THE HEALTH PROJECT

APPLICATION FOR THE 2022 C. EVERETT KOOP NATIONAL HEALTH AWARDS

Documenting Excellence in Health Promotion and Value-on-Investment

The mission of The Health Project is to seek out, evaluate, promote, and disseminate the lessons learned from exemplary health promotion and disease prevention programs (also commonly referred to as wellness or wellbeing programs) with demonstrated effectiveness in improving employee population health and related business outcomes. To win the C. Everett Koop National Health Award, programs need to be rigorously evaluated and applicants must be willing to share their results as credible evidence of their accomplishments.

Eligibility

To be recognized, a program must employ comprehensive and evidence-based population health management strategies designed to improve the health and well-being of the entire population under consideration and across the health continuum. The program must have been in place a minimum of three years. The application must demonstrate that the program is well integrated into the organization's culture, delivers a *therapeutic dose* (i.e., sufficient intensity in an appropriate sequence), and has yielded significant improvement in population health and noteworthy business results (e.g., medical cost savings, reduced absenteeism, fewer accidents, increased worker productivity, or improvements in other indicators documenting value-on-investment [VOI] such as improved attraction/retention of talent, job satisfaction, engagement, and morale).

Programs may include individual health improvement components in such areas as physical activity, healthy eating, stress management, tobacco cessation, weight control, medical self-care, evidence-based preventive screenings, and disease management – all integrated into an organizational culture that promotes health and well-being.

Application Submission

Please create a PDF copy of your application and e-mail to: **info@thehealthproject.com**

No paper applications will be accepted

Please cc rgoetze1@jh.edu
Ron Z. Goetzel, Ph.D.,
Chairman, Program Selection Task Force

DEADLINE FOR SUBMITTING PROGRAM APPLICATIONS: 5:00 PM EST ON TUESDAY, MAY 31, 2022

Include the following information on the cover page of your application:

Name of Program:
Company/Organization:
Number of Employees:
Address:
City/State/Zip:
Contact Person:
Telephone:
Email address:
Program URL, if applicable:
Vendor(s), if applicable:
Word count:

APPLICATION GUIDELINES AND REQUIREMENTS

For the Koop Award, programs are judged on their documented evidence of improved employee health and for demonstrating a business case for investing in the health and well-being of populations. Therefore, 60% of the Koop Award application is focused on a description of program evaluation methodology and results. To the extent possible, please highlight the connection between your program design and outcomes. Outstanding applications provide enough information to establish a link between measurable outcomes and specific program elements, thereby demonstrating how results can be attributed to the organization's efforts.

The structure of the program is important, so attention should be given to leadership commitment and organizational culture, strategic planning, communications/marketing/promotion, intervention components, integration into benefit design, program coordination, and data management/evaluation. We recognize that a health promotion program will be most effective when it is offered in the context of broader organizational efforts related to business strategy and practices, benefit design, absenteeism rules, career development, and other relevant policies. We are interested in hearing about these complementary efforts in the context of the overall program. However, the focus of the application should be on core health promotion initiatives. Make the best case for the impact your program has had on population health improvement/risk reduction and its VOI demonstrated by improved business results. This includes describing innovative approaches that have contributed to the success of the program.

The table below summarizes the application requirement categories and their respective weight.

Application Category	Weight (% of total score)
PROGRAM DESIGN & IMPLEMENTATION	
1. Organizational Strategy and Support	10%
2. Health Management Strategy, Program Goals, and Tactics	10%
3. Program Participation and Engagement	10%
OUTCOMES	
4. Health Outcomes	30%
5. Business Outcomes	30%
INNOVATION	
6. Innovative Approaches	10%
Total	**100%**

Please report all individuals and organizations involved in the completion of your application. Specifically, you should report any vendors or other third parties who helped prepare the application and describe their role (e.g., consultant, data analyst, editor, provider, university faculty).

Please adhere to the highlighted word counts. A font size of 12 is required for the narrative. This font size is not required for graphs and tables, but all content should be legible.

APPLICATION CHECKLIST

Please check each item below to confirm that the application meets these requirements. If your completed checklist does not indicate that all these requirements have been met, your application will not be reviewed.

