2018

The Inception of a Prediabetes Prevention Program in County Government

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Consultancy Project
Executive Summary

Organization:	Gardner-Webb University School of Education
Project Title:	The Inception of a Prediabetes Prevention Program in County Government
Candidate:	Gregory R. Grier, MBA
Consultancy Coach:	Dr. Jeffrey Hamilton
Defense Date:	July 12, 2017
Authorized by:	Allison Mauney, Human Resource Director

Amendment History

Version	Issue Date	Changes
1	5/1/2018	Initial version.
2	5/30/2018	Additional information provided per Advisor.
3	6/18/2018	Revisions per editor.

Approval

This consultancy project was submitted by Gregory R. Grier under the direction of Direction of the persons listed below. It was submitted to Gardner-Webb University School of Education and approved in partial fulfillment of the requirement for the degree of Doctor of Education at Gardner-Webb University.

_____ _____

Dr. Jeffrey Hamilton, Faculty Advisor **Date**
Gardner-Webb University

_____ _____

Allison Mauney, Site Advisor **Date**
Cleveland County Government
Human Resource Director

Acknowledgements

Romans 8:28 "And we know that God causes everything to work together for the good of those who love God and are called according to his purpose."

As I conclude this chapter in my life, I would like to recognize and thank those who have prayed and supported me throughout this process. First and foremost, I would like to thank God for his unfailing love and for being with me every step of the way. To my wife, Danielle for her patience, support, and love! I love you baby. You have been my encourager, supporter and partner in marriage for 10 years and I am grateful. I dedicate this book to you and also my Nana (Frances Marie Mitchell). Nana thank you for your constant support, for being my biggest cheerleader, and most importantly my prayer warrior. I am also thankful for my son, mother, step-father, siblings, in laws, aunts and uncles. You have each played a unique part in your own special way and I am eternally grateful.

I would also like to thank my church family St. Peter Baptist Church and Pastor Reverend William Thompson for being my spiritual leader for the past 12 years – you have been a source of inspiration and a sounding board for both my personal and professional life. Thank you, Pastor.

Lastly, I would like to thank my classmates, and staff/faculty of Gardner-Webb University. Ten years and 3 degrees later I have learned much, grown significantly, and I am very thankful specifically for the support of Dr. Cindy McKinney, Chief Barry Johnson, Lou Ann Scates, and Susan Glascock.

Abstract

The Inception of a Prediabetes Prevention Program in County Government. Grier, Gregory R., 2018: Consultancy Project, Gardner-Webb University, Digital Commons/Prediabetes Prevention Program/Wellness/Health Indicators

With the increasing prevalence and high cost of treatment, diabetes places an enormous demand on economic resources. To combat this issue and rising health care costs, Cleveland County Government took a proactive approach and partnered with its local YMCA. The YMCA was contracted to provide Prediabetes Prevention and Diabetes Control program classes to County employees. The programs were designed to (a) decrease the A1c level of program participants, (b) lower health care costs for the County, and (c) provide education about prevention and maintenance.

The ultimate goal of the program was to assist county administration and staff in their efforts to improve the quality and effectiveness of the program while also determining if the County needed to renew the 3-year contract. This evaluation focuses on the benefits of the program and the success of program participants based on biometric screening results and includes a review and analysis of survey data collected from program participants.

Results indicate that after the first year, the County saved approximately $550,000 in health care costs by offering the program. Biometric screening results for program participants significantly improved with 77 employees moving from a prediabetes range glucose to a normal range glucose and with 246 employees improving A1c (blood glucose) metrics from the previous year.

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1 Introduction

1.1 Project Purpose

Based on County Health Rankings published by the University of Wisconsin and the Robert Wood Johnson Foundation in 2014, Cleveland County ranked 84th within the state for having poor health (2014), with 10% of its current population having been diagnosed with diabetes and County government employees making up 1% of the population.

With this report, along with rising employee health care costs, County management made a concerted effort to take action and improve the health of the workforce. The overall purpose of this evaluation was to examine the impact of diabetes and diabetes prevention programs in relation to biometric screening results and personal health gains. Outcomes were evaluated through the use of program participant survey data as well as analyzing the cost benefits to the County. The Consultant also served as a program participant and case study.

In addition, the evaluation will provide valuable feedback to the County human resources department as well as the YMCA that may be used to improve program effectiveness as well as ways to enhance workplace health throughout the County.

Technical Terms and Definitions:

Biometric screening. "The measurement of physical characteristics such as height, weight, body mass index, blood pressure, blood cholesterol, blood glucose (A1c) to determine any potential health risk" (Center for Disease Control, [CDC] 2015, para. 2)

Cleveland County STRONG. "Cleveland County Government's Healthy Lifestyle Vision. Which combines physical activity, nutritional education and counseling, and positive workplace initiatives. Cleveland County is working hard to create a vision to improve the quality of life of its employees" (Cleveland County Government Vision Statement, p. 18).

STRONG acronym. Service; Teamwork; Respect; Opportunity; Networking; Getting Healthy.

Prediabetes.

> Individuals with prediabetes have a high blood sugar, but not high enough to be considered or diagnosed with diabetes. People with prediabetes are at an increased risk of developing Type 2 diabetes within 5 years if not controlled or corrected by lifestyle modification. (American Diabetes Association [ADA], 2016, Prediabetes section, para. 2)

Diabetes.

A progressive disorder of abnormal elevation in the blood glucose level as a result of a lack of insulin, decreased ability of the body to use insulin, or both. Insulin is a hormone in the body that allows sugar (glucose) into the body cell to be converted into energy. A defect in insulin secretion, insulin action, or insulin resistance will result in high blood sugar. (ADA, 2016, Type 1 diabetes section, para. 2)

Diabetes education.

