW), Health Alliance Plan (HAP)'s Purchaser Initiatives, Chrysler, and many Henry Ford Health System Departments and Centers including Employee Health and Wellness, Center for Health Promotion, Public Relations, Biostatistics, and the Center for Health, Education, and Wellness. CIW team members led the clinical design and execution of the program. HAP team members provided the program opportunities at Chrysler through the existing client relationship, in addition to the logistical, financial, and organizational coordination of the project. Henry Ford Public Relations coordinated all efforts to recruit employees; Employee Health and Wellness provided funding for several programs; the Center for Health Promotion assisted with health outcomes data collection: Biostatistics provided data analysis; and the Center for Health, Education, and Wellness provided oversight and monitoring of program content in partnership with the CIW. This model leveraged a cross-function of skills and synergies from all involved to build a highperforming, effective, and efficient program to serve the chronic pain needs of participating employees.

For more information about these projects, contact Dr. Robert Levine, Robert A. Levine, PhD, CHt, Director, Center for Integrative Wellness, Henry Ford Medical Group, (248) 342-7555, rlevine1@hfhs.org.

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