# Waist Lines Will Continue to Rob Bottom Lines Until Physicians Lead by Example with Their Own Employee Wellness Programs

Suvidha Khatri Clayton State University

**Barbara Lacy Wilson** 

Michael E. Dalmat Clayton State University

A growing number of large health care providers such as Aetna, Mayo Clinic, and Cleveland Clinic are taking a preventative approach utilizing employee wellness programs. However, there is a lack of supporting evidence online regarding established wellness programs for small businesses, especially medical group practices. In this study, we used secondary data analysis, from online literature supported by empirical data collected through Clayton State University's 8 Client organizations, to analyze how physicians can once again lead the way in fostering healthy behaviors among their employees and patients, as well as their outside circles of influence. Our paper demonstrates the potential far reaching effects on the total population's health through a "ripple effect" (Socio-ecological Model).

# **INTRODUCTION**

A growing number of organizations understand the importance of using a comprehensive health management strategy to protect and enhance their biggest asset, human capital, and also as an effective approach to containing costs (Partnership for Prevention, 2009). Employee wellness programs are used as a tool to reduce the cost of providing health care, improve worker productivity and reduce absenteeism by improving the health of employees. Generally, the larger the organization, the more likely it is to offer a wellness program. Many hospitals and clinics such as the Cleveland Clinic, the Mayo Clinic, MD Anderson Cancer Center, UT Physicians, among others, have well managed employee wellness programs and are reaping benefits from them. "In 2001 MD Anderson Cancer Center created a workers' compensation and injury care unit within its employee health and well-being department, staffed by a physician and a nurse case manager. Within six years, lost work days declined by 80% and modified-duty days by 64%. Cost savings totaled \$1.5 million; workers' comp insurance premiums declined by 50%" (Berry et al, 2010). Cleveland Clinic stopped hiring smokers, launched a healthy-food initiative and removed sugared beverages from its campuses four years ago (Tribble, 2011). The American Institute for Preventive Medicine has studied short-term ROI for more than the past twenty years and has shown savings-to-cost ratios of more than \$3 saved for each \$1 invested (American Institute for Preventive Medicine, 2008). Organizations that have effectively developed a wellness culture also realize cost savings associated with retention, presenteeism, and recruitment and reputation through employee

wellness branding (US Corporate Wellness, Inc., 2013). One of the University of Michigan's Health Management Research Center (HMRC's) findings conducted a meta-analysis of 56 studies documenting the savings observed in medical costs and absenteeism, in health promotion programs showed an average (Chapman, 2005):

-27 percent reduction in sick leave absenteeism.

-26 percent reduction in health care costs.

-32 percent reduction in workers' compensation and disability management cost claims.

-\$5.81-to-\$1 ROI ratio

While small businesses place high importance overall on workforce health (93 percent say the health of their employees is important to their businesses bottom line), only 22 percent currently offer an employee wellness program (National Small Business Association, 2012). There is a need to involve more small businesses in providing employee wellness programs in workplaces, thereby helping to create a "wellness epidemic in the nation (McCormack, 1987).

In order to provide visibility and to promote employee wellness programs, the Atlanta Business Chronicle presents and publishes each year "Atlanta's Healthiest Employers Awards" to ten large, ten medium, and ten small companies (private and public companies, non-profit organizations, and government agencies) that are judged against specific metrics to offer the best employee wellness programs in the Atlanta region (Atlanta Business Chronicle, 2013). No matter the size of the organization, employee wellness programs adhere to a best practices combination of providing financial and other incentives for participation plus health improvements based on both health assessments and biometric screenings; promoting physical activity, healthy eating, emotional support and health (including stress reduction), and smoking cessation. These wellness offerings are promoted, and accountability is maintained, by employee wellness committees (a leadership partnership comprised of managers and employees). In addition to reporting on the specifics of these award winning employee wellness programs, the Atlanta Business Chronicle identifies consulting firms that are locally available to help organizations have healthier, happier, more productive workforce and to reduce health plan costs. In summary, the employee wellness methods have been demonstrated to be effective, provide a return on investment, and best-practice "blueprints" are available, as are experts to help with implementation.