A specialized form of education for diabetic or prediabetes patients focusing on self-management by a facilitator/life coach discussing diabetic education in relation to nutrition, exercise, disease process, medication management, and prevention and assisting the patient in setting achievable short and long term goals. (Hass et al., 2016, p. 2402)

Key acronym. Prediabetes Prevention Program (DPP).

1.2 Associated Documents

A: Program Participant Survey Data. Each participant of the DPP program is asked to complete a satisfaction survey. The information gathered from the survey is then aggregated and evaluated (see Appendix A).

B: Cleveland County Health Rankings. "The Rankings not only provide a snapshot of a county's health, but also are used to drive conversations and action to address the health challenges and gaps highlighted in these findings" (County Health Rankings, 2018, p. 3; see Appendix B).

C: Cleveland County Public Health Center State of the County Health Report. This report further outlines the County Health Rankings report and outlines measure utilized to address the health challenges within the county (see Appendix C).

1.3 Project Plan Maintenance

The Project Plan was evaluated as each project milestone was completed. Each milestone was evaluated and approved by Dr. Jeffrey Hamilton. In addition, the Consultant met with County Management to address any concerns or issues that needed to be addressed during the Consultancy Project.

2 Project Scope

Prior to the inception of the DPP, the Board of County Commissioners as well as the County Manager's Office was concerned with the County Health Rankings report as well as rising employee health care costs. The decision was then made to partner with the local YMCA to create and support a program that was evidence based to help control costs. Through these cost savings, monies would be reinvested to improve employee benefits and compensation. The scope of the study focused only on participants in Cleveland County's DPP program during the 2014-2015 fiscal year. It was limited only to data and information obtained from the interview questionnaires distributed at the end of the program. Personal experience was also included as the Consultant was also a participant in the program.

The limitations of the study included participates answering all the questions on the survey (preventing missing data) and honesty of participant responses due to self-reporting.

The purpose of this study is to help Cleveland County Government ensure that it supports the County's mission to provide a quality wellness program for its employees. This was measured through the following objectives:

2.1 Outline of Partnering Organization's Objectives

2.1.1 Objectives

The purpose of this project was to evaluate the impact of the program in relation to biometric screening results and personal health gains as well as provide valuable feedback to the County's Human Resources Department as well as the YMCA that may be used to improve program effectiveness. In addition, the following SMART objectives were utilized:

Objective	Performance Indicators
1. Provide aggregate data of employee participation in the Prediabetes and Diabetes prevention classes.	Attendance of Participants? Frequency of Classes? Mode of Delivery? Successful completion? Personal Reflection.
2. Was the program beneficial? Did the program help to improve the knowledge of employees?	Survey results
3. Employee Satisfaction?	Survey Results
4. Did the program improve the health, habits, or conditions of employees and for you personally?	Number of those making personal life changes? Barriers to making changes? Number achieving goals in regards to biometric results? Personal health gains?

2.1.2 Success Criteria

The success of the project is measured through biometric screening results and personal health gains for employees which include lowering blood glucose, blood pressure, cholesterol, waist circumference, or increasing physical fitness. In addition, aggregate data from program participant surveys is used to address program effectiveness. Most importantly, success is based on lowering bottom line health care costs for the County.

2.1.3 Risks

The main risk factor associated with the project is the implication that biometric screening results the following year would improve and that health care costs would decrease.

In addition, a SWOT analysis was also completed to show further risk factors. A SWOT analysis "is a study undertaken by an organization to identify its internal strengths and weaknesses, as well as its external opportunities and threats" (Dubrin, 2013, p. 420).

Strengths Peer Support Long Term format (12-month program) Free YMCA membership Lifestyle Coaches Accredited Program	Weaknesses Length of program Follow up after graduation
Opportunities Expansion of programming Engage the entire family Expand program curriculum	Threats Lack of Family Support Loss of Funding Loss of motivation from staff

2.2 Outline of Student's Objectives

2.2.1 Objectives

The Consultant's main objective was to serve as a Champion for the project. A Champion as defined by Business Dictionary

> is a person who voluntarily takes extraordinary interest in the adoption, implementation, and success of a cause, policy, program, project, or product. He or she will typically try to force the idea through entrenched internal resistance to change, and will evangelize it throughout the organization. (Business Dictionary, 2018, Section Champion, para. 1).

In addition, the following objectives were utilized for the Consultancy Project:

1. This project will help County management gain a deeper understanding of program effectiveness through quantitative analysis, resulting in the production of a satisfaction survey.
2. This project will result in a qualitative analysis of the DPP based on biometric screening results and personal experience.
3. This project will result in the production of a comprehensive report of the research findings, along with at least two recommendations for program effectiveness.

2.2.2 Success Criteria

1. This project will help County management gain a deeper understanding of program effectiveness through quantitative analysis. This will be obtained through evaluation of biometric screening results as well as the production of a satisfaction survey.
2. This project will result in a qualitative analysis of the DPP based on findings from the Consultant as a participant.

3. This project will result in the production of a comprehensive report of the research findings, along with at least two recommended solutions for program effectiveness identified by the end of July 2018.

2.2.3 Risks

Student risks were minimal as the project was supported by the County Manager with approval from the Board of County Commissioners; however, the following risks were considered in relation to program participation: funding for continuation of the program; the hope for positive results in biometric screening reports; and the resistance of program participants to follow the program as outlined by the Coach. It is assumed that participants in the program will accept the education and training by the lifestyle coaches, while making positive lifestyle modifications. There is also an assumption that the project will lower the health care costs of the County.

