Occupational Wellness & Workers Compensation University of California WorkStrong Program

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#### Workplace Wellness Programs are Effective When Well Done

#### Lots of Literature

By Katherine Baicker, David Cutler, and Zirui Song

Workplace Wellness Programs Can HEALIM Arrow NO. 2 (2010): -©2010 Project HOPE---The People-to-People I **Generate Savings** 

ABSTRACT Amid soaring health spending, there is growing interest in workplace disease prevention and wellness programs to improve health and lower costs. In a critical meta-analysis of the literature on costs and savings associated with such programs, we found that medical costs fall by about \$3.27 for every dollar spent on wellness programs and that absenteeism costs fall by about \$2.73 for every dollar spent. Although further exploration of the mechanisms at work and broader applicability of the findings is needed, this return on investment suggests that the wider adoption of such programs could prove beneficial for budgets and productivity as well as health outcomes.

ering costs. Much discussion has taken to the employee. place about investment in disease prevention and health promotion as a way of achieving bet-terest in such programs among employers-and ter health outcomes at lower costs. President especially large employers. In 2006, 19 percent Barack Obama has highlighted prevention as a of companies with 500 or more workers reported central component of health reform, as have ma- offering wellness programs, while a 2008 survey jor congressional reform proposals.<sup>12</sup> Work- of large manufacturing employers reported that place-based wellness programs, which could af- 77 percent offered some kind of formal health fect prevention, have been showcased in these and wellness program.<sup>64</sup> Consistent with the evireform proposals, the popular press, and con- dence presented below, small firms seem slower gressional hearings.3,4

This enthusiasm for workplace programs grams offered are still quite limited in scope.9 stems in part from the fact that more than 60 percent of Americans get their health insurance cov-gested a positive return to employers' invest erage through an employment-based plan,5 as ment in prevention. For every dollar invested well as from the recognition that many employ- in the program, the employer saves more than ees spend the majority of their waking hours in the dollar spent. The Citibank Health Managethe workplace-which makes it a natural venue for investments in health. There are several rea-of \$4.50 in medical expenditures per dollar sons that employers might benefit from invest-ments in employee wellness. First, such pro-fornia Public Employees Retirement System grams might lead to reductions in health care (CalPERS), Bank of America, and Johnson and costs and thus health insurance premiums. Sec- Johnson have similarly estimated sizable health ond, healthier workers might be more produc-care saving sfrom wellness programs.<sup>11-13</sup> Despite

n an environment of so aring health care tive and miss fewer days of work. These benefits spending, policymakers, insurers, and may accrue at least partially to the employer employers express growing interest in (such as through improved ability to attract methods of improving health while low- workers), even if the primary benefits accrue

These factors may motivate the increasing into offer such programs, and many of the pro-Several well-publicized case studies have sug-

FEBRUARY 2010 29:2 HEALTH AFFAIRS 1

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#### **Average Savings**

- Medical cost ROI = \$3.27:1
- Absenteeism cost ROI = \$2.73
- Overall average ROI = \$6:1
- Must focus on studies of effective wellness

## The Magnitude of Health Risk Costs

Healthcare Costs: Which Matters More Age or Health Risk? Annual Medical Costs \$11,909 \$11,965 \$10,785 \$7,991 \$12,000 38.927 \$5,710 \$7,989 \$5,114 \$9,000 \$6,625 \$4.620 \$6,000 \$3,353 \$2,565 \$5,756 High \$4,613 \$3,000 \$3,73 Med Risk 0 \$2,193 \$2,740 1.776**S0** Low 19-34 35-44 45-54 55-64 65-74 75 +Age Range Edington. AJHP. 15(5):341-349, 2001