We postulate that physicians can lead us to a tipping point, helping the country to a "wellness epidemic" and diffusion of innovation by adopting employee wellness programs in their own practices. Historically, they have played a pivotal role in combating behavioral threats to health like smoking in the United States. Since the 1964 "Smoking and Health: Report of the Advisory Committee to the Surgeon General", physician smoking prevalence rates have steadily declined dramatically from around 40% (Smith, 2008) to 3.3% in 1991 (Nelson, Giovino, Emont et al., 1994). Moreover, 86% of Family Medicine, Internal Medicine, Obstetrics/Gynecology, and Psychiatry physicians advise and assist patients to stop smoking (Association of American Medical Colleges, 2007). Doctors' personal behaviors translated into having increased influence with their patients.

Physicians posses the requisite traits, consistent with the three "basic laws of epidemics" described by Malcolm Gladwell in his book, *The Tipping Point: How Little Things Can Make a Big Difference* (Gladwell, 2000): "Law of the Few;" "The Stickiness Factor;" and the "Power of Context." With respect to the "Law of the Few," the physicians can serve as "gate-keepers of innovation diffusion because their adoption patterns will naturally be respected by peers (patients, colleagues, and the public) as informed decisions" or "mavens". Moreover, physicians are "connectors" who "derive their influence not (only) through expertise, but also by their position as highly respected members of the connected social network hubs." Through their personal examples as engaged promoters and champions of employee wellness programs, they can create "stickiness," making it irresistible to exercise, eat healthfully, get rest, and cope positively with stress (the objectives of all employee wellness programs). This will appeal to employees' and patients' natural desire for "aesthetics" (looking good), "association" (being part of positive associations), "engagement" (fostering emotional involvement), "functional value" (help with goal attainment), and "cost" (perceived value for money—spending less on health care and more on enjoying

life). Physicians are the perfect nexus for the "Power of Context"—they have what it takes to be perfect launching pads for spreading wellness rapidly and broadly throughout the country.

### METHODOLOGY

We conducted an online literature review to identify the total number of people that could be impacted if medical group practices take a lead by supporting and providing employee wellness programs. To document the potential reach of medical group practices through their employees, we found and used statistics about the number of medical group practices, staff employed by these practices and the average family size in the United States. Data about the number of physicians has been broken down by the size of the medical group practices; which varies from 1-2 physicians per group practice, 3-5 per group practice, 6-9 per group practice, 10-19 per group practice and 20-plus physicians per group practice. The total number of active physicians in the U.S. in 2007 was 765,688 (American Association of Medical Colleges, 2008). Those in 1-2 physician group practices of 3-5 to 20 or more physicians, we used data from the organization, SK &A (SK & A, 2012), which was the only source we could find online, and is the source used by the American Medical Association (AMA). Kane reported the information about the average number of staff employed at these medical group practices (including clinical and administrative) by size of the practices in a journal article published by the American Medical Association (AMA, 2011).

We found that the average family size in the U.S. is 3.14 according to the 2010 U.S. Census Briefs (Lofquist, D., Lugaila, T., O'Connell, M., and Feliz. S., 2012). We used all of these sources of data to estimate the potential reach of doctors through their employees and families of both employees and the doctors themselves. See Table1.

We performed another set of calculations to estimate the reach of primary care physicians through their patients, and patient's families. For the purpose of this calculation, we only considered the number of physicians who work in medical group practices for Family Practice, Internal Medicine, Obstetrics and Gynecology, and Pediatrics. We obtained these data from United States Bureau of Labor Statistics (2007). We also collected and used data about the mean number of patients seen per physician each day, which is 29.1 (Gottschalk, 2005). To be conservative with our estimate of the potential reach of physicians through their patients and their patients' families, we used 20 instead of 29.1 as the mean number of patients seen per day per physician, and 3 instead of 3.14 as the average family size in the U.S. See table 2.

