

**APPLICATION OF PUBLIC HEALTH
THEORY IN A RURAL POPULATION
FOR PROGRAM DEVELOPMENT AT
WELLNESS PARTNERS (A
CORPORATE WELLNESS
COMPANY)**

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Internship Dates:
Jan 2-Feb 14,
2013

BACKGROUND

- Health insurance is often provided by employers
 - Their claims increase with unhealthy employees
 - In turn, costs to obtain the insurance also rise for the employees
- Maintaining a healthy workforce is of mutual benefit to the employer and the employee
 - Healthy workers cost less and accomplish more

BACKGROUND

- Employers have taken matters into their own hands with a multitude of strategies involving incentives including:
 - Insurance Premium Discounts
 - Free health screenings
 - Cash
 - Paid time off
 - gym memberships discounts
 - Preventive health screenings
 - Weight loss challenges
 - Access to on-sight fitness facilities
 - Mental health services
 - 24 hour nurse hotlines
 - Flu shots
 - Healthy food options
 - Mental health services/Employee advocates
 - Smoking cessation at no charge
 - Tobacco free campuses
 - Safety programs
 - Personal health coaching

WELLNESS PARTNERS BACKGROUND

- Corporate Wellness company founded by Mark Wilcox in 2002
 - Started off in insurance sales
 - Saw opportunity for clients to cut costs by investing in preventive health care for their employees
- Location: McCook, NE
- 40 employees and growing rapidly



WELLNESS PARTNERS SERVICES

- Health Risk Assessments
- Lab tests
- Personalized annual wellness plan
- Wellness calls with an RN
- Specialists (Dietician, Exercise Physiologist, Employee Advocate) available upon request
- Health Fairs
- Disease management
- Data management
- Monthly Wellness Challenges
- Monthly Wellness Publications
 - The Brief
 - The WellSaid

PUBLIC HEALTH CONTEXT

■ Assessment

- Monitor health status and identify and solve health problems.
 - Accomplished through lab work, personal wellness profiles, and direct interaction with the participant during health fairs and coaching calls

■ Policy Development

- Inform, educate and empower people about environmental health issues
 - Developed educational materials (HB manual)
 - Worked to create new strategies to encourage and empower people to make positive wellness decisions

■ Assurance

- Research for innovative solutions to health problems
 - Health Boost Weight Management
- Evaluate effectiveness, accessibility, and quality of health services
 - Analysis of HB in 2012

PURPOSE OF INTERNSHIP

- Apply public health knowledge in a corporate wellness setting. In particular, research and develop new strategies for addressing the most prominent health issues facing the wellness plan participants in a way that promotes self-awareness and informs and empowers people to invest in their health. Increase amount of exposure current and potential clients have to wellness resources through social media.

METHOD: TARGET POPULATION DESCRIPTION AND NEEDS

- ~30 enrolled employer groups (“clients”)
- ~4000 participants total
- From 28 states
 - Mostly Nebraska
- Primarily agriculture based companies
 - Farmer’s cooperatives, equipment suppliers, etc
 - Also some industrial producers, auto groups, and grocery stores

METHOD: TARGET POPULATION DESCRIPTION AND NEEDS

- Trend: Average participant is showing slow, maintained weight gain year to year
- Need: New strategies to address consistent weight gain
 - Formation of support network
 - Encourage use of WP resources
 - Education on self-awareness
- Trend: Participants view WP as an obligation and an unwanted overseer
- Need: Change perspective of participants
 - Marketing strategies to emphasize WP as an ally in health
 - Empower participants to utilize WP as a resource

DISEASE MANAGEMENT

- Even in a business of prevention, those who have an existing condition cannot be overlooked and are an important component of employee wellness
- For the Wellness Partners, the solution is Health Boost (HB)

WHAT IS HEALTH BOOST?

- Program offered for disease management as a part of the “full package” for those participants who meet the following criteria:
 - Diagnosed Diabetic (Fasting blood glucose (FBG)>125),
 - Pre-Diabetic AND Obese (FBG> 110-125 AND BMI>30), or
 - Hypertensive: Blood Pressure 160/100 mm Hg or higher.
- Those qualified can choose to enroll at no extra cost and receive:
 - Quarterly A1C kits
 - *For diabetics only, as you will see later, this is the large majority of current Health Boost participants
 - Quarterly phone consults with a nurse
 - Phone consultations and coaching with specialists
 - Dietician, Exercise Physiologist, and Employee Advocate
 - Actively managed wellness plan involving the entire HB team
 - Nurses and specialists offer collaborative case management
- Has been in operation for 2 years as a trial and was due for analysis and review in January 2013

