

Live Healthy... Work Well - A Diabetes Study for a Healthy Workforce: Utilizing Life Coaching to Build Diabetes Self-Management Skills - Preventing Complications and Loss of Employment



Abstract

The Hawai'i Demonstration to Maintain Independence and Employment (DMIE) "Live Healthy – Work Well" (LHWW) Project is funded by the U.S. Centers for Medicare & Medicaid Services and is a joint partnership between state and private industry, facilitated by the University of Hawai'i at Manoa – Center on Disability Studies. The goal of the LHWW study is to determine whether access to diabetes supports can improve health, prevent loss of employment and independence, and forestall the need for public assistance programs (SSI and SSDSI). LHWW examines how access to life coaching, pharmacist counseling and other supports impact employed (40+ hours per mo.) persons ages 18 - 62 living with a chronic illness - diabetes.

Research Statement

This poster will address the following questions:

- What was the effect of Life Coaching and Pharmacist Counseling on participant's health outcomes, quality of life, and functioning?
- How satisfied were participants with Life Coaching and Pharmacist Counseling?

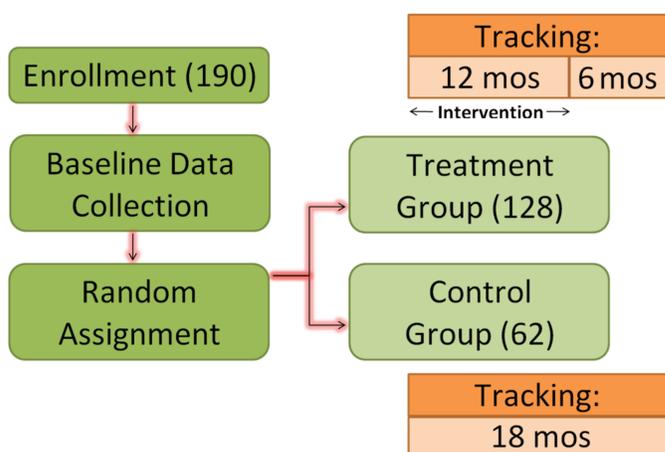
"Coaching allows me to share concerns about other aspects of my life which affects the way I deal with my health."

Baseline Demographics

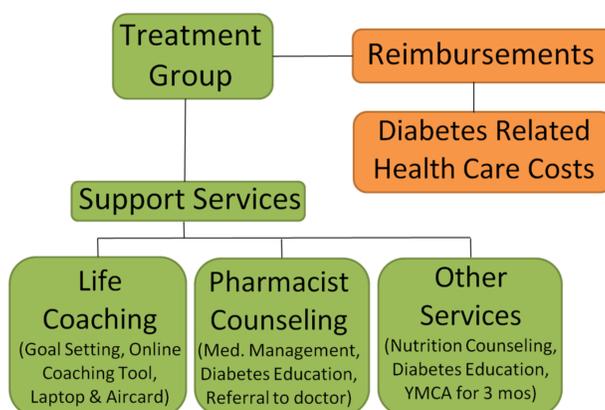
Diabetes Type Type 2: 86%	Gender Female: 63%
Years since diagnosis Mean: 8 yrs	Age Mean: 48 yrs
Hemoglobin A1c¹ Mean: 7.8%	Education Bachelor's degree or higher: 50%
Body Mass Index (BMI)² Overweight or Obese: 86%	2007 Annual Earnings³ Mean: \$44K
Healthcare Coverage Insured: 97%	Employment Mean hrs worked/wk in past month: 38 hrs

1 Obtained from healthcare provider
2 Calculated from height and weight obtained from healthcare provider
3 Obtained from State of HI Dept of Labor & Industrial Relations
All other data: self reported

Two Group Randomized Controlled Trial



Intervention Components



*Control Group received Usual Care, reimbursements for health assessments, and incentives for completion of evaluation surveys.