From Fall of 2009 through Spring of 2013, Clayton State University graduate students in Health Care Management worked with eight client organizations to lay the ground work for employee wellness programs: seven small medical group practices and one hospital emergency department. The students helped these employers assess the health challenges faced by their employees; employees' willingness to commit to associated wellness offerings to prevent diseases and disability at or near their workplace or at or near their homes; and the willingness of employees to make a financial contribution in support of an employee wellness program each pay period. The students also secured a written commitment from a senior executive in each organization to implement specific recommendations for the establishment of an employee wellness program. The unpublished reports from these eight client organization employee wellness program projects confirm what the literature, including the Atlanta Business Chronicle reporting of annual employee wellness program awards, have concluded in terms of the key components of an employee wellness program; the critical role that a partnership (management-employee) employee wellness committee plays in engaging employees and maintaining accountability; and the potential that employee wellness programs hold for helping small businesses create healthier and happier employees, and in turn increasing productivity, reducing absenteeism and turnover, and decreasing costs.

## RESULTS

In Table 1, we estimate that a 69,761,000 Americans can be reached and influenced to improve their own health through the reach and influence of physicians on their employees and the families of the physicians and their employees. These physicians include physicians from all specialties working in medical group practice in United States. History and the documented effectiveness of employee wellness programs suggest that these physicians can have the same impact in fighting obesity and associated diseases, should they (a) embrace employee wellness programs for their own employees and (b) provide the same type of example and leadership that they have historically provided, and continue to provide, related to smoking cessation, in promoting physical activity, healthy eating, and emotional health in their offices.

Size of	Number of	Average	Number	of	Total	Median	Total people
physician	physicians	staff for the	medical		employees	family size	influenced
group	in this group	group size	groups		including	in U.S.,	
		(Includes			physicians	2010	
		medical and					
		clinical					
		staff)					
1 to 2	245,020	3	122,510		612,550	3.14	1,923,407
3 to 5	183,799	8	45,950		551,399	3.14	1,731,393
6 to 9	120,224	20	17,175		463,724	3.14	1,456,093
10 to 19	106,897	29	7,635		328,312	3.14	1,030,900
20 plus	114,377	22	5,719		240,195	3.14	754,212
Total					2,195,484		6,896,005

 TABLE 1

 POTENTIAL REACH OF DOCTORS THROUGH THEIR EMPLOYEES AND FAMILIES

#### Notes

Number of medical groups = Total physicians in that group / the median size of the medical group

Staff employed in the practice, excluding the physicians = Average staff X number of medical groups

Total employees in practice = Total physicians in the groups + staff employed

Total people influenced = The sum of the total employees X average family size

In Table 2, we estimate the potential reach of primary care physicians through their patients and their patients' families. The mean number of patients seen per day per physician is 29.1 (Gottschalk , 2005). However, we used 20 as the mean number of patients seen per day to provide a conservative estimate. We used five as the average number of working days in a week to keep the calculations simple and straight forward. We assume that primary care medical group practices are open five days per week, and that all physicians are present each of those days, even though this is not always the practice. We then multiplied the number of primary care physicians (209,550) by 100 (i.e., 5 work days X our conservative estimate of 20 patients seen per physician each day) to estimate the number of patients seen by primary care physicians each week, which is 20,955,000 patients. While the U.S. Census reports that the average family size in the U.S. is 3.14 (U.S. Census, 2010), we used three as our conservative estimate for the purposes of our estimates. We multiplied the number of patients seen by primary care physicians per week, 20,955,000 persons, by an average of three family members to estimate the number of patients and their family members that primary care physicians can influence each week, which equals 62,865,000 persons.

# **TABLE 2** POTENTIAL REACH OF DOCTORS THROUGH PATIENTS AND PATIENTS' FAMILIES

Mean No. of patients seen per day per physician	Average working days per week	Average number of patients seen per week by a physician	Number of primary care physicians	Number of patients seen in a week by primary care physicians	Average family size in the U.S.	Estimated number of people reached through primary care physicians in a week
А	В	C = A X B	D	E = C X D	F	G = E X F
20 (instead	5	100	209,550	20,955,000	<b>3</b> (instead of	62,865,000
of 29.1)					3.14)	

Notes

The mean number of patients seen per day per physician is 29.1 (Gottschalk, 2005)<sup>A</sup>. However, we have used 20 as the mean number of patients seen per day to get a conservative estimate.