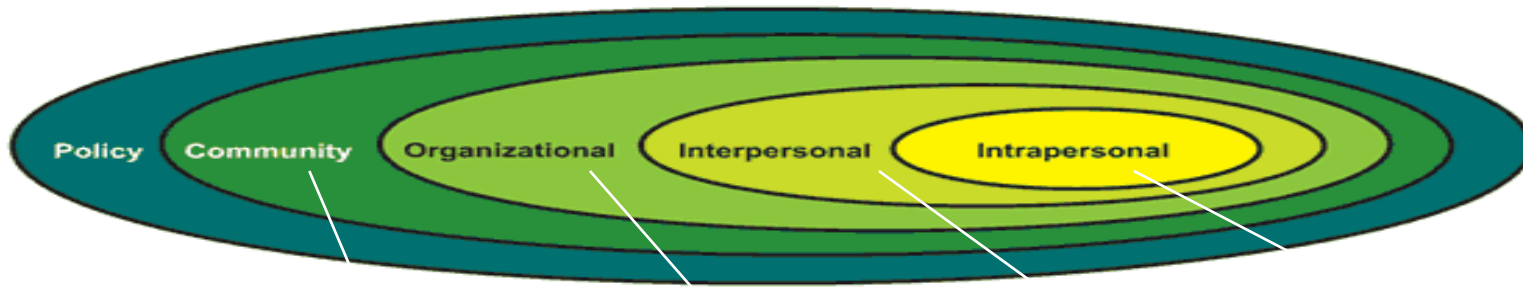
WHERE IS HEALTH BOOST HEADED?

- **Expansion:**
 - **Of criteria for eligibility**
 - **BMI>40 regardless of comorbidities**
 - **Why? Morbid obesity is associated with countless negative health consequences**
 - **Program components**
 - **Weight Management**
 - **Why? Important part of disease management and prevention**

INPUTS	OUTCOMES				
	Activities	Outputs	Short-term	Medium-term	Long-term
Funding	Research TTM interventions and construct a literature review Research and create wellness journaling tools Research staging mechanisms for different behaviors using the TTM Become familiar with the Health Boost program Collaborate with other specialist staff members to create an implementation and evaluation plan for the new sector of Health Boost Analyze data on current and potential participants in the Health Boost program Develop new strategies for the new population being added to Health Boost Become familiar with all of the services offered by the Wellness Partners and summarize them for employee benefits guide Monitor and contribute to the Wellness Partner's Facebook page Travel as part of a team to conduct health fairs Research pre-diabetes and type 2 diabetes and develop content for an informational/empowerment pamphlets Analyze the Wellness Partner's website and construct new content and features for it's redesign	Description of services for employee benefits guide	Increased exposure of the Wellness Partners to the public	More cost effective use of resources	More clients for the Wellness Partners
Facilities		Wellness Journaling Tool			
Development Hours		Program plan, implementation plan, and evaluation plan for new division of Health Boost	Increased client engagement online	Increased ROI for clients	Increased impact of services provided (ie larger improvements in employee wellness)
Paper		Content for diabetes pamphlets			
Data Collection		Blueprint for website overhaul	Increased availability of resources to clients	Increased sense of community among Wellness Partners staff, employer groups, and participants	Better quality of life for all Wellness Partner clients
Research		Literature review over TTM interventions in the workplace			
Computer		# of people reached through Facebook	Increased self-awareness of lifestyle and its impact among participants	Increased use of POC for new participants in Health Boost	
Internet		# of people to be invited to the new division of Health Boost			
KSU Online Libraries					



Ecological Model for Health Promotion Interventions



Future incentives tied to the Health Boost program

Future policy changes associated with website development

Future changes in Health Boost criteria

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METHOD: MEASURES AND EVALUATION

■ Facebook

- Download administration data from the site. Compare baseline with post-internship report