Methods

Health	<ul style="list-style-type: none"> • Well being – SF-12 physical and mental summary scores (SR = Self Reported) • Functioning – Activities of Daily Living, Instrumental Activities of Daily Living (SR) • Diabetes self efficacy – U Michigan Diabetes Empowerment Scale short form (SR) • Diabetes management – Hemoglobin A1c • Weight loss – Body mass index
Employment	<ul style="list-style-type: none"> • Hours worked (SR) • Earnings (from Hawaii Department of Labor) • Work Productivity and Activity Impairment (specific health problem version)
Disability	<ul style="list-style-type: none"> • Participation in government programs (SR): Temporary Assistance to Needy Families, Food Stamps, Section 8 or other subsidized housing, Medicaid, Vocational Rehabilitation

Preliminary Findings

Health and Functionality

Diabetes self efficacy and body mass index changes were significantly better in the treatment than the control group.

Measure	T	C	p-value
Diabetes self-efficacy (% improved)	68%	45%	0.007
Body mass index¹	-0.64	0.09	0.02
Number of ADLs	-0.30	0.07	0.06
Number of IADL	-0.36	0.00	0.09
SF-12 (mental)	0.61	-0.77	0.32
HbA1c ²	-0.003	-0.002	0.59
SF-12 (physical)	1.60	1.90	0.81

¹ Among participants overweight or obese at baseline.

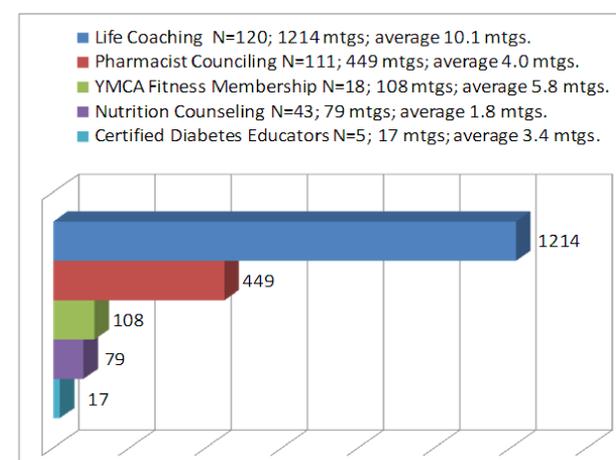
² Among participants that had moderately or poorly controlled diabetes at baseline.

Employment

- Changes in work productivity reported by the treatment group were significantly better than those reported by controls.**
- Treatment group reported losing work hours while the control group reported slight gains; however, earnings did not change.**

Measure	T	C	p-value
Effect diabetes has on work productivity	-0.38	0.31	0.008
Hours worked (in past week)	-6.83	0.98	< 0.001
Annual earnings (\$)	2,264	2,119	0.95
Hours absent (diabetes-related, in past week)	0.28	0.09	0.77

Intervention: Service Usage



Satisfaction

Life Coaching	N= 66	Mean
Coaching improved my health, employment, or other areas.	N= 66	4.26
My coach listens to me.	N=66	4.86
SMART goals made positive changes in my life.	N=66	4.0
I will continue to set SMART goals.	N=66	4.02
I would recommend coaching to others.	N=66	4.59



Mean = 4.59
1= Strongly Disagree
5= Strongly Agree

Pharmacist Counseling	N=65	Mean
Helped me find solutions to my diabetes related problems.	N=65	3.74
Showed respect for my opinions.	N=65	4.08
Materials given to me were useful.	N=65	3.83
My sessions were beneficial.	N=65	3.77
I would recommend a pharmacist to others.	N=65	3.97



Mean = 3.97
1= Strongly Disagree
5= Strongly Agree

Implications

When offered an array of diabetes services, patients gravitate to the ones they find most useful. Supporting people with diabetes to set goals and access services results in high satisfaction which may correlate to better diabetes health outcomes. While more research is needed, the life coaching model shows promise as a way to assist people with diabetes and other chronic conditions. Preliminary findings indicate:

THE INTERVENTION:

- Lowered effect of diabetes on work productivity
- Increased diabetes self efficacy
- Improved health
- Increased participant knowledge, lifestyle changes and improved diabetes management
- More effective for those with poor chronic disease management skills