

Weight Management and Obesity Symposium

CMI is using a multidimensional, public health approach

An Overview of the Care Management Institute's Weight Management and Obesity Initiative

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Weight Management and Obesity Initiative Strategic Model, Focus, and Goals

As prevalence of overweight and obesity reached epidemic proportions,¹ clinical intervention alone became obviously insufficient to address the problem. In January 2002, the Care Management Institute (CMI) of Kaiser Permanente (KP) launched the Weight Management and Obesity (WMO) Initiative to develop and implement a plan to address this critical public health issue. The strategic model for weight management includes the following five interlocking components:

- a research network;
- successful practice dissemination;
- legislative and public policy;
- community partnerships; and
- clinical management—the keystone that holds the other four pieces of the model together.

This multidimensional, public health approach evolved through the expertise and commitment of a clinical network of stakeholders and experts within and outside KP. Clinical leads included Warren Taylor, MD, KP Northern California; Jonathan Brown, PhD, Center for Health Research, KP Northwest; Scott Gee, MD, KP Northern California; Gary H Wong, MD, KP Southern California; Sasha Stiles, MD, Codirector, Multidisciplinary

Weight Management Program, formerly KP Hawaii, currently KP Northern California; and Keith H Bachman, MD, KP Northwest. This clinical advisory group documented the current “KP landscape” in weight management, delivered initial tools and strategies for primary care settings, and began a rigorous evidence review to identify optimal intervention.

Under the leadership of William Caplan, MD, and Trina Histon, PhD, of CMI, the initiative also set longer-term goals: to establish prevention and management of overweight and obesity as an organizational priority; to develop metrics to quantify effectiveness; to optimize and standardize program components; to develop evidence-based risk stratification approaches; and to enhance clinician and member skills through tools and education.

External Collaboration

Given the public health approach to combating such a complex and multilayered problem, CMI also sought external collaboration with other health plans, federal agencies, and academia to identify and disseminate effective models for prevention and treatment of overweight and obesity. Organizations represented in the collaboration have included the following: Centers for Disease Control and Prevention, HealthPartners, National

Institutes of Health, Geisinger Clinic, Robert Wood Johnson Foundation, American Dietetic Association, American Academy of Family Practice, American Association of Health Plans, North American Association for the Study of Obesity, and International Life Sciences Institute Center for Health Promotion.

KP/CDC National Meetings

One of the strongest collaborations has been forged between CMI and the Centers for Disease Control and Prevention (CDC). As part of that partnership, a working group was formed with the goals to identify practical, effective non-surgical approaches for the prevention and treatment of overweight and obesity; to increase the likelihood of adoption and implementation of these interventions and partnerships, thus leading to improved health outcomes for KP members and communities; to identify clinical research opportunities that support these goals; and to create a forum linking colleagues in the academic and research communities, federal agencies, and practicing clinicians who are actively engaged in assessing and implementing programs for overweight and obese patients.

Although the initial goals focused on the medical setting, the KP/CDC working group partici-

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pants quickly recognized that an approach limited to medical settings would probably not be effective without reinforcing strategies in the community, workplace, and home. This recognition reemphasized the need for expanded partnerships between health care providers, communities, schools, nongovernmental organizations, and state and national government—especially between health care providers and payers at that level.

Four KP subgroups convened to address specific areas of concern:

- prevention and treatment of obesity in children and adolescents
- primary prevention in adults
- identification and management of adults at high risk
- treatment of severe obesity.

Weight Management Strategies Identified

Meetings, held in June and November of 2002, were structured to identify practical, effective strategies that could be rapidly implemented to help prevent and treat obesity among KP's 8.3 million members. Speakers were invited from numerous entities, including research, government, health care, and private industry as well as from KP.

Brief presentations, followed by long discussion, produced much insight and suggestions for population-based weight management strategies. The following section summarizes strategies by general category; presenters are attributed (in parentheses) and are listed in Table 1. (Many of these presentations were included as part of *The*

Permanente Journal's Weight Management and Obesity Symposium Vol 7, No. 2.)

Lessons learned from smoking cessation (Gee). Dr Gee described how successful smoking cessation program strategies do not directly transfer to programs for preventing and treating obesity.