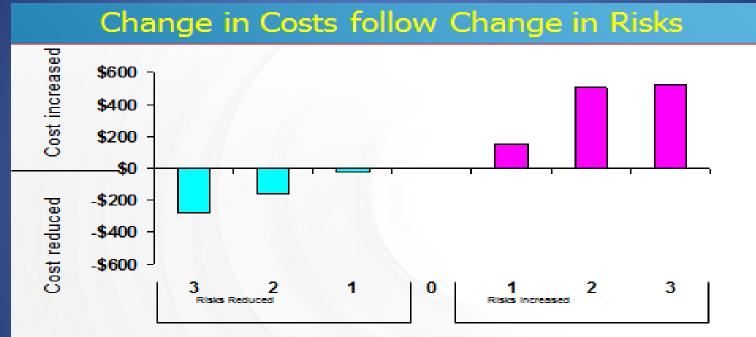
## HRA Risk Tiers and Cost: 2001 \$s

#### Association of Risk Levels with Cost Measures

| Outcome<br>Measures      | Low Risk | Medium<br>Risk | High Risk |
|--------------------------|----------|----------------|-----------|
| Short-term<br>Disability | \$ 120   | \$ 216         | \$ 333    |
| Worker's<br>Compensation | \$ 228   | \$ 244         | \$ 496    |
| Absence                  | \$ 245   | \$ 341         | \$ 527    |
| Medical &<br>Pharmacy    | \$1,158  | \$1,487        | \$3,696   |
| Total                    | \$1,751  | \$2,288        | \$5,052   |

Wright, Beard, Edington. JOEM. 44(12):1126-1134, 2002

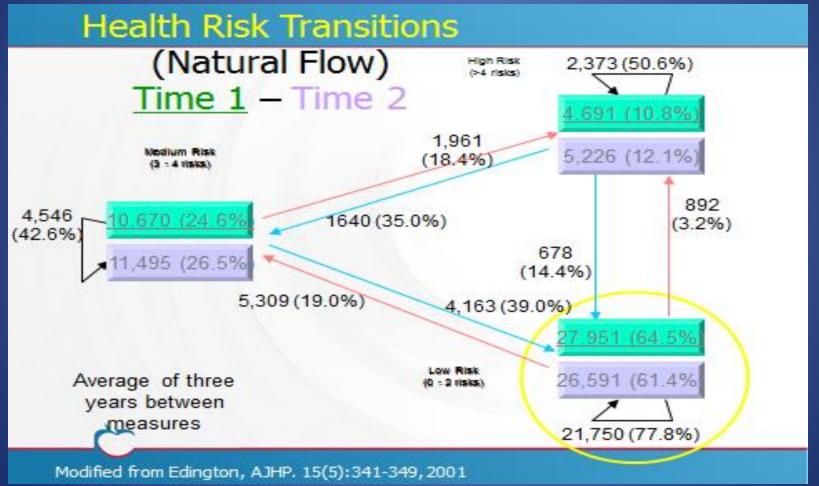
# Reducing Personal Health Risks Reduces Costs and Vice Versa



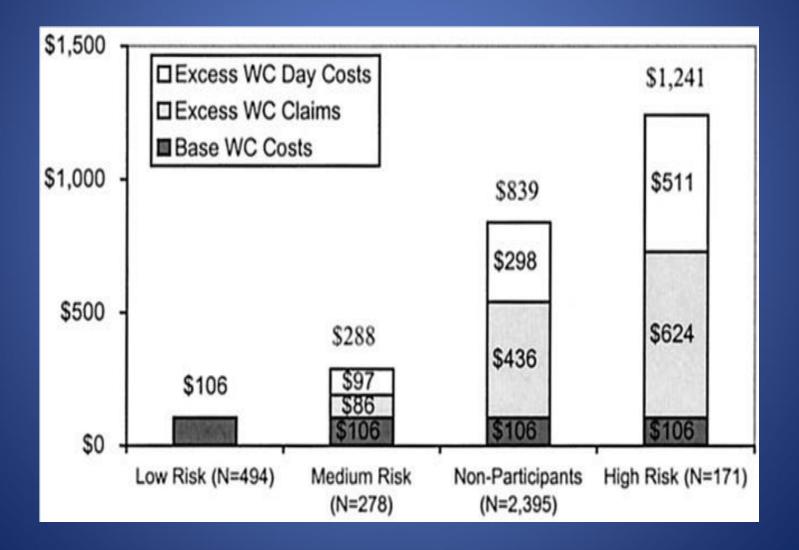
Overall: Cost per risk reduced: \$215; Cost per risk avoided: \$304 Actives: Cost per risk reduced: \$231; Cost per risk avoided: \$320 Retirees<65: Cost per risk reduced: \$192; Cost per risk avoided: \$621 Retirees>65: Cost per risk reduced: \$214; Cost per risk avoided: \$264

Updated from Edington, AJHP. 15(5):341-349, 2001.