Last, a risk that was not considered but became apparent is the lack of interest in the program from County administration. Due to a change in administration, other issues took precedent.

See Section 9.1 for Risk Table.

2.3 Definitive Scope Statement

The project evaluated the impact of the program in relation to biometric screening results. The scope of this project was limited to survey data and direct savings costs in relation to the program benefits, which led to the question, should the County renew its contract with the YMCA as a provider of the diabetes program?

3 Deliverables

3.1 To Partnering Organization

The outputs of the project were the cost savings the County would receive if employees followed the program model.

Deliverables/Benefits/Outputs of the Project

The projected organizational deliverables or outputs of the project included

1. A decrease in overall employee health-related costs
2. To delay/reduce incidences of type II diabetes
3. To enhance the County employee wellness program
4. To inform, educate, and engage staff and stakeholders continually about diabetes.
5. To improve the health and well-being of Cleveland County staff with the goal of affecting the County as a whole, especially people most in need of support and assistance, emphasizing education and prevention and optimal human service delivery.
6. To identify, collaborate, and coordinate with existing community resources.
7. To reduce the incidences of diabetes within County government and improve the quality of life for people living with diabetes.
8. To seek new partnerships and/or leverage relationships to assess and plan for new resources targeting unmet needs.
9. Seek more opportunities to involve and integrate County departments in collaborative service delivery.

3.2 From Student

As a program participant, the Consultant is provided the health benefits of the program.

4 Project Approach

4.1 Project Lifecycle Processes

Phase One -- 12-month period (Program Inception)

Project Lifecycle Process	Outcome
Stage 1	Initial meeting County Management and CEO of YMCA
Stage 2	Follow up meetings County Management, HR Staff, and YMCA (Several Occurrences)
Stage 3	Research/Benefits/ Cost Analysis
Stage 4	Incorporation into County Benefits program
Stage 5	Assess and Reassess
Stage 6	Analyze program participant survey data
Stage 7	Analyze biometric screening results and cost savings
Stage 8	Assess and Reassess

Phase 2 (Program Participants)

Stage 1	Biometric Screenings
Stage 2	Program Participants informed of screening results
Stage 3	Program begins (weekly sessions)
Stage 4	Introduction of modified eating
Stage 5	Introduction of physical fitness
Stage 6	Weekly to biweekly sessions
Stage 7	Biweekly to Monthly sessions
Stage 8	Program Ends

4.2 Project Management Processes

Meetings are held as needed with the County management leadership team along with YMCA management for program updates and changes needed to improve the program.

4.3 Project Support Processes

The County Manager, Human Resource Director, YMCA CEO, and wellness director were all vital supports for the Consultant during the process.

The Consultant participated in a steering committee meeting, Channel 19 news interview, YMCA Executive Board meeting and Board of County Commissioners meeting to address the program benefits.

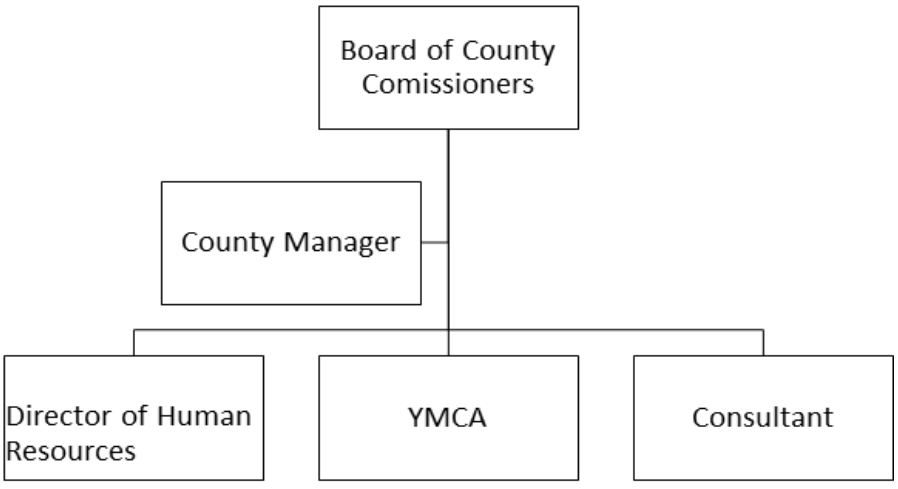
4.4 Organization

4.4.1 Project Team

Project Team consisted of

- County Manager
- Community Service Director/Assistant County Manager
- Human Resource Director
- CEO Cleveland County YMCA
- YMCA Wellness Director
- Consultant

4.4.2 Mapping Between <Organization> and Student



5 Communications Plan

Stakeholder	Information Needed	Rationale	Timeline	Delivery
Cleveland County Government	-Expected Benefits	-Provides summary of benefits	June 2015	August 2015
Diabetes Prevention Program	-Financial Plan	-Describes cost saving analysis	July 2015	August 2015
Consultant and Participant	-Employee Survey	-Provides quantitative data	June 2015	August 2015
	-Quality Assurance Plan	-Explains quality assurance process	June 2015	August 2015
	-Performance Plan	-For continuous quality improvement	June 2015	August 2015

6 Work Plan

6.1 Work Breakdown Structure

Objective	Task	Sub-Task	Begin Date	End Date
1. Participation in the DPP program				
	Begin Program	First Class	August 2014	May 2015
		Modified Eating	October 2014	May 2015
		Physical Activity	January 2015	May 2015
		Biometric Screening results	April 2014	April 2015
2.Communications plan	Create a communication plan for the County	Appendix D	August 2016	July 2018
3.Participant in benefit meetings	Steering committee meeting	Speaker	July 2015	July 2015
	Channel 19 news	Interview	August 2015	September 2015
	County Commissioners meeting	Speaker	September 2015	September 2015
	YMCA Executive Board meeting speaker	Speaker	January 2016	January 2016
5. Compile data	Analyze Data including personal health gains		July 2015	July 2018

6.2 Resources

Reference Section 6.1.

