

The North Carolina Department of Commerce: A Healthy Workforce Promotes Economic Security

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To thrive economically, North Carolina needs a healthy, productive workforce. The public and private sectors should collaborate on the prevention and management of chronic diseases, which significantly impact the state's economy. Evidence-based prevention strategies should be prioritized, and communities should be designed with public health considerations in mind.

A healthy, productive workforce is vital to strong economic growth and is a critical factor in economic development. Such a workforce helps attract businesses to a community and enables employers to meet their productivity goals and to curtail their bottom-line costs.

The North Carolina Department of Commerce is the state's leading economic development agency, and its mission is to improve the economic well-being and quality of life of all North Carolinians. In essence, it is the agency's charge to help create environments in which businesses thrive and jobs multiply. Key components to accomplishing this include assuring the state has a robust pool of highly skilled, healthy workers and assuring its communities are designed to support an active, healthy constituency.

Importance of a Healthy Workforce

The health problems associated with chronic disease have a significant economic impact not only on the state's health care system, but also on its economy. Lost labor time and the inability of employees to concentrate or perform optimally when they are at work—due to their own poor health or a family member's poor health—are drains on the economy.

Health care costs are rising more quickly than costs in other sectors, with the majority of health care insurance in the United States being provided by employers [1]. The average annual percent growth in health care expenditures per capita from 1991-2009 was 6% in North Carolina compared to the national average of 5.3% [2]. The state's employer contribution for employer-based health insurance in 2010 averaged 81% (\$4,054) versus the national average of 79% (\$3,919) for single premium, 74% (\$10,151) versus 73% (\$10,150) for family premium, and 76% (\$6,814) versus 74% (\$7,166) for employee-plus-one premium per enrolled employee [3].

Medical costs associated with chronic disease include not just the direct costs of preventive, diagnostic, and treatment services, but also indirect costs related to morbidity (the value of income lost from decreased productivity, restricted activity, and absenteeism) and mortality (the value of future income lost by premature death). These costs affect everyone, regardless of whether it is the employer or the employee who covers them. Health care costs matter. A North Carolina Chamber report on manufacturing published in 2008 [4] notes that "A recent analysis by the New America Foundation found that 'many manufacturers have blamed rising healthcare costs for decisions to drop health benefits for workers or shift jobs overseas.'" The report goes on to state that "North Carolina manufacturers complain that health care costs are outpacing wages and productivity." High health care costs make it more difficult for small businesses in North Carolina to provide health insurance, and that in turn makes it more difficult for those businesses to retain and compete for good workers. Also, entrepreneurship suffers when individuals are reluctant to leave the security of their current job's health coverage to start up a new and innovative business venture. With the increased cost of health care also comes a growing uninsured population. This too has serious implications for employment and for economic development.

A Milken Institute report titled *An Unhealthy America* [5] published in 2007 states that the economic burden of chronic disease in the United States is "costing us lives, quality of life and prosperity." The report states that in 2003, the top 7 chronic diseases—cancers, diabetes, heart disease, hypertension, stroke, mental disorders, and pulmonary conditions—resulted in lost productivity nationwide totaling \$1.1 trillion dollars per year, with another \$277 billion being spent on treatment. The report projects that if the country stays on its current path, lost economic output and treatment costs will total \$4.2 trillion by 2023. However, even modest improvements in preventing and treating disease could

Electronically published August 10, 2012.

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NC Med J. 2012;73(4):278-280. ©2012 by the North Carolina Institute of Medicine and The Duke Endowment. All rights reserved.
0029-2559/2012/73415

TABLE 1.
Economic Impact of Chronic Diseases in North Carolina in 2003 and in 2023.

Type of cost	Annual costs of chronic diseases in North Carolina in 2003 (in billions of dollars)	Projected annual costs of chronic diseases in North Carolina in 2023 (in billions of dollars) ^a
Treatment expenditures	7.9	28.9
Lost productivity	32.1	111.1
Total costs	40.0	140.0

Note. Data are for 7 chronic diseases: cancers, diabetes, heart disease, hypertension, stroke, mental disorders, and pulmonary conditions. ^aThe projected costs for 2023 assume that no improvements are made in the prevention and management of chronic diseases. Data are from DeVol R, Bedroussian A. *An Unhealthy America: The Economic Burden of Chronic Disease—Charting a New Course to Save Lives and Increase Productivity and Economic Growth*. The Milken Institute; October 2007.

make it possible to avoid 40 million cases of chronic disease, which would increase the nation's gross domestic product by \$905 billion and decrease treatment costs by \$218 billion annually [5].

