

Final Report **Evidence-Based Approaches** to Worksite Wellness and Employee Health Promotion & Disease Prevention

Prepared for the North Carolina Teachers' and State Employees'
Comprehensive Major Medical Plan

By North Carolina Institute of Medicine (NC IOM)
and Center for Health Improvement (CHI)
Sacramento, California

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executive summary **Executive Summary**

This report summarizes the work, begun in June of 2004, of the North Carolina Institute of Medicine¹ and the Center for Health Improvement (Sacramento, California)² to:

- 1 Assemble two national panels of experts to advise the North Carolina Teachers' and State Employees' Comprehensive Major Medical Plan (the State Health Plan) with regard to evidence-based worksite wellness interventions. The first of these panels focused on worksite *programs and interventions*, while the second focused on efforts to increase employee *participation and acceptance* of health promotion and disease prevention interventions.
- 2 Evaluate the information presented by the two expert panels and to recommend a strategy considered feasible for implementation by the State Health Plan.
- 3 Summarize the work of the three meetings as a framework to guide subsequent investment of resources by the State Health Plan in either targeted or more generally available health promotion and disease prevention initiatives for NC teachers and state employees.

An advisory group convened by the State Health Plan (the State Teacher and Employee Wellness Advisory Committee – STEWAC) served to provide insight as to the feasibility of implementation of specific health promotion/wellness initiatives among Plan members, as well as the acceptability of various incentives for participation that might be considered.

This report summarizes the information derived from the presentations of the two panels of experts, as well as the deliberations of STEWAC members at the third meeting, and offers a number of specific recommendations for how the State Health Plan might use these findings and observations in shaping its planned initiative in this area.

background **Background**

Over the past couple of years, evidence has been accumulating to demonstrate an alarming trend toward a greater prevalence of chronic health conditions among beneficiaries of the State Health Plan. At the same time, the rates of expenditure for personal healthcare services among Plan beneficiaries have been rising at a rapid rate.

It was out of a concern for these trends, and the consequences for the financial stability of the State Health Plan, that the Administrators and the Board of the Plan undertook to address the problems associated with the rate of increase in chronic health conditions among those insured by the Plan.

1 The NC Institute of Medicine is an independent, not-for-profit agency created by the North Carolina General Assembly (in 1983) to provide advice to agencies of state government concerning some of the state's most complex health and healthcare issues.
2 The Center for Health Improvement is a national health policy organization with a primary focus on health promotion and disease prevention.

health smart initiative

The NC Health Smart Initiative

The State Health Plan has embarked on a multi-component strategy for addressing these disease and cost-of-care patterns now evident among teachers and state employees insured by The Plan. The State Health Plan's new vision and mission is to provide its members with the tools and education through multiple channels, including the healthcare provider, community, family, the Health Plan itself, and the worksite, to empower them to make smart health and healthcare decisions. The State Health Plan envisions worksite wellness and health promotion as a crucial component supporting individual and environmental behavior change, which will reduce healthcare costs to the member and the Plan, improve health, and increase productivity.

Basically, the *NC HealthSmart Program* strategy includes six broad components (each explained in the body of the full report):

- 1 Targeted **disease management** interventions for Plan members with specific chronic disease diagnoses.
- 2 A set of centrally designed **health promotion** interventions to be available to all Plan members (e.g., newsletters, Web sites, a 1-800-nurse call line, health fairs, and walk-a-thon events).
- 3 **Health tracking** initiatives to include health risk assessments (HRAs), clinical screening, and other data-gathering activities (including stage of change assessments).
- 4 Contractual relationships with a number of local health service provider organizations capable of offering one or more **risk-reduction programs** in a local area for the benefit of qualifying teachers and state employees.
- 5 Decentralized **worksite wellness programs** organized at specific places of employment for teachers and state employees with the objective of health risk factor reduction.
- 6 The State Health Plan is also planning to better coordinate **primary healthcare and pharmacy services** provided to Plan members with health promotion, disease management and risk-reduction goals of the NC HealthSmart program.

technical assistance effort

The NC IOM and CHI Technical Assistance Effort

The three STEWAC meetings organized by the NC Institute of Medicine and the Center for Health Improvement proposed to develop a framework for undertaking the review of existing experience and knowledge in the broad field of worksite wellness program development.