7 Milestones

Milestone Number	Title	Forecast date
1	Develop a detailed statement of purpose of the project including a clear and comprehensive problem statement.	December 2015
2	Consultancy project objectives, expressed in terms that are measurable (SMART objectives)	May 2016
3	Develop the scope, boundaries, and organizations, processes, and systems impacted	May 2016
4	Develop a summary of the business benefits that are expected	December 2016
5	Develop a Risk Assessment based in the initial summary of the anticipates risks associated with the consulting project.	May 2017
6	Develop a detailed summary of the key facts upon which the consulting project will be planned and executed	May 2017
7	Develop a detailed outline of a project plan including specific strategies, activities, timelines, responsibilities, expected outcomes, and results (to date)	August 2017
8	Estimated Budget	December 2017
9	Develop a quality assurance plan which includes actions to measure the effectiveness of project plan phases	May 2018
10	Track and document overall plan performances	July 2018

8 Metrics and Results

Cleveland County employs roughly 800 individuals. The annual biometric screening event took place in April 2015, giving the following aggregate results:

- 77 employees moved from the prediabetes range glucose to normal range glucose
- 246 employees improved the A1c metric (blood glucose)

The County is self-insured, and the number of health claims has stabilized since a spike in the 2013-2014 fiscal year:

- In 2014, $950,000 was allocated to the health plan. In 2015, $400,000 was allocated. This is a $550,000 reduction in costs.
- In 2014, $750,000 was allocated to employee compensation. In 2015, $2,000,000 was allocated. This is a $1,250,000 increase that was utilized for compensation.

See Appendix A.

9 Risks, Constraints, Assumptions

9.1 Risks and Constraints

During the risk assessment stage of the project, four possible risks became evident. These included resistance of employees to engage in the program, poor implementation, poor attendance, and loss of funding.

Risk Description	Mitigation Plan	Impact	Likelihood of occurrence
Resistance of employee engagement	One on one meeting with employers; Tailor curriculum to meet the needs of the group.	Increased health care cost; Discourage other program participants	High
Poor Implementation	Peer Observations; Quarterly training meetings.	Loss of engagement from program participants	Medium
Poor Attendance	Create a required attendance policy.	Stabilize attendance	High
Loss of Funding	Seek grant opportunities.	Increased health care cost.	Low

9.2 Assumptions

Several assumptions were considered.

1. The belief that participants will answer honestly on the satisfaction survey 2. The belief that participants will work the program as outlined in the educational curriculum.

3. The belief that participants will be motivated to utilize skills learned postgraduation.

4. The belief that participants will make changes in their lifestyle and behavior to avoid becoming diabetic.

5. Program would lower health care costs of the County.

10 Financial Plan

Contractually, Cleveland County Commissioners committed to an investment in the YMCA of $200,000 per year for 3 years. The cost per program participant was $429, which included membership to the YMCA; however, it is important to note that the cost of avoidance outweighs any cost that the County incurred during this contractual agreement. Based on statistics from the Center for Disease Control, a person with Type II Diabetes has an average health care cost of $17,200 a year with $9,200 of the total utilized for diabetic needs (2014).

Refer to Appendix E.

11 Quality Assurance Plan

Continuous progress has been made within the County to address diabetes prevention and diabetes maintenance, due to the program being accredited through the Center for Disease Control. The strategies to address quality assurance in this study were developed in accordance with the Health Impact Pyramid (HIP), illustrated in Figure 1. The HIP "provides a framework for developing public health strategies set by the (CDC) and focuses on the importance of interventions at multiple levels to achieve the greatest impact for program participants" (Freiden, 2010, p. 593).

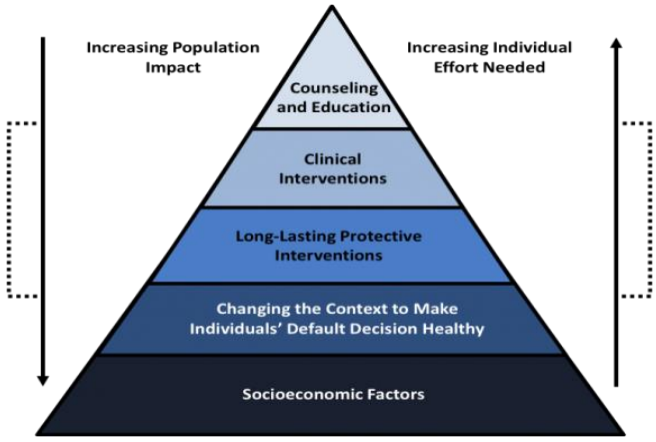


Figure 1. Center for Disease Control Health Impact Pyramid.

The Health Care continuum in Figure 2 looks at ways to improve overall health by empowering the person to

> Acquire knowledge (what to do); Acquire skills (how to do it), Develop confidence and motivation to perform the appropriate self-care behaviors (want to do it); Develop the problem-solving and coping skills to overcome any barriers to self-care behavior (can do it). (Mulcahy, Peeples, & Tomy 2003, p. 795).