1.__ **Three or more years of program implementation.** Applications will not be reviewed for programs that have not been operational for at least three full years after the planning period and initial launch. Where applicable and practical, please provide similar time horizons for the data reported (i.e., three or more years of participation, health, and business results).

2.__ **Methodology and results tables.** Completed tables describing the methodology and results for participation, health, financial, and comparative analysis outcomes.

3.__ **Word count and format.** Word count may not exceed **7500** words, excluding the tables and supplemental material. Please report this word count on the cover page. All text (excluding tables, charts, and graphs) must be in 12-point font.

4.__ **Supplemental materials**. If supplemental materials are provided, they must not exceed five pages.

CORE APPLICATION

Applications should include all the content described in Sections I-V below. Eight elements of the application are scored while the rest of the content provides important context. The eight scored elements are: 1) Individual Health Improvement Efforts and Strategy, 2) Organizational Health Improvement Efforts and Strategy, 3) Evaluation Methodology, 4) Participation Levels, 5) Health Outcomes, 6) Organizational Outcomes, 7) Comparative Analysis, and 8) Innovation. Reviewers score these eight elements as "exceeding standards", "meeting standards" or "not meeting standards." In general, applicants "meeting standards" in all elements are strong candidates for Honorable Mention recognition, and those "exceeding standards in multiple elements are strong Koop Award candidates. Appendix A describes the Evaluation Methodology Standards and Appendix B describes Program Outcome Standards.

Section I: Executive Summary <u>(maximum 500 words)</u>

Provide a succinct overview of the population health and organizational goals for health and wellbeing efforts, the target population, and the organizational and individual-level strategies used to pursue goals. Summarize the evaluation methodology and the impact of health and well-being efforts on participation, health outcomes, and organizational outcomes. Briefly mention any unusual challenges the organization faced, and creative approaches developed to address them.

Section II: Narrative Description of Program (maximum 2,000 words):

A. Organization Description (maximum - 500 words)

Briefly describe your organization. Your application may include such items as the organization's culture, business strategy, location, core products, number of employees, and any major benefit design changes that occurred during the period covered by the evaluation and how these changes may have affected results. If applicable, please include information regarding the unique characteristics of your employee population, which may include the number and percentage of employees who are racial/ethnic minorities, low-wage workers, have a work disability, are field-based, work from home, or are members of union groups.

B. Health Improvement Efforts and Strategy (maximum – 1,500 words)

1. What are the organization's health and well-being goals?
You may address such issues as: What specific elements of individual health and well-being are prioritized? What specific organizational or business outcomes (e.g., medical spending, productivity, engagement) are prioritized?

2. **How did the organization develop these goals**?
You may address such issues as: Were goals the result of challenging trends in employee health status and related costs or productivity reductions, expressions of employee interest, a shift in organization purpose or values, a champion or advocate in leadership, or some other factor? To what extent were goals informed by data or best practice scorecards? Which stakeholders were involved? Who were the target populations (e.g., employees and their families, customers, community)? How have goals evolved over time?

3. Scientific Principles
You may address such issues as: What, if any, underlying scientific principles in health behavior change, culture change, and organizational development have been important to you or your vendors in guiding health and well-being efforts?

4. **What is the organization doing to achieve its health and well-being goals?**
Describe relevant organization-level and individual-level efforts to improve health, wellbeing, safety, and business results and the timeline of these efforts.

a. Individual-level Efforts. What has the organization done to support individuals in their efforts to improve their health-related behaviors? If applicable, describe these for employees and spouses/domestic partners. You may address any of the issues below:
- What are the components of the program and which segments of the population can access them?
- How is the organization enhancing awareness of the link between lifestyle habits and relevant program offerings?
- What intrinsic (e.g., sense of pride, being part of a team, gaining a new skill) and extrinsic (e.g., financial incentives) strategies is the organization using to motivate individuals to engage in program offerings and practice healthy lifestyles?