How to talk to patients about obesity: stigma and discrimination (Brownell). Dr Brownell stated that attention to tone and technique is required to work effectively with obese members. Varying acceptability of terms used to describe excess weight exists among overweight and obese people, a factor making it necessary to test prevention and treatment messages for acceptability.

Prevention and treatment in children and adolescents (Dietz, Ham-

Table 1. Presenters from KP and Centers for Disease Control and Prevention at national meetings on treating and preventing obesity

Kelly Brownell, PhD, Director of the Center for Eating and Weight Disorders, Yale University
William Dietz, MD, PhD, Director, Division of Nutrition and Physical Activity, National Center for Chronic Disease Prevention and Health Promotion, Centers for Disease Control and Prevention
John Foreyt, PhD, Baylor College of Medicine
Scott Gee, MD, Medical Director of Prevention and Health Information, KP Northern California
Lawrence Hammer, MD, Professor of Pediatrics at Stanford University
Jim Hill, PhD, Director, Center for Human Nutrition, University of Colorado
Njeri Karanja, PhD, KP Center for Health Research
Esther Myers, PhD, RD, American Dietetic Association
Tim McDonald, PA, MHSA, Manager, Health Promotion, General Motors Corporation
Paul Nussbaum, Secretary, Department of Health and Human Services, State of West Virginia
F Xavier Pi-Sunyer, MD, Professor of Medicine, Columbia University College of Physicians and Surgeons
Nico Pronk, PhD, Vice President, Center for Health Promotion, HealthPartners
Tom Robinson, MD, MPH, Stanford University
Barbara Rolls, PhD, Guthrie Chair of Nutrition, Pennsylvania State University
Warren Taylor, MD, Director of Chronic Conditions Management, KP Northern California
Jim Sallis, PhD, Professor, San Diego State University
Sasha Stiles, MD, Co-Director, Multi-Disciplinary Weight Management Program, formerly KP Hawaii, currently KP Northern California
Victor Strecher, PhD, Director, Health Media Research Lab, University of Michigan
Deborah Tate, PhD, Assistant Professor, Brown University Medical School
Rodolfo Valdez, PhD, Epidemiologist, Division of Diabetes Translation, Centers for Disease Control and Prevention
Thomas Wadden, PhD, Director, Weight and Eating Disorders Program, University of Pennsylvania School of Medicine
Gail Woodward-Lopez, RD, MPH, Center for Weight and Health, University of California, Berkeley
George Isham, MD, MS, Medical Director and Chief Health Officer, HealthPartners

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mer, Gee). Drs Dietz and Hammer addressed growing prevalence of obesity in children and adolescents and described a family-based, group behavioral program for overweight children and their parents. Family-based group weight control programs may be more feasible, efficient, and effective than individual counseling in pediatric primary care settings. Addressing cultural diversity in program design is crucial. Dr Gee presented a pediatric obesity prevention and treatment program based on a treatment room poster and on motivational interviewing.

Prevention and treatment in adults (Pi-Sunyer, Myers). Drs Pi-Sunyer and Myers discussed the Diabetes Prevention Program, the NIH guidelines for treating obesity, and the role of medical nutrition therapy. Obesity is a chronic disease, for which modest weight loss (5%-10% of body weight) offers considerable medical benefits. Lifestyle change (diet and physical activity) is the basis of therapy, and registered dietitians are preferable providers for addressing dietary issues.

Building a population-based approach (Taylor). Dr Taylor discussed components of addressing obesity at the population level. Primary and early secondary prevention are important, and a broad spectrum of programs is appropriate for overweight and at-risk members. KP must move ahead with programs in the absence of conclusive evidence about efficacy; incorporating measures of effectiveness into program design is important too.

Increasing physical activity (Pronk, Hill). Drs Pronk and Hill described pedometer-based programs to increase physical activity. Because the environment is important for promoting or discouraging

physical activity, community partnerships are needed to implement effective programs. Multiple points of entry to pedometer-based programs already exist at KP—mandating flexible program models—and broad worksite implementation at KP is fundamental.

Behavioral intervention (Brownell, Gee). Dr Brownell reviewed the current status of behavioral treatment in research trials, and Dr Gee discussed brief negotiation, a motivational interviewing strategy. Behavioral treatment is associated with increased weight loss, but the degree to which behavioral treatment can be offered in primary care settings at KP is not resolved. Brief negotiation increases primary care providers' confidence levels in addressing behavior change and can be learned quickly.

