Development of an Education Intervention to Prevent Sedentary Behaviors in an Adult Family Practice Population

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Background

Chronic diseases are a significant health concern. Sedentary behaviors have been identified as contributors to chronic disease.

Emerging evidence suggests a distinct underlying physiology for prolonged sitting time related to the inactivation of lipoprotein lipase, and subsequent deleterious impacts on lipid metabolism.

Chronic diseases such as heart disease, diabetes, obesity are among the most common costly and preventable of all health problems.

Reducing uninterrupted sitting time can improve health.

Purpose

The current knowledge gap provides a need develop effective interventions.

The purpose of this project was two tiered. Identify patient interest in learning more about sedentary behaviors; identify a preferred learning tool. Then develop the tool to help reduce sedentary behavior in adults in a primary care setting.

Methods

A convenience sample of 20 anonymous adult patients from a primary care practice in Maine completed a baseline needs assessment survey.

Methods Continued

The education tool, a website, was developed based on the survey results. The tool was validated with the Systems Usability Scale (SUS) and reviewed by expert consultants for content.

Results

Patient preference by survey*
- Webpage: 5
- You Tube Video: 3
- Pamphlet: 2
- Other: 1

*SUS Results
- Mean SUS score: 86.7
- Usability: 85.4
- Learnability: 91.7
- Cronbach alpha: 0.745

Expert Consultants Comments
- Further define medical terms in a user friendly format
- Identify the muscle groups targeted with each stretch.

Implications

Giving primary care providers a patient preferred tool to decrease sedentary behavior may help reduce chronic disease in primary care populations.

References


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BACKGROUND
*Chronic diseases are a health concern; sedentary behaviors have been identified as contributors to chronic disease.
*Evidence suggests an underlying physiology for prolonged sitting time related to the inactivation of lipoprotein lipase, and subsequent deleterious impacts on lipid metabolism” (Owen et al)
*“Chronic diseases such as heart disease, diabetes, obesity are among the most common costly and preventable of all health problems” (CDC)
*“Recommendations for time allotted to uninterrupted sitting time are warranted” (Rhodes et al)

PURPOSE
*A paucity of literature regarding adults population understanding of the negative effects of sedentary behaviors; and lack of effective interventions to prevent sedentary time.
*There exists a need to further understand this gap and develop an effective intervention for primary care use.
*The purpose of this project was twofold, to measure baseline knowledge and to develop a patient preferred tool for use in primary care.

METHODS
*Quality Improvement
*Convenience sample of 20 anonymous & voluntary patients filled out a baseline needs assessment survey
*Education tool was developed based on the survey results
*Tool was validated with the SUS scale reviewed by expert peers
*Descriptive and Inferential statistics
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RESULTS
Survey Results
Webpage 5
You Tube Video 3
Pamphlet 2
Other 1
Did not meet inclusion criteria 9
SUS expert consultants
Fitness expert: Physical therapist: Nurse Educator:
Import SUS calculations from spreadsheet
patient preferred method of 1