In the first of the three meetings, four experts were invited as speakers: Ron Z. Goetzel, PhD, Vice President, Consulting and Applied Research, The Medstat Group, and Director, Cornell University Institute for Health and Productivity Studies; Joyce M. Young, MD, MPH, Regional Wellbeing Director, IBM Global Wellbeing Services and Health Benefits; William L. Beery, MPH, Vice President for Programs, Group Health Cooperative Community Foundation; and Allen Feezor, Chief Planning Officer, University Health Systems of Eastern North Carolina (former Executive Officer for Health Benefit Services, CalPERS, the California Public Employees' Retirement System).

In the second meeting, STEWAC members heard from four additional speakers: Eric Finkelstein, PhD, Health Economist, Division for Health Services and Social Policy Research, Research Triangle Institute, Research Triangle Park, NC; Dee W. Edington, PhD, Director, Health Management Research Center, Professor and Research Scientist, Division of Kinesiology, School of Public Health, University of Michigan, Ann Arbor; Larry S. Chapman, MPH, Chairman, Summex Corporation, Seattle, Washington; and Ray E. Fabius, MD, Global Medical Director, General Electric Corporation, Fairfield, Connecticut.

In the third of these sessions, emphasis shifted to a synthesis of lessons learned from worksite wellness efforts elsewhere and a consideration of a proposed set of recommendations for how the overall wellness component within the overall *NC HealthSmart* initiative should/could take shape.

lessons to be learned

Lessons to Be Learned from Previous Experience in Worksite Wellness Intervention Programs

With regard to specific health promotion *interventions* at the worksite, experience gained in other workforce populations leads to the following observations (each of which is explained in detail in the body of the report):

- 1 *Health behavioral change is difficult to influence in others and even more difficult to achieve and maintain as an individual.*
- 2 *A large number of the diseases and disorders from which typical workforce populations (and NC teachers and state employees) suffer are preventable.*
- 3 *Poor health costs money.*
- 4 *In the design of worksite health promotion/wellness initiatives, it is just as important to reduce the number of people who move from low/moderate-risk status to high-risk as it is to promote programs designed to target the current high-risk behaviors of persons currently in the high-use and high-cost categories.*
- 5 *Worksite health promotion/disease prevention programs vary in their comprehensiveness, intensity, and duration.*
- 6 *It is important that worksite health promotion programs have as a foundation a defined “logic model” through which it is possible to describe the purpose of each element of an overall program.*
- 7 *It is now widely accepted that an HRA instrument of some form is an essential entry point to a well-organized worksite wellness program.*
- 8 *It is very important to have some form of ongoing program evaluation.*
- 9 *There are some paradoxical observations from worksite wellness and health promotion programs as well. Some insurance provisions thought to provide incentives to worksite wellness participation do not have the presumed effect.*

Observations Regarding the Incentives for Participation of Employees in Worksite Wellness Programs

Regardless of how elaborate and extensively publicized a health promotion/wellness program may be, an overarching concern of those responsible for such programs is the extent to which employees will voluntarily participate. From the presentations on this topic, the following observations emerged:

- 1 *Solid evidence of the effect of particular types and amounts of incentives on worksite wellness program participation are rarely available in the published reports of such interventions.*
- 2 *Though the types and amounts of incentives vary considerably, it is a widely held view among experts in the field that financial incentives are the most effective as the primary incentives.*
- 3 *Financial incentives are allowable under current HIPAA rules and regulations, but incentives cannot be targeted to people based on their personal health status.*
- 4 *Participation rates are generally far too low in most worksite health promotion programs.*
- 5 *A key consideration in the design of worksite health promotion programs, and their participation incentives, should be on keeping currently low/moderate-risk individuals from moving to the higher-risk category.*
- 6 *Four key factors appear to be important in assuring the success of a worksite wellness program:*
 - a *Driving the program from the top through leadership performance objectives and healthy work environment objectives.*
 - b *Driving the program from the bottom by allowing employees to self-monitor their own progress through an HRA.*
 - c *Workplaces providing resources for maintaining low-risk status and taking advantage of risk-reduction opportunities in the local community.*
 - d *Key indicators of health status and health behavioral patterns should be periodically measured and collectively summarized.*

Synthesizing the Perspectives of Technical Experts:

An Approach to the Design of a Worksite Wellness Intervention for NC State Health Plan Members

The State Health Plan will, over the coming few months, consider a number of policy options with regard to its investment in worksite wellness program components of the *NC HealthSmart* initiative. Although the State Health Plan in partnership

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with local state agency wellness coordinators will have primary responsibility for the promotion of employee participation in health tracking components of *NC HealthSmart* (e.g., HRA, clinical screenings, and risk-reduction interventions), and although demonstration programs have already begun in certain local communities and are being offered to teacher and state employee Plan members (e.g., public schools, community colleges, the UNC System, Department of Justice, Department of Health and Human Services, Department of Revenue), several components of the *NC HealthSmart* worksite wellness initiative will be standardized statewide. It is to the policy decisions regarding statewide standards for program implementation that these three sessions with STEWAC members were oriented.

