



Performance Audit

Wellness Center

Durham County Internal Audit Department

February 22, 2017



Richard Edwards
Internal Audit Director
rcedwards@dconc.gov

Internal Audit Department
200 E. Main Street, 4th Floor
Durham, NC 27701
(919) 560-0042
FAX: (919)560-0057

Audit Committee:
Harrison Shannon
Brenda Howerton
Michael Page
Germaine Brewington

February 22, 2017

Mr. Wendell Davis,
County Manager

Dear Mr. Davis:

The Internal Audit Department has completed its audit of the Wellness Clinic's cost and health benefit effectiveness. The audit focused on determining if the clinic was cost beneficial and if employee health has improved due to its availability.

Our conclusion is that the clinic is cost beneficial. Health cost savings to the County was approximately \$984 thousand, almost a million dollars, during fiscal years 2013 through 2015. However, we were not able to conclude that employee health has improved based upon the available data. However, considering that the Wellness Clinic has and continues to create health care cost savings, we conclude that the Clinic is beneficial and helpful, especially as it relates to the County's financial health.

The report has been reviewed by the HR Department. Their comments are included in the report as Appendix 1.

We appreciate the cooperation of the health clinic staff and administration during the conduct of this audit.

Sincerely,

Richard Edwards,
Internal Audit Director

CC: Kathy Everett-Perry,
Human Resources Director

INTRODUCTION

This internal audit was conducted to determine if the Wellness Clinic is cost beneficial and if employee health has improved due to its availability. The Audit Oversight Committee approved this audit in the fiscal year 2015 and 2016 Annual Audit Plans

We conducted this audit in accordance with generally accepted government auditing standards. The standards require that I plan and perform the audit to obtain sufficient, appropriate evidence to provide a reasonable basis for the findings and conclusions based on the audit objectives. I believe the evidence obtained provides a reasonable basis for the findings and conclusions based upon the audit objectives.

Performance audits are defined as audits that provide findings or conclusions based on an evaluation of sufficient, appropriate evidence against stated criteria. Performance audits provide objective analysis to assist management and those charged with governance and oversight in using the information to improve program performance and operations, reduce costs, facilitate decision making by parties with responsibility to oversee or initiate corrective action, and contribute to public accountability.¹

AUDIT OBJECTIVES SCOPE AND METHODOLOGY

Internal Audit conducted the fieldwork for the audit engagement between February 8, 2016 and June 10, 2016. The objectives of our audit were to determine (1) if the clinic was contributing to health cost savings and (2) if health benefits were resulting from clinic operations. To conduct the audit, we took the following specific steps:

1. Obtained and reviewed copies of contracts with the clinic provider.
2. Reviewed cost documents submitted by Clinic Administrative staff.
3. Reviewed cost data assembled by the Center for Medicare & Medicaid Services,
4. Reviewed usage data provided by Health Stat (the clinic contract administrator).
5. Reviewed the clinic's reporting controls.
6. Reviewed HR savings calculations.
7. Researched best practices for employee health clinics.

BACKGROUND

In their article, "Employer-Sponsored Medical Clinics: Much More Than Convenience Care," Victor M. Brugh II, and Mac McCarthy, said

"On-site medical clinics date back at least 70 years, but their true utility and value has only been fully recognized in the last 15-20 years as progressive employers integrated them into their health and wellness strategic plans. The evolution of employer-sponsored medical clinics picked up significant speed in recent years as employers recognized their potential for health care cost containment.

¹ Comptroller General of the United States, *Government Auditing Standards*, Washington D.C: U.S. Governmental Accountability Office, 2011, pp.

During the first 50 years, employers viewed clinics as employee conveniences. They generally were staffed by nurses who provided care for minor illnesses and injuries and referred work-related conditions to community physicians and hospitals. On-site clinics fell out of favor and their numbers dropped during the 1980's through mid-1990 as competition among employers increased, and the need to reduce overall business operational costs became more critical. However, as health care costs continued to escalate, some employers looked to on-site clinics as possible health care cost-containment and employee productivity centers.” (First quarter 2014 Benefits Quarterly p. 19)

Durham County developers of the clinic had the same issues in mind when they established the clinic in 2007. In a statement excerpted from the October 2006 contract proposal, (RFP #07.006) administrators said, “We are seeking to make available a wellness center for our employees in order to complement our health benefits program.” The proposal further stated services would include:

- Treatment of chronic and acute episodic injuries, illness and accidents,
- Illness prevention and risk-reduction counseling and support groups,
- Immunizations and various injectable medicines such as intramuscular antibiotics and cortisone,
- Conferring with participant's private physicians as needed,
- Administers Health Risk Assessment (HRA) and analyzes data,
- Follow up with employees to monitor and improve health,
- Develop an individualized plan for reduction of risk factors (including medication, referrals, lifestyle changes, etc.),
- Order lab tests/x-rays,
- Assistance in making healthcare and/or health service decisions, and
- Providing quarterly reports of risk factors and intervention and improvement efforts.

