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## FINAL GRANT REPORT

### Evaluating the Benefits of Enhanced Access to Medical Care for Patients at UNITE's Union Health Center

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## Evaluating the Benefits of Enhanced Access to Medical Care for Patients at UNITE's Union Health Center

The primary objective of this project was to assess the health care delivery and financing innovations established at the Union Sanatorium Association Union Health Center (UHQ in New York City for members of the Union of Needletrades, Industrial and Textile Employees (UNITE). In New York State, Workers' Compensation (WC) cases for occupational diseases are frequently controverted (challenged) by the WC insurance carriers. This in turn usually leads to treatment delays because most third party insurance will not pay for medical care for work-related conditions.

Investigators from the Mount Sinai Irving J. Selikoff Center for Occupational and Environmental Medicine (COEM) evaluated the experience of 135 consecutive patients diagnosed with occupational carpal tunnel syndrome (OCTS) who filed for workers' compensation in New York State between 1991 and 1994 by review of WC Board records. The results for these 135 patients showed that only 21% of these workers' compensation claims were initially accepted. The remaining 79% either had their claims controverted by the WC insurance carrier or received no response from the carrier. Of the group of controverted/no response cases which had been ruled on by a WC judge at the time of the study, 96% were found in favor of the worker. However, it took an average of 429 days from the date the case was opened by the WC Board to when it was ruled on by a judge. Some cases took longer than 1,000 days to be decided. Furthermore, the average time between the date on which a claimant's physician first requested authorization for treatment and the date on which the WC Board first authorized that treatment in hearing was 226 days. When carpal tunnel surgery was considered alone, the average duration of this time period was 318 days.<sup>1</sup>

Recognizing the problem of frequent case controversion and subsequent treatment delays for workers with occupational diseases, a demonstration program funded by a grant from the Robert Wood Johnson Foundation was initiated at the occupational clinic at the UHC in 1996 to provide workers with immediate access to diagnostic tests and medical treatment for work-related injuries and illnesses, regardless of WC claim status or coverage disputes. This demonstration program was developed by the UHC, UNITE, and the Mount Sinai Selikoff COEM. Recent data from the demonstration program found that UNITE members with work-related injuries and illnesses had to wait, on average, 567 days from the time they filed their WC claim to the time it was adjudicated by the New York State WC Board. UNITE members with OCTS had one of the longest waiting periods, 666 days, from claim filing to adjudication, demonstrating the continued need to provide medical services to UNITE members awaiting adjudication of their WC claims.

Based on the findings from the demonstration project, the Robert Wood Johnson Foundation subsequently funded an evaluation project that is described in this final report. The primary goal of the evaluation project is to explore the experiences of UNITE members filing for WC in New York State who are participating in the UHC program and to evaluate their perceptions of the demonstration program's impact on symptoms, medical outcomes, work and financial status, and the process and quality of care. The specific objectives and the accomplishments made in meeting each objective during the entire grant period are described below.

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<sup>1</sup> Herbert R, Janeway K, Schechter C. Carpal tunnel syndrome and workers' compensation among an occupational clinic population in New York State. *American Journal of Industrial Medicine*, 35:335-342, 1999.

## Objectives

**Objective #1: Enroll UNITE members with occupational cumulative trauma symptoms (OCTS) into prospective and retrospective study groups.** Two groups of study participants were recruited for this project. The first group includes UNITE members newly diagnosed with OCTS and filing a New York State WC claim for OCTS at the UHC WC program from January 1, 1998-November 30, 2000. Study participants in this first group form the prospective study group and they are followed for one year and interviewed in-person at baseline, 6- months, and 12- months post-baseline. The second group includes UNITE members diagnosed with OCTS who filed a New York State WC claim for OCTS at the UHC WC program between January 1, 1996-December 31, 1997. These study participants are interviewed once and constitute the retrospective study group. Their WC claims are either pending or have been adjudicated at the time of interview.

**Objective #2: Enroll UNITE members with other upper extremity disorders into the prospective and retrospective study groups.** The survey questionnaire did not need to be modified for this because the questions refer to cumulative trauma disorder, not carpal tunnel syndrome, and the functional symptoms target the full upper extremity. Information was collected on diagnosis and statistical tests for differences by diagnosis (OCTS versus other upper extremity) can be analyzed.

**Objective #3: Conduct baseline, 6-month, and 12-month follow-up interviews with prospective study participants and conduct one interview with retrospective study participants.** Once someone gives consent to be in the study either a prospective baseline interview or a retrospective interview is completed soon after. During the project period, 63 study participants completed a baseline interview and 60 completed a retrospective interview. The follow-up interviews are scheduled for 6- and 12-months from the baseline interview completion date. In the prospective group, 41 people completed a -6-month interview, and 28 completed a 12-month interview. We expect the number of completed follow-up interviews to increase in the upcoming months. Although funding from the RWJF has ended, 6-and 12-month interviews that are pending will continue to be conducted by project staff and will be funded through other funds from the Health Policy Research Center.