- What is the organization doing to help the eligible population build the skills necessary to change and maintain healthy lifestyle habits?
- What is the organization doing to increase the opportunities for employees to practice a healthy lifestyle?

b. Organization-level Efforts. What changes have been made to create an organizational culture that supports health and well-being? You may address such issues as:

- Staffing structure: leadership, program staff, partners, and vendors
- Executive, manager, and grassroots support
- Resources allocated: out-of-pocket budget, value of leadership time invested, value of volunteer staff, value of space and sources of these resources
- Integration of employee well-being into organization-level purpose / values / beliefs statements
- Integration into health plan, hiring, compensation, training, performance review, paid time-off or absence, flextime, remote work, tobacco, and other policies
- Realignment of health-related departments or shifts in the organizational hierarchy
- Onsite or community facilities to support physical activity, nutritious eating, emotional well-being, medical care access, and other aspects of good health
- Strategies to enhance psychosocial work climate and work practices such as manager sensitivity training, team building, expectations for working during off hours
- Strategies to address disparities in race, age, ethnicity, cultural background, gender or gender identity, education, job type (salary vs. non-salary), work location (headquarters vs. remote offices), shift schedule, or other characteristics
- Other strategies important in health and well-being efforts

Section III. Evaluation Methodology and Results (maximum - 4,000 words)

Please list the methods used and results achieved for participation, health, and organizational outcomes. The description should include:(1) evaluation design (including variables of interest and structure of the evaluation); (2) population/sample size and composition; (3) measures, measurement tools, and information about their validity and reliability; and (4) statistical analyses including their appropriateness given the measures described.

See Appendices A-C for guidance on appropriate methodologies for measuring different outcomes.

Strong applications demonstrate success in engaging a large portion of the employee population in health improvement initiatives, resultant sustained health improvements, and business outcomes. Applications should describe these outcomes following the format below.

A. <u>Participation</u>

Provide descriptive statistics demonstrating overall reach and sustained participation in core components of the program for the eligible population. For example, you may report:

- Which employees, spouses and dependent children were and were not eligible?

- What portion of the eligible population participated in at least one aspect of the program each year? Please provide annual participation rates, including both number of participants (N) and percent (%) of eligible population, for each year of program implementation. When available, report the demographics of participants and non-participants.
- In which aspects of the program did employees participate? Where available, report separate annual participation rates and multi-year trends (N, % eligible) for assessment components (e.g., health assessment questionnaire, biometric screening) and lifestyle behavior change components of the program.
- Was participation sustained year-round? Where available, provide data (N, % eligible) demonstrating that participants remained involved in the program at least periodically throughout the year. This may include data on the number of months / quarters participants engage in program activities, or data on the number of program activities participants completed during the year.
- Passive exposures. Where available, report the level to interventions that do not require intentional joining, enrollment, or engagement, such as marketing campaigns, smoke free campuses, enhanced nutritional offerings, walking paths, or other forms healthy environments.

The strongest applications will include a "participation cascade" table or graph that reports the number and percent of employees eligible for the program, enrolled, and engaged, long-term participants.

B. <u>Health Outcomes</u>

Provide data demonstrating that the program has yielded meaningful health improvements in the population. Data may include improvements in health behaviors or biometrics that are the focus of the program (e.g., weight loss/maintenance for a weight management program). An organization's results are strengthened by demonstrating positive changes in the health of the population compared to national health guidelines (e.g., percent having normal blood pressure).

Some examples of approaches for demonstrating health outcomes may include the following:

- Have participants in the program made positive changes in lifestyle knowledge, behaviors, biometric risk factors (e.g., BMI, blood pressure, cholesterol), health conditions or diseases? Data addressing this question typically compare each participant's baseline and most recent follow-up result for all program participants or, alternatively, for participants in specific program components.
- Has the lifestyle knowledge, behaviors, biometric risk factors, conditions, or diseases of program participants improved more than in eligible non-participants? Demographic and other relevant baseline differences between the participant and non-participant groups should be controlled in the data analysis whenever possible.
- Has the health of the eligible population improved more than comparable populations external to the organization? Differences between the organization's population and the comparison group's population should be addressed to the extent the organization has access to demographic and baseline health data for this purpose.