The clinic, directed by a nurse practitioner, is a modified primary care facility, and provides convenient care for minor illnesses and injuries along with most primary care services. Services include detailed medical history taking, annual physical examinations, medical screenings, test interpretations, ongoing recommendations, and chronic disease management. The Wellness Clinic does not provide night and weekend treatment services or hospital admission management. Patient visits averaged approximately 6,045 annually for fiscal years 2013 through 2015.

FINDINGS

Health clinic data supports the financial value of the Wellness Clinic. Financial data shows that for a three-year period from July 1, 2012, to June 30, 2015, the County's health care costs decreased by approximately \$984,673 due to availability of the clinic. Although medical costs were reduced due to availability of the clinic, evidence does not show that employee health improved because of clinic availability. There were gains and losses in the number of risk factors for a group of employees whose health was tracked over a period but the data is inconclusive regarding health improvements.

Clinic Availability Results In Health Cost Savings

When the cost of a like number of regular doctor visits and clinic visits are compared, clinic visits result in savings. During fiscal years 2013 through 2015, employees made 18,135 visits to the clinic at a cost of \$1,140,261. The same amount of visits to a private doctor's office would have cost \$2,122,605 or \$984,673 more than clinic visits. The following exhibit shows the difference in the cost of a visit to a personal physician and the cost of a clinic visit.

Exhibit 1
Personal Physician Visit versus Clinic Visit Costs

Fiscal Year	Regular Physician Costs			Clinic Costs			Savings
	Cost Per Visit	Number of Clients	Annual Physician Costs	Cost Per Visit	Number of Clients	Annual Clinic Costs	
2013	\$113	6969	\$787,497	\$52	6,969	\$362,388	\$425,109
2014	\$116	6738	\$781,608	\$57	6,738	\$383,781	\$397,827
2015	\$125	4428	\$553,500	\$89	4,428	\$394,092	\$159,408
Total			\$2,122,605			\$1,140,261	\$982,344

Source: Data provided by Diane Pearson, Human Resources Manager (HR).

Note: The savings shown in the above exhibit were provided by HR from notes and were not confirmed by backup data from Blue Cross/Blue Shield of North Carolina, the insurance administrator during the years cited. Internal audit believes the data is sufficient to indicate that the wellness clinic facilitates savings via its patient visit costs, which are lower than costs for private physicians. Internal audit took this position because Medicare Provider Utilization and Payment Data provided by the Center for Medicare & Medicaid Services (CMS) for calendar years 2012 through 2014 were much higher than costs provided by the HR. For example, in calendar year 2012, average costs of a 30-minute office visit to an internal medical specialist was \$191, according to information in the Medicare Provider Utilization and Payment Data Report, while costs calculated from data provided by HR showed cost per patient averaged approximately \$62 per visit. Internal audit chose the more conservative lower cost figure provided by HR for reporting purposes.