The economic impact of chronic disease in North Carolina is significant. The annual costs of treatment expenditures and of lost productivity totaled more than \$40 billion in 2003. These costs are projected to increase substantially by 2023 [5], as Table 1 shows.

Included in the health care burden is the cost of workers' compensation. Obese and unhealthy workers are at greater risk of workplace injuries and often require more complicated medical care during recovery. A 2007 retrospective cohort study of results from the Duke Health and Safety Surveillance System [6] found that extremely obese workers (those with a body mass index greater than or equal to 40) filed twice as many workers compensation claims as recommended-weight employees (those with a body mass index of 18.5 to 24.9) filed. In addition, their medical costs were nearly 7 times higher, their indemnity claims costs were 11 times higher, and they missed nearly 13 times as many days of work due to their injuries as did recommended-weight employees. The takeaway message from this study is that to reduce the risk of injury and to avoid the subsequent loss of productivity and increase in health care costs, employers should (in addition to doing whatever they can to make the workplace safer), give high priority to encouraging employees to maintain a healthy weight through healthy eating and physical activity [6].

The nation's leading medical organization devoted to worker health and safety, the American College of Occupational and Environmental Medicine (ACOEM), understands that employers must have a healthy workforce to compete in the global economy. The ACOEM is actively advocating that greater attention and resources be committed to "health-related services that protect the employability of the working-age population to maximize workforce participation and productivity" [7]. In 2009 ACOEM developed an action agenda based on the following principles: 1) to keep the economy strong, it is essential to keep the workforce healthy and productive, 2) workforce health and productivity will benefit from public investment in better health and

better health care, 3) investment in evidence-based primary, secondary, and tertiary prevention strategies should be prioritized, and 4) spending on prevention should not be discretionary. Employers and disability insurers should be given greater incentives to help people stay healthy and employed, and benefits should not be designed to give employees any disincentives for healthful behavior [7].

As the ACOEM acknowledges, health care professionals who specialize in occupational and environmental medicine best understand the correlation between health and productivity. They must partner with employers in all sectors of the economy—private, public and nonprofit—to identify workplace initiatives that reduce risks and better ensure that employees stay healthy and productive.

Importance of Community Design to Public Health

Community design can play an important role in maintaining a healthy workforce by encouraging a less sedentary lifestyle. Active transportation options allow workers the chance to increase their physical activity level during their daily commute or while taking breaks during the workday. To encourage biking or walking to work, safe street and sidewalk facilities must be provided that allow these activities to take place. The best place for local governments to address these needs is within their comprehensive planning process. Historically, public health concerns have not always been directly included in plans; however, the movement to include these issues in the process has gained momentum within the past decade. Today public health officials are increasingly consulted about and involved with local planning efforts. In a 2010 article in *Planning Magazine* [8], the American Planning Association highlighted efforts under way across the country to identify critical public health concerns and the solutions that have been proposed within the planning process. The American Planning Association has also launched the Planning Healthy Communities forum on their website, which provides a forum for dialogue between professions and offers a host of resources [9]. The American Planning Association has also partnered with the National Association of County and City Health Officials to develop a jargon fact sheet to help planners and public health professionals better communicate [10]. In addition, the National Association of County and

City Health Officials have released a factsheet titled Public Health in Land Use Planning and Community Design [10] to help educate public health officials about the reasons to become involved in local planning. In an effort to help communities understand the linkages between health and community planning, the Community Planning Division of the North Carolina Department of Commerce, which was established in 1957 to help prepare local governments for growth and development through planning technical assistance, is engaged in an effort to include public health considerations in an upcoming revision to the division's land use planning guidelines. The purpose of the guidelines is to give staff members and local officials a blueprint for developing local plans, especially in rural areas. The project will include input from the North Carolina Department of Transportation, the North Carolina Department of Environment and Natural Resources, and the North Carolina Division of Public Health, as well as other agencies. The goal is to develop an easy-to-use guide to help local communities make better planning decisions, while also satisfying planning requirements of other state agencies.

