

## **Name of Program/Strategy: Wellness Outreach at Work**

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### **1. Overview and description**

Wellness Outreach at Work provides comprehensive risk reduction services to workplace employees, offering cardiovascular and cancer risk screening and personalized follow-up health coaching that addresses alcohol and tobacco use. Wellness Outreach at Work begins with outreach to all employees through voluntary, worksite-wide health risk screening, including biometric measures of health status, delivered as near to workstations as is practical. The screening directs employees' attention to health issues and to their own health risks and provides baseline information about the health risks of the total workforce. The screening takes approximately 20 minutes per employee and includes immediate feedback on health risks and first steps that might improve them. After the screening, employees are triaged for follow-up based on the number and severity of the health risks identified. Within the context of personalized, one-on-one coaching for cardiovascular health improvement and cancer risk, wellness coaches provide employees with education and counseling on alcohol use, tobacco use, weight control, and health management.

### **2. Implementation considerations (if available)**

Computerized records allow employees to track their own health status and to access tools and information that can help them sustain their progress. Individual employees' health information is

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confidential, but profiles of changing risk factors for the workforce as a whole are made available periodically to employees and to management. The program includes long-term support for employees, both directly and through the corporate environment (e.g., alcohol-free public functions, peer encouragement of health promotion).

### **3. Descriptive information**

<b>Areas of Interest</b>	Substance abuse prevention
<b>Outcomes</b>	1: Alcohol consumption 2: Smoking cessation 3: Overall health risks
<b>Outcome Categories</b>	Alcohol Tobacco
<b>Ages</b>	18-25 (Young adult) 26-55 (Adult) 55+ (Older adult)
<b>Genders</b>	Male Female
<b>Races/Ethnicities</b>	Black or African American White Race/ethnicity unspecified
<b>Settings</b>	Workplace
<b>Geographic Locations</b>	Urban Suburban
<b>Implementation History</b>	Wellness Outreach at Work, first implemented in the early 1970s, has been used with 6,500 individuals in 36 worksites. Approximately 5,000 individuals have participated in two major evaluation studies.
<b>NIH Funding/CER Studies</b>	Partially/fully funded by National Institutes of Health: Yes Evaluated in comparative effectiveness research studies: Yes
<b>Adaptations</b>	No population- or culture-specific adaptations were identified by the applicant.
<b>Adverse Effects</b>	No adverse effects, concerns, or unintended consequences were identified by the applicant.
<b>IOM Prevention Categories</b>	Universal

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## **4. Outcomes**

### **Outcome 1: Alcohol consumption**

<b>Description of Measures</b>	<p>During face-to-face interviews at the initial screening and the rescreening at the end of the 3-year intervention period, participants answered the following questions:</p> <ol style="list-style-type: none"> <li>1. Do you ever drink alcoholic beverages such as beer, wine, or liquor? (yes/no)</li> <li>2. On how many days in an average week do you drink something alcoholic? (0-7)</li> <li>3. On the days that you drink, how many drinks do you have? (open ended)</li> <li>4. How many drinks do you have in an average week? (open ended)</li> </ol>
<b>Key Findings</b>	<p>One study examined drinkers who were at the highest risk level of alcohol consumption (those drinking three or more drinks three or more times per week) at initial screening. At rescreening, 38% of those who received counseling lowered their drinking to levels that did not put them at risk, compared with 22% of those who did not receive counseling. Because the drinkers at highest risk represented a small percentage of the study population, this finding was not statistically significant.</p> <p>In another study, among drinkers who were at risk for alcohol-related problems (men who drank more than 3 drinks per day or 12 drinks per week and women who drank more than 2 drinks per day or 9 drinks per week) at initial screening, 68% of those who received ongoing follow-up counseling had reached a "safe" level of alcohol consumption at rescreening. By comparison, 46% of those who only received one brief, end-of-screening counseling session had reached a safe level at rescreening (<math>p &lt; .05</math>).</p>
<b>Studies Measuring Outcome</b>	Study 2, Study 3
<b>Study Designs</b>	Experimental
<b>Quality of Research Rating</b>	3.1 (0.0-4.0 scale)

### **Outcome 2: Smoking cessation**

<b>Description of Measures</b>	During face-to-face interviews at the initial screening and the
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	rescreening at the end of the 3-year intervention period, participants provided a history of their cigarette smoking (e.g., ever smoked, how often).
<b>Key Findings</b>	<p>In one study, worksites that provided follow-up monitoring and counseling along with a menu of four other service options (guided self-help, one-on-one formal consultation, mini-group interventions, and full-group classes) had higher rates of participation in worksite smoking cessation services than worksites with the regular offering of wellness-related activities (<math>p &lt; .001</math>). Further, among employees identified as having smoking as a cardiovascular disease (CVD) risk factor, those who received follow-up and a menu of service options had higher rates of smoking cessation (<math>p &lt; .01</math>) and lower rates of smoking recidivism (<math>p &lt; .01</math>) at rescreening than those who received the regular offering of programs.</p> <p>In another study, among those identified at initial screening as smokers or former smokers, 65% of those who received counseling were not smoking at rescreening, compared with 53% of those who did not receive counseling (<math>p &lt; .001</math>).</p>
<b>Studies Measuring Outcome</b>	Study 1, Study 2
<b>Study Designs</b>	Experimental, Quasi-experimental
<b>Quality of Research Rating</b>	2.8 (0.0-4.0 scale)