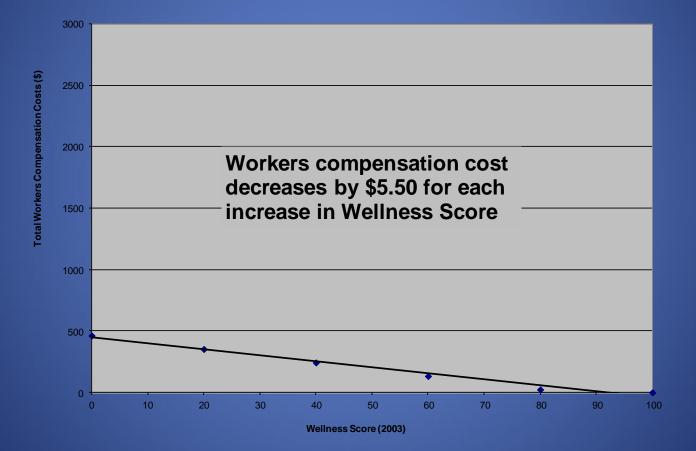
# Reduce the "Natural Flow" to Higher Risk = Savings



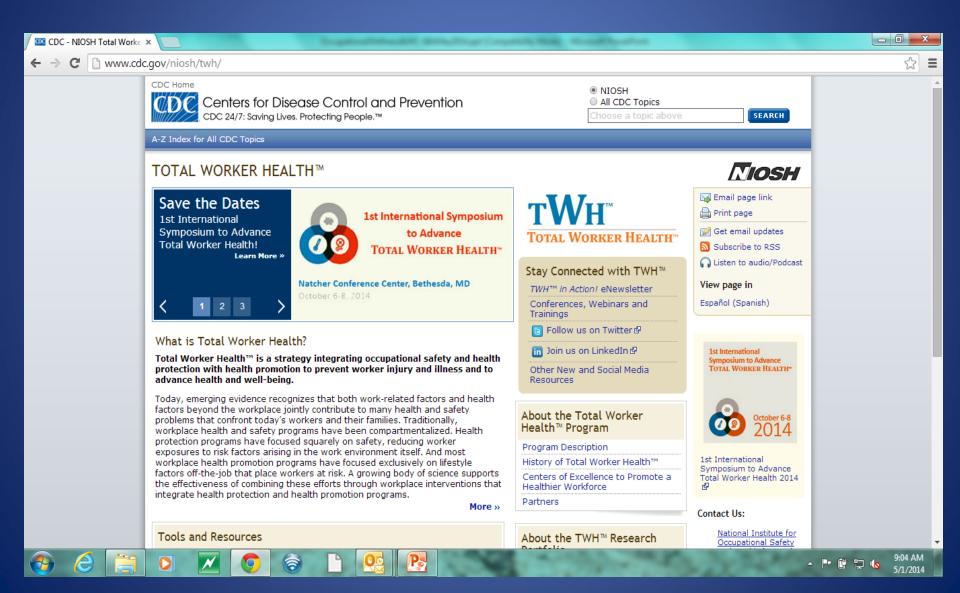
#### Personal Health Risks Also Predict WC Costs

