



**Health Maintenance Consortium Resource Center**  
The Science of Maintaining Healthy Behavior

## Site Progress Reports

Principal Investigator	As of February 15, 2008										September 1, 2007 – February 15, 2007			
	Current Recruitment Goal (A) #	Actual Recruitment (B)		Minorities		Women		Intervention Completed			Abstract (A) Manuscript (M) Other Work (O)	New Measures	Reported Challenges	Reported Findings
		#	%	#	%	#	%	(C) #	(C/B) %	(C/A) %				
Beresford	2908	3132	108	1087	35	809	26	2063	71	71			X	
DiClemente	703	701	100	701	100	701	100	299	43	43	A			X
Elliot	505	460	91	56	12	38	8	505	100	100	A,M,O			
Friedman	405	371	92	78	19	182	45	177	48	44	A			
Gorin	402	402	100	91	23	255	63	402	100	100	A			
Hooven	528	381	72	109	29	222	58	NA	NA	NA	A	X		
Hughes	536	536	100	352	66	464	87	434	81	81	A,O		X	
Killen	301	301	100	54	18	121	40	301	100	100				
Kirby	131	166	127	113	68	62	37	131	100	100	A		X	
Klesges	400	363	91	122	31	182	46	136	37	34				
Lapham	835	718	86	484	67	433	60	NA	NA	NA	A,O		X	
Lowe	238	238	100	174	73	212	89	87	37	37				X
Martinson	1049	1049	100	74	7	759	72	412	39	39	M,O			
McKay	252	252	100	233	92	89	35	150	60	60	A			X
Rimer	3547	3547	100	957	27	3547	100	4353	123	123	A,M	X		X
Roll (LTBC)	118	118	100	50	42	53	45	65	55	55	M			
Roll (CMDE)	119	119	100	63	53	45	38	69	50	50	M			
Toobert	279	279	100	28	10	279	126	126	45	45	M			
Williams, G	950	760	80	198	26	444	58	590	78	62	M		X	X
Williams, P	16000	40000	250	6598	27	22203	59	*	*	*				
Wing	400	541	135	34	6	431	80	NA	NA	NA	A			

\*Missing Data

■ Recruitment Complete

■ Intervention Complete

□ Not an Intervention

HMC PI	Abstracts, Manuscripts and Other Scholarly Work
DiClemente	<p>Sales JM, DiClemente RJ, Wingood GM, Rose E, Crittenden CP, Spitalnkck J. Mediating role of partner communication skills on HIV/STD-associated risk behaviors in African Americans. American Public Health Association, San Diego, CA.</p> <p>Sales JM, Crittenden CP, Latham TP, Bradley E, Rose E, DiClemente RJ, Wingood GM, et al. Differences between sexually active female adolescents who use dual protection to prevent pregnancy. American Public Health Association, San Diego, CA.</p> <p>Sales JM, Latham TP, Crittenden CP, Bradley E, Rose E, DiClemente RJ, Wingood GM. Differences in sexual risk taking between adolescent females who use dual protection to prevent pregnancy. American Public Health Association, San Diego, CA.</p> <p>Ukuku M, Crittenden CP, Sales JM, Rose E, DiClemente RJ. Why parents matter: A qualitative examination of parental monitoring on adolescent sexual risk taking. American Public Health Association, San Diego, CA.</p> <p>Ukuku M, Crittenden CP, Sales JM, Rose E, DiClemente RJ. Role of primary caregiver support as a protective factor against high risk sexual behavior. American Public Health Association, San Diego, CA.</p>
Elliott	<p>Levesque C, Williams GC, Elliot DL, Pickering MA, Bodenhamer B, Finley PJ. Validating the theoretical structure of the Treatment Self-Regulation Questionnaire (TSRQ) across three different health behaviors. Health Education Research, 2007,22:691-702.</p> <p>Yaroch AL, Nebeling L, Thompson FE, Hurley TG, Hebert JR, Toobert DJ, et al. Baseline design elements and sample characteristics for seven sites. J Nutr, 2008 Jan,138(1):185S-192S.</p> <p>Elliot DL, Kuehl KS, Goldberg L, Moe EL, DeFrancesco CA, Dulacki KN. Observations and Implications from National Dissemination of the PHLAME Health Promotion Program for Fire Fighters. Submitted for publication.</p> <p>Fairchild A, MacKinnon D, Elliot D, Kuehl K, Lockwood C. Mediation analysis of the PHLAME health promotion program. In preparation.</p> <p>Lockwood C, Elliot D, DeFrancesco C, Beresford S, Toobert D. Mediation analyses: applications in nutrition research and reading the literature. Requested manuscript in preparation for J American Dietetic Association.</p> <p>Kuehl KS. Cost Justification of Fire Fighter Wellness. Presented at the John P. Redmond Symposium, biannual national symposium for professional fire fighters, Chicago, IL, October 2007</p> <p>Kuehl KS, Elliot DL. Presented the Effects of Sleep Deprivation and Fatigue on Fire Fighter Health &amp; Safety, Canadian Fire Chiefs, Toronto, Ontario, January 2008.</p> <p>Kuehl KS, Elliot DL, Dulacki K, Lenar D. Changing Healthy Outcomes in Clinical Environments. SBM, San Diego, CA.</p> <p>Lockwood C, Beresford S, Elliot D, Toobert D, MacKinnon D. Comparison of three dietary interventions with varied methodology and populations. Society for Prevention Research, San Francisco, CA.</p>