Bariatric surgery (Stiles). Dr Stiles addressed the need for a national database to capture information about all bariatric surgery patients because such a database is essential to developing models of care, best practices, and long-term effectiveness studies.

Role of interactive technology in supporting weight loss and weight maintenance (Sallis, Strecher, Tate). This panel presented their experience with computer- and Internet-based weight management technology. Computer-based programs apparently work for adolescents as well as for adults and allow individual participants to change more than one behavior at a time. Tailored messaging enhances effectiveness, and the Internet can be an effective way to deliver behavioral therapy components of weight management programs.

Nutritional approaches for preventing and treating overweight and obesity (Dietz, Myers, Rolls). These panelists discussed many

existing and potential—and potentially conflicting—key nutritional messages for preventing and treating obesity. For example, a simple and visually appealing construct is the energy density of foods; the related message focuses on lowering the energy density of food to control weight.

Definitions of the metabolic syndrome (Valdez). Dr Valdez discussed multiple existing definitions of the metabolic syndrome. Consensus is still emerging about what criteria define this syndrome. Impaired glucose tolerance, waist circumference, and triglyceride:HDL-C ratio are proposed indicators of metabolic risk.

Role of pharmacotherapy in weight management (Wadden). Dr Wadden discussed several studies evaluating effectiveness of sibutramine and orlistat for inducing and maintaining weight loss. Pharmacotherapy is useful as adjunctive therapy in weight loss programs, to which lifestyle change in diet and in physical activity is fundamental.

Culturally competent care for overweight and obese members (Karanja, Foreyt). Drs Karanja and Foreyt discussed weight loss intervention in African American and Mexican American populations, which are at much greater risk for obesity and related conditions than is the non-Hispanic white population. Community- and family-based intervention takes on increasing importance, socioeconomic and environmental issues change effectiveness of weight management intervention, and cultural differences regarding dietary preference and weight-related issues must be considered and respected. Cultural strength can form the foundation of effective programs, and community coalitions can address environmental issues.

Community-based intervention (Robinson, Woodward-Lopez). Drs Robinson and Woodward-Lopez addressed community- and school-based intervention. School-based programs to reduce TV viewing and to increase physical activity have proved effective, and community coalitions can result in rapid program development.

Purchasers' perspective (Isham, McDonald). Drs Isham and McDonald discussed weight management as viewed by employer-purchasers of health care services. A discussion of health promotion and prevention activities must be framed in terms that employers understand; return on investment is a successfully used concept, as is incorporating primary prevention in any discussion of more costly secondary and tertiary health care.

National, state, and community initiatives (Dietz, Nussbaum). Drs Dietz and Nussbaum described political and governmental initiatives to address obesity. All levels of community coalitions and stakeholders—such as physicians, parents, and educators—are fundamental to creating program and environmental change.

Clinical Management Tools and Resources **CMI Weight Management Source Book²**

A source book of weight management and bariatric surgery programs in KP also has been developed as part of the Weight Management Initiative. The purpose of the *CMI Weight Management Source Book* is to provide an informational resource for clinicians, administrators, and managers interested in improving care for patients who are overweight or obese or who are at risk of becoming overweight or obese.

The *Source Book* provides infor-

mation on the process of planning as well as building a business case for weight management activities and outlines key elements of both weight management and bariatric surgery programs throughout KP. The *Source Book* is intended to meet the needs of anyone within KP who wants tools, knowledge, and support for improving or creating a weight management program.

The *Source Book* provides an early snapshot of what KP currently provides to members regarding weight management activities. The book may also serve as a vehicle to further explore these themes and to help prioritize, standardize, refine, and evaluate approaches to weight management programwide. The resources are meant to help begin an active process of integrating appropriate models of weight management at the regional and local levels within KP to ensure that excellent care happens routinely and is not a matter of chance. The *Source Book* can be found at the Permanente Knowledge Connection: <http://pkc.kp.org>.

Guidelines

CMI is working with one of its health system collaborators (HealthPartners in Minneapolis) to conduct a literature review from which evidence-based guidelines, models of care, and successful practices for evaluation and treatment of overweight and obesity can be developed.