C. Organizational Outcomes

Provide data demonstrating that the program and related health outcomes have yielded meaningful improvements in business results important to the organization.

Some examples of organizational outcomes include the following:

- Have organizational outcomes improved among participants in the program? Responses to this question would ideally include baseline and three implementation years of data. The analysis would ideally demonstrate a change in trend following program implementation.
- Have organizational outcomes improved more in sites or individuals exposed to the program than in sites or individuals not exposed? Responses to this question would ideally include baseline and three implementation years of data and control for baseline differences between groups.
- Have overall organizational trends improved more than in comparable organizations since the organization implemented its health and well-being program? The strongest evaluation approach is comparing prior and current trends in the organization versus prior and current trends in similar organizations. One or two years of pre-program trend data and three years of implementation data would ideally be provided for the applicant's organization and comparison organizations. If comparison organization data are not included in the evaluation, one or more additional years of the organization's trend data would ideally be provided (5+ years total).

D. Financial Analyses

Applicants are encouraged (but not required) to report on the value-on-investment (VOI), return-on-investment (ROI), or cost-effectiveness-analyses (CEA) of their program.

Section IV. Innovation and other important factors

Please share innovative approaches the organization has developed to address issues such the following.

- What is the organization doing to address diverse segments of the employee population and enhance health equity?
- How has the organization addressed any difficult challenges, including COVID-19 or natural disasters?
- How has the organization adapted to serve remote and distributed workforce; epigenetic testing; and other clinical developments.
- Has the organization used any innovative strategies in any aspect of planning, implementing, or evaluating program efforts?
- What efforts have been implemented to support the health of the broader community beyond employees and dependents?

Section V. Supplemental Documentation (5-page limit): Applicants have the option to provide non-duplicative documentation that supports the information provided in the application. This might include senior management letters of support, abstracts of articles published in peer-reviewed journals, consultant summary reports, insights from best practice scorecards, survey results, internal memoranda, or other evaluation

Appendix A: Evaluation Methodology Recommendations

Introduction

The most important requirement to win the Koop Award is conducting a rigorous analysis of programmatic and organizational data that demonstrates:

(1) high levels of year-round participation in the initiative;
(2) meaningful health improvements in the population; and
(3) meaningful organizational improvements linked to the program.

Many past applicants with seemingly outstanding programs have fallen short because they failed to use or clearly communicate the required rigor in their evaluation, provided incomplete data, or failed to demonstrate a credible link between their program and the organizational outcomes they report. We created this Appendix to guide applicants in the level of rigor required in evaluations to meet the standards of the Koop Award and the level of detail required to communicate that rigor in the application.

Basic Methodology Requirements

The strongest applications use rigorous actuarial or statistical methods to measure health and organizational outcomes. Both approaches involve analyzing trends from a baseline period through the required minimum of three years of program implementation.

You may use any of the approaches described in this Appendix in conducting your evaluation depending on your organization's priorities and access to program, organizational and comparison data, and the expertise to conduct the analysis. Your application should include descriptions of your evaluation design, population and sample size and composition, measurement tools including any available information about validity and reliability. and statistical or actuarial analyses appropriate to the data distributions. Regardless of the approach you use, your methodology must represent best-in-class standards for applied evaluation.

Many past Koop Award applications have evaluated health outcomes based on changes in the medical costs of participants compared to non-participants. If you use this basic evaluation approach, your health outcome evaluation should include all employees (and eligible spouses and other dependents) in the eligible population with baseline measures and one or more follow-up measures during the 3+ year program implementation period. If your application is based on enhancements to a pre-existing program, you can use the year before you implemented these enhancements as your baseline year. Program impact is based on comparing the baseline health measure with the most recent measure during the multi-year implementation period. These measurements must be at least one year apart, and the average time between measurements must be reported in the application. Applications merit the strongest award consideration if they report time-over-time health impact based on a large portion of the eligible employee population.