Promoting Better Health Is an Investment in Economic Security.

North Carolina is participating in an increasingly competitive global economy, and the state's performance is linked with its ability to produce the best educated, most highly skilled, and healthiest workforce possible.

We recognize that to avoid being overwhelmed by a tide of chronic illness there must be a partnering of the public and private sectors—health care professionals, business owners, educational institutions, and public policy makers—to provide incentives and make investments that encourage and reward prevention and early intervention. To this end, the North Carolina Department of Commerce and its sister agencies are working to realign programs and resources, and are working together to promote healthier economic and community development strategies and outcomes for North Carolina. NCMJ

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Acknowledgment

Potential conflicts of interest. L.S. and J.M. have no relevant conflicts of interest.

References

1. DeNavas-Walt C, Proctor BD, Smith JC. Income, Poverty, and Health Insurance Coverage in the United States: 2010. US Department of Commerce Report; September 2011. <http://www.census.gov/prod/2011pubs/p60-239.pdf>. Accessed June 18, 2012.
2. The Henry J. Kaiser Family Foundation. State Health Facts. Average annual percent growth in health care expenditures per capita by state of residence, 1991-2009. The Henry J. Kaiser Family Foundation Web site. <http://www.statehealthfacts.org/comparemaptable.jsp?ind=598&cat=5>. Accessed July 6, 2012.
3. The Henry J. Kaiser Family Foundation. State Health Facts. North Carolina: employer-based health premiums. The Henry J. Kaiser Family Foundation Web site. <http://www.statehealthfacts.org/profileind.jsp?cat=5&sub=67&rgn=35&cmprgn=1>. Accessed July 6, 2012.
4. Toft GS, Melton SB. What North Carolina Makes, Makes North Carolina: Manufacturing's Value Proposition for a State on the Go. North Carolina Chamber Manufacturing Report; August 2008. http://www.ncchamber.net/docs/WhatNCMakes_CompleteReport_Final.pdf. Accessed May 7, 2012.
5. DeVol R, Bedroussian A. An Unhealthy America: The Economic Burden of Chronic Disease—Charting a New Course to Save Lives and Increase Productivity and Economic Growth. The Milken Institute; October 2007.
6. Østbye T, Dement JM, Krause AM. Obesity and workers' compensation: Results from the Duke Health and Safety Surveillance System. *Arch Intern Med*. 2007; 167(8):766-773.
7. Special Committee on Health, Productivity, and Disability Management, American College of Occupational and Environmental Medicine. Healthy workforce/healthy economy: the role of health, productivity, and disability management in addressing the nation's health crisis: why an emphasis on the health of the workforce is vital to the health of the economy. *J Occup Environ Med*. 2009; 51(1):114-119. http://www.acoem.org/uploadedFiles/Healthy_Workplaces_Now/Healthy%20Workforce%20-%20Healthy%20Economy.pdf. Accessed May 8, 2012.
8. Wooten H. Healthy planning in action. *Planning Magazine*. Washington, DC: American Planning Association; 2010. http://www.gethealthysmc.org/uploads/pages/197_healthy_planning_in_action.pdf. Accessed July 17, 2012.
9. American Planning Association. Planning and Community Health. Planning Healthy Communities Web site. <http://planninghealthycommunities.webs.com>. Accessed July 11, 2012.
10. National Association of County and City Health Officials. Public health in land use planning and community design factsheet. <http://www.naccho.org/topics/environmental/landuseplanning/upload/Land-Use-Fact-Sheet6-19-03.pdf>. Accessed May 8, 2012.
11. American Planning Association and the National Association of County and City Health Officials. APA Fact Sheet: Public Health Terms for Planners & Planning Terms for Public Health Professionals. Get Healthy Web site. www.planning.org/research/healthy/pdf/jargonfactsheet.pdf. Accessed July 11, 2012.