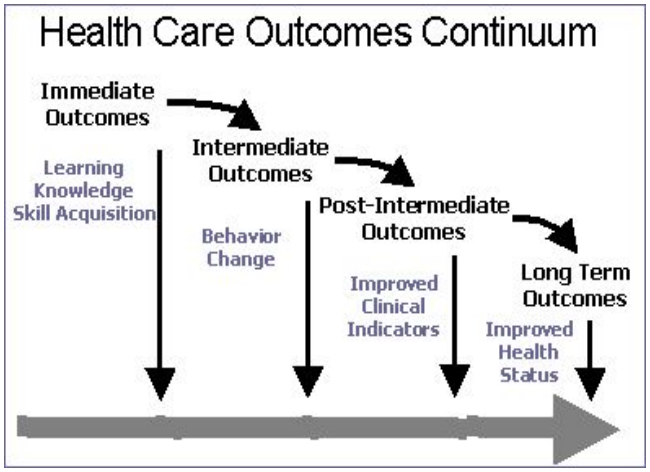
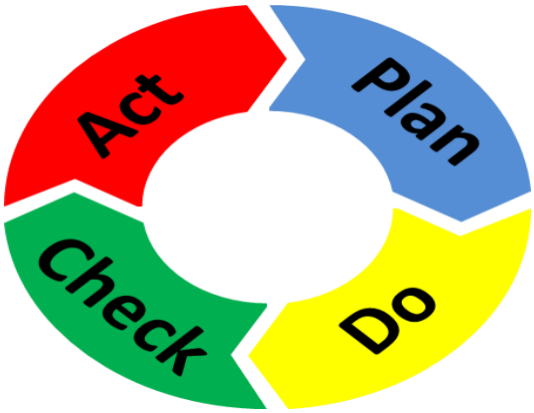


Figure 2. American Association of Diabetes Educators Health Care Outcomes Continuum.

Formal quality improvement strategies can lead to improved diabetes outcomes. By measuring and monitoring both process and outcome data on an ongoing basis, we will be able to identify areas of improvement and adjust participant engagement strategies and service offerings accordingly. Evaluation including positive results can contribute to the sustainability of the program. The Institute for Health Care Improvement suggests three fundamental questions that should be answered by a quality improvement process: What are we trying to accomplish? How will we know a change is an improvement? And what changes can we make that will result in an improvement? This can be further illustrated through the Deming Model, Plan, Do, Check, Act as an internal method to aid in the process of quality improvement.



Plan: Establish objectives and processes necessary to deliver results.
Do: Execute the plan and implement the processes. Collect data for analysis.
Check: Analyze the actual results.
Act: Identify corrective actions

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Appendix A

1. **Program Statistics**
    - 185 total participants
        - 136 Diabetes Prevention participants
        - 49 Diabetes Control participants
    - 22 total classes
        - 15 Diabetes Prevention
        - 7 Diabetes Control
    - 24 total sessions for each class
        - 16 weekly sessions
        - 8 monthly sessions
    - 16-week outcomes: YMCA's DPP
        - Average session attendance – 13.9
        - Average percentage weight loss – 3.2%
    - End-of-year outcomes: YMCA's DPP
        - Average session attendance – 18.3
        - Average percentage weight loss – 3.7%
        - Percentage participants achieving at least 5% weight loss – 20%
            - Most achieved 7% or greater
            - Highest percentage weight loss without medical intervention – 18%
        - Average activity minutes for those achieving at least 5% weight loss – 143
    - **1,600 aggregate pounds lost**
        - YMCA'S Diabetes Prevention and Diabetes Control
            - Although the primary objective of the Diabetes Control program was to provide support and build community for those already diagnosed, the participants also worked toward a weight loss goal (when applicable) and a physical activity goal

2. **Participant Spotlight**

3. End-of-Program Survey Results

- 114 completed surveys received – some responses left blank
  - 62 indicated interest in an ongoing monthly program to provide support and continued resources
  - Identified those willing to be group leaders
  - Identified those willing to share experience with others
  - Anecdotal evidence concerning positive changes in habits/health – awareness, accountability, support

Please share how strongly you agree or disagree with the following statements about your Lifestyle Coach:

	Strongly Agree	Agree	Neutral	Disagree	Strongly Disagree
Delivers session content in a clear manner, ensuring comprehension	83% (95)	14% (16)	3% (3)		
Collects all information necessary for the session in a way that protects the privacy of participants	83% (95)	15% (17)	2% (2)		
Refrains from judgmental comments or responses	83% (94)	14% (16)	3% (3)		
Consistently provides encouragement	88% (100)	11% (12)	2% (2)		

Please share how strongly you agree or disagree with the following statements about this program:

	Strongly Agree	Agree	Neutral	Disagree	Strongly Disagree
I felt supported by all of the YMCA's Diabetes Prevention staff.	61% (69)	26% (30)	5% (6)	1% (1)	
Being part of a supportive group was very important to my success in this program.	44% (50)	42% (48)	7% (8)	1% (1)	1% (1)
I will continue to use the skills and tools I gained from this program in the future.	55% (63)	37% (42)	2% (2)	1% (1)	
This program has positively impacted my health.	54% (61)	33% (38)	7% (8)	1% (1)	1% (1)
This program has positively affected the health of my family/loved ones.	31% (35)	31% (35)	31% (35)	1% (1)	2% (2)
I would recommend this program to a friend or family member.	55% (63)	30% (34)	6% (7)	3% (3)	1% (1)
I have developed lasting relationships as a result of participating in this program.	46% (53)	26% (30)	24% (27)	3% (3)	1% (1)
I plan to keep tracking what I eat and/or my physical activity now that the program has ended.	36% (41)	27% (31)	25% (28)	5% (6)	2% (2)

Since participating in the YMCA's Diabetes Prevention and Control Program, I have…