The Average working days in a week are 5. For the sake of simplicity, we assume that all medical group practices are open 5 days per week and that all physicians in the practice are there each day.

Thus, the average no of patients seen per physician in a week would be:  $20 \times 5 = 100$ )<sup>C</sup>

Number of primary care physicians = 209,550 (U.S. Bureau of Labor Statistics, 2007)<sup>D</sup>

Average no of patients seen by 209,550 physicians in a week: 20,955,000 (E) Average family size: 3.14 (U.S. Census, 2010 Census Briefs).<sup>F</sup> We used 3 instead of 3.14 to be conservative.

For estimating the number of people reached through the primary care physicians in a week (G), we multiply the number of patients seen per week by the family size:  $209.550,000 \times 3 = 62.865,000$ .

We also postulate that physicians can transform this wellness "Ripple Effect" into a "wellness epidemic" by also influencing those in their "outer circle" of influence. This includes friends of physicians, their employees and patients, and the families of physicians, other employees, and patients; suppliers; colleagues; civic organizations; schools; houses of worship; professional organizations (i.e., through medical practice standards, codes of ethics, and policies); insurance companies (i.e., through policy coverage and incentives); and elected officials (i.e., health-related laws and policies that they enact and enforce). See Figure 1, Physicians' Potential "Ripple Effect". However, we do not provide data nor projections for physicians' reach and influence through their "outer circle" in this paper.

Physicians' Potential Ripple Effect (Social Ecological Model) Concernent incontinues New Normal Friends Schools Aedia Qoctors' Familie etients' Fentilie oatient Civic Organizations professional Organ Pouses of Morald Doctors Employee Sinployees' Familie <sup>oluppliers</sup> and Vendor Regulations, incentive

FIGURE 1 PHYSICIANS' "POTENTIAL RIPPLE EFFECT"

Note: We adapted this application of the Social Ecological Model from diagram included in the report of the Institute of Medicine, "Preventing Childhood Obesity," 2005.

### DISCUSSION

Our analyses demonstrate that in any given week, the wellness of 20% of the U.S. population (62.8 million of 315.1 million) could be both directly and indirectly influenced through the wellness example and leadership of primary care physicians alone. Physicians have the potential to serve as "mavens", "gatekeepers of innovation", and "connectors" for a "wellness epidemic" in America.

We postulate that physicians' "outer circle" of influence can lead to changes in long-term policies, incentives, and health care norms that have the potential to shift greater emphasis to wellness and prevention on a sustainable basis as strategies that can dramatically reduce health care costs while improving millions of American's lives. Medical associations such as the American Medical Association and American Academy of Family Physicians could play a leadership role in this "wellness epidemic" by encouraging the adoption of employee wellness programs as a best practice, and by providing incentives, tools, rewards and recognition to medical group practices that employ wellness programs. Leaders in the medical field could work with insurance companies to adopt creative and innovative solutions that provide benefits to both the employers and employees practicing healthy habits. The Patient Protection and Affordable Care Act (PPACA) provide an opportunity for organizations, especially small business practices to establish Employee Wellness Programs while improving their bottom lines. "Beginning in 2011, PPACA provides \$200 million in grants for fiscal years 2011 through 2015 (or until expended) to

small business owners who initiate wellness programs for their employees". (O.C.A. Benefit Services, 2012)

There are some limitations to our analysis and study. Quality data about medical group practice sizes and numbers of employees is scarce, which made it difficult for us to cross-verify these statistics. As mentioned before, no research was found in the literature about employee wellness programs in medical group practices.

We strongly recommend that researchers work with professional medical associations to identify individual medical group practices that have adopted employee wellness programs. Once identified, it would be highly beneficial to evaluate the sustainability, health benefits, and cost savings of their employee wellness programs. Also, studies to directly test the extent to which physicians in these practices produce a "wellness ripple effect" in their communities would be very beneficial.