HMC PI	Abstracts, Manuscripts and Other Scholarly Work (continued)
Friedman	Wright, JA, Campbell, MK, Turner-McGrievy, B, Friedman, RH. Generalizability of two commonly used fruit and vegetable screeners. ASPO, Washington, DC.
Gorin	<p>Gorin, A. A., Phelan, S., Raynor, H. A., Maguire, K., Jordan, D., &amp; Wing, R. R. Obesogenic homes: Differences in the home food and exercise environments of normal weight and overweight individuals. Obesity Society, New Orleans, LA.</p> <p>Raynor, H. A., Gorin, A. A., Maguire, K., &amp; Wing, R. R. Reliability and validity of a questionnaire measuring the availability and visibility of fruits and Obesity Society, New Orleans, LA.</p> <p>Gorin, A. A., Raynor, H. A., Maguire, K., Ferguson, E., &amp; Wing, R. R. Modifying the physical and social home environment to promote weight loss maintenance. Association for Behavioral and Cognitive Therapies, Philadelphia, PA.</p>
Hooven	E. Walsh, E. Thompson, C. Hooven. Depression and Suicide Risk: Trajectories in Emerging Adulthood Society for Prevention Research, San Francisco, CA.
Hughes	<p>Hughes, S.L., Seymour, R.B., Campbell, R.T., Huber, G., Desai, P. Healthcare and Aging Award 2008. Awarded by The Healthcare and Aging Network of the American Society on Aging, in collaboration with Pfizer Inc.</p> <p>Hughes, S.L., Seymour, R.B., Desai, P., Der Ananian, C. Translation of Fit and Strong!: Focus group findings from suburban and rural providers and instructors. American Public Health Association, San Diego, CA.</p>
Kirby	CM Carpenedo, B Versak, E Bresani, T Case, J Clement, M Carter, B Rosenwasser, K Dugosh. Cocaine abstinence in a randomized controlled trial of 3 vs 9 months of voucher-based reinforcement. College on Problems of Drug Dependence, San Juan, Puerto Rico.
Lapham	<p>Lapham, S.C., Laxton, G.A. Risk factors for posttraumatic stress disorder in a first driving-while-impaired offender. Research Society on Alcoholism. Washington, D.C.</p> <p>McMillan, G.P., Lapham, S.C. Validation of a DIS-III-R rescoring algorithm for DSM-IV alcohol use disorders. Research Society on Alcoholism, Washington, D.C.</p> <p>McMillan, G.P., C'de Baca, J., and Lapham, S.C. Validation of a DIS-III-R rescoring algorithm for DSM-IV alcohol use disorders. Manuscript submitted to Journal of Studies on Alcohol</p> <p>Lapham, S.C. Manuscript under development. Long-term changes in impaired driving among male and female first offenders 15 years following screening.</p> <p>Lapham, S.C., Skipper, B., McMillan, G.P. Manuscript under development. Comparison of the Cognitive-Behavioral and Social-Control theoretical models in explaining long-term drinking and driving outcomes of first driving while impaired offenders.</p>