	Strongly Agree	Agree	Neutral	Disagree	Strongly Disagree
Incorporated physical activity into my daily routine	44% (50)	39% (44)	14% (16)	3% (3)	
Reduced my portion sizes	43% (49)	36% (41)	11% (12)	2% (2)	
Paid more attention to nutrition labels on food/drinks	63% (72)	28% (32)	7% (8)		1% (1)
Consistently tracked what I eat/drink	22% (25)	33% (38)	32% (36)	11% (13)	3% (3)

4. Areas of Opportunity

- Program structure changes (September 1, 2015)
  - Sessions 1-16 delivered weekly
  - Sessions 17-19 delivered every other week
  - Sessions 20-25 delivered monthly
  - Physical activity minutes captured at every session, not the first 16
  - Standardized delivery of sessions 17-25
- Attendance record keeping
  - Revised attendance policy to reflect structural changes to program
  - Created Absence Request/Report form to increase employee accountability for each absence
  - Implemented protocol for sharing information with County HR
- Monitor Lifestyle Coach performance
  - Observation Assessment Tool
  - Peer observation
  - Quarterly meetings
  - Continued education
    - Annual HIPAA certification
    - Orientation to Healthy Living at the Y
    - Facilitating Change in Small Groups
    - Lifestyle Coach Skills Refresh
  - Annual performance reviews based on data
- Support physical activity program goal
  - Required visit to the YMCA branch with group
  - Wellness orientation
  - Mentor/"buddy" system
  - County employee appreciation day/week
  - Promote 5K opportunities
- Support specific departments under leadership of health coach
  - 911 communications

5. Next Steps – January 2016

- Ongoing support and resources as we recognize the need to continue to focus on wellness initiatives & what happens after the year-long program ends
  - Foster the established group dynamic

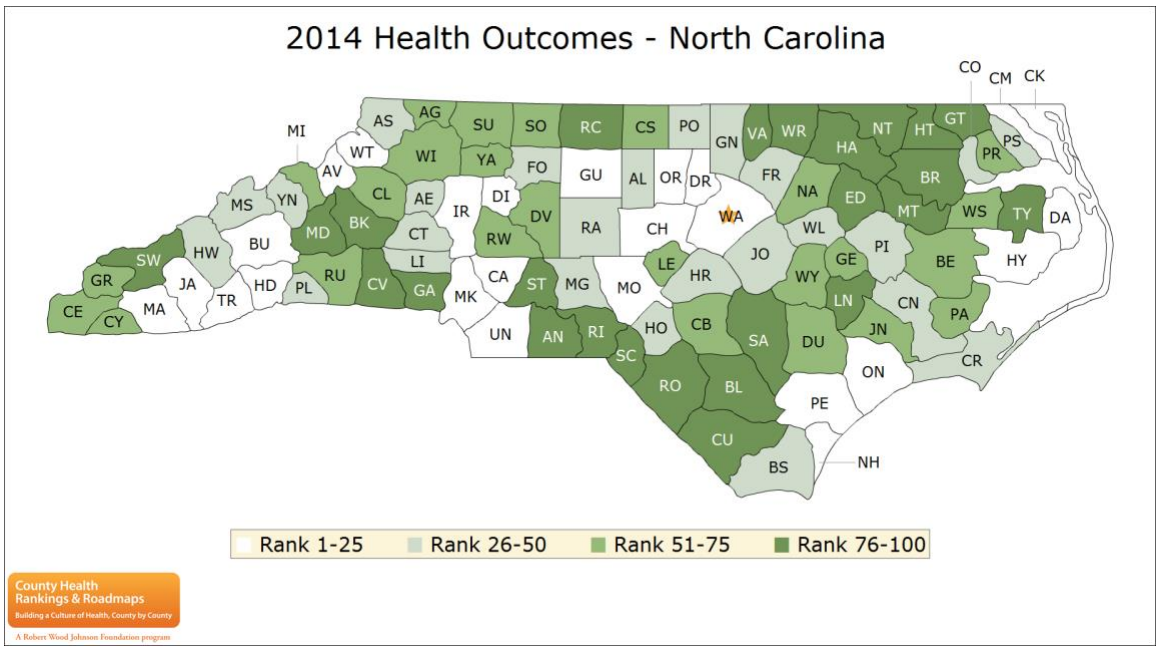
- Hold bi-weekly “check-in” sessions lead by County employees who are “champions” of the program
- Hold quarterly (or more frequent) seminars, utilizing County resources

Topics Desired (in order of most to least survey responses):

Dining out/convenience eating
Small group personal training
Stress management
Cooking demonstrations
Meal planning on a fixed income
“Biggest Loser” contest
Couch to 5K training
Navigating the grocery store
Reading food labels
Dispelling health and wellness myths
Using technology for wellness
Health “buzz words”

Appendix B

County Health Rankings 2015: North Carolina
HOW DO COUNTIES RANK FOR HEALTH OUTCOMES?
The green map below shows the distribution of North Carolina's health outcomes, based on an equal weighting of length and quality of life. Lighter colors indicate better performance in the respective summary rankings. Detailed information on the underlying measures is available at countyhealthrankings.org.



County Rank Cleveland 84

The County Health Rankings & Roadmaps program helps communities identify and implement solutions that make it easier for people to be healthy in their schools, workplaces, and neighborhoods. Ranking the health of nearly every county in the nation, the County Health Rankings illustrate what we know when it comes to what is making people sick or healthy. The Roadmaps show what we can do to create healthier places to live, learn, work, and play. The Robert Wood Johnson Foundation (RWJF) collaborates with the University of Wisconsin Population Health Institute (UWPHI) to bring this program to cities, counties, and states across the nation.