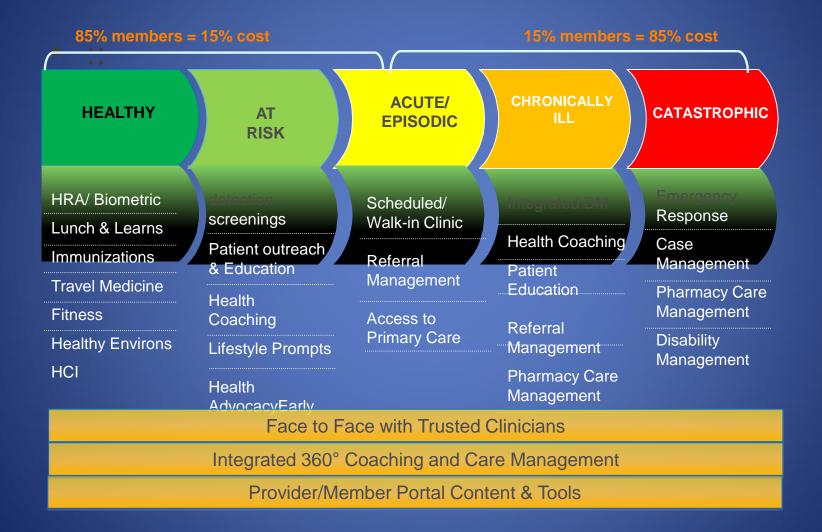


#### We See This for WC As Well



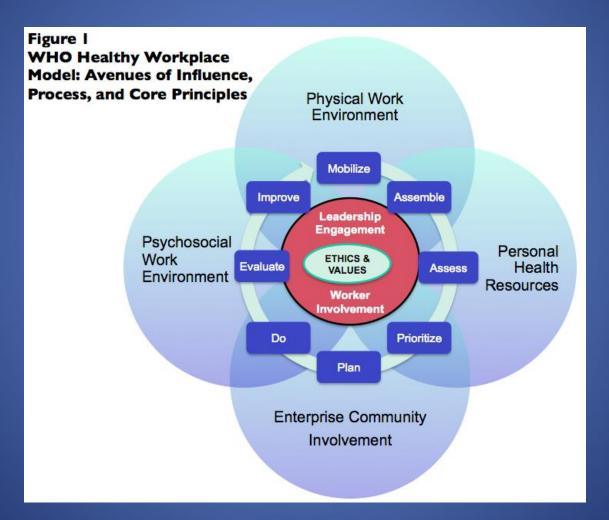
#### NIOSH CDC Total Worker Health







#### WHO Model



### UCSF Pilot: Pre-WorkStrong

- 3 year program to improve personal fitness
- Selected 73 claimants as 'most likely to succeed'
- Provided personal fitness programs to each
- Saw no subsequent WC claims over the 3 years of follow up
- Would have expected many claims
- Served as an early pilot rationale to expand approach across UC campuses

# UC WorkStrong Program Rationale

#### UCSF Pilot

- UC has a stable long term work force
- Eligible were employees with 2 or more WC claims in last 2 years
- 1/3 of UC WC claims occur in individuals who have filed a prior WC claim
- First claims are 60 65% of all claims but only 45-60 % of ultimate WC costs
- Each subsequent claim is more expensive than the prior claim

## UC WS Program design

- OH is the owner and partners with others
- Potential eligibles for WS chart is screened by Occupational Health Medical providers
- Screened by HR
- Contacted by WS coordinator to invite in
- Medically cleared by OH provider
- Sent to Recreation, RDs, life coaching, smoking cessation, other wellness programs on campus
- 12+ personal fitness coaching visits, plus other wellness services

#### **Cost of Subsequent Claims**



#### **Estimate of Savings Needed**



UC Target Population for Starting WorkStrong year 1 from 6/2012

- <u>System Wide</u>
- 32,593 employees with multiple claims (120,184 injuries)
- 7,149 employees with 5 or more claims (22%)
- 1,401 employees with 10 or more claims (4%)
- 2,206 employees with multiple claims 7/1/09 - 6/30/11
- 926 of the 2,206 employees have open claims
- Highest number for one employee 48

UC -Wide WorkStrong Data 6/1/2012 - 3/31/14

- Referrals to WS 3885
- Enrolled in WS- 631
- Graduates 331\*
- New injuries(claims) 89
- Individual claimants 65
- Ave weeks to graduate- 17.5
- Ave cost per participant \$2220
- \* Most of balance are mid program

#### UCLA WS Program

- Wellness options for participants:
  - -1 on 1 Personal Fitness Training- 12-18 sessions
  - -1 on 1 sessions with a RD 6-10 sessions
  - -Smoking Cessation Program
  - -Life Coaching/Biofeedback (37 % select)
  - -Other UCLA sponsored wellness offerings (exercise classes, meditation, boot camps
    - farm fresh produce delivered weekly, etc.)