Organizational outcome evaluation should include all eligible employees (e.g., all health-plan eligible employees). Program impact based on a "differences-in-differences" approach that compares the differences between the baseline measure and the most recent post-implementation-year measure for the participant

versus non-participant groups is acceptable. The evaluation should include all relevant eligible employees (and eligible spouses and other dependents) (e.g., all employees continuously enrolled in the health plan, excluding outliers based on standard actuarial practices). Applications merit the strongest award consideration if they account for baseline demographic and health-status differences in the participant and non-participant groups, either through an actuarial weighting scheme or by using an appropriate statistical approach such as covariate analysis or propensity score matching. Statistical significance testing results should be reported.

Evaluation Design Options

This section summarizes four general evaluation designs that meet the standards for Koop Award consideration. Not all these designs are appropriate for evaluating organizational outcomes, and this is indicated in the relevant summary.

A. **Pre-Post Participant Change:** This approach evaluates changes in the participant population following program implementation and is acceptable for evaluating a program's health outcomes (e.g., changes in tobacco use or BMI) if comparison data are not available, which is often the case if these outcomes are measured using components of the program such as health assessments or worksite-based screenings. Analyses typically compare each participant's baseline and most recent follow-up health assessment questionnaire and biometric screening result for all program participants or, alternatively, for participants in specific program components. To provide reasonable evidence that changes in participant health trends are related to the program, applicants must include at least one year of pre-program baseline data and three or more post-implementation years in their analysis. Measures collected in the first year of the implementation period (e.g., health assessment) may be used as baseline data for this evaluation approach. This approach is not appropriate in evaluating overall organizational outcomes since it excludes employees who do not participate in the program.

B. **Participant vs. Non-Participant Change:** This approach compares changes in participants versus non-participants in the eligible population to determine whether participants show more positive change following program implementation. At minimum, the evaluation must include one baseline year and three or more implementation years of data and compare individuals' baseline status with their most recent status following implementation. Applicants should not limit the participant group to those who have participated every year, since this self-selected subset of employees is likely to represent the most motivated segment of the population. If data (e.g., health assessment, biometric screening) are collected at the beginning of the first year of implementation as a gateway to intervention programs, they can be used as the baseline data in evaluating these programs. Because the participant and non-participant groups may differ in demographics, health status and motivation, the analysis should control for these differences to the extent possible. Using established statistical matching techniques to control for differences when comparing participant vs. non-participant changes is regarded as a best-practice approach in evaluating workplace programs.

C. **Pre-Post Eligible Population Change:** Appropriate for evaluating both health and organizational outcomes, this approach evaluates changes following program implementation in an organization's entire eligible population, (e.g., slowed growth or reductions in medical costs, reduced illness absences, improved customer satisfaction or net promoter scores). To provide reasonable evidence

that changes in an organization's trends are related to the program, applicants should include a minimum of two years of pre-program baseline data and three or more post-implementation years in the analysis. Applicants are encouraged to increase the number of years beyond these minimums, since this will more convincingly demonstrate changes in trends following program implementation in the absence of an external comparison group.

D. **Eligible Population vs. Comparison Population Change:** This approach compares trends in the entire eligible population to changes in an external comparison population. The comparison group may be business units within the applicant's organization that have not implemented the program, other similar organizations, or another appropriate source. At minimum, the evaluation should include a baseline year and three or more implementation years of data and compare individuals' baseline status with their most recent status following implementation. Because the eligible population and the comparison group are likely to differ in demographics and health status, the analysis should control for these differences to the extent possible. Although often not feasible, this "quasi-experimental" approach to comparing change in the entire eligible population versus an external population, while controlling for group differences, may be the strongest evaluation design available for workplace program evaluation. Applicants are encouraged to increase the number of years beyond these minimums, since this will more convincingly demonstrate changes in trends following program implementation in the absence of an external comparison group.

Common Health and Organizational Outcomes

We welcome applications to measure program impact on a wide range of health and organizational outcomes, including but not limited to those listed below.

Health outcomes to consider in program evaluation include changes in health-related knowledge, behaviors, biometric risk factors, conditions, and diseases. Health data sources may include self-reports (e.g., health assessment surveys), biometric health screenings (e.g., BMI, blood pressure, cholesterol, glucose), devices (e.g., steps, sleep, weight), fitness assessments, medical records (e.g., claims-based risk scores, biometric values, chronic conditions), or other health-related data sources.