### **Outcome 3: Overall health risks**

<b>Description of Measures</b>	Measures of overall health risks, obtained at the initial screening and the rescreening at the end of the 3-year intervention period, included systolic and diastolic blood pressure, weight, total cholesterol, and HDL cholesterol.
<b>Key Findings</b>	<p>In one study, worksites that provided follow-up monitoring and counseling along with a menu of four other service options (guided self-help, one-on-one formal consultation, mini-group interventions, and full-group classes) had higher rates of participation in worksite blood pressure treatment (<math>p &lt; .05</math>) and weight loss (<math>p &lt; .001</math>) services than worksites with the regular offering of wellness-related activities. Among employees identified as having high blood pressure or overweight as CVD risk factors, those who received follow-up and a menu of service options had better blood pressure control (<math>p &lt; .05</math>) and greater weight loss (<math>p &lt; .01</math>) at rescreening than those who received the regular offering of programs.</p>

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	<p>In another study, overall health risks improved among all study groups - those who received counseling and those who did not-- from initial screening to rescreening: (1) of participants with hypertension, the percentage with blood pressure under control increased from 29% to 53% (p &lt; .001); (2) of participants with hypercholesterolemia, the percentage with cholesterol under control increased from 2% to 27% (p &lt; .001); and (3) of participants 20% or more overweight, 31% lost 3 or more pounds (p &lt; .001), and 19% lost 10 or more pounds (p &lt; .001).</p> <p>In a third study, employees who received ongoing follow-up counseling had significant outcomes related to CVD risks, with a higher proportion of participants becoming risk free (p &lt; .01) and a lower proportion of participants developing new CVD risks (p &lt; .05) compared with employees who only received one brief, end-of-screening counseling session.</p>
<b>Studies Measuring Outcome</b>	Study 1, Study 2, Study 3
<b>Study Designs</b>	Experimental, Quasi-experimental
<b>Quality of Research Rating</b>	3.3 (0.0-4.0 scale)

5. **Cost effectiveness report (Washington State Institute of Public Policy – if available)**
6. **Washington State results (from Performance Based Prevention System (PBPS) – if available)**
7. **Who is using this program/strategy**

Washington Counties	Oregon Counties

## 8. Study populations

The studies reviewed for this intervention included the following populations, as reported by the study authors.

Study	Age	Gender	Race/Ethnicity
<b>Study 1</b>	18-25 (Young adult) 26-55 (Adult) 55+ (Older adult)	89.5% Male 10.5% Female	70.7% White 29.3% Race/ethnicity unspecified

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<b>Study 2</b>	18-25 (Young adult) 26-55 (Adult) 55+ (Older adult)	Data not reported/available	63% Race/ethnicity unspecified 37% Black or African American
<b>Study 3</b>	18-25 (Young adult) 26-55 (Adult) 55+ (Older adult)	64.5% Female 35.5% Male	81% White 10.8% Race/ethnicity unspecified 8.2% Black or African American

## **9. Quality of studies**

The documents below were reviewed for Quality of Research. Other materials may be available. For more information, contact the developer(s).

### **Study 1**

Erfurt, J. C., Foote, A., & Heirich, M. A. (1991). Worksite wellness programs: Incremental comparison of screening and referral alone, health education, follow-up counseling, and plant organization. *American Journal of Health Promotion*, 5(6), 438-448.

### **Study 2**

Heirich, M., & Sieck, C. J. (2000). Worksite cardiovascular wellness programs as a route to substance abuse prevention. *Journal of Occupational and Environmental Medicine*, 42(1), 47-56.

### **Study 3**

Heirich, M., Sieck, C. J., Klykulo, K., & Bonnington-Kouri, K. (2002). Moderation counseling as a route to substance abuse prevention: M- CARE's DrinkWise and Health Risk Appraisal Programs at the University of Michigan. Final Report for grant number 6 U 1 K SPO8146-03-02, awarded by SAMHSA/CSAP to the Greater Detroit Area Health Council and the University of Michigan.

### **Quality of Research Ratings by Criteria (0.0-4.0 scale)**

External reviewers independently evaluate the Quality of Research for an intervention's reported results using six criteria:

1. Reliability of measures
2. Validity of measures
3. Intervention fidelity
4. Missing data and attrition
5. Potential confounding variables
6. Appropriateness of analysis

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For more information about these criteria and the meaning of the ratings, see [Quality of Research](#).