#### UC WorkStrong Program Participation Through Sept 30, 2014 Total number of unique referrals - 4,615

| Location      |             | # enrolled |               | #graduates |
|---------------|-------------|------------|---------------|------------|
|               |             |            |               |            |
| UC Berkeley   |             |            | 35            | 61         |
| UC Davis      |             | 1          | )6            | 77         |
| UC Davis Med  | l. Ctr.     |            | 54            | 30         |
| UC Irvine     |             |            | 51            | 28         |
| UC Irvine Med | d. Ctr.     |            | 14            | 18         |
| UCLA Campus   | s/Med. Ctr  | 2          | 24            | 107        |
| UC Riverside  |             |            | 36            | 18         |
| UC Santa Bar  | bara        |            | 51            | 31         |
| UC Santa Cru  | Z           |            | 27            | 18         |
| UC San Diego  | )           |            | 36            | 61         |
| UC San Franc  | isco        |            | 47            | 32         |
|               |             |            |               |            |
|               |             |            | (Sedgwick     |            |
| Total for all | UC Campuses | 5 8        | 1grads = 456) | 481        |

#### Actual versus Expected Number of Subsequent WC Claims by Months



#### WS Actual vs. Expected WC Claims at 25 Months

#### **Subsequent Claims**

| Months after Referral          | Actual   | Ex       | pected  | Actual minus Expected        |
|--------------------------------|----------|----------|---------|------------------------------|
| 0 to 2 Months                  | 24       | 21       | 3       |                              |
| 0 to 3 Months<br>3 to 6 Months | 34<br>38 | 31<br>26 | 5<br>12 |                              |
| 6 to 9 Months                  | 21       | 28       | (7)     |                              |
| 9 to 12 Months                 | 9        | 27       | (18)    |                              |
| 12 to 15 Months                | 7        | 24       | (17)    |                              |
| 15 to 18 Months                | 13       | 21       | (8)     |                              |
| 18 to 21 Months                | 5        | 17       | (12)    |                              |
| 21 to 24 Months                | 6        | 13       | (7)     |                              |
| 24 to 27 Months                | 0        | 9        | (9)     |                              |
| 27 to 30 Months                | 1        | 6        | (5)     |                              |
| 30 to 33 Months                | 0        | 4        | (4)     |                              |
| 33 to 36 Months                | 0        | 3        | (3)     |                              |
| Total All Months               | 134      | 209      | (75) 3  | 6 % reduction below expected |

## Incurred Loss Cost of Subsequent Claims: Actual vs. Expected

- Overall, claims subsequent to WorkStrong were approximately \$1.15 million, which is 56% below expected costs of \$2.65 million.
- WC costs are \$1.5 M less than expected
- The actual ultimate losses are based on incurred losses valued as of September 30, 2014, projected to ultimate with case reserve development factors.

#### **Typical Program & Cost at UCLA**

Typical program includes:
12 -18 Personal Training Sessions\*
6 - 10 Sessions with a Dietitian\*
6 month gym membership
Ave. cost per participant: \$1737

\*Programs are customized based on patient needs

# What patients are saying about WorkStrong...

"I feel like you guys really care, and I am so grateful for all the help and support from the Workstrong program."

"I was able to avoid shoulder surgery and feel stronger now and more able to do my job."

"Workstrong literally saved my life. I was so unhealthy, and now my injuries are better, I have tons of energy and I love eating healthier."

"After a year off of work due to a stubborn injury, I'm now back at work and feeling great thanks to this program!"

"If you are interested in changing to a healthier lifestyle, WorkStrong will give you the tools to do it! I've made improvements in my diet and exercise habits that I expect to last a lifetime. Because of WorkStrong I discovered that I do have the ability to make those changes."

"My pain has gone away (after a year of pain). I am healthier in every sense of the word – physically, mentally, and spiritually. I feel very fortunate to have been a part of this WorkStrong program – thank you!"

#### Next Steps

- Continue to monitor and report results
- Increase participation capture rate

   Currently is 18 % of eligibles; aim to double that
- Keep WS graduates on track
  - Survey
  - WorkStronger pilot at UCLA
- Translate to group health
  - Explore GH savings in WS population if possible
  - Communicating with HEE, Kaiser, Stanford, others

#### Q & A Discussion

#### • Thank You

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#### Resources

- NIOSH Total Worker Health <u>http://www.cdc.gov/niosh/twh/</u>
- Dee Edington <u>Zero Trends</u> <u>http://www.edingtonassociates.com/index</u>
- "Workplace Wellness Programs Can Generate Savings" in <u>Health Affairs</u> Feb. 2010 <u>http://content.healthaffairs.org/content/29/2</u> /304.abstract