Three broad principles guide the recommendations emerging from this process through which decision options have been considered:

- 1 The overarching goals of the *NC HealthSmart* worksite wellness initiative should be to achieve a “healthier” state employee and public school workforce through health risk reduction and to reduce the rate of increase of overall expenditures (costs) of healthcare services provided to the workforce population insured by the State Health Plan.
- 2 All Plan members should be invited to participate. Although the largest impact of a health promotion program for Plan members can be obtained from a focus on those Plan members at highest health risk (if it were possible to bring about such change), it is the recommendation of STEWAC members involved in this process that low- and moderate-risk employees should also be invited to participate, and there should be explicit program components relevant to the needs and interests of these employees as well.
- 3 Participation in the worksite wellness initiative should be voluntary, with no financial or other penalty (or negative incentive) associated with lack of participation. However, positive incentives can and should be offered both for participation and, where possible, for the achievement of personal health promotion goals.

With these three principles in mind, the following aspects of a proposed worksite wellness initiative have been addressed by STEWAC members:

Target Groups

It is recommended that Plan members be defined confidentially (using aggregate HRA results and other available claims data) in two categories: *Group A: Low- and Moderate-Risk; and Group B: High-Risk.*

Anticipated Outcomes (Target Goals)

For all eligible Plan members, the HRA participation rate goal should be 80%.

Goals for Group A: Maintain low or moderate health risk.

Goals for Group B: Reduce high health risk.

The longer-range goal for the program in general: 70% of Plan members will be classified as either low- or moderate-risk based on HRA aggregated results.

Target Population Initial Program Contact

All Plan members will be offered an opportunity to complete a Health Risk Assessment (HRA), with a goal of a completion/participation rate of 80% or greater. Participation for current Plan members should be completely voluntary, but incentives (described below) should be offered. New employees who elect to become Plan members might be required to complete an HRA.

HRA Follow-up Options

Risk factor-related follow-up options should be available for all Plan members completing the HRA, but these may differ somewhat depending on the individual's risk status category determined through the HRA process.

Incentives for Participation

STEWAC members considered the matter of financial incentives for participation, both for completion of the HRA and for participation in post-HRA follow-up risk factor interventions. STEWAC members are aware of the difficulty of offering financial incentives for either of these types of participation in a situation where no state employee pays for his/her health insurance basic premium. However, it is recommended that the State Health Plan give serious consideration to the possibility of offering some form of financial incentive for program participation. Several options in this regard are offered in the body of the report.

One non-financial incentive (at least for HRA completion) could be making completion of the HRA a contingency for participation in other *NC HealthSmart* program components.

Interventions for Risk Factor Reduction

Risk factor interventions will be made available to Plan members statewide through the services of a contract “care management company,” and others will be identified either locally through collaborating arrangements with healthcare provider organizations (e.g., hospitals, public health departments, or clinics). It is not possible to specify which types of interventions will/could be offered to Plan members statewide. It is anticipated that it will be important to offer every Plan member who completes an HRA the option of participating in or accessing the risk factor-relevant services of a program (either in-person or on-line through Web-based interventions) pertinent to his/her HRA results. It is anticipated that every Plan member will be assured some level of access to risk factor interventions addressing at least four basic wellness program components:

- smoking cessation;
- diet and weight management;
- physical activity; and
- stress reduction.

Incentives for Outcomes Achievement

Although some level of incentive is usually considered essential for encouraging participation in health promotion programs, it is less common for incentives to be associated with the achievement of specific health outcomes. Yet, the ultimate goal should be to maintain good health behaviors or to modify health risk behaviors (and, consequently, health outcomes), not just to achieve certain program participation levels. Providing incentives for participation is easier to measure and to implement, but will not necessarily achieve the greater goal of changing the health risk profile of Plan members. The State Health Plan is encouraged to explore performance/outcome incentives.

Evaluation

Program evaluation is considered an essential component of the *NC HealthSmart* initiative. It is strongly urged that the State Health Plan, and not the HRA or risk factor intervention vendor, engage an independent (outside) evaluator and ask that this organization (with input from the State Health Plan and STEWAC members) establish measurable criteria for evaluation for all program components.