<b>Outcome</b>	<b>Reliability of Measures</b>	<b>Validity of Measures</b>	<b>Fidelity</b>	<b>Missing Data/Attrition</b>	<b>Confounding Variables</b>	<b>Data Analysis</b>	<b>Overall Rating</b>
<b>1: Alcohol consumption</b>	2.6	3.0	3.0	4.0	2.9	3.3	3.1
<b>2: Smoking cessation</b>	2.5	2.6	2.8	3.1	2.8	3.4	2.8
<b>3: Overall health risks</b>	3.6	3.6	2.8	3.5	3.1	3.5	3.3

## **Study Strengths**

The studies were well designed and improved over time with the introduction of randomization at the subject level, use of health care utilization records, and use of more reliable and valid measures. The concordance between level of cardiovascular risk and indicators of drinking severity is an indication of the validity of both measures. In one study, a very high certainty of consistent service delivery could not be documented given the dispersal and sheer scope of the work conducted at the four experimental sites; however, counselors underwent a 2-day training, and new counselors were shadowed for the first few visits. Rescreening rates were above 80% of targeted respondents, which is high for large-scale studies like these. Missing data were rare, and in two of the three studies, missing values were imputed using the conservative LOCF (last observation carried forward) method. The authors considered and addressed many potential confounds. Logistic and other more sophisticated regression techniques were sometimes used and showed fairly clean relationships between the variables tested.

## **Study Weaknesses**

The non-biometric measures used are not well developed and have questionable reliability and validity. Some of the services provided (e.g., alcohol counseling) were complex and highly vulnerable both to inexpert usage and drift. Some important sources of potential bias were uncontrolled. For example, counselors, who could not have been blind to subjects' group assignment, may have been biased about the superiority of individual versus group follow-up counseling. In one study, workers randomized to the group condition wanted to cross over to the individual condition, and workers who were not included in the study wanted to participate in the individual follow-up. This necessitated modifications to the analytic scheme. The analytic techniques used were sometimes too simplistic. For example, partial or semi-partial statistics could have been used to remove the influence of pre-intervention status from change scores.

## **10. Readiness for Dissemination**

The documents below were reviewed for Readiness for Dissemination. Other materials may be available. For more information, contact the developer(s).

### **Dissemination Materials**

NREPP submission overview

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Program Web site (University of Michigan's Worker Health Program Web site), <http://www.ilir.umich.edu/wellness/>

Sieck, C. J., Heirich, M., & Major, C. (2004). Alcohol counseling as part of general wellness counseling. *Public Health Nursing*, 21(2), 137-143.

Wellness Outreach at Work program history and summary

Wellness Outreach at Work replications manual

## **Readiness for Dissemination Ratings by Criteria (0.0-4.0 scale)**

External reviewers independently evaluate the intervention's Readiness for Dissemination using three criteria:

1. Availability of implementation materials
2. Availability of training and support resources
3. Availability of quality assurance procedures

For more information about these criteria and the meaning of the ratings, see Readiness for Dissemination.

<b>Implementation Materials</b>	<b>Training and Support Resources</b>	<b>Quality Assurance Procedures</b>	<b>Overall Rating</b>
3.0	3.0	1.0	2.3

## **Dissemination Strengths**

A number of implementation materials and supports are available on the program Web site. Individual implementation protocols are detailed and easy to locate online. Training and implementation support and a client performance monitoring tool are available to implementing organizations for a fee. Outcome monitoring is encouraged.

## **Dissemination Weaknesses**

Implementation of the intended program depends greatly upon appropriate assessment of organizational needs, and little guidance is provided for accomplishing this task. Some implementation resource links on the program Web site led to error pages. Training and support services are provided by a private company, and the content of these services is unclear. No training performance or implementation fidelity instruments are available to support quality assurance.

## **11. Costs (if available)**

The information below was provided by the developer and may have changed since the time of review. For detailed information on implementation costs (e.g., staffing, space, equipment, materials shipping and handling), contact the developer.

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<b>Item Description</b>	<b>Cost</b>	<b>Required by Program Developer</b>
Protocols and intervention materials	Free	Yes
Licensing for use of program database, with computer support	\$25,000 plus \$2 per employee per month entered into database	No
2-day, on-site or off-site training	\$12,000 for up to 20 participants	

### **Additional Information**

Employers interested in implementing the intervention must retain wellness coaches, health care professionals with certification in a health specialty and additional training as a "generalist." They should be qualified to provide counseling on a wide range of health issues and to refer clients to specialists when needed. Holtyn & Associates can be contracted to perform the full program implementation at a cost of \$400 per employee.

## **12. Contacts**

### **For information on implementation:**

Ken Holtyn  
(269) 382-5897  
ken@holtynhpc.com

### **For information on research:**

Max Heirich, Ph.D.  
(734) 668-1008  
mheirich@umich.edu

Cynthia J. Sieck, Ph.D.  
(937) 286-4918  
cynthiasieck@gmail.com

**Learn More by Visiting:** <http://www.ilir.umich.edu/wellness/>