Appendix C

State of the County Health Report

Cleveland County, North Carolina

PRESS RELEASE FOR
IMMEDIATE RELEASE Contact:
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Wednesday, March 23, 2016

County Health Rankings Show Where We Live Matters to Our Health (Shelby, NC)—Each year, the University of Wisconsin Population Health Institute in partnership with the Robert Wood Johnson Foundation release the County Health Rankings. These rankings compare the overall health of nearly every county in the nation, with the goal of showing that where you live influences how well and how long you live. With a ranking of 1 indicating the healthiest county and a ranking of 100 indicating the least healthy county in North Carolina, Cleveland County received a ranking of 80 according to the 2016 annual County Health Rankings. This is an improvement from the 2015 county health ranking of 86. This improvement in overall county health ranking appears to be primarily as a result of improvements in the measureable health outcome of morbidity/quality of life and the health factor of clinical care. In the category of morbidity/quality of life, we saw a decrease in reported poor physical health days from 2015 to 2016 as well as a decrease in reported poor mental health days. In the health factor of clinical care, the percentage of uninsured adults in Cleveland County decreased from 18% in 2015 to 16% in 2016. Furthermore, the rate of preventable hospital stays among our Medicare population decreased, and the percentage of Medicare recipients who participated in mammography screenings increased. Last, the ratio of both primary care physicians and mental health providers to the number of residents in Cleveland County improved from 2015 to 2016. Despite Cleveland County's overall improvement

in the County Health Rankings and notable improvements in the areas of morbidity/quality of life and clinical care, the rankings also help to identify areas that need improvement. Perhaps most noticeable is the regression in Cleveland County's health behaviors ranking from 55 in 2015 to 59 in 2016. This regression is marked by an increase in adult obesity from 29% in 2015 to 32% in 2016. Excessive drinking also increased from 2015 to 2016, rising from 10% to 14%. Despite these regressions, there were also some marked improvements in the category of health behaviors. Adult smoking decreased from 24% in 2015 to 20% in 2016. Also, while the reported percentage of excessive drinking increased, the percentage of alcohol-impaired driving deaths decreased from 27% in 2015 to 24% in 2016. Last, both the rate of sexually transmitted infections and rate of teen births in Cleveland County decreased significantly from 2015 to 2016. As stated by DeShay Oliver, Public Information Officer for the Cleveland County Health Department, "The health factors category of Health Behaviors is an area that the health department continues to work diligently to improve. We provide numerous programs and information, run media campaigns, and even work to make individuals' environments more conducive to making healthy choices. However, when it comes down to it, the behaviors in this category are individual choices. Even if armed with the right information, knowledge and resources, someone can still choose to participate in unhealthy behaviors such as excessive drinking, unhealthy eating or failure to exercise. We want to ensure individuals live in an environment that encourages healthy behaviors and individuals have the information and resources to do so. Then, it is up to them to do the right thing to take care of themselves." Social and economic factors is a category that is very difficult to change that can have a major impact on an individual's overall health. This is another category in which Cleveland County saw a regression, going from a ranking of 59 in 2015 to 66 in 2016. This is marked by statistics such as 31% of our children living in poverty, 40% of our children living in single-parent households, and 7.1% of our employable population being unemployed. "Social and economic factors can impact individuals' ability to choose and practice healthy behaviors," says Oliver. "For example, healthy foods such as fresh fruits, vegetables and meats are more expensive than processed foods. Individuals may lack transportation, making it more difficult to access grocery stores, healthcare, or physical activity opportunities. Individuals may live in an area where they feel it is unsafe to allow their children to play outside, especially in areas that are not well-lit or lack sidewalks, playgrounds, etc. There are numerous factors, many of which are environmental, that can impact health behaviors and overall health status. We must be mindful of this." Despite regressions in the category of social and economic factors, there are noteworthy improvements as well such as an increase in the high school graduation rate and a decrease in the rate of injury deaths. Furthermore, although our unemployment percentage is higher than we would like to see it at 7.1%, this is a great improvement when compared to the 2015 percentage of 8.9. Improvements in the social and economic factors category should be celebrated, as these indicators can be the most difficult to target and change. This is the seventh year of the County Health Rankings, the most comprehensive report of its kind to rank the overall health of nearly every county in all 50 states by using a standard way to measure how healthy people are and how long they live. The Rankings help everyone see how where people live, learn, work and play influence their health and behaviors. The Rankings are available online at

www.countyhealthrankings.org. For additional information on Cleveland County's health ranking, or for assistance in interpreting the data available on the County Health Rankings website, you may contact the Cleveland County Health Department at 980-484-5199. ###

Appendix D

Introduction

Social Media Purpose for Cleveland County Government

To enhance service delivery for clients and staff through the efficient use of social media technology.

Social Media Vision Statement

Our social media vision is to be better connected with employee and client needs, to better inform and engage them in the process of benefits.

Description

- To inform, educate and engage staff and stakeholders continually about diabetes.
- To improve the health and well-being of Cleveland County staff with the goal of affecting the County as a whole, especially people most in need of support and assistance, emphasizing education and prevention and optimal human service delivery.
- To identify, collaborate, and coordinate with existing community resources.
- To reduce the incidences of diabetes within County government and improve the quality of life for people living with diabetes.
- To seek new partnerships and/or leverage relationships to assess and plan for new resources targeting unmet needs.
- Seek more opportunities to involve and integrate County departments in collaborative service delivery.

Elements of the plan

INTERNAL COMMUNICATIONS

Strategy: Provide important, timely and accurate information to all employees using a variety of communication channels.