■ Health Boost

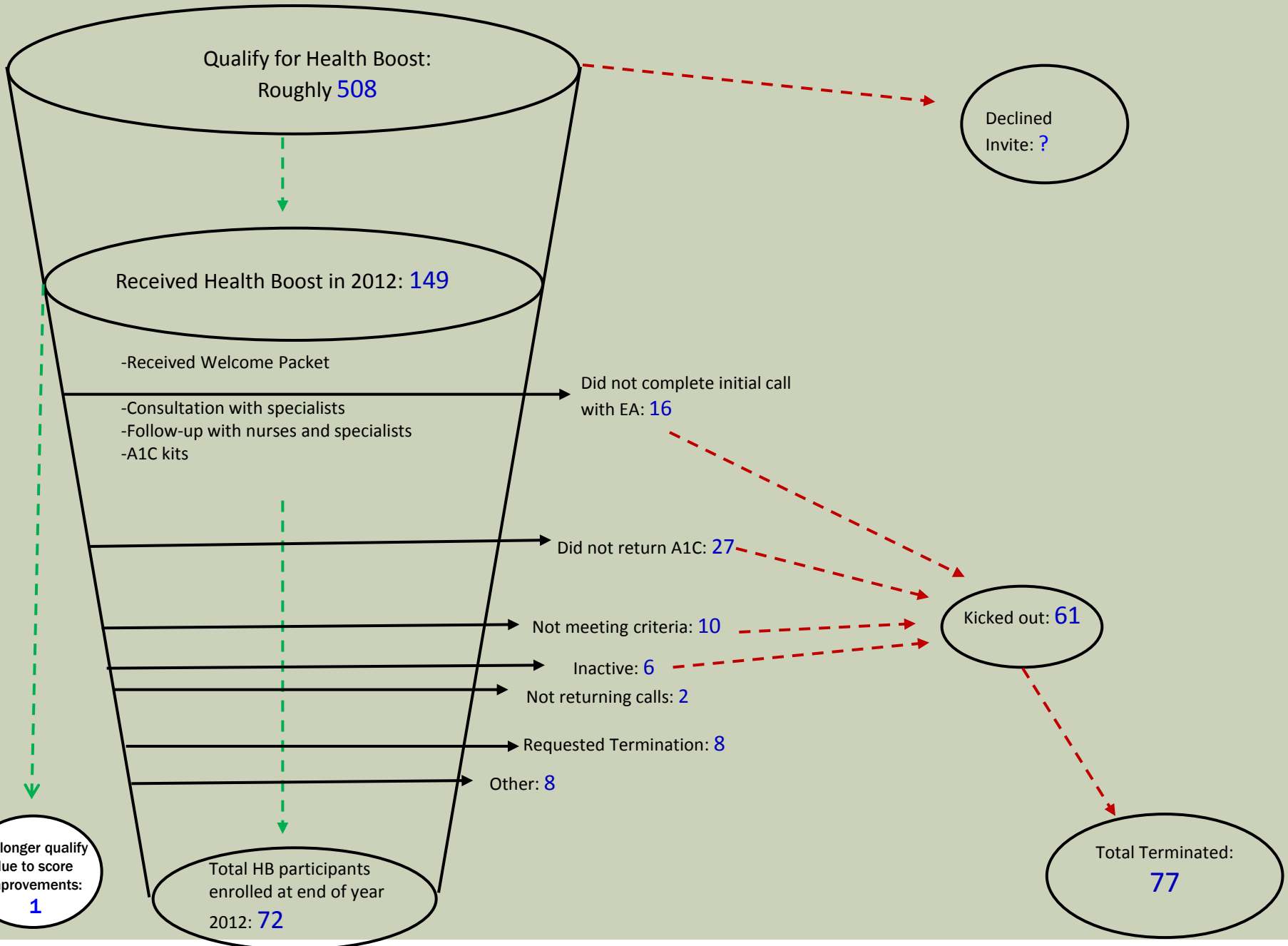
- Baseline participant data on demographics, weight, BMI, A1C, cholesterol, and BP
 - Analyze the success of the past year (2012) gather the same data this year with the new program and compare in 2014
- Collect disease status, readiness and confidence to change, and demographic data for the new potential HB participants

■ Health Boost Manuals

- Obtain cost of printed materials currently used by WP and compare to estimated cost of production of new HB manuals

RESULTS: WP PARTICIPANT DEMOGRAPHICS

	# of People/ % of Total	Average BMI	Average Age	#Diabetic/ % of total weight category	#Hypertensive/ % of total weight category	#Hyperlipidemia/ % of total weight category
Morbidly Obese	341/8.68	45.31	48	58/ 17	143/42	124/36.36
Clinically Obese	449/11.42	36.98	49	64/14.25	180/40	107/23.83
Obese	971/24.71	32.16	49	97/10	278/28.63	182/18.74
Overweight	1256/31.96	27.41	48	55/4.4	243/19.34	178/14.17
Normal Weight	878/22.34	22.58	45	15/1.71	75/8.54	66/7.5
Underweight	35/<1	17.68	42	1/ 2.8	2/5.7	3/8.6
Total/Overall Average	3930	30 ± StD 6.84	48 Range: 20-78	290/7.38	921/23	660/16.8