Future research on medical group practice employee wellness programs should also examine the effectiveness of specific incentives, wellness components, and governance structures to change and sustain employees' wellness behaviors. In addition, an analysis of the effectiveness of health insurance companies' employee wellness program incentives for both employers and employees will pay dividends.

# CONCLUSION

There is a substantial body of research that establishes that the workplace is a critical setting for implementing effective wellness programs. Our research demonstrates the potential "ripple effect" that physicians can have in creating wellness in America. In any given week, primary care physicians alone can influence 20% of Americans to adopt wellness behaviors through their own example as health care providers, and through the example that their medical group practices can provide through the adoption of employee wellness programs, practicing what they preach. Both through their "inner circle" of influence with employees, patients, and their families, and their "outer circle" of influence with those that influence policy makers, and with policy makers themselves, physicians can be the "gatekeepers of innovation", "mavens", and "connectors" who help our nation reach the "tipping point" that establishes an "epidemic of wellness" in America. Until then, waist lines will continue to rob bottom lines.

# REFERENCES

American Institute for Preventive Medicine (2008). The Health & Economic Implications of Worksite Wellness Programs. Wellness White Paper For CFO's, HR Executives, Benefit Managers, Medical Directors, & Wellness Professionals. Retrieved May 25, 2013:http://www.healthylife.com/template.asp?pageID=75.

Association of American Medical Colleges. (2008, November). 2008 Physician Specialty Data. Center for Workforce Studies. Retrieved June 5,

2013:http://www.omionline.org/newsite/docs/specialtyphysiciandatabook.pdf.

Association of American Medical Colleges (2007). Physician Behavior and Practice Patterns Related to Smoking Cessation: Summary Report. 1-15. [On-line; retrieved 5/23/13]. Available http://www.legacyforhealth.org/content/download/566/6812/file/Physicians\_Study.pdf

Atlanta Business Chronicle (2013). Atlanta's Healthiest Employers Awards. Special Section, February 15-21.

Beard, J., Biggs, S., Bloom, D., Fried, L., Hogan, P., Kalache, A., and Olshansky, J. (2012, January). Global Population Aging: Peril or Promise? pp. 17, 23. Program on the Global Demography of Aging

(PDGA) Working Paper No. 89. World Economic Forum. Global Agenda Council on Ageing Society. Retrieved June 1, 2013:http://www.hsph.harvard.edu/pgda/WorkingPapers/2012/PGDA\_WP\_89.pdf.

Berry, Leonard L., Mirabito, Ann M, & Baun, William B. (2010). What's the Hard Return on Employee Wellness Programs?. Harvard Business Review

Boukus, Ellyn, Cassil, Alwyn & O'Malley, Ann S. (2008). A SNAPSHOT OF U.S. PHYSICIANS: KEY FINDINGS FROM THE 2008 HEALTH TRACKING PHYSICIAN SURVEY Results from HSC Research.

Centers for Disease Control and Prevention (2013, January). *Social Ecological Model. Colorectol Cancer Control Program (CRCCP)*. Retrieved May 25, 2013: http://www.cdc.gov/cancer/crccp/sem.htm.

Chapman, L. (2005). Meta-evaluation of worksite health promotion economic return studies: 2005 Update. *Am J Health Promotion.* Jul-Aug; 19(6):1-11.

DeVol, R., and Bedroussain, A. (2007, October). *An unhealthy America: The Economic Burden of Chronic disease charting a new course to save lives and increase productivity and economic growth. Executive Summary and Research Findings.* Milken Institute. Retrieved June 1, 2013:http://www.milkeninstitute.org/healthreform/pdf/AnUnhealthyAmericaExecSumm.pdf.

Gladwell M. (2000). The Tipping Point: How Little Things Can Make a Big Difference. New York City: Little Brown.

Gottschalk, Andrew & Flocke, Susan A. PhD. Spent in Face-to-Face Patient Care and Work Outside The Examination Room Ann Fam Med. 2005 November; 3(6): 488–493. Retrieved from http://www.ncbi.nlm.nih.gov/pmc/articles/PMC1466945.