HMC PI	Abstracts, Manuscripts and Other Scholarly Work (continued)
Lapham (cont.)	<p>Lapham, S.C. Manuscript under development. Long-term progression of alcohol use and other psychiatric disorders among convicted impaired-driving offenders.</p> <p>Lapham, S.C. Manuscript under development. Natural recovery from alcohol and drug use disorders among first driving while impaired offenders: a 15-year follow-up.</p>
Martinson	<p>Martinson, B.C., Crain, A.L., Sherwood, N.E., Hayes, M., Pronk, N.P., O'Connor, P.J. Maintaining physical activity among older adults: Six-month outcomes of the Keep Active Minnesota randomized controlled trial. <i>Prev Med</i>, 2008, 46(2):111-9.</p> <p>Sherwood, NE, Martinson, BC, Crain, AL, Hayes, M, Pronk, NP, and O'Connor, PJ . Manuscript under review - "A new approach to physical activity maintenance: Rationale, design, and baseline data from the Keep Active Minnesota trial"</p> <p>Martinson, BC, Crain, AL, Sherwood, NE, Hayes, M, Pronk, NP, and O'Connor, PJ . Manuscript in process - "Recruitment and Enrollment of Active Adults ages 50-70 to an RCT of a Physical Activity Maintenance Intervention: Assessment of population reach and enrollment biases"</p> <p>Martinson, B.C., Hanson, L, Sherwood, N.E., Crain, A.L., Hayes, M., O'Connor, P.J. Developing a Multi-Domain Intervention to Maintain Cognitive Health in Sedentary Adults Ages 60-80. Awarded by the National Institute on Aging. Supplemental award to the Keep Active Minnesota project. Purpose is to develop and pilot test a phone-based intervention designed to help older adults (ages 60-80) maintain healthy brain aging through increased physical activity, social integration, participation in cognitively stimulating activities, and eating a "brain healthy" diet.</p>
McKay	<p>McKay, J.R., Lynch, K.G., Van Horn, D., Ward, K., Oslin, D Effectiveness of Extended Telephone Continuing Care. Research Society on Alcoholism, Washington, DC.</p> <p>McKay, J.R., Lynch, K.L., Coviello, D., Morrison, R., Dackis, C. Effectiveness of contingency management and CBT in Intensive Outpatient Treatment for Cocaine Dependence. College on Problems of Drug Dependence, Puerto Rico.</p>
Rimer	<p>O'Neill SC, Bowling JM, Brewer NT, Lipkus IM, Skinner CS, Strigo TS, Rimer BK. Intentions to Maintain Adherence to Mammography. <i>Journal of Women's Health</i>, In press.</p> <p>Lipkus IM, Bowling JM, Gierisch JM, O'Neill SC, Rimer BK. When Ambivalence Predicts Repeat Mammography Screening: It's the Amount of Thought that Counts. 29th Annual Society of Behavioral Medicine Meeting, San Diego, CA.</p> <p>O'Neill SC, Bowling JM, Brewer NT, Lipkus IM, Skinner CS, Strigo TS, Rimer BK. Intentions to Maintain Mammography Adherence. 32nd Annual Meeting American Society of Preventive Oncology, Bethesda, MD.</p>