Organizational outcomes employers have traditionally used in evaluating their programs include medical costs, absenteeism, disability rates and costs, and workers compensation claims. More recently, employers have incorporated presenteeism, turnover/retention, employee engagement, performance, net promoter score (NPS) or other customer satisfaction measure, employee experience such as employee NPS (eNPS) or other employee satisfaction measure, and external/customer/community reputation into their value equation.

Additional requirements for several popular evaluation approaches are described below.

Health and Cost Risk Migration

Applicants may evaluate changes in health or cost risk using a "risk migration" approach. The health risk migration approach evaluates movements over time in the number and percent of employees with health

risks identified through a health assessment questionnaire or biometric screening that can be classified as low-, moderate-, and high risk, or similar categories. The cost migration approach tracks movements over time in the number and percent of employees classified as low-, moderate-, and high-cost, or similar categories.

In risk migration evaluations, classifications are based on a health risk index that simply counts the number of health areas where a participant is "at risk" based on national health guidelines. Health areas included may encompass self-reported health risk behaviors (e.g., tobacco use, physical activity, nutrition, stress), as well as biometric risk factors (e.g., BMI, blood pressure, cholesterol/HDL) if screening data are available. Risk classification varies across providers, but a typical classification is 0-2 (low risk), 3-4 (moderate risk) and 5+ (high risk) elevated health risks. Risk migration evaluation normally includes statistical testing to determine whether the observed risk movement demonstrates true change. In cost migration evaluations, evaluators often establish goal-appropriate cost cut-points using percentiles in their baseline cost distribution. For example, they may define the low-cost group as baseline costs below the 50th percentile, the moderate-cost group as baseline costs between the 50-89th percentile, and the high-cost group as baseline costs of 90th percentile and above.

While demonstrating overall risk and cost migration using this index approach meets our standard for evaluating change in health status and medical spending, applicants using the risk migration approach should report migration/change in risk status in at least 3-5 specific health areas their program prioritizes.

Reporting on specific health areas should include all individuals with baseline and current data and report the number and percent at different risk levels at both points in time (e.g., number and percent who smoke, get adequate physical activity, eat healthy, etc.). Risk and cost migration analysis must also use single cohorts with both pre- and post-implementation data to demonstrate individual migration, although the risk migration cohort and the cost migration cohort do not need to be the same if this approach is used to evaluate both health and organizational outcomes.

Medical Cost Trend

A growing number of employers are measuring the overall rate of annual increase in medical spending to evaluate the impact of their programs. This is sometimes called "Medical Trend," sometimes with an ultimate goal to reach "Zero Trend" (i.e., no annual increase in medical spending per employee). This approach makes a lot of sense for employers who implement programs to control medical spending because it incorporates the net effect all elements of a program, including engaging a critical mass of employees in meaningful health enhancement efforts that yield improved health and, ultimately, result in reduced medical utilization. In this approach, employers calculate medical cost savings by comparing the annual rate of increase in the employee population to the rate expected or to the rate experienced by peer employers.

The challenge in this evaluation approach is identifying the medical cost savings achieved by improved health from other causes, such as changes in policies, plan design, or eligibility. Applicants need to make a concerted effort to parse savings achieved by health improvements from other causes by reporting other possible causes and quantifying the impact of each factor as described below. This requires identifying organizational initiatives implemented during or within two years prior to the program implementation and evaluation period that could potentially account for savings in medical spending. These might include benefit plan

changes that shift costs to employees, change in provider networks, insurer or provider price reductions; absence and related policy changes; a policy of not hiring smokers; adding a fitness standard for some new hires; and changes that impact age, gender or health status mix of the employee population, including lay-offs, mergers, acquisitions, divestitures, and natural attrition or growth. In addition to savings attributed to the health and well-being program, applicants using this approach should estimate and report the portion of the overall reduction in trends that was due to these other factors, separate from the health and well-being program. In addition to reporting organizational cost trends, applicants using this approach should also report trends in premiums paid by employees for individual and family coverage, as well as trends out-of-pocket spending by employees not paid by the plan. Overall trends and these components should be reported for at least six years, including 1-2 years prior to program implementation.