In addition, the initiative's subgroup focusing on identification and management of adults at high risk for overweight and obesity has been working with KP Regions to develop evidence-based guidelines on treatment for high-risk populations, eg, populations with impaired glucose tolerance and sleep apnea.

Posters and Tipsheets

Two clinical examination room posters, originally developed by KP Northern California's Regional Health Education Department, were modified by a subgroup to meet the needs of all KP Regions.

The posters can be used to raise awareness and to catalyze conversations between clinicians and patients in the framework of motivational interviewing. Posters have been printed in Spanish as well as English and include information directed to the Spanish-speaking culture. A tipsheet accompanies the posters and expands on key messages and action items in the poster.

Get More Energy, a poster designed for children and adolescents, incorporates the following messages in a colorful and motivating way:

- Get up and play hard
 - At least 30-60 minutes a day
- Cut back on TV and video games
 - No more than one hour a day
 - Remove TV from the bedroom
- Eat five helpings of fruits and vegetables a day
 - One fruit or 1/2 cup of vegetables equals one helping
- Cut down on sodas and juice drinks
 - No more than one can or small cup a day
 - Drink water when thirsty

The accompanying tipsheets, designed for children and adolescents and their families, can be used as a support tool by giving parents tips on how to better motivate and support their children in managing the children's weight. The goal is to have a *Get More Energy* poster in every pediatric examination room KP Programwide.

The *Getting in Balance* poster,

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printed in English and Spanish, displays motivational messages for adults:

- Get Up and Get Moving:
 - Be physically active, exercise for at least 30-60 minutes each day.
 - Walk more. Count your steps with a pedometer.
- Eat Healthy:
 - Eat at least five helpings of vegetables and fruit a day.
 - Replace soda and juice with water.
- Take Time to Take Care of Yourself:
 - Balance your work and relaxation to help manage stress.
 - Commit to small changes and healthy choices.
- Strive for a healthy weight; holding your weight steady is a great first step.

The accompanying tipsheets incorporate the Stages of Change model by asking: "How ready are you to make a change and to get in balance?"

The Body Mass Index (BMI) Wheel

Ascertaining body mass of patients is an efficient and important first step in helping clinicians treat patients who are overweight or obese. Many KP Regions use body mass index (BMI) charts. A BMI Wheel also has been developed and is being distributed to KP clinicians as part of structured training sessions. The BMI Wheel, which calculates BMI based on height and weight, has two sides: one side for adults and the other side for children. Having the BMI data enables clinicians to take a population-based approach to care by stratifying members according to their risk and treating them appropriately for their risk level. Plans call for the automated medi-

cal record being implemented within KP to capture BMI. In the meantime, clinicians are encouraged to chart both height and weight for their patients in the medical record. From the perspective of the health care system, knowing the BMI for KP membership allows us to profile by BMI not only risk of disease but also cost.³

Pedometer Program

A national KP workgroup has been formed to develop and implement a pedometer program in the KP Regions with employees and clinicians as its initial audience. The physical activity program includes selling pedometers to staff at a reduced price and encouraging them to participate in the 10,000 Steps Program developed by HealthPartners.⁴ Participants are asked to walk 10,000 steps a day and are sent health prompts, tips, and recipes via e-mail messages. Participants also register with a *10,000 Steps* Web site that helps them track the number of steps they've taken and gives them access to a reading room containing information about how physical activity improves health.

Almost every KP Region has implemented a pedometer program for KP audiences. Plans are that the programs will be shared with the Health Plan members.

Research Network

Establishing a research network has been an integral component of the initiative work. The approach has been to create cohesion in the research community by escalating information flow to increase energy and ensure participation. A KP Programwide research network comprised of 30 KP scientists in six regions was formed with the following objectives:

- Make KP's weight management programs and processes more effective and efficient
- Create and disseminate new knowledge
- Enhance KP's reputation
- Obtain external research funding
- Support the WMO Initiative

The KP Research Network also will collaborate with researchers outside KP through the HMO Research Network and academic scientists.

The Kaiser Permanente Garfield Memorial Fund also has established a Weight Management Research Initiative allocating funds for research to evaluate strategic issues in weight management within KP and in the community. The research initiative will be cochaired by a KP clinician and a researcher. A request for application (RFA) is expected by the end of 2003. The Garfield Fund may also be used in partnership with other funding opportunities from the Robert Wood Johnson Foundation and others.