HMC PI	Abstracts, Manuscripts and Other Scholarly Work (continued)
Roll	<p>Rodgers, M., Norell, D., Dyck, D., &amp; Roll, J. M. An Overview of Mental Health Recovery Primary Psychiatry, In press.</p> <p>Prendergast, M.L., Hall, E.A., Roll, J, Warda, U. Use of vouchers to reinforce abstinence and positive behaviors among clients in a drug court treatment. Journal of Substance Abuse Treatment, In press.</p> <p>Roll, J. M., Howard, J. Economic gain versus economic loss: Role of reinforcer valence in initiating abstinence. Journal of Applied Behavior Analysis, In press.</p> <p>Roll, JM. Contingency Management: An Evidence-Based Component of Methamphetamine Use Disorder Treatments Addiction. Addiction, 2007, 102, 114-120.</p> <p>Myeres, L., Masisis, K. Roll, J. M. Promising treatments for methamphetamine use disorders. Primary Care Provider (2007), 101 - 103.</p> <p>Stitzer ML, Peirce J, Petry NM, Kirby K, Roll J, Krasnansky J, Cohen A, Blaine J, Vandrey R, et al. Abstinence-based incentives in methadone maintenance: interaction with intake stimulant test results. Experimental and Clinical Psychopharmacology, (2007) 5, 344-50</p> <p>Stitzer ML, Petry N, Peirce J, Kirby K, Killeen T, Roll J, Hamilton J, Stabile PQ, Sterling R, et al. Effectiveness of abstinence-based incentives: interaction with intake stimulant test results. Consulting and Clinical Psychology, (2007) 75:805-11</p> <p>Petry, N. M., Roll, J. M., Rounsaville, B., Ball, S., Stitzer, M., Peirce, J. M., Blaine, J., et al. Serious adverse events in randomized psychosocial treatment studies: Safety or Arbitrary Edicts? Journal of Consulting and Clinical Psychology, In press.</p>
Toobert	<p>Toobert, D. J., Strycker, L. A., Barrera, M. Jr., Duncan, T., Klesges, L. M., Yaroch, A. L., et al. Social resources as a mediator of dietary and physical activity change in a multi-site sample. Health Psychology, under review.</p>

HMC PI	Abstracts, Manuscripts and Other Scholarly Work (continued)
Williams, G.	<p>Greene, GW, Resnicow, K, Thompson, FE, Peterson, KE, Hurley, TG, Herbert, JR, Toobert, DJ, Willia. Correspondence of the NCI Fruit and Vegetable Screener to Repeat 24-H Recalls and Serum Carotenoids. <i>Journal of Nutrition</i>, 138(1):200S-4S</p> <p>Thompson FE, Midthune D, Williams GC, Yaroch AL, Hurley TG, Resnicow K, Hebert JR, Toobert DJ, et al. Evaluation of a short dietary assessment instrument for percentage energy from fat in an intervention. <i>Journal of Nutrition</i>, 138(1):193S-9S</p> <p>Williams GC, Hurley TG, Thompson FE, Midthune D, Yaroch AL, Resnicow K, Toobert DJ, Greene GW, et al. Performance of a short percentage energy from fat tool in measuring change in dietary intervention s. <i>Journal of Nutrition</i>, 138(1):212S-217S</p> <p>Peterson, KE, Hebert, JR, Hurley, TG, Resnicow, K, Thompson, FE, Greene, GW, Shaikh, AR, Yaroch, Accuracy and precision of two short screeners to assess change in fruit and vegetable consumption. <i>Journal of Nutrition</i>, 138(1):218S-225S</p> <p>Davis, RE, Resnicow, K, Atienza, AA, Peterson, KR, Domas, A, Hunt, A, Hurley, TG, Yaroch, AL, et al. Use of Signal Detection Methodology to Identify Subgroups of Dietary Supplement Use in Diverse Populations. <i>Journal of Nutrition</i>,138(1),205S-211S</p> <p style="text-align: center;">*Please note all publications relate to data from our first cohort originating in the BCC and extending into the HMC.</p>
Wing	Phelan, S., A. Gorin, T. Liu, J. Hogan, M. Lowe, J. Fava, and R. Wing. What distinguishes long-term weight loss maintainers from the treatment-seeking obese? <i>Society of Behavioral Medicine</i> , San Diego.