Study participants have been very cooperative in completing the interviews, which take 1-2 hours to complete. The refusal rates for the project have been very low with a 97% acceptance rate by potential participants to enter the study and a 92% completion rate of follow-up interviews. Interviews are conducted in English, Spanish, and Chinese (Cantonese). An interview booklet was developed as part of this project and translated into Spanish and Chinese along with the consent forms. English copies of the interviews are located in the Tool Box ([http://dev-www.umassmed.edu/workerscomp/Tool\\_Box/](http://dev-www.umassmed.edu/workerscomp/Tool_Box/)). Translations are available upon request.

**Objective #4: Collect data from C-4 Forms and New York State Workers' Compensation Board files.** All study participants were asked to sign a release of information, which is notarized, in order for the research team to access their case files at the New York State Workers' Compensation Board. There were no refusals during the grant period to sign the release of information. Data from C-4 forms were collected at the research site since these forms were completed by treating providers. Diagnosis, date of diagnosis, work status, disability due to work, and disability level were collected from the C-4 forms. In addition, other information pertaining to an individual's WC claim were also obtained from WC records maintained at the UHC such as data from C-3 ) forms, C-7 forms, and various WC documents reporting on the WC hearings and decisions made at the hearings. Due to the completeness of the WC records

maintained at the UHC it was not necessary for the research team to access the files located at, the New York State WC Board. However, the WC Board files can be accessed, if necessary, since signed releases are on file for all study participants allowing access up to five years from the date of signing,

**Objective #5: Data coding, data entry, data cleaning, and data analysis.** As interviews were completed for this project they were entered into SPSS data base files in preparation for analysis. Interviews with discrepant or missing information were promptly returned to the interviewers for correction. Codebooks and coding decisions are maintained for each data base file. All completed interviews have been entered into SPSS data base files and have been cleaned and analyzed.

**Objective #6: Dissemination of project findings.** Project findings were most recently presented at two national conferences: The National Occupational Injury Symposium in Pittsburgh, PA on October 18, 2000 and two presentations at the American Public Health Association Annual Meeting in Boston, MA on November 15, 2000. Plans are also underway to prepare several manuscripts for publication in peer-reviewed occupational medicine and health policy journals.

**Objective #7: Compare the UNITE garment workers with a different labor group, specifically computer users treated at Mount Sinai COEM.** The findings for the UNITE garment workers are compared, with findings from a separate study of computer users (funded separately). In-person interviews were conducted with over 100 Mount Sinai COEM patients diagnosed with upper extremity work-related musculoskeletal disorders (WRMSDs) at baseline and follow-up (approximately 20 months post-baseline). These patients had a first visit at Mount Sinai COEM between 1997-1998 and they reported a minimum of three hours of computer use per work-day at the time of diagnosis or were diagnosed by a health care provider as having a prior upper extremity cumulative trauma disorder due to computer use. The addition of this new objective to the study allows comparisons to be made between the experiences of two different groups of workers filing WC claims in New York State for similar illnesses. As illustrated below, the addition of this objective allows us to more effectively highlight the disparities that exist in the treatment and compensation of WRMSDs for different groups of workers.

## Results

The main results of this research project are summarized below.

**Demographics:** The UNITE garment workers are primarily female, non-white, born outside the United States, in their mid-fifties, and have been working in the garment industry for 18 years. The Mt. Sinai computer users are primarily female, white, born in the United States, 40 years old, and have been working in their respective occupations for 9 years.

**Top WRMSD Diagnoses:** All of the study participants have multiple work-related diagnoses. CTS is the top diagnosis for both the garment workers and the computer users. Other top diagnoses include forearm tendonitis, lateral epicondylitis, tension neck, and wrist/digit tendonitis.

**Occupation:** The majority of UNITE study participants are sewing or knitting machine operators. The Mt. Sinai study participants are in occupations requiring use of the computer such as data entry, secretarial, office worker, media professional, director, and administrator.

**Work Status:** Both the garment workers and the computer users experience negative impacts on their work status due to their WRMSDs. However, the garment workers experience much more adverse events and they also report more disability. Over 80% of the garment workers were not working at baseline and did not return to work during the study period. Many were either temporarily disabled (36%) or permanently disabled (33%) at follow-up. The computer users were more likely to be working at baseline (78%) but they also experienced negative outcomes in work status with only 70% actively working at 20-month follow-up and 14% temporarily or permanently disabled.

**Reasons for stopping work:** Pain is the top reason for stopping work among the garment workers and fear of re-injury is the top reason among the computer users.

