## Health Coaching in Primary Care: A Pilot Study R. Engstrom, N. Peddireddy, J. M. Mann, J. Mckenna, M. Segar, A. Locke, and Z. Djuric University of Michigan Department of Family Medicine, Ann Arbor, Michigan

As obesity and obesity-related illnesses continue to rise across the globe, it is important to find ways to help individuals lead a healthier lifestyle. This is especially important in primary care as physicians are increasingly charged with prevention of disease. Health coaching has the potential to maximize patient health in a cost-effective way. In health coaching, the coach partners with the patient, helping them discover their own strengths, challenges, and solutions. We conducted a pilot study in one primary care practice using a trained medical assistant as a health coach. This was an interim analysis of the first 54 subjects enrolled to evaluate how motivation and stress contribute to achieving one of the health coaching goals, namely physical activity. The Cohen Perceived Stress Scale was used to evaluate subject stress level, and a motivation questionnaire was developed for this study to measure both extrinsic and intrinsic motivation for physical activity. At study entry, stress and extrinsic motivation negatively impacted on physical activity while autonomous motivation had a beneficial effect. Over 12 weeks of coaching, mean total physical activity increased by 47 minutes/week, but only 18 subjects completed the study thus far. These trends in change over time may become significant as more subjects complete the study. These data thus far show that health coaching is feasible in primary care and that coaching likely should target methods to increase autonomous motivation.



# Health Coaching in Primary Care: A Pilot Study

# INTRODUCTION

As obesity and obesity-related illnesses continue to rise across the globe, it is important to find ways to help individuals lead a healthier lifestyle. This is especially important in primary care as physicians are more and more charged with prevention of disease. Health coaching has the potential to maximize patient health in a cost-effective way. In health coaching, the coach partners with the patient, helping them discover their own strengths, challenges, and solutions. We conducted a pilot study in one primary care practice using a trained medical assistant as a health coach. This was an interim analysis of the first 54 subjects to evaluate how motivation and stress contribute to achieving one of the health coaching goals, namely physical activity.

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Notes: BMI<2

# **Table 2: Physical Activity at Baseline**

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For the state of Michigan, the values were bb.b% active, 45.7% very active, and 25.1% inactive

# METHODS

# Eligibility

- Adult patients of Briarwood Family Practice
- Have telephone access
- Physician approval for participation

# Study Design

- 12-week health coaching program
- Subjects could choose to work on physical activity, diet, and/or sleep
- Study questionnaires, anthropometrics obtained at 0 weeks and 12 weeks
- Coaching was done initially in person followed by telephone contact\
- Contact frequency was Weekly for the first 4 weeks Biweekly for the last 8 weeks

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# **Table 1: Subject Demographics**

cteristic	Mean (range) or Number (%)
er enrolled in 6 months	54
ears	52 (31-69)
sian	38 (70%)
e Graduate	45 (83%)
g/m <sup>2</sup>	34 (23-51)
more days with bad last month	11 (20%)
None were smokers. Only one subject had 25.	

racteristics	Mean, SD, Percent
: PA	196 min/week, 182 SD
erate PA	126 min/week, 216 SD
nuous PA	37 min/week, 69 SD
n Score	15, 13 SD
sically Active <sup>a</sup>	33.3%
Active *	16.7%
tive *	11.1%
Meeting Physical uirements	81.5%
m the CDC definition, he state of Michigan, the values were 66.6%	







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# RESULTS

# **Figure 2: Change Over 12 Weeks** in Physical Activitt (A) and **Moivation (B)**



**B.** Change in Motivation and Stress Scores after 12 Weeks of Coaching (Mean, SE)



# SUMMARY

- Most of the subjects recruited were well-educated females
- ✤ Most of the subjects chose to work on physical activity (85.2%)
- Extrinsic and Autonomous motivation affected physical activity in opposite ways (Figure 1)
- Most of the Subjects were not meeting physical recommendations at baseline(Figure 1)
- Thus far, physical activity is trending in the right direction, this should become significant as more subjects finish the study(Figure 2)
- Health Coaching with a Medical Assistant was feasible in primary care setting
- Favorable trends were observed in physical activity and body weight
- This study is ongoing for one more year

# Light Stress