HMC PI	Added Measures
Hooven	We designed, and have recently begun implementing a retrospective interview with young adults that focuses on their experiences since high school in the areas of mood, suicide risk, substance use, social support and family relationships, and goals achievement. We also ask about their experiences in the intervention phase of this project. We have conducted 9 interviews so far. We are still finalizing the interview in this initial phase, which can be made available once we have the final version.
Rimer	We added two items to assess the amount of time and mode of transportation our participants are taking to get from their home to the facility where they had their most recent mammogram. Results from these items will aid in the analysis of doctoral student Jessica DeFrank's dissertation: 1) Thinking about your most recent mammogram, about how long did you travel one-way, in minutes, from your home to the mammography facility? 2) Thinking about your most recent mammogram, how did you get to the mammography facility? We added two items to evaluate participants' attitudes on the accuracy of mammograms. We are working with Dr. Noel Brewer, a colleague in the department of Health Behavior and Health Education, to assess these attitudes: 1) How much do you trust mammograms to give accurate information about whether you have breast cancer? 2) How often do you think an abnormal mammogram result means a woman has breast cancer?

HMC PI	Reported Challenges
Beresford	We had one company drop-out post randomization. Company felt that it could no longer participate due to time constraints, lack of interest of company leaders and company characteristics.
Hughes	Retention of participants in post-test measurement continues to be a challenge, also implementation of the telephone reinforcement.
Kirby	We have had trouble maintaining a follow-up rate above 70% at later follow-up points. We have increased participant payment and eliminated one measure to shorten the length of the follow-up. This seems to have improved our follow-up rates.
Lapham	While we met our location goal, we did not anticipate the increased number of deaths. Nor did we anticipate the increased reluctance of individuals to be interviewed even though they had been interviewed in the past and had agreed to future interviews at that time.
Williams, G.	Recruitment to fill the study continues to be a problem.

HMC PI	Reported Findings ***DO NOT CITE WITHOUT PERMISSION OF PI***
DiClemente	An interim data analysis has shown promising treatment advantages for the HIV prevention maintenance strategy for the primary biological and behavioral outcomes over an 18-month follow-up: (1) a significant reduction in laboratory-confirmed incident STDs (OR=.56, P=.03), and (2) a significant effect in amplifying percent condom-protected vaginal sex acts (11% relative mean difference, P=.03) (see Fig. 1). A significant reduction in pregnancy (OR= .64, P=.05) was also observed. Overall, the observed magnitude and consistency of effects, for both the primary biological and behavioral outcomes, strengthen confidence in the efficacy of the HIV-TES as an HIV prevention maintenance strategy.
Lowe	The attrition rate during the weight loss phase was 40%. The following analyses are based upon the first 132 participants to complete the 12-week weight loss phase. On average, they have lost $6.1 \pm 3.7$ kg ( $p < 0.001$ ). Total cholesterol, systolic blood pressure, waist circumference, and HbA1c also significantly decreased during the weight loss phase ( $ps < .01$ ). Analyses of the weight maintenance treatment period (Months 3-12) are based on the first 83 participants to complete it. Weight during that 9-month period has remained stable ( $p = .32$ ). Waist circumference continued to decrease ( $p < 0.01$ ) during this phase despite no significant change in body weight, but most other physiological measures stabilized. The participants who were randomly assigned to stop receiving meal replacements (MRs) after 3 months dropped out at a significantly higher rate by Month 12 than those who continued to receive MRs. In addition, there was a statistically significant effect of MRs on weight change from Month 3 to Month 12 ( $p = .04$ ) such that participants who received MRs tended to lose a small amount of weight during that time ( $0.4 \pm 3.7$ kg) whereas those who did not receive MRs tended to gain a small amount of weight during the maintenance phase ( $1.5 \pm 4.5$ kg). The fact that these results supported ongoing use of MRs despite the likely bias introduced by having more non-MR participants drop out reaffirms other research suggesting that ongoing use of MRs confers a weight maintenance benefit. The following analyses are based on the first 35 participants to have completed the 1-year follow-up (2 years after the beginning of treatment). During the year of follow-up, participants gained an average of $1.6 \pm 3.4$ kg. There is a trend ( $p = .09$ ) towards participants gaining less weight during the 1-year follow up if they received the Energy Density (ED) intervention during the treatment period ( $0.5 \pm 4.0$ kg) than if they did not ( $2.4 \pm 2.8$ kg).