RESULTS: HEALTH BOOST

Current Health Boost Participants by disease condition

By Health Condition(s)	Non-Diabetic	Pre-Diabetic	Diabetic	Total
Single Condition	XXX	1	7	8
Plus Obesity	0	9	23	32
Plus Hypertensive	1	1	7	9
Plus Obesity and Hypertensive	0	2	30	32
Total	1	13	67	81

80% of the people currently qualified for and enrolled in HB are Obese

Participants enrolled before 2012 and still enrolled			
	Improved (%)	Declined (%)	No Change (%)
Hgb A1C	45.16	41.94	9.68
Glucose	46.88	50.00	3.13
Total Cholesterol	46.88	53.13	0.00
LDL	34.38	59.38	3.13
HDL	40.63	53.13	6.25
BMI	43.75	53.13	3.13
Weight	56.25	43.75	0.00
Triglycerides	62.50	37.50	0.00
BP	12.50	9.38	78.13

Average improvement only among those who improved	
A1C	0.8
Total Cholesterol	21
BMI	1.5

About half of the pool improved health parameters. Although this is an impressive statistic in general, the amount of time/money being spent cannot be applied once the pool is expanded.

RESULTS: HEALTH BOOST

New HB Candidates Descriptive Characteristics

	Morbidly Obese
Single Condition	179
Plus Diabetes	15
Plus Hypertension	102
Plus Diabetes and Hypertension	31
Total	327
Males	158
Females	183
Average Age	48 Range: 21-71
Average BMI	45.3 + StD 4.79

46% of new candidates have a comorbidity of diabetes, hypertension, or both

RESULTS: HEALTH BOOST

Known TTM constructs of new candidates:

Number of the New HB Candidates Readiness to Change by Category

	Exercise	Nutrition	Stress	Weight
Precontemplation	46	33	73	19
Contemplation	106	78	35	98
Preparation	75	62	35	71
Action	68	91	36	106
Maintenance	32	63	142	35
No Response	14	14	20	12

New HB Candidates Confidence to Change

	Exercise	Nutrition	Stress	Weight
Very Confident	74	84	177	39
Somewhat Confident	226	225	129	201
Not Very Confident	36	28	28	94
No Response	5	4	7	7

RESULTS: SOCIAL MEDIA

Change in Wellness Partners' Facebook Exposure from Dec 2012 to Feb 2013

Past 28 days of Activity:	Baseline: Dec 25-Jan 21	Practicum: Jan 22-Feb 14
People Talking about Wellness Partners	0	39
Page Engaged Users	0	47
Organic Reach	5	70
Viral Reach	8	165
Total Reach	12	220
Lifetime Total Likes	34	69

RESULTS: HEALTH BOOST MANUALS

- Currently spending \$3000 annually for “Well Assured Guides”
- The annual price to print the new “Health Boost Manuals” is \$700-\$900

Reducing the cost of materials by 2/3, saving the WP ~\$2200 per year

FUTURE DIRECTION AND ANALYSIS

- Continue materials development for the new HB program and then implement it. In one year analyze:
 - Success compared to 2012: change in weight, BMI, triglycerides, A1C (glucose), cholesterol, and blood pressure
 - Pre-Post comparison of readiness to change and confidence to change
- Continue monitoring Facebook
 - What time of day were the farthest posts posted?
 - What type of posts are getting the most exposure?
 - Who is looking at the posts and what do they want to see more of?
- Develop Pinterest boards
- Pursue development of website and interactive features

PUBLIC HEALTH IMPLICATIONS

- WP gained evidence-based strategies to maximize the impact on client wellness
 - Theory-based changes to HB
 - Coaching aides for the nurses
 - New journaling tool
- Expand the amount of people exposed to wellness material and resources
 - Expansion of HB
 - Marketing of Facebook and website
 - Strategies for nurses to share material

COMPARISON TO PAST RESEARCH

LIMITATIONS

- **Data Analysis**
 - Continually collecting data
 - Have been inconsistencies in data charting in the past
- **Did not have a public health professional as immediate supervisor**
 - Also a challenge that may have been advantageous
- **Limited exposure to diverse participants**
 - Most from same industries. Little experience with a white collar population

IN CLOSING (CONCLUSION)

- WP internship was a challenging and enjoyable launching pad for my future in public health
- Excellent real-world application that allowed me creative freedom
- Considering inputs of owners (business-invested), coworkers (clinically invested in participants), participants, and clients while maximizing public health impact in a cost-effective manner