Rationale: Develop a communication strategy that instills better understanding, positive reinforcement, and team work through better communication between departments, management, staff, and the public.

Action Steps:

• Use Cleveland County Wiki (County intranet) as a main avenue to continually communicate
information to employees.
• Send all County emails when needed to communicate urgent information to employees.
• Provide an Employee Newsletter to employees weekly to highlight events and feature stories.
• Use digital and multimedia (video, streamed content, etc.) channels – video, streaming content, etc. – to
create content about employees who have been successful in the program.
• Create and produce posters, bulletin boards, mailed letters, and other products as needed.
• Utilize social media sites including Twitter, Facebook and Instagram.

WEB SERVICES

Strategy: Use the County's external and internal web sites to communicate County information to the public and employees. Proactively promote County information as media stories and seek media coverage.

Rationale: To increase community outreach, strengthen relationships with community leaders, and educate constituents about what's going on in the County.

Action Steps:
• Post external information to ClevelandCounty.com.
• Post internal information to Cleveland County Wiki and share with employees.
• Utilize video, digital and multimedia content to support and enhance communication.

SOCIAL MEDIA

Strategy: Use the County's social media to communicate County information to the public and employees.

Rationale: Utilizing Social Media channels provide proactive communication of timely and relevant information about the programs, services and results that Cleveland County offers to the community. Centrally managing these sites decreases repetition and increases the number of followers, likes and users for County social media accounts, as well as the number of viewers reached by posting videos on those sites.

Action Steps:

- Share external information via the County's social media sites (Facebook, Twitter, Instagram, and
YouTube).
- Utilize video, digital and multimedia content to support and enhance communication.

- Create a Social Media Policy.
- Collect daily media inquiries from around the County.

COMMUNITY RELATIONS

Strategy: Encourage proactive community engagement with County leadership, Departments, and Stakeholders.

Rationale: Community engagement campaigns will encourage increased awareness within the Community. Engagement activities will be focused around County initiatives and delivered based on interest.

Action Steps:

- Implement strategic community relations plan to guide current and future efforts.
- Hold community meetings and meet with key stakeholders specifically related to major County initiatives.
- Speak to groups and organizations proactively and regularly about County services. Help plan and execute community meetings for Board of County Commissioners as needed.
- Communicate using direct communication methods tailoring outreach to fit all demographic groups.
- Help plan and execute special event planning and facilitation as needed.

DIRECT COMMUNICATIONS

Strategy: Provide important, timely and accurate information to residents and customers using a variety of communication channels.

Rationale: Raising public awareness of current initiatives will increase program participation.

Action Steps:

• Raise public awareness of the decisions made by the County Commission and the County Manager using multiple channels.
• Provide County information via the web, social media, and the news media.
• Develop County-wide branding and marketing strategy.
• Utilize video, digital and multimedia content to enhance communication.
• Design and produce printed materials.
• Manage events (Couch to 5k)
• Develop marketing and advertising campaigns for County departments.
• Create custom communication plans products to address client needs.

Completion Date

- July 1, 2018

Updates/project milestones

- Continue to raise awareness in the community and with employees about major County initiatives and health care benefits changes.
- Meet with department directors and other leaders to learn about specific communication needs and develop solutions to help them achieve their goals.
- Partner with departments to share information and resources, and maximize the effectiveness of County marketing efforts that raise awareness and change behavior with limited resources.
- Implement approved Social Media Strategy, including employee social media guidelines.
- Track outputs and user data through Google Analytics
- Implement and improve employee social media use
- Implement Facebook advertising process for County-wide use
- Train and help administrators and content providers receive the most out of their social media efforts.
- Continue to develop brochures, presentations, and handouts to inform external stakeholders about the countywide revaluation and promote public awareness about the assessment process.

Audience

Cleveland County Board of County Commissioners (BOCC)
Cleveland County Manager and staff
Cleveland County residents
Cleveland County employees and Sheriff's Office
Local media outlets
Community partners – non-profit organizations
Local Municipalities
Businesses

Summary

Cleveland County is the gateway between Asheville and Charlotte and is centered between two of the largest metropolitan areas of the Carolinas, Charlotte and Greenville/Spartanburg. Information is fluid and must be constantly updated to be effective. There is a need for the County to hire a Communications Director/Social Media Specialist and/or Public Information Officer to aid in the process of distributing vital

information to the community and employees. In addition to annually updating this plan, the PIO should meet with County departments each year to determine specific communication needs. Those plans will be incorporated into this plan as they are developed and implemented.

Program Costs

Adding the diabetes prevention lifestyle improvement program has been a cost-effective use of resources: The cost of preventing diabetes is typically much smaller than the cost of managing the complications of type 2 diabetes. The cost per person of offering the lifestyle change program is about $500, depending on factors such as promotion, recruitment, staff and logistics costs. The annual cost of an employee with diabetes is $13,243; whereas the annual cost of an employee without diabetes is $2,560 (Diabetes America). The CDC has determined that intensive lifestyle interventions to prevent type 2 diabetes among people with impaired glucose tolerance are “very cost-effective” and in many cases, cost saving.

Appendix E

Annual out-of-pocket medical cost of someone without diabetes:	Annual out-of-pocket medical cost of someone with diabetes:	Annual out-of-pocket medical cost of someone with diabetes and associated conditions:
$3,673	**$9,202**	**$17,762**

Economic Costs of Diabetes in the U.S. in 2012." Diabetes Care. March 6, 2013.

Centers for Disease Control and Prevention. National diabetes fact sheet: national estimates and general information on diabetes and prediabetes in the United States, 2011. Atlanta, GA: U.S. Department of Health and Human Services, Centers for Disease Control and Prevention, 2011.