HMC PI	<p style="text-align: center;"><b>Reported Findings (continued)</b></p> <p style="text-align: center;"><b>***DO NOT CITE WITHOUT PERMISSION OF PI***</b></p>
McKay	<p>Data from the first 175 patients were included in the intent-to-treat analyses, which examined alcohol and drug use outcomes out to the 12 month follow-up. The results yielded a significant group x time interaction on the primary outcome measure, days abstinent from alcohol and cocaine in each month (<math>p = .0015</math>). Patients in Extended telephone monitoring and counseling condition (TMC) were abstinent on at least 25 days in each month, whereas those in the control condition (TAU) started out well but had a steeper decline in days abstinent over the follow-up period. Patients in Extended telephone monitoring only condition (TM) also showed initial declines in days abstinent, but began to improve after month 6; outcomes in this group were equivalent to those in TMC by 12 months. Post-hoc comparisons indicated that days of abstinence were higher in TMC than in TAU at 9 and 12 months; higher in TMC than TM at 3, 6, and 9 months; and higher in TM than TAU at 12 months. At the 12 month follow-up, 73% of those in TMC reported no alcohol or cocaine use in the prior month, compared to 65% in TM and 45% in TAU. These results suggest that telephone-based continuing care is an effective method for sustaining good outcomes in alcohol dependent patients receiving outpatient care.</p>
Rimer	<p>1) We assessed annual mammography screening status among 596 insured African American and Non-Hispanic white women ages 43 to 49 by confirming claims data with self-report of the last two mammography dates during telephone interviews. Adherence was defined as having a second mammogram no sooner than 10 months and no later than 14 months after a previous mammogram. We examined sociodemographic, medical and healthcare-related variables on receipt of repeat mammograms on an annual interval. We also assessed specific barriers associated with screening. 44.8% of the sample were adherent to annual interval mammography. History of abnormal mammograms, family history of breast cancer and never having smoked were associated with adherence. Not recalling receipt of mammography reminders and reporting barriers were associated with non-adherence. Four barrier categories were associated with non-adherence: lack of knowledge/not thinking mammograms are needed, cost, being too busy, and forgetting to make/keep appointments. 2) We examined efficacy of our enhanced usual care, enhanced letter, and automated telephone reminders on receipt of annual mammograms. Each intervention produced respectable proportions of adherence, ranging from 71%-76%. Women assigned to automated telephone reminders were about 31% more likely to have had mammograms compared to women receiving enhanced usual care reminders (OR=1.31, 95% CI= 1.08-1.59; <math>p = .006</math>). Reminder efficacy also varied by previous mammography status; automated telephone reminders were particularly effective for women who had gotten off schedule (OR= 1.50, 95% CI= 1.15,1.95; <math>p = .003</math>). 3) Analyses are underway to determine the effect of supplemental interventions (a combination of priming letters and telephone counseling) tailored on women's self-reported barriers and knowledge deficits about mammography (manuscript in preparation).</p>
Williams, G	<p>All major findings are available in the published works listed.</p>