Health Data Alone Does Not Demonstrate Positive Effects of the Clinic

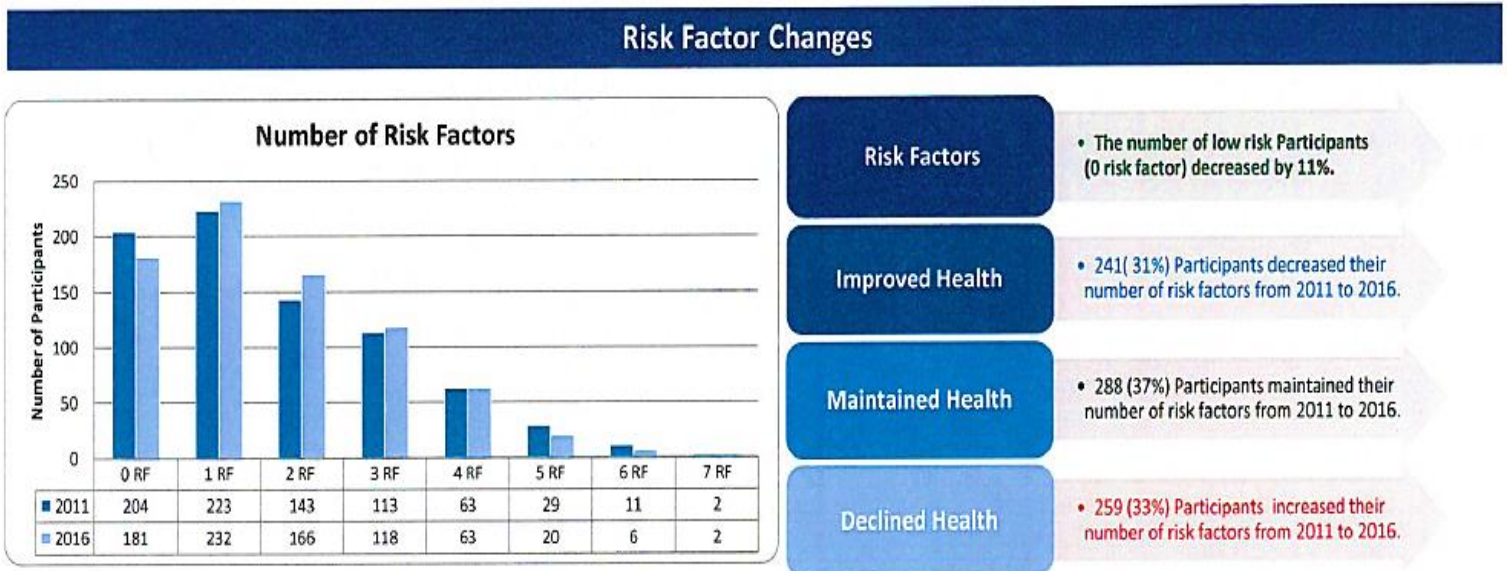
Tracking data for 788 patients that received health assessments over a five-year period from 2011 through 2016 does not demonstrate that employee health has improved due to health clinic availability. The data showed that movement occurred throughout the risk spectrum, demonstrating that health risk factors are not static but changed in some employees between evaluation periods. The health data did not show that employee health changed significantly but rather remained steady for the patients that were tracked.

The clinic tracks eight risk factors during its annual assessment and the unstated goal is to lower risk factors. It is believed that risk factors equate to better health conditions and lower health care costs. The risk factors the clinic tracks are:

1. Total Cholesterol
2. Low Density Lipoprotein (LDL cholesterol)
3. High Density Lipoprotein (HDL cholesterol)
4. Systolic Blood Pressure
5. Diastolic Blood Pressure
6. Glucose Levels
7. Triglycerides Levels
8. Body Mass Index.

The data shows that for 788 employees tracked, movement occurred in both increased and decreased risks factor categories. The data also showed that about 37% of participants maintained their number of risk factors. Generally, about a third of participants increased, decreased, or maintained their risk factors. While initially decreased risk factors were a goal, recent industry goals are for maintenance of health risk factors. Below is an exhibit that shows the movement in risks over the tracking period.

Exhibit 2



The County has not set specific goals for lowering health risks, but individually and collectively, employees are encouraged to make life style changes that facilitate better health. The clinic promotes various healthy behavior programs such as weight loss, healthy diets, smoking cessation programs, exercise programs including an exercise facility, and education. Although, we cannot measure the benefits of such programs on employee health, such programs lead to a more healthy workforce and thus to a more productive workforce, according to experts.

CONCLUSION

The Wellness Clinic has benefited the County and taxpayers through sustained health cost savings for the period we reviewed. Additionally, the clinic promotes healthy lifestyles through its smoking cessation, exercise, and nutritional training programs. Based upon those factors, Internal Audit believes the Wellness Clinic is a benefit to the County's health and wellness strategic goals and its financial health.

Appendix 1. Director Comments



Human Resources

February 9, 2017

Richard Edwards
Internal Audit Director

Dear Richard,

Thank you for preparing the Wellness Center performance audit that focused on determining if the clinic was cost beneficial and if it provided health benefits to the County.

I agree with its conclusion that clinic use created considerable savings of almost a million dollars during fiscal years 2013 through 2015 and that the Clinic is beneficial and helpful as it pertains to the County's financial health.

Regarding the fact that employee risk factor data tracked over a five year-year period from 2011 through 2016 does not demonstrate improved employee health due to health clinic availability, it should be noted that research by Dee Edington, Ph.D., a leader in the field of employee wellness, has evolved away from a focus on reducing risk factors based on newer research that shows the aging process is responsible for much of the increase in risk factors – and that age-related risks may or may not be able to be eliminated by behavior change. Dr. Edington's research now recommends employee wellness clinics focus on helping employees to maintain their risk level (whatever it is) over time.

I appreciate the time and effort required to conduct this audit and will be happy to share its positive conclusions with the Wellness Clinic staff.

With kind regards, I am

Sincerely,

Kathy R. Everett-Perry, Esq.
Chief Human Resources Officer/Director