Successful Practices Dissemination

Disseminating successful practices is one of the five components of the CMI public health model. Because of this, each KP Region has formed an obesity task force. These regional groups share strategies and tools and promulgate them at the grassroots level.

One of the most effective dissemination strategies to date is the motivational interviewing training being conducted by Dr Scott Gee in the KP Northern California Region. Dr Gee teaches clinicians how to help patients change behavior according to the Stages-of-Change

Ascertaining body mass of patients is an efficient and important first step in helping clinicians treat patients who are overweight or obese.

model. Dr Gee developed the program in the KP Northern California Region and, by request, has trained about 200 providers in KP's Southern California Region also.

CMI-sponsored workshops on the topic of weight management and obesity took place at the KP Primary Care Conference in April 2003. At that conference, KP members—who paid for their own transportation—spoke passionately about their experience managing their own weight and offered perspectives on their care experience at KP.

The *How-to Guide* is available on the Permanente Knowledge Connection Web site at <http://pkc.kp.org>.

KP and its partners also have made presentations at state and national medical conferences outside KP, including one at the West Virginia State Medical Association given by request of the National Governors Association. The talk focused on the clinical nature of the obesity epidemic and on the impact of bias and discrimination in clinical practice toward overweight patients. Presenters also gave an overview of and training in motivational interviewing.

CMI also has developed a *How-to Guide* for clinicians to assist them in making decisions about treatment options. The *How-to Guide* is available on the Permanente Knowledge Connection Web site at <http://pkc.kp.org>.⁵

Community Partnerships

CMI's WMO Initiative is designed to complement community partner-

ships that can help deepen and extend the knowledge base in this area. Numerous activities are underway. For example, CMI and KP's Community Benefit Program are working with community clinics in the area of overweight and obesity. Messages about weight management are included in the Educational Theatre production, "*Zip's Great Day*," and the "*Get More Energy*" posters have been adapted to incorporate pictures of the characters from the play. These weight management posters will be available at schools when KP Educational Theatre productions are staged there.

Influencing Policy and Legislation

The final piece of the interlocking public health model looks at changing societal structures to help prevent and treat overweight. In August 2003, a major national roundtable discussion will be held in Washington, DC, called "*Prevention and Treatment of Overweight and Obesity: Toward a Roadmap for Advocacy and Action*." The roundtable will include 45 to 50 people and will be structured around information in a white paper developed by KP. The objective of the meeting is to provide a forum for critical discussion among such diverse stakeholders as representatives of health plans and providers, employers, consumers, food industry representatives, researchers, analysts, community-based organizations, and policymakers.

In addition to KP's CMI and Institute for Health Policy, sponsors of the meeting include the American Association of Health Plans, Centers for Disease Control and Prevention, HealthPartners, the Robert Wood Johnson Foundation, and the Washington Business Group on Health.

The goals of the roundtable meeting are as follows:

- To summarize effective, evidence-based prevention and treatment strategies for overweight and obesity; and to apply lessons from other social change initiatives to weight control.
- To create an action plan for expanding the Chronic Care Model so that it effectively applies to the issues of overweight and obesity. The Chronic Care Model,^{6,7} developed by Improving Chronic Illness Care at the MacColl Institute for Healthcare Innovation in Seattle with support from the Robert Wood Johnson Foundation, identifies elements essential to high-quality chronic disease management. These elements include the community, the health system, self-management support, delivery system design, decision support, and clinical information systems.
- To identify short- and long-term public policy intervention or other actions that may be necessary to improve prevention and treatment of overweight and obesity.

Future Directions

The Weight Management Initiative signifies commitment of KP to address the critical public health issue of overweight and obesity in a comprehensive and sustainable manner. We have the good fortune of being able to build upon the talents and dedication of many physicians and other health care professionals and administrative support. Our links with experts and organizations external to KP have significantly strengthened our efforts and

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brought national recognition to KP. We have built a strong foundation and are well positioned to address the challenges ahead. ❖

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The Vision To Plan

Our Medical Group and our Medical Care Program can accomplish all objectives ultimately if we have the vision to plan them well and the patience to develop and expand them when finances and other conditions make it possible.

*Ray Kay, MD, founding Medical Director of the Southern California Medical Group
This "Moment in History" quote collected by Steve Gilford, KP Historian*