Extending the Benefits of the Wellness Program to Retirees and Dependents Covered by The Plan

Throughout the three sessions conducted by the NC Institute of Medicine and the Center for Health Improvement for the information of STEWAC members, the focus of attention was on wellness and health promotion programming for the benefit of actively employed Plan members. Yet, at the outset of these discussions, the Executive Administrator of the State Health Plan asked that the situation pertaining to dependents and retirees also be considered. Time in these three meetings did not allow for a detailed discussion of how these same considerations would pertain to dependents and retirees, but all considered these issues important. Staff of the State Health Plan advised that STEWAC members’ time in these meetings not be devoted to extensive discussion of dependents and retirees because the near-term activities in building out the various components of the *NC HealthSmart* program were not intended to be focused on these populations.

Summary

It is the recommendation of the North Carolina Institute of Medicine, in partnership with the Center for Health Improvement (Sacramento), that the North Carolina Teachers’ and State Employees’ Comprehensive Medical Plan, as part of its *NC HealthSmart* Program, develop an initiative to promote worksite wellness activities for the benefit of Plan members that will have the following characteristics:

- 1 The *NC HealthSmart* worksite wellness initiative should be open to all Plan members, not just those at highest health risk.

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- 2 In its contract with a proposed “care management company,” the State Health Plan should include a provision for: the vendor to administer a Health Risk Assessment (HRA) instrument that meets current industry standards of coverage of appropriate risk factors, the vendor to arrange for the confidential reporting of risk-related information to Plan members who complete the HRA, and the vendor to provide the State Health Plan with aggregated summary information on the risk profiles of Plan members completing the HRA.
- 3 The State Health Plan should have the responsibility through its vendors to ensure that ALL members of the Plan receive ample education on the benefit of health behavior changes and an understanding of how access to *NC HealthSmart* programs can be achieved. Additional resources and personnel may be needed to encourage the participation of hard-to-reach workforce populations.
- 4 Prior to the invitation to Plan members to participate in the HRA process, the State Health Plan is encouraged to create a committee of Plan members (and others with relevant knowledge and expertise) to act as an Institutional Review Board (IRB).³ The IRB should review the content of the proposed HRA, the process through which it will be disseminated to Plan members, the procedures to be used in assuring the confidentiality of personal information, and the way in which personal information will be used to channel Plan members into various risk-reduction interventions. It is recommended that the observations or conclusions of the IRB include a privacy statement and be made an integral part of the HRA (perhaps summarized as part of the consent form to accompany the HRA) as it is disseminated to Plan members and that the IRB annually update its observations and issue assurances to Plan members about the process and use of these data.
- 5 The State Health Plan is encouraged to develop procedures for offering meaningful (preferably financial) incentives for both *HRA completion* and for *post-HRA participation* in risk-reduction interventions.
- 6 The State Health Plan should establish program participation and outcome goals for the worksite wellness component of *NC HealthSmart*.
 - It is recommended that 80% of all Plan members should participate in HRA completion. Outcome goals for Group A (low- and moderate-risk) and Group B (high-risk) are recommended as follows:
 - Goals for Group A: Fewer than 20% of low-risk Plan members (as measured by HRA at baseline) will be classified as “moderate-risk” and fewer than 5% of baseline “low-risk” employees will be classified as “high-risk” at the end of year 02 and every year thereafter. Fewer than 10% of baseline “moderate-risk” employees will be classified as “high-risk” at the end of year 02 and every year thereafter.
 - Goals for Group B: The overall proportion of baseline “high-risk” employees will be reduced by 5% by the end of year 02 and every year thereafter.
 - The longer-range goal for the program in general: 70% of Plan members will be classified as either low- or moderate-risk based on HRA aggregated results.
- 7 Post-HRA risk-reduction intervention options are an essential element of a comprehensive worksite wellness initiative where HRA completion serves as a personal benchmark and baseline measure of workforce health status. A variety of arrangements for ensuring access to such options are under development by the State Health Plan. It is recommended that every Plan member be offered options for HRA follow-up through risk-reduction interventions that minimally include: smoking cessation counseling and medical assistance, diet and weight management counseling, physical activity interventions, and stress reduction counseling and other related interventions.
- 8 Prior to the program’s initiation, the State Health Plan is encouraged to develop a plan for program evaluation that will provide both process and summative information by which to assess the impact of the program in general, as well as subcomponents of the program whether operating under the aegis of the State Health Plan or other community-based agencies or vendors.
- 9 The State Health Plan is encouraged to continue to explore ways in which both populations (Group A and Group B) can be included in further elaborations of the *NC HealthSmart* initiative.

³ As an alternative, the State Health Plan could approach an existing IRB at one of the public universities, or within another agency of state government, to perform this function. In that way, a group experienced in the review of subject/participant rights and interests will be involved.