Kane, Carol K. PhD. (2011). The Employment of Non-physician Staff by Self-employed Physicians, 2007-2008. Retrieved June 5, 2013: http://www.ama-assn.org/resources/doc/health-policy/prp201104-non-phys-staff.pdf.

Lofquist, D., Lugaila, T., O'Connell, M., and Feliz. S. (2012, April). Households and families, 2010. 2010 Census briefs. Retrieved June 5, 2013: http://www.census.gov/prod/cen2010/briefs/c2010br-14.pdf .

McCormack, Patricia. (1987, December). Survivors of 'Wellness Epidemic': Exercise in the Workplace Bringing Healthy Returns. Retrieved June 5, 2013: http://articles.latimes.com/1987-12-06/news/vw-26843\_1\_work-site-wellness

Nelson D.E., Giovino G.A., Emont S.L., Brackbill R, Cameron L.L., Peddicord J, Mowery P.D. (1994). Trends in Cigarette Smoking Among US Physicians and Nurses. JAMA, 271(16), 1273-1275.

NHE. Projections 2010-2020, forecast summary and selected tables. Retrieved from https://www.cms.gov/NationalHealthExpendData/03\_NationalHealthAccountsProjected.asp#TopOfPage

NSBA, Humana. WORKPLACE WELLNESS PROGRAMS IN SMALL BUSINESS: IMPACTING THE BOTTOM LINE. Retrieved June 6, 2013: http://www.nsba.biz/wp-content/uploads/2012/09/wellness-survey-v3.pdf

Obesity in Children and Youth. 2010 Georgia Data Summary. Retrieved from http://health.state.ga.us/pdfs/epi/cdiee/DPH.Epi.7-20-11.pdf

O.C.A. Benefit Services .(2012). Small Employer Wellness Grants. Retrieved June 6, 2013: http://www.oca125.com/wp-content/uploads/2012/02/smallbusinesswellnessgrants.pdf

Partnership for Prevention. (2009). Healthy Workforce 2010 and Beyond. An essential health promotion sourcebook for both large and small employers. Partnership for Prevention/U.S. Chamber of Commerce. Retrieved June 5, 2013:

http://www.welcoa.org/freeresources/pdf/healthy\_workforce\_2010\_and\_beyond.pdf.

SK &A group practice physicians. (Updated 2012). Retrieved from: http://www.skainfo.com/datacards/group\_practice.pdf.

Smith, D.R. (2008). The historical decline of tobacco smoking among United States physicians: 1949–1984. 1-9. [On-line; retrieved 9/15/09]. Available: www.ncbi.nlm.nih.gov/pmc/articles/PMC2556033

Surgeon General's Advisory Committee on Smoking and Health (1964). Smoking and Health: Report of the Advisory Committee to the Surgeon General of the Public Health Service. United States Public Health Service, Office of the Surgeon General. [On-line; retrieved 10/12/09]. Available: http://www.surgeongeneral.gov/library/reports/

Tribble, S. (2011). Initiatives help Cleveland Clinic employees get healthier, lower insurance costs. Retrieved June 5, 2013: http://www.cleveland.com/healthfit/index.ssf/2011/10/clinic employees get healthier.ht ml

U.S. Bureau of Labor Statistics. (2007, May 17).Occupational employment and wages. United States Department of Labor. Retrieved June 5, 2013:http://www.bls.gov/news.release/archives/ocwage 05172007.pdf.

US Corporate Wellness, Inc. (2013, January). GET WELL. ROI-Based Analysis of Employee Wellness Programs. The Problems...The Cost...The Solution Page 2.

U.S. Department of Health and Human Services (October 18, 2008). 2008 Physical Activity Guidelines for Americans. Retrieved on October 26, 2012 fromhttp://www.health.gov/PAGuidelines/guidelines/chapter2.aspx.

World Economic Forum (2008). *Working Towards Wellness: The Business Rationale*. Retrieved June 1, 2013: http://www.weforum.org/pdf/Wellness/Bus\_Rationale.pdf.