Comparative Health and Organizational Outcome Analyses

Comparative health and organization outcomes analyses provide a mechanism to compare medical cost savings, productivity improvements, and other positive organizational outcomes to program costs, as well as comparing the cost of achieving these improvements through a health and well-being program to other strategies. The most common comparative analyses include return-on-investment (ROI), value-on-investment (VOI), and cost-effectiveness-analysis (CEA).

For the purposes of this application, **ROI** measures the total financial benefits of the program divided by the total financial costs. This approach is typically used to determine savings in medical spending and/or enhanced productivity that can be measured quantitatively. If an ROI analysis is conducted, it should clearly articulate the specific financial benefits and time periods, and cost categories and amounts included in the analysis and also report the cost categories but not the amounts that were not included.

VOI is a variation of ROI in which organizational "values" derived from a program are broader than direct medical cost savings, productivity and other monetary organizational outcomes included in ROI analysis. These might include morale, subjective forms of well-being, and other priorities that motivated the organization to focus on enhancing employee health. These values do not need to be monetized, but their values do need to be quantified as relevant to the measures in this analysis.

CEA provides a mechanism to estimate costs per unit of benefit. For example, CEA can be used to measure overall program impact, such as total program cost per health risk improved, or subunits of program impact, such as cost per successful smoking quit, or per attempt. It can also be used to measure the impact of elements within a program, such as cost of marketing efforts per program participant enrolled. One of the most important emerging uses of CEA is to measure the impact of some of the difficult-to-quantify values often included in VOI, like morale, engagement, or similar outcomes. An extension of CEA is comparing the cost per unit of change achieved from a health and well-being program to the cost for achieving the same benefits from other organizational expenditures including salary and other benefits or strategies.

Randomized Controlled Trials

Some economics and medical researchers argue that randomized controlled trials (RCT), in which employees are randomly assigned to a treatment (receive program) or control group (not receive program) are the only valid evaluation design to accurately measure the health or organization impact of a health promotion

program. In practice, however, most experts in the health promotion field consider the RCT to be an inferior design for evaluating organizational outcomes in workplace health and well-being programs because it is not feasible to randomize the factors most important to program success, such as leadership support, policies, organizational culture, natural and built environment, food supply and multiple other community or organization-level factors. Because of this inherent limitation, appropriate uses of RCT evaluation design in the workplace are largely confined to time-limited program elements that can be randomized such as specific skill building activities or incentive amounts.

Appendix B: Table Template on Methodology for Each Outcome Reported

Please prepare a table following the format below that summarizes the methodology used for each outcome reported.

Table # e.g., 1a,1b,1c,1d,1e, etc.

Outcome e.g., health risk prevalence, medical cost trends, absenteeism, etc.

Evaluation Design
-Structure of the evaluation: e.g. pre-post only, pre-post with comparison group, time series, etc.
-Timing of outcome measurement: e.g., baseline, annual for 3 years, etc.

Population and Sample
-Size of target population and sample analyzed:

Tools and Data Used to Evaluate Outcome e.g., administrative records, health screening, health insurance claims

Statistical Analyses e.g., descriptive statistics, differences in difference, trend analysis

Results

Appendix C: Program Outcome Standards

Participation:
-Meets standards: 40%-70% of all employees (not just those eligible) participated in some aspect of the program
-Exceeds standards: > 70% of employees (not just those eligible) participated in some aspect of the program and at least half of them participated more than once

Health outcomes:
-Meets standards: Measurable improvements in at least 2 targeted diseases, health conditions, or behaviors
-Exceeds standards: Measurable improvements in at least 3 targeted diseases, health conditions, or behaviors

Organization outcomes:
-Meets standards: Measurable improvements in at least 2 targeted organization priorities
-Exceeds standards: Measurable improvements in at least 3 targeted organization priorities

Comparative Health and Organization Outcomes Analysis
-Meets standards: none required
-Exceeds standards: at least 1 form of analysis (ROI, VOI, CEA) conducted for at least 1 outcome