**Ergonomic modifications:** Only 4% of the garment workers in the retrospective group received a work-site change (20% requested a change) compared with 45% of the computer users who received a work-site change.

**Treatment delay:** The garment workers wait an average of 7-10 months from their first WRMSD symptom before seeking medical care while the computer users wait an average of 7 months.

**Reasons for treatment delay:** The top reasons for treatment delay reported by the garment workers are "thought I'd get better", "couldn't get off work", "worried about losing job", and "thought WRMSD was part of job".

**Mean levels of pain:** The garment workers report higher mean levels of pain for all parts of the upper extremity as compared with the computer users. There is no reduction in pain over time for both groups as the mean levels of pain remain the same or increase at follow-up.

**Functional status and symptom severity:** The garment workers scored "moderate difficulty" on the functional status and symptom severity scales<sup>2</sup>. The functional status scale measures the ability to write, button clothes, hold a book while reading, grip a phone handle, open jars, do household work, carry groceries, bathe, and dress. The symptom severity scale measures the severity of hand and wrist pain, weakness, tingling, and numbness.

**SF-12 scores:** The garment workers scored significantly lower than the general U.S. population on the physical and mental health SF-12 scales<sup>3</sup>. These results indicate serious impairments in physical and mental health functioning among the garment workers due to their WRMSDs.

**Insurance and financial status:** The garment workers experience a dramatic loss of medical benefits and income over time due to their WRMSDs. At baseline, 87% of the garment workers have medical insurance, at the 6-month follow-up 59% have medical insurance, and by the 12-month follow-up only 48% have it. Likewise, at baseline, 33% report using up their savings which increases to 53% at the 6-month follow-up and 62% at the 12-month follow-up.

**Annual income before and after WRMSD:** The garment workers are lower wage workers than the computer users and they experience significant declines in their income after developing their WRMSD. Before developing their WRMSD, 36% of the garment workers had incomes from \$0-\$10,000 and 62% had incomes from \$10,001-\$20,000. After developing their WRMSD, 95% of the garment workers have incomes from \$0-\$10,000. The computer users also experienced a decline in their income after developing their WRMSD but not to the extent of the garment workers. Before their WRMSD, none of the computer users had income from \$0-\$10,000 but after their WRMSD 15% were in this category.

**Financial problems due to WRMSD:** The garment workers report having major financial problems due to their WRMSD (48% in the prospective group and 67% in the retrospective group). Additionally, 90% of the garment workers in the retrospective group reported no income at one time because of their WRMSD. In contrast, only 21% of the Computer users report having major financial problems because of their WRMSD.

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<sup>2</sup> Brigham and Women's Hospital Hand Surgery and Upper Extremity Service, 1993.

<sup>3</sup> Ware, JE, Kosinski M, Keller SD. SF-12: How to Score the SF-12 Physical and Mental Health Summary Scales. Boston, MA: The Health Institute, New England medical Center, 2nd Edition, 1995. p. 33).

**New York State WC claim adjudication:** On average, it took 682 days and 725 days for WC claims to be adjudicated by the New York State WC Board for the prospective and retrospective groups of garment workers. This is a much longer time period than the 429 days experienced by the earlier Mt. Sinai group and the 567 days experienced by the earlier UHC group of garment workers reported in Section I of this report. Among the garment workers, 50% of the claims were controverted (or challenged) in the prospective group and 69% were controverted in the retrospective group. Additionally, only 17% of the claims in the prospective group have been adjudicated (accepted) while 62% have been adjudicated in the retrospective group. We expect that, over time, more claims will be adjudicated in the prospective group since these claims have been filed more recently and are still in process.

**Satisfaction with WC system:** The majority of the garment workers rated as poor the time to get a hearing (64%) and the time to resolve the claim (76%) as. The majority felt the judge was fair to both sides (67%) although 14% who needed a translator reported that one was not available at their hearing.

**Conclusions:** The UNITE Union Health Center project was conducted among a predominantly older, female, immigrant, non-English speaking, low wage population. The majority of the garment workers were not working at the time they filed their WC claim and many never returned to work during the project period. There were substantial delays in WC claim adjudication for UNITE garment workers of almost two years. The garment workers suffered severe financial hardships as a result of their work-related illness and continue to have physical impairment 3-4 years after filing their claim. The computer users treated at Mt. Sinai COEM also experienced financial and physical hardships but not to the extent of the UNITE garment workers. The results of this project indicate that there are multiple barriers to effective medical management of WRMSDs and it is likely that these barriers are not experienced equally by all workers. Our preliminary work among garment workers and computer users suggests that low wage, immigrant workers may be particularly Vulnerable to the impact of WRMSDs, and may sustain greater adverse health, employment, and economic outcomes than other workers.